

Encyclopedia of Radio and Television Broadcasting

The man behind the microphone

ROBERT ST. JOHN

Encyclopedia of Radio And Television Broadcasting

(The Man Behind the Microphone)

By
ROBERT ST. JOHN



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**ENCYCLOPEDIA
OF RADIO AND TELEVISION
BROADCASTING**

Preface

Close by the Capitol in Washington there is a building with a misleading name — the Library of Congress. Actually it is our National Library. To this building flows, from all corners of the country, a torrent of books, for the public laws of the United States state that in order to obtain a copyright on any work of fiction or non-fiction, two copies must first be dispatched to the Library of Congress. That explains why, the last time a count was taken, there were found to be 12,752,000 different titles on the shelves.

For each title, a 3 x 5 card is made out and put into the proper place in drawers that stretch as far as the eye can see. The drawers are 17 inches deep, with 98 cards per inch, except that so many people thumb through these files that the upper right corners of the cards gradually acquire a film of grease and dirt. As a result, after a time it is possible to get only 97 cards to the inch. That means 1,649 cards to the drawer and there are 21 drawers of cards devoted to the single subject: RADIO.

Those 34,629 books on radio cover every conceivable aspect of the subject. There is, for example, an entire book just on the fluffs, goofs and boners that have been made on the air by professional broadcasters. There are other books devoted exclusively to such specialized subjects as why the radio audience years ago panicked over a play about an invasion from Mars, and how to make people laugh if you are a television actor, and how to store sound recordings. Then there is a book just listing other books on radio — a bibliography — put out by the National Association of Educational Broadcasters, which discloses that books on the non-technical aspects of radio are being written and published at the rate of almost a thousand a year.

If a young man set out to read the Library of Congress's mountain of books on broadcasting and were able to read three a day and worked at it 365 days a year, by the time he was 50 years old he would still be reading.

In the face of such statistics it may sound presumptuous to claim that this *Encyclopedia* is unique. Better to say, modestly, that its aim is to do something that none of those other books has yet done.

Every single subject treated herein has been dealt with more exhaustively

in other books, long before now. There are whole shelves of books, for example, on microphone technique alone, or on writing news stories. What this volume has set out to do is to cover in these few hundreds of pages the wide range of subjects that are of intense interest to the young broadcaster — to give him a sense of the excitement of the broadcasting business — its problems, its thrills, its sorrows, its rewards — and at the same time to pass on to him some practical advice on “how to do it” — *it* being anything from how to get the best use out of a tape recorder and how to use the human voice for all its worth, to how to delve for truth and how to acquire knowledge. For those who want to go deeper into any one subject, a Reading List in Section III recommends many fine books on specialized matters. In other words, no claim is made that this is a definitive book on any single phase of broadcasting.

Some of its readers will use it as a textbook, yet one aim in writing it has been to keep it from sounding like a textbook. Section I, especially, is meant to be read with enjoyment. Therein are stories about some of the most *momentous* broadcasts ever delivered — broadcasts that helped to change history and channel the course of human destiny. Some of this section has been lived by the author. The rest has come from observation, from the stories told by colleagues during moments of reminiscing, and from research.

Samuel Johnson, who had the distinction of making the first dictionary of our language, once wrote:

“A man will turn over half a library to make one book.”

Months and months have been spent doing research in the Library of Congress, checking facts, figures, dates and statistics.

Section II has been written with the help of professional broadcasters in both radio and television, who have been unselfishly eager to pass on to a younger generation what they have learned — in most cases learned the hard way — by trial and error, because in *their* young days good schools of broadcasting did not exist.

Section III is a book in itself. It is designed to serve as a ready-reference library, always close at hand to answer questions about dates, spellings, pronunciations, code regulations.

The *Encyclopedia* has not been written for any one group of broadcasters or prospective broadcasters. It is for the man who is already at work in front of a microphone, as well as for the aspiring broadcaster who is just beginning to learn the fundamentals of the business.

The hope is that it will interest, entertain, inform and be of instructional value to those who have chosen for their life-work the fascinating business of broadcasting.

Robert St. John,
Washington, D.C.,
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Section

I.

The Story of
Broadcasting

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What Is Communication?

In the north of China, in prehistoric times, when an ancient man called *Homo Erectus Pekinensis* (the Erect Man of Peking) indicated to his wife by grunts what he thought of the meal she had just spread before him on the dirt floor of their cave . . . that was communication.

Skip 360,000 years and consider all the ways in which modern man communicates. The postman rings the doorbell. That is a form of communication. Then there is what he has in his mail sack, the bell on the bicycle of the Good Humor Man, the radio in the kitchen, the television in the living room, the clock on the mantle, the cry of a baby, the telephone, pop music coming from a record player, magazines and books on the library table, a teacher's questions on the school blackboard as well as the charts and maps she uses in her work, the movie at the theater around the corner, the public address system at the clubhouse, traffic lights, posters on billboards, the policeman's whistle, the auto horn, signals used by railroads, the airplane overhead, a mother waving to her child as he leaves for school, lovers saying it all with an embrace. The life of everyone is ruled by communication in all its manifold forms.

Fundamentally communication is sharing information, through the media of sight, sound, smell, taste and touch. The information passed on may be concerned with hunger (the crying baby's desire for food), joy (a spectator's shout of delight when the home team scores a touchdown), or fear (the call for help from a ship in distress). It may be a demand for information (a mother telephoning a doctor to ask what to do for a child who has just eaten rat poison), or it may be a commercialized spreading of information (a reporter's discussion of a disaster, communicated to his public by radio, television, or newspaper).

Radio Is Talk Mechanized

When the descendants of the Peking Man learned to talk, they invented a medium of communication that has never been excelled, despite all the wonders of modern science. The printed word merely puts what one man has thought and said into a form that can be pored over and preserved, almost indefinitely. Radio merely enables more people to hear what one man is saying. Television is a way of illustrating with pictures something a man is saying. (A camera shot of a half-destroyed building is meaningless until the announcer discloses whether the building is being shelled by enemy artillery, or is being intentionally demolished in a slum clearance project, or contains the dead bodies of hundreds of earthquake victims.)

Machines can communicate, as well as animals and humans. The hundreds of dials and gauges on the instrument panel of an airplane communicate continuously to the pilot during a flight. Computers that seem to possess better than human brains communicate to their inventors not only facts and figures but intellectual conclusions.

And yet, communication remains primarily a human function. It is the basis of all modern life. Each millenium, each century, each year widens the gap between four-legged creatures and their animal progenitors. Communication has made possible the conquest of disease, exploration of the ocean's floor, and human travel in the space between the stars. Thanks to communication human beings learned first to come together in clans, then in communities, then in states, and finally in nations. Eventually man's development of communication with his fellow man will make possible the organization of a true community of nations in which warfare may become as outmoded as cannibalism and then, hopefully, man can devote his intelligence and his energies to construction instead of destruction.

Illiterate for 79-1/2 Years

If, as the archaeologists say, man has lived on earth for 500,000 years, and if the first great improvement in communicating was the development of a picture language called hieroglyphics by the Egyptians in about 3300 B.C., it is as if an eighty-year-old man had remained illiterate for 79½ years and had finally learned to write just six months before his eightieth birthday. The development of modern communication has been that recent.

Thousands of years ago King Solomon (or whosoever else it was who wrote the Book of Ecclesiastes) put down these words: ". . . of making many books there is no end." Yet it was not until a German named Gutenberg invented movable type in the year 1440 that general literacy became possible. Another four centuries passed and then Bell invented the telephone, Edison invented (or perfected someone else's invention of) the phonograph, Eastman developed a practical photographic film, and Marconi invented wireless telegraphy.

Suddenly (thinking the way archaeologists do — in terms of man's 500,000 years on earth) we had radio, motion pictures, televised pictures, sound films, color films, television, color television, and, most recently, international television, thanks to orbiting satellites.

From Grunts to Groans

That, in several small nutshells, is the history of communication, from the grunts of *Homo Erectus Pekinensis* in his cave in the Orient, to the groans of *Homo Erectus Manhattanensis* in his fiftieth floor New York City apartment when he suddenly realizes that the color television program he has been watching has kept him up an hour past his normal bedtime.

Communication with an *s* added means, says Webster, "a system, as of telephone, telegraph, etc., for communicating." This distinguishes between osculation and oscillation — between the simple way in which lovers communicate and that complicated, mechanized system of communication involving electricity, magnetism, waves, tubes, condensers, transformers, cables, antennas, and — oscillators.

When *communications* is preceded by the single word *mass*, or by the words *the media of mass*, or when the whole phrase is shortened simply to *mass media*, the speaker is probably talking about films, newspapers, magazines, radio or television.

Communicate Or Die!

In the latter half of the Twentieth Century, especially in the United States, communicating has become an art, a science, even a fit subject for the learned theses of doctors of philosophy and doctors of law. Everyday conversations are sprinkled with various forms of the word. In a subway or bus you can overhear one man saying to another: "He and I simply don't communicate!" Many colleges and universities have established communications schools. Degrees are given in communications. Nations try to communicate, and when they fail they go to war.

Shanties along the railroad tracks in the slum areas of large cities bristle these days with television antennas, just as do the Park Avenue apartment buildings of the wealthy and the suburban homes of the pleasantly prosperous. Madison Avenue, which used to be simply a street in New York, is now the name of a profession — that of communicating advertising messages to the millions of people who rely for information and entertainment on rectangular boxes that are connected by wires to those antennas.

Hollywood has become a hand maiden if not actually a humble servant of television. Many Broadway actors and actresses would rather perform electronically than act before a live audience. And in any large city during the rush hour when a traffic light suddenly turns red, six cars abreast may brake to a quick stop; as they do six different booming voices can often be heard;

not the six drivers shouting at each other, but the voices of announcers on six different broadcasting stations coming over the radios of those six cars whose drivers are so impatiently waiting for the green light — and for the next news bulletin.

The Sky Seems the Limit

As more and more once-great newspapers disappear, licenses are issued in Washington for the operation of more and more radio and television stations, and so an ever-growing army of communicators spends an ever-growing number of hours a day in the living rooms, automobiles, play rooms, bedrooms and even the bathrooms of America. Once electronic communicating stopped there. But the invention of transistor radios and portable television sets has given the electronic communicators access to the hearts, the minds and the pocketbooks of Americans even when they are lying on bathing beaches, or walking to work, or battling storms on a sail boat at sea, or (if new underwater and space transistors prove successful) while scuba diving or space walking.

That is communication in the last half of the almost unbelievable Twentieth Century.

2.

*What Is A
Broadcaster?*

No language in the world is as rich as English. We have words for every object, every idea, and every degree of meaning. If something comes along that does not have a name, we soon decide what to call it and that word quickly becomes part of our vocabulary.

Yet we lack one, all-inclusive word that will describe the rewrite man on a newspaper, the editor of a weekly news magazine, a radio news reporter, a war correspondent, and a man who writes topical books. The French would call any one of them *un journalist*. But the English word *journalist* does not cover so many categories and, anyway, it is in disrepute with the very people who could qualify.

In the world of electronic communication the same problem exists. There is no single word to describe a disc jockey, a woman who emcees a children's television show, a sportscaster, a man who reads news torn off a press association machine, a radio commentator, an announcer who reads commercials all day, and men like Deems Taylor and Walter Damrosch, who gave American radio audiences a love of good music through their appreciation talks. It is hardly proper to call such people announcers. The best existing word to cover them all, like a circus tent, is *broadcaster*, for they all do broadcast, and the suffix *er* at the end of a word generally means "one who". A *gardener* is one who gardens; a *farmer*, one who farms; a *glass blower*, one who blows glass; a *seller*, one who sells; a *baker*, one who bakes; a *bartender*, one who tends bar. (Please don't bring up butcher or lawyer.) However, while the compilers of dictionaries are in perfect agreement as to what *broadcasting* means, there is some confusion over *broadcaster*. Webster says:

Broadcaster: One who or that which broadcasts; specifically . . . (radio) an apparatus for broadcasting or a person broadcasting.

The new Century Dictionary says:

Broadcaster: One who or that which broadcasts.

Funk and Wagnalls says:

Broadcaster: (1) One who owns or operates a broadcasting station. (2) One who makes broadcasts.

And so the question remains: What is a broadcaster? Is it an organization or a human being; the station or the man behind the microphone?

Those who christened the National Association of Broadcasters took the former view, for that organization is not made up of talent, but of station and network management.

Likewise, Harry Bannister, for years a vice president of NBC and before that general manager of WWJ, Detroit, rarely if ever did any broadcasting himself, yet he called his published book of reminiscences *The Education of a Broadcaster*.

It is also true that the help wanted columns of *Broadcasting*, the industry's weekly news magazine, do not have a classification: BROADCASTER. Rather, positions are offered under these sub-heads: MANAGEMENT. SALES. ANNOUNCERS. TECHNICAL. NEWS. PRODUCTION. PROGRAMMING. OTHERS.

However, in these pages broadcaster will be used to mean — with the authority of Mr. Webster — a man or woman who does something behind a microphone or in front of a television camera, be it narrating or ad libbing or announcing; be it concerned with news, sports, politics, editorializing, the introduction of pop music records, giving the weather, emceeding a panel show, reporting a fire, or covering a war, as long as it is done on mike or on camera.

Is There a Broadcaster-Type?

As soon as a broadcaster has thus arbitrarily been defined, another question immediately pops up: Is there such a thing as a broadcaster-type? Those who have been successful on the air happily do not fall into any neat pattern or look as if they came out of any mold. Consider what, if anything, these phenomenally successful broadcasters had or have in common: the dead-pan-serious television newsmen, Huntley and Brinkley; the exuberant Bob Hope, who made a fortune clowning in front of a microphone; Fran Allison, who has played Aunt Fannie on the Breakfast Club since 1937, and John Cameron Swayze, whose stock in trade is that he can make a television commercial sound both interesting and convincing? What do they have in common?

No matter what branch of the business he may have chosen, the broadcaster

must have certain fundamental qualities. The following list is suggestive rather than definitive:

Extroversion

An introvert is a subjective person who finds his greatest satisfaction in the inner life of thought and fancy. Many monks in monasteries are introverts. So are many poets, and a few actors and actresses.

An extrovert is one whose pleasures grow out of external things — people, places, events.

Both may have great intelligence. Both may experience intense pleasure and severe pain. It is not impossible for an introvert to become a good broadcaster, but extroversion helps greatly.

Enthusiasm

Some people have the natural ability to be enthusiastic about even the smallest experience. Because enthusiasm is generally contagious, those who come in contact with a vibrant personality immediately become interested, often against their will. An enthusiastic person can go around the block and come back with an interesting, perhaps even exciting, story of what he saw, heard, smelled and experienced, whereas a phlegmatic character could circumnavigate the globe and return with nothing more to report than “how good it is to be home.” (Unfortunately phlegmaticism is just as contagious as enthusiasm.)

It matters not whether a broadcaster is reading a commercial, interviewing an author, covering a sports event, or introducing the mayor on the air, enthusiasm is essential. If the announcer sounds bored with the product he is advertising in the commercial, his listeners are not likely to grab their hats and rush out to buy. If the interviewer sounds disinterested in the author being interviewed, listeners are likely not only to ignore the author’s book but also to switch to another station for more interesting fare. If the sportscaster makes all his football games and boxing matches sound dull, he can hardly expect to retain his following.

Some people can put enthusiasm into facial expressions and gestures, which is helpful for those who work on camera. But nothing picks up enthusiasm — or its absence — like a microphone. Be warned!

Enthusiasm can be manufactured — turned on and off at will — but it is most contagious if it is genuine; that is, if the man behind the microphone really feels as vitally interested as he *seems* to feel.

Ability to Get Along with People

A person who likes people is generally well liked himself. It bounces. Dale Carnegie made a fortune before his death telling the American public *How to Win Friends and Influence People*. His book, although packed with clichés and sprinkled with truisms, is well worth reading for tips on how to get along

with people.

The first rule to remember is that everyone worships at the shrine of the perpendicular pronoun, which is another way of saying that the most important, most fascinating person in the world to anyone is himself. Listen to two women talking by telephone, or two men in a cocktail lounge, or two students crossing a college campus. The words they all use the most are *I*, *me* and *mine*, with *we*, *us* and *ours* running a poor second.

Show someone a group picture and the first face he looks for is his own. If you mispronounce all the other words in a sentence it will not cause nearly as much offense as if you were to mispronounce the name of the listener. The next worse would be, in this order, to mispronounce the name of his wife, his home town, the street on which he lives, the company for which he works, or his mother-in-law.

These examples should give the person who wants to get along with people a clue as to what conversational subject will interest most people the most.

James A. Farley, who has been given more credit than anyone else for bringing about the nomination and first election of Franklin D. Roosevelt as President of the United States, owed much of his own success with people to his amazing memory — especially for proper names. Years ago at a political gathering in Concord, New Hampshire, I heard Mr. Farley, then Postmaster-General, greet by name every third or fourth person who passed through the receiving line, even though he had not seen them in years.

Nothing flatters a male, or even a female so much, as to be addressed by name, especially if it is unexpected. The late manager of the Muehlebach Hotel in Kansas City insisted that his entire staff take courses in remembering, so that they would be able to say, "Good morning, Mr. Cruckshank!" to a guest who perhaps last spent a night at the Muehlebach five years ago. (By the time the average Mr. Cruckshank got to his room, after being greeted in that familiar manner by a doorman, a desk clerk, a porter and an elevator operator, his ego was so inflated that even if the bed were hard, the room service terrible and the hot water only lukewarm, he would still feel kindly toward the dear old Muehlebach.)

Personality

Are people born with personalities? Most mothers contend that *their* babies are "different," almost from birth. But after they start going through the education "factories" it is not long before they take on some of the assembly line qualities of a mass-produced automobile. In a society that tends to worship conformity, it is dangerous to be too distinctive, too individualistic, or to have too much personality. A novel, *The Man in the Gray Flannel Suit*, about a typical New York suburbanite, became so popular that it gave the American language an expression for a certain conforming type: the man

in the gray flannel suit. Such conformity is almost a prerequisite to financial success in certain walks of life. But it does not apply in the entertainment field. It is not true on Broadway, in Hollywood, or in the world of broadcasting. Conformist America wishes its matinee idols, actresses on the movie screen, the television comedian, the radio news man, even the war correspondent to be unique, different, distinguished.

Personality, like fingerprints, may be something every baby acquires in the mother's womb — from parental genes. If a person feels the need for obscuring the personality he has, it can be done, just as a criminal can wear gloves to avoid leaving fingerprints. Or personality can be developed. Before the reader reaches the final pages of this volume, many ways of developing personality will have been suggested.

Powers of Observation

Years ago a professor of psychology at Columbia University devised a way of testing the power of observation of his freshmen students. One day early in the semester, the classroom door would burst open, half way through a lecture, and a man dressed in a black double-breasted suit, with a gray cap pulled down over one eye, would run to the front of the room, pull a small automatic revolver from his pocket, fire three shots at the professor, turn to the students and warn them in two short sentences what he would do to them if any of them moved a muscle, and then, putting the gun into his inside coat pocket, would rush from the room. The "wounded" professor would ask someone to lock the classroom door and then would instruct his students that while awaiting an ambulance and the police they should each write a complete account of what had happened, describing the gunman and telling exactly what he had done.

Each year the results were almost unbelievable. Never did any two students agree as to what they had seen and heard. The gunman's age would be given as anywhere from 20 to 60. His headgear was variously described as a cap, a felt hat or a beret, some students even insisting that he was bareheaded. Few described the weapon accurately. Each would have a different version of the actual shooting, what the man had said in addressing those in the room, and what he had done with the gun as he fled.

The observation powers of college students were thus shown to be so bad that before long professors around the country were using similar stunts to emphasize the point. (On one campus a professor used the device so often that when a real gunman staged a real holdup, the blasé students, certain that it was just another stunt, let him escape without even notifying the police.)

Keen powers of observation often seem to be inbred, or inherited, but they can also be developed, if one cares enough, but it takes mental alertness and a healthy curiosity.

On some matters women are inclined to be much more observant than men. Clothes, for example. Most women, after what seems to have been a mere glance at another member of their own sex, can describe everything she had on and even tell, within a few dollars, the price she probably paid for each garment. Women are not quite so perspicacious about a man's appearance, and yet, in one glance, many women can take in shoe style, color of socks, whether the trousers were creased, the buttons on the suit coat, whether the points of the shirt collar were short or long, the pattern of the tie, how long ago it was that he last shaved, and whether his hair had been recently combed.

By contrast some men are so unobservant that they can spend a whole evening in the living room of a new friend and go home without the slightest idea what was in the room — whether there were any pictures on the walls, whether there were few or many books, magazines, floor lamps or rugs. An observant person would have known not only whether there were any pictures on the walls, but something about the artistic taste of the host and what his literary values were, from the titles of his books and magazines.

Few qualities are as valuable for a reporter as the power to see much in a few glances, no matter whether he is a war correspondent for a network or the employee of a small radio station who only now and then leaves the studio to cover a local happening of some sort.

The Human Touch

One of the greatest comedians the English-speaking world has ever produced was Charlie Chaplin, who owed most of his success to his down-to-earth qualities — his ability to identify with his audience, which in turn enabled his audience to identify with him. His old films were (and still are) popular the world over. Even after talking pictures replaced the old silent films, audiences still laughed over Chaplin's antics, which he played to nothing more than occasional background music.

By contrast, Herbert Hoover, as able a man as he was in some respects, caused public relations men more headaches than anyone else who had ever occupied the White House. While his aides were trying to think up some stunt to endear him emotionally to the people, a small boy in the West became a headline figure over night, after the school bus in which he had been riding was stranded in a blizzard for days and he, alone, was credited with saving the lives of the entire busload by his cool-headedness, intelligence and ability to keep up the spirits of the other children.

One of the White House press officers decided that this was a great opportunity, so the boy was invited to be President Hoover's personal guest at the White House for several days. Of course the boy accepted. But the stunt boomeranged.

President Hoover, an engineer by profession, lacked warmth of character

and the human touch. He tried to be polite and friendly to the boy, but it never came through. The visit was climaxed by the President taking the boy to a baseball game. The papers next day all carried photographs of the excited youngster holding Mr. Hoover's hand and looking up eagerly into the face of the President for some reflection of his own happiness. But the President's jaw was set firm and he was looking straight ahead, scowling slightly, his mind probably a thousand miles away, concerned with some weighty problem of state.

To have the human touch one must instinctively like people. No press agent was able to change Mr. Hoover. No one can transform a mature engineer into a young clown, or an atomic scientist into a pop music orchestra leader. Yet a human touch *can* be developed, if a start is made early enough.

An Understanding of Life

Only with maturity comes understanding of any sort. Therefore, maturity is a quality every broadcaster should attempt to acquire, for his ultimate success depends upon his ability to reach, by microphone and television camera, the human beings in his audience — their hearts as well as their minds — their sympathy as well as their understanding. The prerequisite to reaching people is understanding them.

Some wise literary figure once said that no writer should attempt to do a book about a person or a group of people unless he knows his subjects so thoroughly and so intimately — their motivations and their way of thinking — that he can imagine himself thinking exactly as they thought, acting exactly as they did, if he had had their background and had been in their situation. (Of course there would not have been so many books written about the Nazis or the Kennedy assassin if all writers had followed that rule.)

A corollary to that author's advice is the statement that no broadcaster should attempt to communicate by radio or television with any audience — with any group of people — without knowing a great deal about them. A man who had never been out of the State of Maine would have great difficulty figuring out how to write a radio commercial that would appeal to the people in a rural area of Mississippi.

But an understanding of life means much more than that. It means not only understanding the hopes, fears, dreams and aspirations of a particular group in a particular place, but comprehending some of the universal qualities of human beings — qualities which, despite differences of climate, geography, skin coloration, religion and cultural background, do not vary from country to country, continent to continent, nearly as much as nationalists and hate-mongers would have us believe. Such an understanding cannot be acquired *only* by going to college. No university course can be expected to provide the wisdom that comes from experience. The quest for understanding can and should never

cease. It must be continuous and continual. The reward comes not in getting high marks on a test, or in acquiring degrees, but in the total enrichment of life. For the broadcaster the reward comes in an ever-increasing ability to reach deeper and deeper into the hearts and minds of the people with whom he is trying to communicate.

Sense of Perspective

If I were an actress about to play an important role in a television drama, I would whisper to myself, just before air-time:

“Remember, during the next half hour you are going to entertain more people than saw the great Sarah Bernhardt during her entire long career on the stage!”

If I were a news commentator in Washington, D.C., I would remind myself before each broadcast:

“Don’t forget that there are more people waiting to listen to you than George Washington addressed in all the years he was in the Presidency.”

Even the young man who reads the 5 p.m. news each day over a small station in Twenty-Mile-Stream, Texas, population 3,500, is reaching more people with his voice (counting in the outlying ranches) than Abraham Lincoln did when he delivered his immortal Gettysburg Address.

Of course there are two dangers.

The young man in Twenty-Mile-Stream, Texas, may talk like that to himself so often that he becomes an egomaniac and finally gets run out of town because no one can put up any longer with his conceit.

Or, the awareness that there are so many millions of people waiting to listen to him may give the commentator in Washington such a case of stage fright that he either is unable to go on at all, or stumbles through his script so badly that the network feels compelled to find a permanent replacement for him.

Yet it is well and good for broadcasters to realize the power of their medium. Newton Baker, who was Woodrow Wilson’s Secretary of State during World War I, lived thirteen years longer than his chief — long enough to witness the astonishing growth of radio in the post-war years. This led him to say that if Wilson had had access to the ears of America by radio, as several Presidents did before Baker died, he could have sat at a desk in the White House and made his plea for joining the League of Nations into a microphone, instead of having to barnstorm across the country by train. The result, said Baker, would undoubtedly have been that Wilson would not have contracted the illness that caused his death and (even more important for the future of the world) he would have succeeded in selling the League idea to the American public, with the possibility that thus World War II would have been avoided, millions of lives saved, and the whole story of mankind changed — for the better.

Integrity

Because radio and television do form so powerful a mass medium, there are daily temptations — even in small towns — to use the microphone for illegal, illegitimate, or just slightly shady purposes. A music publisher wants his song plugged and is willing to pay a little under the table to the man who will favor it on his record show. A politician wants his side of a story played up; his rival's viewpoint ignored. Someone involved in a local crime wants the report killed. Or it may be as minor a matter as a wife who wants her husband to give more publicity on the air to the activities of *her* club, and less to "that stupid club Mrs. So-and-so belongs to that's always getting so much more space in the paper than it deserves."

Integrity may involve refusing to slant news to please those in authority when their economic and political interests are involved. It may even mean resigning rather than submitting.

Each broadcaster must early in his career establish his own personal code of ethics, setting down as a guide for his own behavior what he will and will not do to hold his job. From then on, his own rule of conduct should be, in the memorable words of Polonius to his son (Hamlet, Scene 3, Act 1):

{ This above all: to thine own self be true,
 { And it must follow, as the night the day,
 { Thou canst not then be false to any man. }

Courage

Early one morning in July, 1930, Jerry Buckley, an announcer on WMBC, a 100-watt station in Detroit, with studios in a small hotel on the edge of the city's night life district, finished announcing election returns and went down to the hotel lobby. Tired from his long night's work, he slumped into a chair. As he sat there three men entered the lobby, fired fifteen bullets into the announcer's body, and fled.

There were many theories about the murder. Some said the announcer had had underworld connections. There was even a story that he had communicated information to rum runners by what tunes he played on his record show. Others said he had been slain because he was about to expose a gang of racketeers.

The day Jerry Buckley was buried it rained in Detroit. Nevertheless, 50,000 of his listeners attended the funeral services.

In World War II the only war correspondents covering the invasion of Yugoslavia by the Nazis and the fall of that vital Balkan country, who escaped without falling into the hands of the enemy, were five men who chose to trade

their automobile for a 20-foot sardine boat and push off onto the Adriatic. Of the five, two were killed, one was almost fatally wounded, and another collected a leg full of machinegun bullets as a souvenir of the campaign.

The first American war correspondent to make a big name for himself in the Pacific was Cecil Brown of CBS, who was blown off the British Aircraft Carrier *Repulse* during the battle for Singapore.

Before the last world war was over, many frontline reporters for radio had been killed and scores wounded. The death toll was even higher in Korea and Vietnam, with photographers and reporters for both radio and television shot up by the dozens, many fatally.

Whenever war correspondents go into action with their typewriters, microphones and cameras, their rate of casualties is often higher than that of combat troops. And they seldom get either a good military funeral or medals. Naturally, conflicts with the underworld and the hazards of war reporting are not everyday tests of courage faced by broadcasters.

But there are other sorts of courage that a good broadcaster needs to have — less dramatic, less heroic.

It may be only the courage of trying to explain to a non-understanding wife that as glamorous as she thought it would be, being married to a broadcaster also involves not complaining when the husband gets switched to the dog watch and can't leave the studio until 2 a.m. Or the courage it takes to keep talking into the microphone for hours on end when a throat infection makes the voice box feel as if it were being massaged with coarse sandpaper. Or the courage it takes to say "No!" to the mother who thinks her small daughter can sing better than "any of those flops you have on your record show every morning, and why don't you just give my little Elsie a chance?"

Given all those qualities in abundance, any man or woman who also has a good voice and plenty of ambition ought to be able — after some months of training by experts — to earn anything from a living wage to \$250,000 a year in broadcasting, the difference being how good his training was and how much he really wants to succeed. Also, whether he gets a certain minimum number of "the breaks".

Ask Lowell Thomas!

But there are other rewards for those who go into broadcasting. Ask Lowell Thomas or the man who reads the news on any thousand-watt station. Ask Howard Miller or a disk jockey who spins records in a small town in Maine or Mississippi. Ask a hundred people in radio or television and at least 99

of them will give virtually the same answer. They will agree that above and beyond what is in the pay envelope at the end of the week, broadcasting has rewards to be found in no other field.

What other communicator has the broadcaster's opportunity of reaching people? The preacher, the political orator, the Rotary speaker, the man on the lecture circuit — such public speakers may have an audience of some size here and there, now and then, once a week or once a month. But the broadcaster has the ears of the public for hours and hours every day of the week.

Who else in the community has the power of the broadcaster? Love of power can be and is a dangerous disease when it consumes such a man as Adolf Hitler or Genghis Khan. But if power is used as the broadcaster uses it — to enlighten, inform and entertain — then it is power-for-the-good, and the acquisition of such power by good men is to be encouraged.

Creativity Unlimited

There is reward for the broadcaster in the opportunity to be creative, for every time he puts a program together, every time he voices a news broadcast, every time he selects what music to play on a record show, he is making creative decisions.

There is reward in the chance that broadcasting gives for individualism. It is true that even the man in a prime spot on a network must operate within certain restrictive limits and will have both sponsors and network officials taking an intense interest in what he says and does, but what other business or profession offers a man or woman such a chance to express personality and to capitalize on his individualism?

The broadcaster is a respected member of the community. In England, where newspaper reporters are often treated with a certain degree of contempt and figuratively if not literally are sent around to the servants' entrance, the front door is open to the broadcaster. At a White House news conference, the gentlemen of the press may be annoyed by the engineers who string wires, set up lights and install microphones, but the President, no matter who he may be, is aware that when he is talking into those microphones and looking into the cameras, he is face to face, mouth to ear, with America, and so no President has ever treated broadcasters with anything but respect.

Is there anything else quite as rewarding as broadcasting?

Ask the veteran sportscaster Merle Harmon if he is sorry he went into it. Ask Herb Morrison, the broadcaster who did the celebrated radio report about the Lakehurst (N.J.) dirigible tragedy, why, 30 years later, he was still in broadcasting. Ask the d.j. on any small station what he would rather be.

Broadcasting has great tangible, as well as intangible rewards, for those who can make it.

***How Many Words
Are Worth 10,000 Photos?***

An anonymous Chinese philosopher is credited with being the first one to say:

“One picture is worth ten thousand words.”

What picture? What words?

Lincoln’s Gettysburg Address contained 268 words. Not worth a single picture? No picture has ever had such a life as those 268 words.

The Preamble to the United States Constitution is just 52 words long, yet those 52 words explained, as ten thousand pictures could not have done, the reasons for forming this “more perfect Union.”

The entire Constitution contains less than ten thousand words. What single picture is worth so much?

In the Lord’s Prayer there are fewer than a hundred words. Try saying what that prayer says with pictures!

How many words is a picture worth?

How many pictures are ten thousand words worth?

It depends on the words, and also on the pictures.

Words do have, still, the power to change the course of human events.

3.

*This Is How
It All Began*

One of the earliest forms of wireless communication was invented by natives in Africa when they began using drums to talk to each other across great distances. They had nothing resembling a Morse Code. They did not, as some people now imagine, spell out words on their drums. Instead, certain tonerhythms were used to convey specific messages.

Before drums there was fire. From Dan to Beersheba the ancient Israelites communicated with each other by a system of signal fires, which they built on hilltops. (It was the prophet Jeremiah who warned his people that "evil appeareth out of the north and great destruction" and instructed them to flee from Jerusalem "and set up a sign of fire in Bethhaccerem.")

When Troy fell, the ancient Greeks signaled the news home to Athens over the most efficient wireless network that had ever been established — a series of beacon fires on mainland mountain tops and on islands stretching all the way across the Aegean.

The great importance of Galileo's invention of the telescope (from the Greek words *tele*, far off, and *skopos*, watcher) in the Seventeenth Century was that now signal fires could be built much farther apart and still be seen.

It was the aboriginal Picts of Britain who devised the system of blanketing a fire and permitting the smoke to escape in short or long puffs, thus making it possible to send all manner of coded messages.

When white men landed on the shores of America, their arrival was flashed by the Indians' smoke signals across the continent.

A lantern, rather than smoke or fire, was used in the tower of the Old North Church in Boston to warn that the British troops were coming.

The word *telegraph* originally meant an apparatus of any sort for communi-

cating at a distance by signals. In the early days a *telegraph station* consisted of an observer with a telescope, who picked up signals from the nearest semaphore relay station in one direction and passed them on, by his semaphore, to the nearest relay station in the opposite direction. A network of semaphore relay stations was built from Cape Cod to Boston and from Coney Island in to New York City. Telegraph Hill in San Francisco was thus named because an observation tower and a semaphore station were built there, the better to report the arrival of clipper ships.

A Prediction That Came True

It was much earlier than all this — in 1661 — that a British writer, Joseph Glanvill, had the prescience to write in his book, *The Unity of Dogmatism*:

“The time will come, and that presently, when, by making use of the magnetic waves that permeate the ether which surrounds the world, we shall communicate with the Antipodes (a group of rocky islands in the South Pacific exactly halfway around the globe from London).”

What basis he had for such a prediction no one has ever discovered. Of course, even in 1661 a great deal was already known about magnetism and something about magnetic waves.

And that takes us back to the real start of the story of electronic communication.

In ancient Greece, in the days that Homer the Poet wrote about, one member of a learned group known as the *Seven Wise Men* was Thales, a philosopher who spent his life trying to discover the substance from which everything in nature is made. One day, walking by the sea, he noticed a brownish-yellow object being tossed about by waves. When he retrieved it and rubbed it on his woolen robe in order to dry it, he observed that this caused bits of thread, fluff and straw to leap up from his robe and cling to the piece of rock. Thus, accidentally, he discovered the magic quality of the substance we call amber but which the Greeks called *elektron*.

Elektron, or amber, was soon looked upon as a miraculous thing. So, also, was a heavy black rock — a type of iron ore — that was found in an ancient country of Asia Minor called Magnesia. (The words *magnet*, *magnetism* and *magnetite* all come from Magnesia.) Men were awed by the way the stone attracted metal and so they came to regard it with the same reverence that the Greeks had for elektron.

The discovery of these two minerals, amber and magnetite, constituted the first important step in the development of radio, for it led, eventually, to the science of electromagnetism. But before this knowledge could be put to any practical use, man had to learn a great deal more about the world in which he lived.

Elektron — Electrica — Electricity

More than two thousand years after the days of Thales the Philosopher a British physician, William Gilbert, made an important discovery about static electricity — that other substances such as glass, sulfur and resin, when rubbed with a cloth behaved in the same manner as amber. He called these substances *electrica*. His discovery was the second important step in the development of electricity. Not many years later another English physician used the word *electricity* for the first time.

Skip a hundred years and we come to Benjamin Franklin, who not only performed his celebrated experiment with a kite in a storm to prove that lightning is electricity, but was the first one to use the terms *positive* and *negative* about electrical charges.

The fascinating story of how it all began is now sprinkled with the names of Italians, Danes, Frenchmen, Englishmen and Americans who made large or small contributions to the development of communication devices and systems.

Frogs Manufacture Electricity?

There was an Italian professor of anatomy who, during his experiments with current electricity, fastened the legs of a freshly killed frog to a copper hook, which he hung over an iron railing and when the legs twitched violently concluded, (wrongly, of course) that it was because the legs contained electricity, which was released when they touched metal. It was another Italian, this time a physics professor, Alessandro Volta, who found a better explanation: the chemical action of moisture on two pieces of different metals, copper and iron, had produced the electricity. With this established, he built the world's first battery and eventually his family name was added to the lexicon of electricity.

Then there was Samuel F. B. Morse, a successful (for a time) portrait painter, of all things, who got the idea for the electric telegraph while returning from Europe on a ship, the *Scully*. After overhearing a dining room conversation about how some men somewhere had found a way of sending electricity instantly over a wire of almost any length, he spent the rest of the voyage making notes. When he left the ship he addressed the captain in these words:

“Well, Captain, should you hear of the telegraph one of these days, as the wonder of the world, remember that the discovery was made on the good ship *Scully*.”

Because Morse lost a commission to do a painting for the Capitol in Washington, he was soon penniless, but he spent five years giving art lessons, using all the fees he collected to buy wire for his telegraphic experiments. Unable, because of his impecunious condition, to purchase any considerable quantity of wire at one time, he bought short lengths and soldered them together. Unable to afford insulated wire, he wrapped the considerably less expensive bare wire — inch by inch, foot by foot, mile by mile — with cotton thread.

After years of experimentation he was finally ready for a dramatic exhibition. He had two miles of wire that he had not only insulated with thread but waterproofed by covering it with pitch, tar and rubber. This wire was stretched under the water from the Battery at the foot of Manhattan Island, New York, to Governor's Island in the bay. Thanks to announcements in the papers that referred to his invention as "the wonder of the ages" a crowd gathered on the appointed day, but a ship's anchor became entangled in the wire, so the sailors on board cut it. The demonstration was over before it started. The crowd left grumbling over being victims of a hoax.

Telegraphy's First Words

The next year a friend succeeded in pushing through Congress a bill appropriating \$30,000 to test the idea of a telegraph. Morse strung his line from the Supreme Court room in the Capitol to Baltimore, Maryland, and on May 24, 1844, tapped out in a code of dots and dashes, which he himself had devised, the first words ever to go any considerable distance — words that would become part of communications history:

"What hath God wrought."

Before long fame and fortune were both his. And America had the telegraph. Another step had been taken on the road to today's miracles of electronic communication.

Then there was Bell. Alexander Graham Bell. Seven years after the end of the Civil War he opened a school for the deaf in Boston, because he was so keenly interested in his father's invention of Visible Speech, a code of symbols to guide the deaf in learning to speak.

It was that same year, 1872, that a Boston newspaper carried this article:

A man about 46 years of age, giving his name as Joshua Coppersmith, has been arrested in New York for attempting to extort funds from ignorant and superstitious people by exhibiting a device which, he says, will convey the human voice any distance over metallic wires so that it will be heard by the listener at the other end. He calls the instrument a "telephone", which is obviously intended to imitate the word "Telegraph" and win the confidence of those who knew of the success of the latter instrument without understanding the principles upon which it is based.

Well-informed people know that it is impossible to transmit the human voice over wires as may be done with dots and dashes and signals of the Morse Code, and that, were it possible to do so, the thing would be of no practical value.

The authorities who apprehended this criminal are to be congratulated and it is hoped that his punishment will be prompt and fitting, and that it may serve as an example to other conscienceless schemers who seek to enrich themselves at the expense of their fellow creatures.

History does not record exactly who this man Coppersmith was or what ultimately happened to him, but those who arrested him in New York in 1872 and the journalist who wrote the article for the Boston newspaper must have been chagrined four years later when the former teacher of the deaf, Alexander

Bell, obtained his first patent on the telephone. He had been experimenting for years in two garret rooms in a Boston boarding house for which he paid \$1 a week rent. He shared these quarters with a friend, Thomas A. Watson. They used one room for sleeping, cooking and eating, the other as a laboratory and workshop.

Three days after the patent had been granted — a patent based on diagrams and specifications Bell had worked out on paper — Watson was in the bedroom with their crudely-made telephone receiver to his ear and Bell was in the laboratory working on the reeds that were such an important part of their transmitter. Suddenly Watson heard through the receiver, distinctly, unmistakably, seven words — words that before long would have as permanent a place in history as those of Morse:

“Mr. Watson, come here. I want you.”

Watson dropped the earphone and ran into the next room. Bell had accidentally spilled a jar of battery acid over his clothing. But this was minor. What was important was that his vision had suddenly become a reality. Watson had heard his words over the wire and had come. The human voice *could* be transmitted electrically!

America's Greatest Wonder

Later that year Bell exhibited his telephone at the Philadelphia Centennial Exposition. It attracted little attention until one of the judges, Dom Pedro, Emperor of Brazil, exclaimed over it. Then Lord Kelvin, who a few years before had been the engineer in charge of laying the first transatlantic cable, declared:

“This invention is the most wonderful thing in America!”

So the telephone became the sensation of the exposition and one more great stride had been taken in the march of communications toward its ultimate goals.

Sparks Become Acrobats

More and more names now come into the story. Some have places in history books and encyclopedias; others are already almost forgotten.

An Englishman, James Clark Maxwell, was the one who discovered that the speed of light is 186,000 miles per second and that light is a form of electromagnetic radiation.

Then Heinrich Hertz, a German scientist, put Maxwell's theories to work and made sparks jump through space, using two large metal balls and a loop of wire, with a gap in the center.

Mary Had a Little Lamb

In 1877, while engaged in telegraphic experimentation, a 30-year-old American inventor, Thomas A. Edison, learned how to make a diaphragm or disk that would respond to the vibrations of sound. That led to his invention of the phonograph. After the first model was built, he tested it by reciting into the

mouthpiece, "Mary had a little lamb, its fleece was white as snow." After one false start, the machine repeated his words back to him so distinctly that Edison himself was surprised, while his laboratory assistant nearly fainted.

Two years later Edison gave the world the electric light bulb, but only after a long search for a satisfactory filament material. He sent agents into the forests of Japan and the jungles of the Amazon. He even tried using strands of hair from the red beard of a railroad station agent who had taught him, when he was a boy, to tap out messages on a telegraph key. The filament of the first incandescent light was finally made with a piece of ordinary cotton sewing thread burned to an ash.

The Limit of Human Felicity

In 1888 a New England newspaperman, Edward Bellamy, wrote a book he called *Looking Backward*. In it he tried to imagine the world as it might be in the year 2000. In one chapter a hostess asked one of her guests — the principal character in the book — if he would like to hear some music and when he said "yes", handed him a card listing a great variety of musical programs. After he had studied the musical menu and made his choice, "she crossed the room and as far as I could see merely touched one or two screws and at once the room was filled with the music of a great organ anthem."

And Then Marconi

In the over-simplification of history, credit nearly always goes to the few. Dozens of scientists work years — maybe a whole lifetime — on an idea and then suddenly one man takes all they have done, adds perhaps only a very little bit more, and gets all the credit, while they, who made it possible, remain in the shadows of history, nameless, forgotten.

This volume is no place in which to try to redress the wrongs that have been committed by the historians of communications. There is space to list only the few who are generally recognized as the principals in the drama.

Guglielmo Marconi was one such. He had an Irish mother and an Italian father who, fortunately, was wealthy, so the boy had plenty of tutors and never had to worry about where to get money to buy wire or any other experimental material he needed. Some encyclopedias list him just as an inventor, but he was a *developer* as well. He took basic discoveries that had already been made by others and perfected them, ultimately producing a practical wireless telegraphic or radio system and thereby securing for himself a prominent place in communications history.

The Firsts of Wireless

Marconi was only eight years old when an American inventor, Professor Amos E. Dolbear, was awarded a U.S. patent for a wireless apparatus and issued a statement declaring that by the use of his invention "electrical communica-

tion might be established between points certainly more than half a mile apart, but how much farther I cannot say."

When Marconi was just 20 he set up an apparatus of his own on his father's estate near Bologna, Italy, and sent messages a greater distance than anyone ever had until then — two miles — using the earth as one terminal and a great length of wire reaching up into the sky as the other. Then and there the radio antenna was born.

That same year a British scientist, Sir William Peerce, addressing the Royal Society of Arts, declared:

"If any of the planets be populated with beings like ourselves, having the gift of language and the knowledge to adopt the great forces of nature to their wants, then they could oscillate immense stores of electric energy to and fro, in telegraphic order, and it would be possible for us to communicate by telephone with the people of Mars."

News by Wireless

No man in the history of communications has so many firsts to his credit as Marconi. One was being the first to establish telegraphic communication with a ship *in motion*. His claim caused a slight international incident. He had performed his feat with the assistance of the Italian Navy. The British Navy countered with a claim that two years earlier British ships had communicated with each other by wireless. Marconi investigated and brought to light that none of the British ships had been *in motion*, so his first still stood.

There was no connection between this incident and Marconi's decision to move his base of operations to England, where he thought there would be more opportunities.

In 1898, another first was chalked up when the *Daily Express* of Dublin chartered a steamer to follow the yachts in an annual regatta and from a 75-foot antenna on board sent the first running news report ever transmitted through the air. Later that year wireless was again used to cover the International Yacht Races, held in American waters.

Marconi was only 22 years old when he applied in England for a patent based on his theory that the distance sound can be communicated will be increased if the height of the antenna is increased — a theory that seems obvious even to a schoolboy today, but a revolutionary idea then. He was still a very young man when the patent — No. 7777 — was granted. For the next seventeen years No. 7777 remained the most basic radio patent in the world.

Years earlier a Royal Commission had been appointed to investigate the practicability of electrical communication between shore and lighthouses, as well as light ships. Now Marconi helped install wireless sets in lighthouses up and down the British coast.

Then, in 1899, he sent the first wireless message across the English Channel. The distance: 85 miles.

Transatlantic Wireless

Two years later the young Italian inventor decided to try to send telegraphic signals across the Atlantic. After supervising the construction of a sending station at Poldhu, on the coast of Cornwall, England, consisting of a cable stretched between two immense wooden masts, he sailed across the Atlantic himself.

On Wednesday, December 11, 1901, at St. John's, Newfoundland, at an appointed time (noon) Marconi sent up a kite, trailing wires, over which he hoped to hear his colleague in far off Cornwall. They had agreed in advance that the sound to be sent would be the letter *S* — three dots — which would sound something like: *dididit . . . dididit . . . dididit . . .* Marconi felt that this would be the easiest possible signal to receive.

Marconi had had luck the first day, for his kite blew away. But the next day, Thursday, December 12, shortly after noon, he picked up, at first very faintly, the sound he had been straining his ears to hear: *dididit . . . dididit . . . dididit . . . S . . . S . . . S*. This was an important first. For the first time in history a wireless signal had spanned the thousands of miles separating the Old World from the New .

As sensational as the story was, nothing appeared in American newspapers the next morning. Or the next evening. Or the following day. Marconi had been so afraid of a failure that he had intentionally neglected to notify the press. But four days later he wrote his own account for a Canadian paper:

On arriving in Newfoundland and installing my station on Signal Hill, at the entrance to St. John's, I sent up kites every day this week with the vertical aerial wire appended by which our signals are received. I had previously cabled to my station at Cornwall to begin sending the prearranged signal. On Wednesday my kite blew away, and nothing resulted. Thursday, however, I had better luck. My arrangement was for Cornwall to send at specific intervals between 3 and 6 o'clock p.m. the Morse letter "S", which consists of three dots, thus (. . .). The hours were equivalent to from noon to 3 p.m. at St. John's, and Thursday during these hours myself and my assistant, Mr. Kemp, received these signals under such conditions as assured us they were genuine. We received them through a specially sensitive telephone attached to our instrument, which enables us to detect signals which the instrument would not record.

The revolution in communications was now really underway. Before long the United States Navy discontinued the use of homing pigeons and began equipping its ships with wireless. Radio operators, who later would all be nicknamed "Sparks", in those days were called *Marconimen*. The messages they sent by wireless were not cables or telegrams but *Marconigrams*. The first regular transatlantic wireless service was opened by the Marconi Company in October, 1907.

Patent No. 887,357

Just after Marconi's dots spanned the Atlantic, a man whose name has been almost lost to history — Nathan B. Stubblefield — on a crisp New Year's Day

CORRIED AND BOYD AT ODDS IN STOCKS

Opera Director's Brother Handled the Dealings of the Opera House Superintendent.

PROFIT FIGURES WIDE APART

\$1,000, Says Boyd, Perhaps \$300, Says Corried, and He'll Pay in Due Time.

...ing that he was not getting rich from his salary as Superintendent of the Metropolitan Opera House and the board of the many opportunities obtaining money following the action the bulls and bears in Wall Street, drew Boyd who, besides having been superintendent of the Opera House for 27 years in a close personal friend of Corried, decided last January that he would take a little flyer in stocks in his leisure. To-day he is an exceedingly rich man. He met the same fate as any other lambs, though, he says, in a very few days from many of them he has cleared in the theatrical business.

Boyd has always made it a practice to buy a little for a rainy day, and he has put in the bank from time to time until it grew to \$1,000. Then he bought a bond. This nucleus made him the more anxious to save, and another day or two there was added to the pile until the amount had reached at \$10,000, all in interest-bearing bonds.

Then, last January, when the stock market was active, Mr. Boyd grew interested in it through Alexander Corried, a clerk brother of Henrietta Corried, Director of the Metropolitan Opera House.

Alexander Corried has no office, and, far as known, he has no direct connection with any brokerage firm in the city. He is what is known as an "undering broker," taking business from whom he can get it and putting it where he thinks it will be to his best advantage. Boyd says he gave Mr. Corried \$4,000 to be used as margin in stock speculation.

It was Corried who suggested that he should buy some of the stocks that Corried bought for him, and to drop rapidly. The \$6,000 in rights soon became \$7,000, then \$8,000, and \$10,000, and when the \$10,000 mark had been reached, according to Mr. Corried told him he would have advanced more money if he would have the \$10,000 he had already put up. He told him he gave Corried \$4,000 to be used as additional margin. This money, Mr. Boyd thought had saved the day for him. He watched the quotations in the papers, and each day he noticed, to his regret and better. Finally he figured out for himself that he was losing money, and he told Mr. Corried of it. His reply was "get it," and on this point Mr. Corried agrees with him. He said he would do as each profit as Mr. Boyd had used out.

Mr. Boyd took a side of the case to his brother, who said that Corried had done it this he consented to give his opinion of the affair, and it is a very disagreeable version, to a Times reporter.

His advice for Mr. Boyd was just the same as that for all other clients, "be out."

J. VYPOD DAVIES HURT.

Resulting Engineer Stops Runaway of Bay's Children—His Hip Broken.

J. Vypod Davies, chief consulting engineer of the Hudson Tunnel Company, lives in 71 Duane Avenue, Flushing, New York, had on his hip broken and injured in the injury yesterday morning, while preventing a train of runaway cars from running down a group of children.

FIRST WIRELESS PRESS MESSAGE ACROSS THE ATLANTIC

Signaling the Opening of the Marconi Service to the Public, and Conveying a Message of Congratulation from Privy Councillor Baron Avebury, Formerly Sir John Lubbock.

THE WESTERN UNION TELEGRAPH COMPANY.

24,000 OFFICES IN AMERICA. CABLE SERVICE TO ALL THE WORLD. THE COMPANY TRANSMITS AND DELIVERS AMERICAN COPY ON CONDITIONS THAT THE LIABILITY, WHICH HAS BEEN ASSUMED BY THE COMPANY OF THE FOLLOWING MESSAGE: ...

RECEIVED at 119 8th Ave. Corner 46th St. TELEPHONE: 2007 BRANT.

18 Lr St Dh & 53 Colliot D, P R, Lond lines, London Via Marconi Wireless Glace Bay N S Oct 17th; Times, New York.

This message marks opening transatlantic wireless harded Marconi company for transmission Ireland Breton limited 80 words only send one many messages received times signalise event quote trust introduction wireless more closely unite people states Great Britain we sees form one Nation though under two Governments and whose interests are really identical.

ALWAYS OPER. MONEY TRANSFERRED BY TELEGRAPH. CABLE OFFICE.

The above message was immediately followed by others which appear in another column of The Times this morning.

MARCONI CONGRATULATES THE NEW YORK TIMES

GLACE BAY, NOVA SCOTIA, Oct. 17.—Mr. Marconi says: "Congratulate New York Times on having received first westward press message."

FROM THE PRIME MINISTER OF FRANCE.

WEST STRAND, London, Oct. 17, via Marconi Wireless Telegraph to Glace Bay, N. S.—The New York Times's Paris correspondent forwards to me the following message for transmission across the Atlantic by Marconi's wireless telegraph:

"Dans l'inauguration du prodigieux mode de communication mis de nouveau a leur disposition, les deux grandes republics ne peuvent que croquer une heureuse occasion de se feliciter de la formation des liens plus cordiaux pour le maintien de la paix dans le travail pour le bonheur des peuples dans la solidarite."

[Translation.]

In the inauguration of the marvelous means of communication put at their disposition from this time forward, the two great Republics could not but find it a happy occasion to congratulate themselves and to express the most cordial wishes for the maintenance of peace in the work for the happiness of the people in the joint responsibility.

MISS VANDERBILT MUST TAKE CHANCES

By No Means Certain She Will Be Admitted to Austrian Court in Vienna.

A HIGH OFFICIAL SAYS SO

Unless Emperor Dispenses with Proof of Considerable Ancestral Nobility She Will Be Shut Out.

Special Cable to THE NEW YORK TIMES. VIENNA, Oct. 17.—A Court official of high rank, of whom I inquired what would be Miss Gladys Vanderbilt's status with respect to the Court in the event of her marriage to Count Szechenyi, said: "The lady in question would be re-

H. P. WHITNEY ARRESTED?

Colorado Authorities Accuse Victims of Slaughtering Deer Wantonly.

Special to The New York Times. DENVER, Col., Oct. 17.—Two men who say they are Frank Carnegie, nephew of Andrew Carnegie, and Harry Byron Whitney of New York, came to Colorado two weeks ago to hunt deer. They first guided and started out with a pack of hounds. Reaching the game country, they began to slaughter deer promiscuously, both for the sport and for bait for traps. Deputy Warden Bush finally arrested the hunters and their guides, took them under a Justice of the Peace, and prosecuted them for wanton destruction of deer. Bush says he had an offer of \$300 to drop the case before the trial. After the trial began, he says, the Justice was called out of court by his wife, and when he returned he dismissed the case. The State Game Warden is investigating the case.

ROCKEFELLER TOO SAVING.

Supt. Jongs of Forest Mill Realigns Because Expense Area Cut.

DEUTSCHLAND STUCK CLOSE TO HER PIRB

Capt. Kaempff Gives Up Attempt to Get Liner Off After Three Hours' Work.

PASSENGERS SENT TO BED

Hundreds of Friends Exchange Greetings with Them as Seven Tugs Strive in Vain.

The Hamburg-American liner Deutschland from Hamburg for the port, stuck in the mud last night in the Hudson River, with her big fireboard actually scraping against the end of her Hudson pier. After waiting for nearly three hours in the hope that the big ship might be warped into her dock, her 600 rabble passengers and 800 extra passengers reluctantly went to bed, convinced that

WIRELESS JOI TWO WOR

Marconi Transatlantic Opened with a Disappointment The New York Times

MESSAGES FROM EMINEN

Prime Minister Clemence Duke of Argyll, Lord Av and Others Send Greeting

10,000 WORDS THE FIR

Marconi in Personal Sup at Glace Bay and C Pleased with the Res

SIR HIRAM MAXIM'S TH

His Message to Peter Cooper in New York, Who is Try Pick Up the Overseas Mean

By Marconi Transatlantic Wireless Telegraph to The New Times.

LONDON, Oct. 17.—This message marks the opening transatlantic wireless service is handed to the Marconi Company here for transmission to and thence to Cape Breton, Scotia, and New York. Limited to fifty words, it is at present only one of the messages received for transmission to The New York Times. To realize the event. This is from Privy Councillor Lord Avebury, formerly Sir John Lubbock, follows: "I trust that the introduction of the wireless will more closely unite the people of the United Kingdom, Great Britain, and seem one nation, though under two Governments, and whose interests are really identical. AVEBU-

MARCONI'S CONGRATUL

The above message, early yesterday morning, quickly followed by one from Times's correspondent at Glace Bay, as follows: "Glace Bay, N. S., Oct. 17.—Mr. Marconi says: 'I congratulate New York Times on having received first westward press message.'"

Then came in full the message filed by The Times correspondent in London, from the short dispatch above mentioned, to meet the fifty-word message imposed by the Marconi Company upon the first message sent. The full message fol-

MESSAGES FROM EMINEN By Marconi Transatlantic Wireless Telegraph to The New

in Fairmont Park, Philadelphia, sent the human voice (his own) a distance of one mile, without benefit of wires. He claimed that ten years earlier he had figured out a way of sending the voice through the air, but had waited until now for his demonstration in order to perfect his method. Had he known what to do with his invention, had he been a promoter as well as an inventor, he might have gone down in history as the father of radio, or at least as one of its co-fathers. But he demanded such an exorbitant price for his secret that no one expressed any interest. Six and a half years later he was granted Patent No. 887,357. That was the last anyone heard of Inventor Stubblefield.

World's First Radio War Correspondent

In hurrying through these pioneer days, one must not skip over the name of Lee De Forest, Iowa-born inventor, who in the course of his 89 years obtained patents on more than 300 wireless telegraphy and radio broadcasting inventions, the most important of them a vacuum tube called a *triode* or *audion*, which amplifies weak sounds and is basic to long-distance radio as well as to television. It has often been called an invention as great as that of radio itself.

After the Russo-Japanese War broke out in 1904, the London *Times* engaged De Forest as the world's first radio war correspondent. (Of course his reports were sent in dots and dashes, not by human voice.)

And then there was Reginald A. Fessenden, a University of Pittsburgh professor and former Westinghouse engineer. He is given credit by many historians for being the first to think up the idea of transmitting musical notes as well as the human voice through the air without wires. He believed it would be possible if a machine could be developed that would send out continuous waves instead of the erratic spark-arc waves Marconi used.

Voice Radio Is Finally Born

Dr. Ernst F. Alexanderson, who was connected with the General Electric plant at Schenectady, New York, invented a machine which did develop a smooth and continuous flow of high-frequency vibrations and Fessenden utilized it in 1905 to try to send music and/or voice from a 420-foot tower (actually nothing more than a tall cylinder, three feet in diameter) which he had erected at Brant Park, Massachusetts. There radio was really born.

That, briefly, is the story of how it all began. There are other important names. There were other pioneers. There were many unsung amateurs, over-modest inventors, little men in big laboratories, big men in little laboratories, and perhaps some who were intentionally or unintentionally cheated out of the credit they deserved.

From smoke signals and semaphores to stereophonic FM radio and color television took only a few generations. . . .

And man had been on this earth, before that, for all of 500,000 years.

4.

Radio:

The Young & Lusty Years

It was as cold on Christmas Eve, 1906, at sea as it was on land. The wireless operator on the *SS Kroonland*, Antwerp to New York, blew on his fingers occasionally to keep them warm as he translated the dots and dashes he was receiving into words that he typed onto a piece of paper headed:

WIRELESS NEWS BULLETINS

SS Kroonland

At Sea, December 24-25

It was a dull news night. Nothing very startling seemed to be happening anywhere in the world. The New York station reported a temperature of 8 above zero Fahrenheit. The cold wave had already claimed three lives. A New York police officer had told a Superior Court judge that there were 15,000 pickpockets operating in New York City. There had been a holdup at the Waldorf-Astoria Hotel, but the total taken was only \$10. In Chattanooga the sheriff and 26 other men were being held in a lynch case. Back in New York Colonel J. E. Pepper, "the well-known whisky distiller and Kentucky horseman," had slipped on a sidewalk and died of his injuries. In Washington the White House staff was busy returning Christmas gifts sent to President Theodore Roosevelt — even such items as "one box of Christmas tree ornaments" — on the ground that a public official should accept no gifts whatsoever. It was indeed a dull news night.

Suddenly Sparks straightened up, blinked, and put his head on one side, the better to hear what was coming through his earphones.

Incredible! Were his ears deceiving him? He kept hearing snatches of song and now orchestral music. It sounded like Handel's *Largo*. Unbelievable! He ran to the door of his cabin, flung it open, and shouted for someone, anyone, to come and listen. Now a male voice was reading a poem. Before he finished,

some of the Kroonland's officers came on the run, eager to take turns with the earphones. News of "the miracle" swept the ship. Violin music followed the poetry-reading. Guonod's *O, Holy Night*.

It went on and on, this first real radio broadcast of history. It had variety as well as uniqueness. Finally, as the program ended, a male voice asked those who might be listening to write to him, telling him where they were, whether the transmission of voices and music had been clear and distinct, and whether they would like to hear more another time. They were to address their letter to F. A. Fessenden, Brant Rock, Massachusetts, which, the announcer explained, was the point of origin of the transmission.

History Without Publicity

That broadcast by a University of Pittsburgh professor who had formerly been a Westinghouse engineer made communications history, but there were no headlines in the papers the next day. Instead, the *New York Times* devoted its lead story to an account of a race riot in Mississippi. On an inside page there was a short item under a small headline:

'PHONE FROM THE STATEROOM

A well-known Wall Street man received a shock the other day. His confidential agent was scheduled to sail at 11 a.m. for Europe from a pier in Hoboken (N.J.) to put through an important deal. Five minutes before sailing time the telephone rang in the Wall Street man's office and the financier, taking the receiver, was surprised to recognize the voice of his agent.

"Great Scott!" he gasped. "You've missed the ship!"

"No," came back the answer, calmly. "I'm talking from my stateroom."

After a short business talk, the financier rang off and spoke his thoughts aloud. "I knew you could telegraph messages from steamships without wires," he said. "But I never realized you could telephone from a vessel. (The vessel, of course, was still tied up to its dock.) I've heard that, too, now. What next?"

If reporters for the *Times* had been on their toes, they could have had a sensational headline on that day's front page, which would have answered the Wall Street financier's question:

THE WORLD'S FIRST RADIO PROGRAM AIRED; FESSENDEN'S VOICE HEARD FAR AND WIDE

This was not the first time that music or the human voice had been sent through the air without benefit of wires. Many claimed — some with justification — that they had done it before. Two years before Orestes Caldwell had sent his own voice a full city block, using a steel needle on aluminum supporting wires. Fessenden himself in 1904 at Schenectady, N.Y., had made some successful radiophone experiments. But his transmission that Christmas Eve from Brant Rock, Mass., a tiny seaside village between Plymouth Rock and Boston, was an event which communications historians have well noted, for it was the first attempt at radio programming.

Letters trickled in to Brant Rock in response to that first request by a radio

station for fan mail. The *SS Kroonland* had not been the only ship at sea to hear the broadcast. Other Sparks told by letter how they, too, had picked up the signal. On land a few wireless amateurs had also heard. (There were only 500 hams in the entire country then, all using spark sets.)

Up a Tower; At the Pole

Fassenden was encouraged. So was De Forest, who in 1909 took his broadcasting equipment and a talking machine to Paris and from the Eiffel Tower played phonograph records for those few Parisians able to pick him up.

About this same time Admiral Robert E. Peary, the Arctic explorer, used radio to send home the historic message: "Stars and stripes nailed to pole!" (albeit by dots and dashes.)

The next year De Forest took an arc transmitter backstage of the Metropolitan Opera House in New York and persuaded the great Italian tenor, Enrico Caruso, to sing an aria or two into his microphone. This "first" was picked up by at least one ship out on the Atlantic and by a wireless operator in Bridgeport, Conn. Some fifty listeners who had gathered for the event in the Park Avenue Library and at the Metropolitan Life Insurance Building also heard. The press covered the event, but was not enthusiastic. A *Sun* reporter set a pattern for press treatment of radio which would persist long after the infant had its feet firmly planted on the ground. Belittlingly he wrote:

The guests took turns fitting the receivers over their ears, and one or two of them thought that they heard the tenor; they were not positive.

Another New York critic, ignoring the historical significance of the event, wrote:

There was an operator somewhere, carrying on a ribald conversation with some other operator, greatly to the detriment of science — and an evening's entertainment.

Conservatism was in the saddle, and men of imagination, as often, were few. A judge in a Federal court went so far as to point an accusing finger at De Forest, who was before him in some minor litigation, and accused him of being a "mountebank" because of his attempt to transmit the human voice without wires.

In 1910 the first radio law in American history was passed, Public Act. No. 262, 61st. Congress, which declared it unlawful for any American or foreign vessel after July 1, 1911, to leave any American port carrying more than 50 passengers and crew combined, unless equipped with "an efficient apparatus for radio communication, in good working order and in charge of a person skilled in the use of such apparatus, which apparatus shall be capable of transmitting and receiving messages over a distance of at least 100 miles, day and night." Two years later the act was amended to require an auxiliary power plant and at least two qualified operators.

Radio, But Not for Fun

Late in 1912 Congress passed its first licensing law. Although the word *radio* was used, it was obvious that the law makers were not thinking in terms of radio stations as they exist today, but of radio as a means of transmitting messages. Wave lengths were standardized, distress signals were made uniform, provision was made for secrecy of communication, and the Secretary of Commerce and Labor was authorized to license radio operators.

The American Marconi Company was manufacturing equipment for sending and receiving wireless messages and two of its retail outlets were the large New York and Philadelphia stores of John Wanamaker, whose directors decided to promote the sale of this equipment by opening a sending station on top of their New York store. David Sarnoff, who has gone down in history as one of the giants of American radio, at this time was manager of the Marconi wireless station at Sea Gate, N.Y., an enterprising young man of 21. Because he wanted his evenings free to enroll in classes in a Brooklyn college, he applied for the job of operating the Wanamaker station. That is how it happened that on the night of April 12, 1912, he was at his key when the radio operator of the largest ship in the world, the "unsinkable" British *Titanic*, 1,600 miles northeast of New York, sent out this message, again and again:

**CQD. CQD. SOS FROM MGY. WE HAVE STRUCK A BERG. SINKING FAST.
COME TO OUR ASSISTANCE. LATITUDE 41.46 NORTH. LONGITUDE
50.14 WEST. MGY.**

CQ was an international radio signal meaning: "Attention all stations." When the letter *D* was added (*CQD*) it was the international distress signal. About this time *SOS* also began to be used as a distress signal. (Later that same year at the International Radiotelegraph Conference in London *SOS* was adopted as the standard international distress signal.) *MGY* were the *Titanic's* radio call letters.

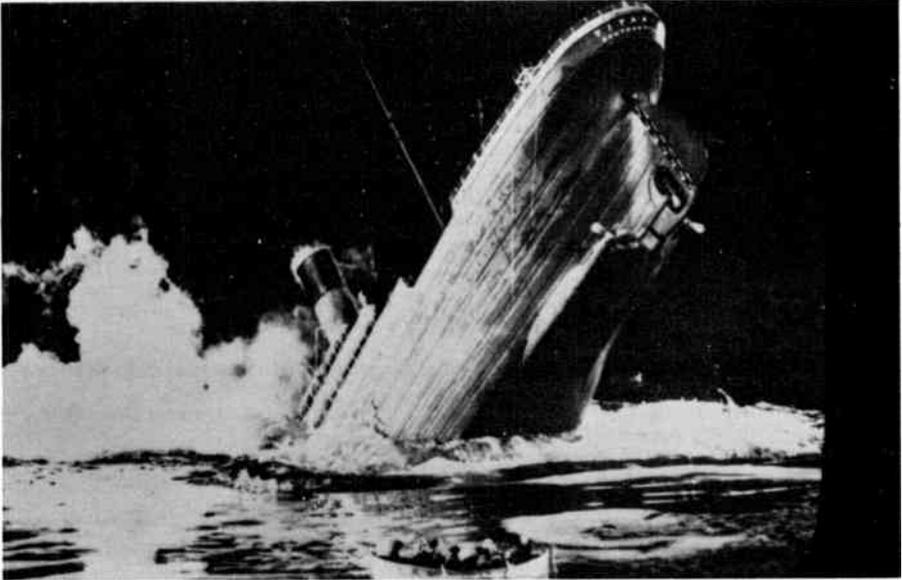
The message was first picked up by a 17-year-old Marconi operator, Charles Ellsworth, at Cape Race, Newfoundland. It was also received by several ships at sea.

The first *SOS* was sent out shortly before midnight. Two and a half hours later the *Titanic* disappeared below the surface of the Atlantic, taking with it 1,517 men, women and children. The first ship to answer the *SOS* was the *Carpathia*, which picked up the survivors, 705 in all.

Newspapers all over the world put out extras. The New York papers were kept abreast of developments by the young man at Wanamaker's who sat at his key all night, following the story by listening to the dots and dashes and passing on all that he learned to the impatient reporters who clustered around him.

Praise for Radio

After the shock of the disaster had worn off, many accusing fingers were



The death of the Titanic.



David Samoff, who helped the press cover the Titanic disaster.

pointed, for the *Titanic*, in attempting to set a new transatlantic record, had been following a Great Circle course not normally used at that time of the year because of the iceberg hazard. But praise was heaped on radio. It had proved its value, for the tragedy would have been much worse had the SOS not been heard and answered.

Most of the communications developments thus far had taken place along the Atlantic seaboard, but now a voice went on the air in the West. The Los Angeles *Daily Tribune* on December 21, 1912, carried this Page One headline:

**WIRELESS PHONE HAS ARRIVED;
CALIFORNIA BOY THE INVENTOR**

Years later the Los Angeles county recorder issued a birth certificate that read:

I hereby declare that Miss Radio was officially born at 8:31 p.m., December 21, 1912, in the county of Los Angeles, California.

The claim was based on a voice broadcast made that day by William A. Poole, who years later wrote a booklet in which he described himself as "the forgotten father of radio." He claimed to have spent half a million dollars of his own money perfecting various radio inventions, which he never was able to market. His test in 1912 was from Long Beach to Los Angeles, approximately 25 miles. When his own money ran out and he failed to find backers, he spent the rest of his days seeking some degree of recognition.

In 1914 two Italian warships off the coast of Sicily received voice radio messages from Ireland. This led Marconi to predict that "the day is not far off when the human voice will cross the Atlantic."

That same year the world learned through radio of the assassination of an Austrian Archduke in Sarajevo, Serbia, which touched off World War I, and one month later of Germany's invasion of France. One week after that German wireless stations flashed this message to all German ships at sea:

**WAR DECLARED ON ENGLAND. MAKE AS QUICKLY
AS YOU CAN FOR A NEUTRAL PORT.**

Marconi abandoned all other projects so he could give his time to adapting radio to warfare, especially using it as a direction finder. But he took time out one day to predict that "the world will eventually be able to *see* as well as hear over a visible telephone."

A Young Man's Idle Dream

The war did not discourage dreaming. In 1916, with the Allies and the Entente locked in a bitter death struggle, young Sarnoff wrote a letter to the General Manager of the Marconi Company which, fortunately, has been preserved and forms one of the most significant documents in radio's archives. In reading it, one needs to bear in mind that the writer was a very young man (just 25), that he had had no experience in business, and yet, almost every-

thing he foresaw in this youthful dream eventually came to pass, detail by small detail.

I have in mind a plan which would make radio a household utility in the same sense as the piano or phonograph. The idea is to bring music into the house by wireless. It would be entirely feasible. For example, a radio telephone transmitter having a range of say 25 to 50 miles can be installed at a fixed point, where instrumental or vocal music or both are produced. The problem of transmitting music has already been solved in principle, and therefore all the receivers attuned to the transmitting wavelength should be capable of receiving such music. The receiver can be designed in the form of a simple Radio Music Box and arranged for several different wavelengths, which should be changeable with the throwing of a single switch or pressing of a single button.

The Radio Music Box can be supplied with amplifying tubes and a loudspeaking telephone, all of which can be neatly mounted in one box. The box can be placed on a table in the parlor or living room, the switch set accordingly, and the transmitted music received. There should be no difficulty in receiving the music perfectly within a radius of 25 to 50 miles.

The power of the transmitter can be made 5KW if necessary to cover even a short radius of 25 to 50 miles, thereby giving extra loud signals in the home if desired. The use of head telephones would be obviated by this method. The development of a small loop antenna to go with each Radio Music Box would likewise solve the antenna problem.

The same principle can be extended to numerous other fields as, for example, receiving lectures at home; also events of national importance can be simultaneously announced and received. Baseball scores can be transmitted by the use of one set installed at the Polo Grounds. The same would be true of other cities. This proposition would be especially interesting for farmers and others living in outlying districts. By the purchase of a Radio Music Box they could enjoy concerts, lectures, music, recitals, etc., which may be going on in the nearest city within their radius.

The manufacture of the Radio Music Box, including antenna, in large quantities, would make possible their sale at a moderate figure of perhaps \$75.00 per outfit. The main revenue to be derived will be from the sale of Radio Music Boxes, which, if manufactured in quantities of one hundred thousand or so could yield a handsome profit when sold at the price mentioned above.

It is not possible to estimate the total amount of business obtainable with this plan, but if only one million families thought well of the idea, it would, at the figure mentioned, mean a gross business of about \$75,000,000, which should yield considerable revenue. This may be roughly divided as follows:

First year, 100,000 Music Boxes	\$ 7,500,000
Second year, 300,000 Music Boxes	22,500,000
Third year, 600,000 Music Boxes	45,000,000
<hr/>	<hr/>
Total 1,000,000 Music Boxes	\$75,000,000

Naught But The Best

De Forest always named 1916 as the year in which he believed "planned and systematic radio broadcasting" actually began. That was the year he opened a factory and laboratory at High Bridge, N.Y., and also installed a transmitter on the Columbia Gramophone Building on 38th. Street, New York, over which he would play Columbia records, in return for free rent. Was this the start of commercially sponsored radio? Did this qualify Columbia Gramophone as the first sponsor of a radio program? Perhaps.

Speaking of those days. De Forest once declared:

"I still cherished the earlier quixotic idea that naught but good music and good entertainment or education matter should go out over our radio."

Radio Hangs Its Head

Seldom if ever had an American presidential election sparked such interest as the one in 1916. President Wilson was running again on the platform: "He kept us out of war." His Republican opponent was the distinguished Charles Evans Hughes. The outcome would effect world history. De Forest remained at his microphone in High Bridge for six hours election night, broadcasting returns supplied to him by friends on a New York newspaper. Several thousand radio amateurs listened to radio's first attempt at covering an election. Late in the night De Forest signed off, after announcing Hughes as the winner. Every state was accounted for but California. The race there was close but Hughes was well ahead. The next morning the one-man radio station was greatly embarrassed. Between midnight and the time De Forest got up the California final vote had come in. Wilson had carried the state by 3,804. California's electoral vote would therefore go to Wilson, giving him a slight electoral majority. Hughes had lost the Presidency by the 3,804 votes cast in California.

Woody by Radio

While the United States was still neutral both sides wooed us. Because the Allies controlled the cables under the Atlantic, the Germans were forced to use radio as a means of propagandic communication, and as a result of the German concentration on this medium some advancements were made that might otherwise not have come for years.

In 1917 the United States went into the war and President Wilson was authorized by Congress to seize control of all telegraph, telephone and radio systems and stations for the duration. By now there were several thousand hams, some using vacuum tubes instead of spark sets.

In November of 1918 radio assisted in telling the world that the war had come to an end with the signing of an armistice. Now the new medium could begin to fulfill some of the dreams of its inventors.

As soon as government control of communications was lifted, Dr. Frank Conrad, then assistant chief engineer of Westinghouse, began conducting tests in voice transmission over an experimental station, 8XK, in his garage, each night after coming home from work. Dr. Conrad's interest in communication without wires had begun in 1915 when, to settle a \$5 bet about the accuracy of his \$12 watch, made with a Westinghouse friend, he built a small receiver to hear time signals from the Arlington Naval Observatory. Later, fascinated by his new hobby, he installed a transmitter.

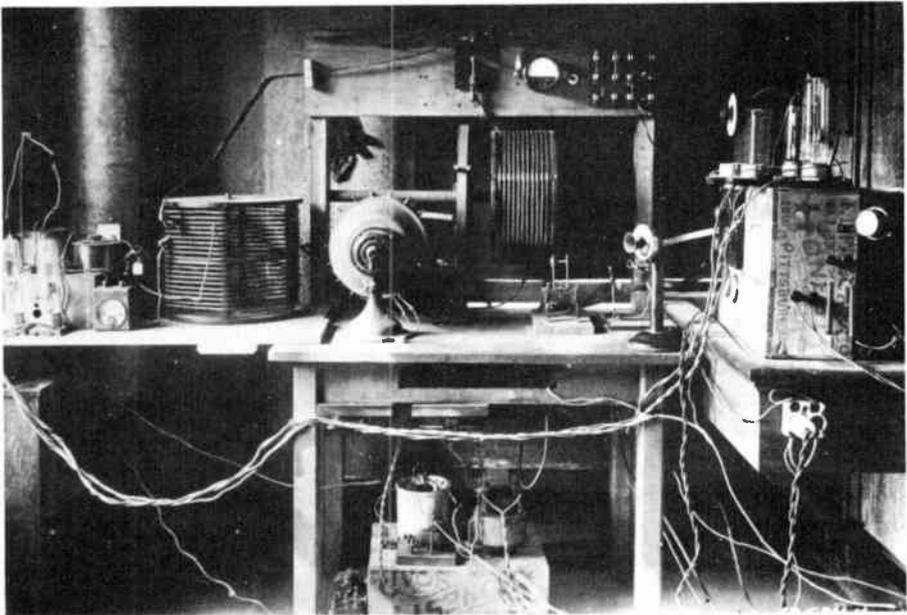
A Presidential Failure

On July 4, 1919, President Wilson, returning home from the Paris Peace Conference on the *USS George Washington*, attempted to make a transatlantic broadcast over the ship's facilities. His speech, the music of the ship's band, and the singing of a sailor quartet were heard by those on the *George Washington* and by the crews of fifty allied ships at anchor in the harbor. But because of some mechanical failure or the weakness of the signal, nothing was heard on shore, in any direction.

That same year listeners all along the Atlantic coast did hear the voices of radio operators in U.S. Navy planes on a flight to the Azores.

D.J.s Take Notice

By now Dr. Conrad's little station had acquired a host of listeners, many of whom began writing fan letters asking for longer broadcasts and more variety, and so from now on 8XK stayed on the air a full two hours each Wednesday and Saturday evening. Next the listeners asked for new music each week, so Dr. Conrad arranged with a local dealer to supply him with a fresh batch of discs each Wednesday and Friday, in return for which the name of the shop was mentioned on the air. The dealer soon reported that the records 8XK played — whatever they were — outsold all others, first positive proof of the effectiveness of radio advertising and songplugging.



Transmitting equipment in garage of Dr. Frank Conrad, radio pioneer.

Ball Scores Demanded

On those nights when Dr. Conrad's two young sons exceed the two-hour program for him they often introduced live local talent. Fan response indicated that this greatly increased the size of the listening audience. Now the letters began demanding baseball scores and still other innovations.

The popularity of these programs was such that a Pittsburgh department store, wishing to dispose of some surplus radio apparatus left over from the war, advertised that purchasers could use it to hear "Dr. Conrad's popular programs." This advertisement gave Westinghouse officials an idea.

At war's end there were three great corporations with a keen interest in the future of radio: Westinghouse, A.T. & T., and General Electric of Schenectady. None of them was thinking of radio as an entertainment medium. Their interest was in a new means of commercial communication, to take the place of telegraph and cable — code radio — telephoning without wires. They wanted to sell wireless phone calls and messages between individuals or business houses. All three companies owned patents on basic radio apparatus. A fourth interested party was the U.S. Government, which was fearful that the British, through control of Marconi, might someday own all the facilities for sending messages through space without wires. To prevent this Washington did a little urging and encouraging, with the result that General Electric bought out the American branch of Marconi and set up the Radio Corporation of America. Westinghouse reacted by buying up all the wireless patents still available, and concentrating on manufacturing. Westinghouse already was making the parts essential for the home assembly of receiving sets. The more popular 8XK became the greater the boom in the sale of these parts. But the army surplus ad convinced Westinghouse that the mystery of radio was really beginning to fascinate the American public and that a golden market could be developed for the purchase of completely assembled sets. To help develop this market Westinghouse decided to put broadcasting on a solid, permanent basis. The first step was to finance what they intended should be the first real radio station in the world.

KDKA Takes to the Air

KDKA — these were the call letters assigned to this new station — was primitive in many respects. It was built on the roof of the tallest Westinghouse factory in East Pittsburgh. They called it a penthouse but it was little more than a rooftop shack containing transmitter, two 50-watt oscillators and four 50-watt modulators. The staff consisted of six men, all working in the one room that was combination studio, control room, staff lounge and transmitter.

It was announced far and wide that KDKA would go on the air starting at 6 p.m. on Nov. 2, 1920, with an evening of returns in the presidential election contest between Warren G. Harding, Republican of Ohio and James M. Cox, Democrat of Ohio. Election bulletins would be put on the air as fast as they were

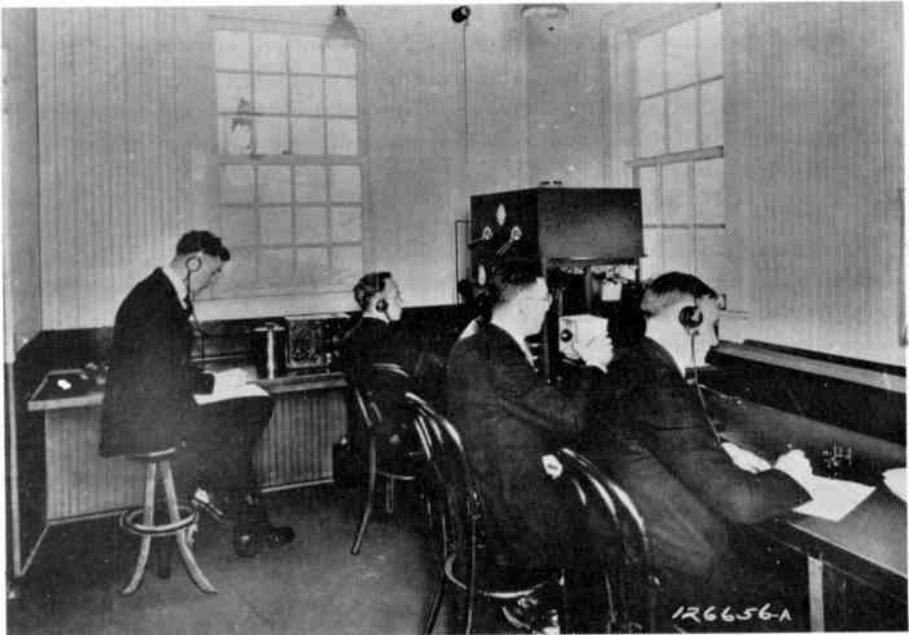
received in the penthouse from the news room of the Pittsburgh *Post*.

Westinghouse had manufactured several hundred sets in time for the occasion. A few were distributed to officers of the company, others to Pittsburgh dignitaries, and some were set up in stores, hotel lobbies and other public places around the city.

Principally for Hams

But the bulk of the estimated audience of 1,000 that listened in were hams. When the United States entered the war there had been 3,500 amateur wireless operators in the country. During the war the army and navy had trained thousands of men for the signal corps and to serve as radio operators on ships. After the war many went home and built their own receivers and transmitters. Each was a broadcasting station in itself. These young amateurs formed the bulk of radio's first audience. These were the men who had picked up Fessenden on Christmas Eve, 1906, and De Forest on election night, 1916, and had been monitoring Dr. Conrad's semi-weekly programs.

The listening audience was augmented that night by a group of Westinghouse officials, their wives and their friends, who gathered in the main ballroom of the Edgewood Club in suburban Pittsburgh to follow the returns being broadcast from KDKA. (The "loudspeakers" were actually two horns borrowed from the Navy.)



Radio's first famous broadcast, the KDKA studio, Pittsburgh, election night, November 2, 1920.

Oddly enough, although Dr. Conrad had inspired this historic night of broadcasting, he himself was not present. Throughout the night he remained at his old experimental station, 8XK, five miles away, ready to carry on if there was trouble with the new installation in East Pittsburgh.

Kill the Music!

In between bulletins received from the *Press*, the men at KDKA played phonograph records, which led some of the Westinghouse people at the clubhouse to make periodic phone calls asking for less music, more returns. (This was another first — in audience criticism.)

Most of the election returns were read over the air by a Pittsburgh publicity man, Leo Rosenberg, a friend of Dr. Conrad, who had hired the young man to work through the night as an announcer. Twenty years later A. A. Schechter, news and special events director of NBC, recruited Rosenberg to help broadcast the 1940 Roosevelt-Wilkie returns and introduced him on the air as radio's first professional announcer. Back in 1920 Rosenberg remained at the microphone all night — until KDKA left the air at noon on Wednesday. Did his work that night qualify him as radio's first announcer? The word *announcer* must be defined. Salaried or serving without pay? On a scheduled program or not? Part time or full time? There were many who were the first. Everyone in radio in the early 1920's deserves credit, for an announcer in those pioneer days received little pay, publicity or even praise.

It rained that night on the crowds that stood outside newspaper offices in Pittsburgh and in many other American cities reading election bulletins as fast as they were put up in the windows. Those who owned crystal sets not only got the news of Harding's victory over Cox ahead of their stay-at-home neighbors, but they got it "dry."

This Sparks Got Locked Up

Because radio signals travel better over water than land, many ships at sea were able to pick up KDKA's broadcast that night. One radio operator, excited at hearing election news by voice over his earphones, rushed to the captain's cabin and awoke him, only to be locked up for drunkenness and disorderly conduct on orders of the angry and disbelieving captain.

KDKA had made history that night. Its feat was hailed by the press throughout the country. Many papers volunteered to print the station's future program schedules free. The KDKA success caused a stampede of potential stations for assignment of wave lengths so that they, also, could start broadcasting. Westinghouse was swamped with orders for sets and this spurt in business led to Westinghouse becoming part of the RCA combine, which in turn led to the establishment of several new and powerful stations, one of which RCA and Westinghouse owned jointly. David Sarnoff, now general manager of RCA, was so encouraged by the election night performance that he re-submitted his

Music Box memorandum, this time to the chairman of the board of RCA, but the corporation's conservative directors appropriated a mere \$2,000 to make a model Music Box or Radiola.

First Football Play-by-Play

Soon after the election KDKA hired as its first full-time announcer, Harold W. Arlin, a handsome young man who often came to work in a tuxedo, stiff-front white shirt and black bow tie, and who, during his five years with the station, introduced on the air such men as William Jennings Byran, Marshal Foch and David Lloyd George. KDKA claimed for him the title of "the world's first *full-time* announcer" and the first sportscaster to do a play-by-play of a football game: West Virginia University vs. the University of Pittsburgh.

(In 1924 Arlin was voted "the world's most popular announcer." He became one of the incorporators and first vice president of the Radio Announcers of America. For years he did most of the announcing for KDKA's short wave transmission. When, in 1925, Westinghouse appointed him to an industrial relations post, the London *Times* called his voice "the best known voice in Europe." In Mansfield, Ohio, an immense stadium was named after him and when he retired from Westinghouse in 1961 he was given the company's highest award, the Order of Merit.)

Circus Tent Radio

Early in its career KDKA tried putting on a band concert. This *did* cause the listeners to complain. They could hear nothing, they said, but echoes and vibrations and something that resembled thunder. For the next concert members of the band sat on chairs on the roof under the stars. That lessened acoustical trouble, except that the stars vanished, the rain came, and the musicians fled for shelter. (It was fortunate that a phonograph was handy!) For the next concert a tent was erected on the roof to shelter the band. This experiment was so successful, acoustically, that from then on not only KDKA's studio but those of rival stations all over the East were built to resemble circus tents.

It Was the Cat's Whiskers

At this point it is appropriate to say a few words about crystal sets and "cat's whiskers." Those who grew up after the early 1920's missed a very exciting experience, but it is possible to imagine it. In the early days you made your own receiver, called a crystal set. It was to a modern radio instrument what a model T. Ford was to the sleek, high-powered car of today. You took a round cardboard box (Quaker Oats benefitted by the craze, because its box was the perfect size and some people bought Quaker Oats just for the box, throwing away the contents in their eagerness to start the construction job.) The box was converted into a tuning coil by wrapping it carefully with No. 20 wire. One hundred

and twenty times around was standard. One end of the wire was attached by a clip to a ground. The other end was attached to fifty or a hundred feet of wire which served as an antenna. This wire could be looped around pictures on the living room wall, although many people recommended attaching it to the metal bed-springs with a clip.

The cat's whisker was a short, stiff wire about the thickness of a cat's whisker (from which its name was derived) that was manipulated to find the most sensitive spot on the surface of a small piece of mineral substance known as a crystal. The crystal (long since replaced by tubes and transistors) had the unusual property of converting radio waves into a form that would produce audible sounds through a pair of earphones. No electricity was required. No tubes. No transistors, which, of course, had not yet been invented.

In the beginning it was smart to make your own crystal set. Later, manufactured models were available with several sets of earphones, so the whole family could sit around in a close circle and listen. (This may have been the origin of the expression "family circle".) The later crystal sets contained a tuning device so that individual stations could be tuned in by tuning the set to the station's frequency. One person had to manipulate the tuner. Because it was still a masculine world in those days, the manipulator was generally father. Those in the family circle would sit, looking like creatures from Mars, with heavy wires hanging down from their earphones, expressions of transfiguration on their faces, staring, glassy-eyed, at the phenomenon of hearing voices and music coming from a distance of perhaps 5 to 10 miles through the air without wires.

A Swinging Family Circle



After the invention of the vacuum tube radios became much more powerful and earphones were replaced by loud speakers. The first radios utilizing vacuum tubes were battery powered but capable of picking up stations located in distant cities. Now the family circle could gather breathlessly around the loud-speaker and listen intently as father tuned the set to pick up the faint signal of a distant station. It was not so much what you heard over the speaker — the program — as it was the call letters of the station you picked up. If someone outside the family circle entered the room to interrupt, Father would look up with annoyance and put his finger to his lips, while the others would hiss “Sh-sh-sh!” in chorus. The next day, whenever two or three people of different family circles would meet, the inevitable question would be:

“What did you get last night? We got. . . .”

Trying to get distant cities was the great American parlor game of the 1920's.

The Battle of the Century

Boxing Promoter Tex Rickard had announced that it would be “the Battle of the Century”: Jack Dempsey vs. the French challenger, George Carpentier, for the heavyweight championship of the world, in an open air arena at Boyle's Thirty Acres, Jersey City, across the Hudson River from New York City, on July 2, 1921.

Sarnoff decided that such a well-ballyhooed event would test how much appeal broadcasting had — whether it had a future. Because no station existed yet in the New York area he created one for the occasion — WJZ, a station-just-for-a-night. The next problem was equipment. When he heard that General Electric had built a powerful transmitter which had not yet been delivered he arranged to borrow it. Then he chose Major Andy White, editor of *Wireless Age*, to take charge and do the actual broadcasting.

White persuaded the Lackawanna Railroad to let him string an aerial between two of its towers, then talked Pullman porters into letting him use a metal shack close to the railroad tracks — a shack in which the porters changed into their uniforms. The borrowed transmitter and truckloads of other equipment were moved in.

Almost a First

White was going to be the first man to broadcast a world's championship fight, but he had one precedent to go by: three months earlier Florent Gibson, Pittsburgh *Post* sports writer, had broadcast over KDKA a blow-by-blow description of a no-decision fight between Johnny Ray and Johnny Dundee, the first sportscast of all time.

It rained the day of the fight, from dawn until dusk. Engineers had worked all the previous night to complete the complicated installation. During the fight one of the engineers stationed in the shack almost went blind from standing too

close to the glare of the tubes. Also, one of the tubes got overheated and exploded. But the fight went on and so did the broadcast. After the tube was replaced, it was estimated that between 100,000 and 300,000 boxing fans in and around New York heard "the Fight of the Century" over WJZ, an almost mythical station that had gone on the air just for this event. (The figures were an estimate because there were no audience-measurement organizations yet.) The 100,000 to 300,000 fans heard the fight over a fraction of that many sets, for there were anywhere from two or three to two or three hundred around each receiver. Most of them agreed that White's diction was so excellent, his own excitement so contagious, and his blow-by-blow account so vivid that it was as good as being present.

Broadcasting was "in."

After the fight, WJZ lapsed into silence until October of the same year when it began transmitting from what had been a ladies' rest room in a Westinghouse factory in Newark, New Jersey, the walls now hung with shocking-red drapes to eliminate echoes. There were seven employees at the start. The neighborhood was infested with alley cats that were given to such early-evening howling that they were the subject of many fan complaints.

"Please turn off the cats!"

Primitive Volume Control

One of WJZ's first engineers recalls the problem of not being able to control volume except by moving the performer closer to or farther away from the microphone. One mezzo-soprano's voice was so piercing and the fear that she would break WJZ's tubes was so great that she was moved farther and farther from the mike until, as she went on the air, she was at one end of the long narrow room, with the mike at the other extremity.

When Ed Wynn, the comedian, appeared at WJZ's studio one night a few minutes before air time to do the first broadcast of his life, he suddenly panicked as he realized he would be almost alone in the studio. Adamantly he refused to go on until they went out and rounded up janitors, cleaning women, an elevator man, a relief telephone operator and even a few people who had been passing by in the street — the first studio audience in history.

And So Who Was First?

WBZ, Springfield, Mass., built to serve all New England, had gone on the air almost a month before WJZ's inauguration. Such dates may not seem important now, but they were then. What was the oldest station in America? KQW, San Jose, California, once claimed the title on the ground that it had started regularly scheduled programming as early as 1912. KDKA also claimed to be the oldest. So did WWJ, the first station in the country to be owned by a newspaper, the *Detroit News*. WWJ gave its birth date as August 9, 1920. (A quarter of a century later the National Association of Broadcasters officially declared WWJ "the

pioneer station.”)

Everything was a “first” in those days. KDKA claimed many distinctions: it did the first remote, the first regularly scheduled broadcast of a church service, the first barn dance, the first political broadcast, the first play-by-play baseball broadcast, the first sportscast, the first remote from a theater, the first coverage of a Presidential inauguration, the first airing of government market reports, the first time signal, and the first baseball scores.

Unusual Antics in a Church

The first remote and the first church broadcast were one and the same — from Pittsburgh’s Calvary Episcopal Church. Recalling the historic day, the rector, the Rev. Edwin Jan van Etten said:

“All was going well, but on glancing at the choir I discovered strange faces and noted unusual antics. It was not until later that I learned these were Westinghouse engineers — one a Jewish lad, the other an Irish Catholic — garbed in surplices to make them inconspicuous in the midst of my Protestant Episcopal Church. Even now, as I think of their presence there, it seems to me that they symbolize the real universality of radio religion.”

Not Attired for the Choir

An engineer for the Canadian Broadcasting Corporation joined the choir in a more spectacular manner.

In a famous church in Toronto the only place available for the radio equipment, when making a church broadcast, was in a large cupboard at the back of the choir loft. The door was located two steps up and there was just enough room for a small table and a chair for the engineer. In a very few minutes the temperature and air became almost unbearable with the result that once the engineer was installed in the cupboard it was the custom to remove the coat, shoes, tie and often the shirt, and to leave the door open part way in order to last out the service.

On one occasion an engineer (who shall be nameless) was leaning back in his chair when suddenly the legs in some manner went over the door sill, with the result that he fell backwards into the choir during the service. The result can be imagined.

How Crooning Really Began

De Forest claimed that he gave air time to the first female radio entertainer, Miss Vaughn de Leath of Buffalo, composer, singer, pianist, actress. She broadcasted over a small station on top of the World Tower Building in New York City, singing and telling stories, into an immense phonograph horn that served as the studio mike. More than all that, she claimed to have originated crooning — not by choice but by necessity. The station’s equipment was so imperfectly adjusted to picking up the range of the human voice that when she hit high notes

she almost shattered the tubes in the transmitting panel, so her engineer advised her to stay in the low registers — to “croon it.” One of her subsequent fan letters, commenting primly on this new technique, said:

“You have inaugurated a form of entertainment which no doubt will become very popular in the future.”

It did.

Kittens for a Birthday

Miss de Leath learned early in her career about the sentimentality of the public and the power of radio. A guest on her program one night mentioned — on mike — that the next day was her birthday. Later that evening the guest made some mention on the air of Miss de Leath's fondness for Angora cats. When the singer-actress arrived at the studio the next night she found two truck loads of birthday gifts awaiting her — from an antique rocking chair to articles of intimate feminine attire — and a considerable number of Angora kittens, delivered by some of her fans in person.

Jessica Dragonette, one of the early singing stars of radio, found out about the power of radio in a different way. Unable to agree with her sponsor over terms for a new contract, she retired from the air and devoted her time to concert tours. Her fans in many parts of the country formed J.D. clubs and took solemn oaths to boycott radio until she returned to the air. In Chicago 150,000 people attended her concert. In Minneapolis, on one of the most bitter nights of the winter, 15,000 flocked to hear her, despite a blizzard and a taxi strike.

Only 1% Music

The first transatlantic broadcast was from east to west: London's Savoy Hotel orchestra. The event was best remembered for the comment of a radio engineer in New York who handled the pickup and later said:

“It was epochal but scarcely audible. At a conservative estimate, what we got in New York was 1% Savoy music, 1% interference, and 98% static.”

Nevertheless it was a first, and firsts were important in those days.

Radio in these days was a mass of mechanical, technical and acoustical imperfections. Tin horns, mica diaphragms and carbon microphones distorted sound almost beyond recognition. What came over the earphones was often a conglomeration of distortion. By contrast a boiler factory would have sounded harmonious and pleasant. Much better music could be cranked out of a phonograph, and yet more and more people every evening were sitting huddled around the magic boxes, straining their ears to catch every word, their faces aglow with ecstasy, despite the cacaphony of spluttering and screeching that passed for entertainment in the early 1920's.



Salt Lake City dignitaries broadcasting over first KSL microphone.



KDKA experiments with balloon antenna.

But the Baby Needs a Bath!

To be sure, there was a dissenting voice here and there, such as that of the droll husband who wrote this fan letter to a New York station:

It is 5.25 p.m. You have just finished broadcasting. You have practically finished breaking up a happy home. Our set was installed last evening. Today my wife has not left her chair, listening all day. Our apartment has not been cleaned. The beds are not made. The baby has not been bathed. And no dinner ready for me!

The year 1921 had ended with thirty stations on the air. By the end of 1922 there were transmitters poking into the sky all over the country — in Chicago, Denver, Minneapolis, New Orleans, Los Angeles, as far north and west as Seattle — more than 500 stations in all, with receivers in at least three million homes.

With some few exceptions the stations with call letters starting with *W* were east of the Mississippi; those starting with *K* west of the Mississippi. Station letters often did (and do) have significance. For example, WORC is in Worcester; KSTP, St. Paul; KAVE, Carlsbad, N.M., a city famous for its caves; KELK, Elko, Nev.; WINT, Winter Haven, Fla.; WEIR, Weirton, W.Va.; WNIL, Niles, Ohio; WILK, Wilkes-Barre, Pa.; WTMJ, owned by the *Milwaukee Journal*; WGN, owned by the *Chicago Tribune*, which calls itself the *World's Greatest Newspaper*; KUSH, Cushing, Okla.; WBAY, Green Bay, Wis.; WELB, Elba, Ala.; WIXN, Dixon, Ill.; WKDZ, Cadiz, Ky.; WNEW, New York, N.Y.; KDLM, Detroit Lakes, Minn.; WNAT, Natchez, Miss.; WINC, Winchester, Va. Oddly, WEST is not in a city called Weston, but in Easton, Pa. WELI is perfect for a station in New Haven, Conn., because that is the home of Yale University, known as "the Eli." WIOD stands for the Wonderful Isle of Dreams, near Miami, and WOOD is a good name for a station in Grand Rapids, Mich., the furniture city.

Why Spend \$135?

The story of the founding of WLW, Cincinnati, is a good one. It is really the story of Powel Crosley Jr., lawyer, engineer, bond salesman and auto racer, who wanted to buy a radio receiver in 1921 and found that the cheapest available cost \$135. After building his own set at a cost of \$35, he decided other people might also like to save \$100 on a set, so he went into the business of making radio receivers for the public. In 1921 he built a transmitter with a range of one mile, which before long became WLW and eventually was able to boast that it was the first 50,000-watt station in the country; that it consumed as much electricity as a city of 100,000 people; that it used a million gallons of water a day to cool its immense tubes; that it had a tower 276 feet higher than the Washington Monument, a staff of 200 full-time musicians and equipment that could amplify an electrical current 70,000,000,000,000 times before

sending the waves into the air. But in the beginning WLW was a modest operation.

What Omniscience!

By the end of 1924 RCA alone had sold enough sets to make Sarnoff's Music Box forecast come true uncannily. To save turning back a few pages, here, in columns one and two, are the predictions he made eight years earlier, while in the last column is the total volume of actual sales by RCA:

First year	100,000 Music Boxes	\$ 7,500,000	1922 RCA Sales	\$11,500,000
Second year	300,000	22,500,000	1923	22,500,000
Third year	600,000	45,000,000	1924	50,000,000
Totals	<u>1,000,000</u>	<u>\$75,000,000</u>		<u>\$83,000,000</u>

More and More Firsts

In the 1920's firsts came tumbling along, one after the other.

In Los Angeles KHJ hired Douglas Fairbanks to report a Rotary International Convention.

Schenectady's WGY covered a race between Gar Wood, the speed boat king, and the Twentieth Century Limited down 75 miles of the Hudson.

Chicago's WGN broadcast the entire proceedings of the Scopes evolution trial at a cost of a thousand dollars a day.

Washington's WRC did the first radio coverage of an opening of Congress.

New York's WJZ, in 1923, was the first station to carry a voice that would someday be recognized the world over — that of Franklin D. Roosevelt.

KSD, St. Louis, did a two-way broadcast between men on the ground and men in a dirigible, and also put on the air Warren G. Harding, the first President to broadcast.

WGN was the first to broadcast a national political convention.

On the West Coast KPO chalked up many firsts: the first to broadcast grand opera from the stage; the first to organize and maintain its own symphony orchestra; the first to broadcast the play-by-play of West Coast baseball games.

In 1922 the first issue of the first radio magazine appeared: *Radio Broadcast*. It predicted that before the market became saturated there would be at least five million radio sets in the United States. Some readers were skeptical of such optimism and said so in letters to the editor. It is to be hoped that the skeptics lived at least until 1966 when there were 242 million sets in use in the country, in addition to the many millions of television sets.

Talent Stages a Rebellion

Radio was originally conceived as a device for inducing more and more people to spend more and more money to buy more and more receiving sets. And it succeeded in doing just that. But then a revolution broke out. At first talent had been unpaid. Singers, actors, actresses, ventriloquists, impersonators and

musicians were persuaded that the prestige and publicity resulting from an appearance on the air made it well worthwhile, without any other, more tangible compensation. This was just as well, for there was no income whatsoever in the beginning to pay for anything. Then one by one many artists decided to revolt. As one singer put it:

“Prestige doesn’t buy the baby shoes!”

When talent insisted on being paid, and other expenses mounted, some way had to be found to foot the bills.

WEAF Tries Passing the Hat

When WEAF, financed by A.T. & T., went on the air in 1922 in New York with the most expensive equipment yet seen, it frankly — and rather daringly — billed itself as “a commercial station,” meaning that its time could be purchased. But while waiting for sponsors, WEAF also tried passing the hat by appealing to the public for voluntary cash contributions. The response was so feeble that all the contributions received were returned.

When WJZ’s annual budget hit \$100,000, one of its parents, RCA (the other was Westinghouse) conceived the idea of financing radio by assessing manufacturers of receivers, and dealers, a certain small percentage of their annual profit. This scheme also fell through.

Then “narrowcasting” was proposed. A coin box would be attached to the side of each set. Radio waves would be fed into the home over telephone lines. When the collector came to empty the coin box once a month, he would disconnect the radio if proper payment had not been made. This idea was likewise dropped.

A trade journal carried a long pro and con article about advertising on the air, under this headline:

SHOULD RADIO BE USED FOR ADVERTISING?

When Secretary of Commerce Herbert Hoover heard that some radio stations were considering advertising he made this unqualified statement:

“The American people will never stand for advertising on the radio.”

Papers & Magazines Hit

The circulation of both newspapers and magazines was dropping, due to the fact that so many people were spending so much of their leisure time “trying to see what *we* can get”. Yet the advertisers were still using the papers and magazines, along with billboards and even banners hung from the underside of balloons.

Various radio stations now began taking money from various sources under various guises, but WEAF was the first (as far as any communications historians know) to put a full-blown commercial on the air. It was done, of course, in a most dignified and subtle manner. The sponsor was the Queensborough Corporation of Jackson Heights, N.Y.

The First Commercial

At 5.15 p.m. on August 16, 1922, the WEAF announcer said:

"Ladies and gentlemen; this afternoon the radio audience is to be addressed by Mr. Blackwell of the Queensborough Corporation, who, through arrangements made by the Griffin Radio Service, will say a few words concerning Nathaniel Hawthorne and the desirability of fostering the helpful community spirit and the healthful, confined home life that were Hawthorne ideals. Ladies and gentlemen, Mr. Blackwell."

Mr. Blackwell then pontificated as follows:

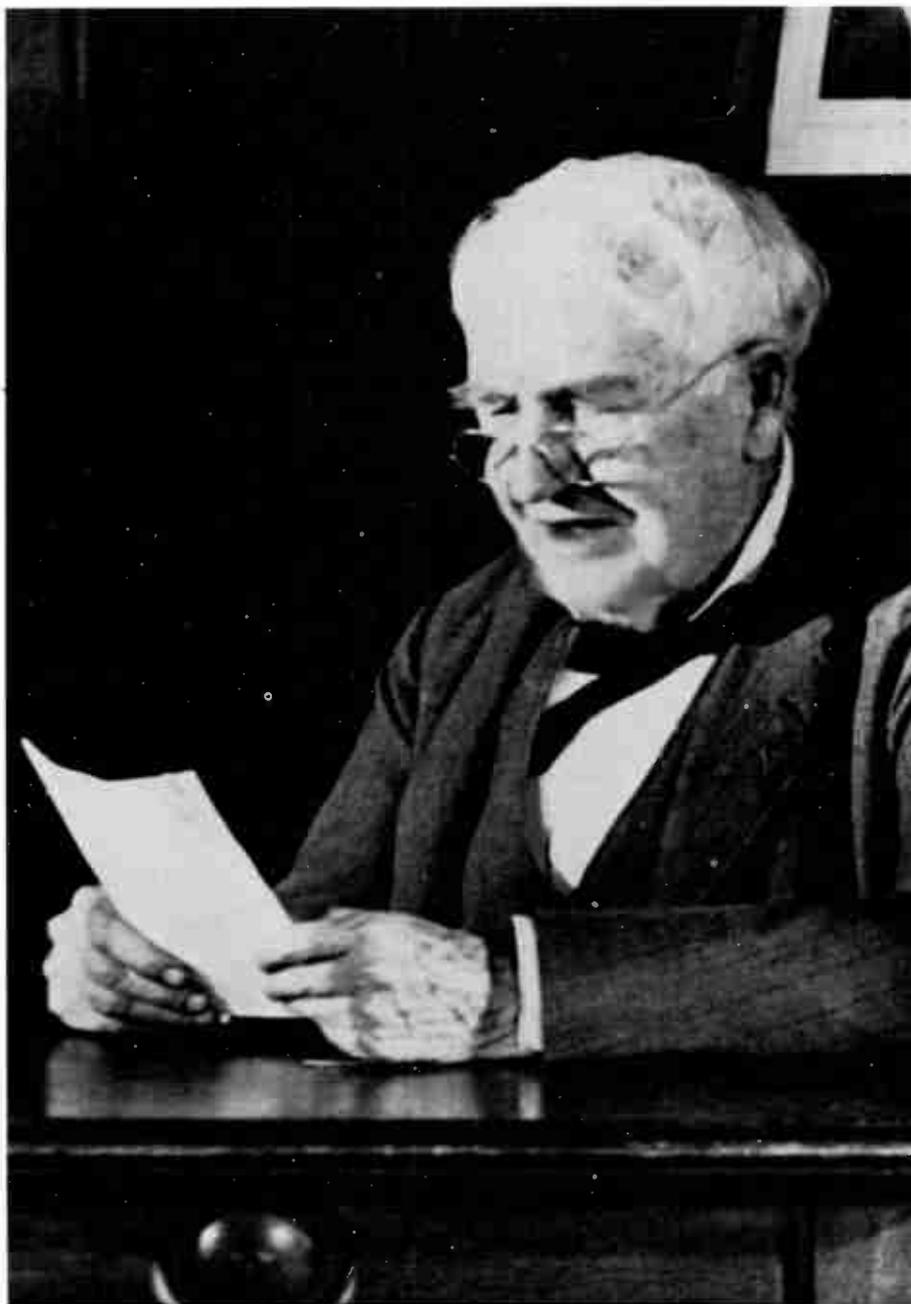
It is fifty-eight years since Nathaniel Hawthorne, the greatest of American fictionists, passed away. To honor his memory, the Queensborough Corporation, creator and operator of the tenant-owned system of apartment houses at Jackson Heights, New York City, has named its latest group of high-grade buildings "Hawthorne Court."

I wish to thank those within the sound of my voice for the opportunity afforded me to urge this vast radio audience to seek the recreation of God's great outdoors! There should be more Hawthorne sermons preached about the inadequacy and general hopelessness of the congested city home. . . . Imagine a congested city apartment lifted bodily to the middle of a large garden within twenty minutes' travel of the city's business center . . . Dr. Royal S. Copeland, Health Commissioner of New York, recently declared that any person who preached leaving the crowded city for the open country was a public-spirited citizen and a benefactor to the race. Shall we not follow this advice and become the benefactors he praises? Let us resolve . . .

It went on and on for a full ten minutes. The Queensborough paid \$100 for that first ten-minute commercial and \$100 for each of four more that followed. Apparently the results were good, for WEAF before long had several other accounts. Mr. Hoover turned out to be only partly right. WEAF's audience mail contained some complaints, but within four months WEAF had sixteen clients, including an advertising agency, several department stores and even the YMCA.

The Networks Are Born

In the early days radio stations were like islands in a vast sea, unconnected with each other in any way. WEAF became the pioneer station in remotes, taking its equipment to Chicago to cover the Princeton-Chicago football game, then sending the broadcast over telephone lines to its transmitter in New York for airing. This led WNAC, Boston, to suggest that WEAF and WNAC feed programs to each other by telephone lines, to be broadcast simultaneously. It was done in January, 1923. By a slight stretch of imagination this can be called the birth of the networks. It was not very successful, because AT & T at that time did not have the high efficiency cable required to give such broadcasts any fidelity. So another hookup was tried: WEAF, NY; KDKA, Pittsburgh; KYW, Chicago; WGY, Schenectady. This time the results were better.



Thomas Edison broadcasting over NBC, 1928.

In 1925 twenty stations were hooked together by telephone lines for a speech by President Coolidge. This was *really* the start of the networks. The next year, on November 15, NBC was inaugurated. The greatest cost in setting up the network was the cost of buying a New York outlet, a million dollars being paid to AT & T for WEAf.

CBS came along in 1927, Mutual in 1934, and in 1943 NBC sold its Blue Network, which became ABC.

From Cigars to CBS

Those are the bare facts of the birth of the great networks which today still dominate both radio and television in America. But behind the vital statistics are some stories, easier to remember and more illuminating. Take the way CBS was born.

Major White, the man who had broadcast the Dempsey-Carpentier fight, and three of his friends formed a small chain of stations to compete with NBC, which they eventually called the Columbia Phonograph Broadcasting System. One of their few network sponsors was the Congress Cigar Company, whose 27-year-old advertising manager, William S. Paley, was so worried about the popularity of cigarets and what it was doing to the cigar business in general and La Palinas in particular that he decided to try radio advertising for 26 weeks. (La Palinas were the Congress company's leader.) The results of the radio campaign were so astounding (sales spurted from 400,000 to 1,000,000 per day) that Paley raised \$400,000 — a rather paltry sum — among a few friends to buy the network. That year CPBS had sold a mere \$72,500 worth of time, much of it to its new president's cigar company. Almost at once the No. 2 network's sales started up. Today they run into the hundreds of millions of dollars a year.

Stunts Galore

In some ways the 1920's constituted a mad, crazy era. In addition to the serious firsts, there were stunts. When radio men found how easy it was to do *remotes* (broadcasts away from the studio) they took their microphones to the oddest places they could think of, to do the weirdest pickups they or their special events directors could dream up. Some were pretty ridiculous. An interview with a monkey in the zoo. The sound of an egg being fried on a cement sidewalk on the hottest day of the year. An interview with a Pulitzer Prize winner in a hotel men's room.

One station interviewed a French strip-teaser at great length on what she thought of nuclear science, which was not much, and a nuclear scientist on what he thought of strip-teasers, which was more complimentary.

WOR broadcast a wedding from a plane circling over New York City, the wedding march being played in the studio and picked up on a radio in the plane.

WTMJ, Milwaukee, Wis., picked up deep-sea divers working at the bottom of Lake Michigan.

Another station loaded two small pianos and two small pianists into a private plane and gave its listeners the first two-piano concert ever broadcast from a plane.

Stoopnagle and Budd were taken aloft, each in a different plane, and did their comedy act in the clouds for the benefit of the radio audience, not even within screaming distance of each other.

These were, indeed, the mad, crazy years. Radio was young and radio was lusty. But radio was on its way, soon to become a force that would win the respect of good men, the fear of villains, and the dollars of those who had something to sell.

HORNE DA
The Best Place to Shop After 5 P.M.



One Week—Starting Tomorrow
on Stock Patterns of
nerware—25% Off

as quoted below are for complete sets of
smaller sets and single pieces. Many of
this sale at the same reduction.

4-Place Dinner Set	\$12.00	10-Place Dinner Set	\$25.00
6-Place Dinner Set	\$18.00	12-Place Dinner Set	\$35.00
8-Place Dinner Set	\$24.00	14-Place Dinner Set	\$45.00
10-Place Dinner Set	\$30.00	16-Place Dinner Set	\$55.00
12-Place Dinner Set	\$36.00	18-Place Dinner Set	\$65.00
14-Place Dinner Set	\$42.00	20-Place Dinner Set	\$75.00
16-Place Dinner Set	\$48.00	22-Place Dinner Set	\$85.00
18-Place Dinner Set	\$54.00	24-Place Dinner Set	\$95.00
20-Place Dinner Set	\$60.00	26-Place Dinner Set	\$105.00
22-Place Dinner Set	\$66.00	28-Place Dinner Set	\$115.00
24-Place Dinner Set	\$72.00	30-Place Dinner Set	\$125.00

The Kiddie-Koop

Specialty Dinner Sets for \$23.00 and \$25.00

Folding Chairs
—40c Each

Air Concert
"Picked Up"
By Radio Here



Air Concert "Picked Up" By Radio Here

Victrola music, played into the air over a wireless telephone, was "picked up" by listeners on the wireless receiving station which was recently installed here for patrons interested in wireless experiments. The concert was heard Thursday night about 10 o'clock, and continued 20 minutes. Two orchestra numbers, a soprano solo—which rang particularly high and clear through the air—and a juvenile "talking piece" constituted the program.

The music was from a Victrola pulled up close to the transmitter of a wireless telephone in the home of Frank Conrad, Penn and Peebles avenues, Wilkinsburg. Mr. Conrad is a wireless enthusiast and "puts on" the wireless concerts periodically for the entertainment of the many people in this district who have wireless sets.

This advertisement is believed to be the first ever placed in any publication anywhere to advertise radios, price \$10. Notice the strange synonym used for the verb broadcast, a word then not yet invented.

5.

*Radio:
The Mature Years*

What a joyous, wonderful world radio created for America in the 1930's! There was something for everyone; melodic music or Beethoven; grand opera or soap opera; dance bands that played it soft and sweet; singers who crooned it or belted it out; quiz shows that sparkled with fast repartee; sophisticated comedy or pure nonsense; documentaries that came to grips with the fundamentals of life; serious-minded commentators who warned of the direction in which the world was heading; radio reporters who took their microphones into the chancellories of the world and let the demagogues show themselves up for what they were.

In the 1930's American radio began to be mature.

The decade started off grimly, with the country in the slough of the worst economic despond it had ever known. Then onto the political stage stepped a candidate for the Presidency who had not only a captivating personality but a voice that had the power of penetrating deeply into the hearts and minds of listeners. Because an overwhelming majority of the press was opposed to him, Candidate Franklin D. Roosevelt began making use of radio. As he traveled into 38 of the 48 states — to dispel rumors and half-truths about his physical condition — his aides made certain there was always a microphone in front of him, even when he spoke extemporaneously. Gradually he and those directing his political life became aware of the tremendous power of this new medium and made ever-increasing use of it. The election resulted not only in victory for the man with the golden voice (Roosevelt, 472 electoral votes; Hoover, 59), but it increased prestige for radio itself in its struggle for recognition.

Three weeks before Roosevelt took office, the country was swept by a banking panic. By inauguration day 5,000 banks were out of business. Thousands

of unemployed men were standing in bread lines to get food for hungry families. Many country men had lost their farms and many city men their homes, out of inability to meet mortgage payments. Thousands of factories were closed. A great pall of gloom hung over America.

A Voice Did It

On inauguration day the Washington sky was gray. Now and then rain pelted the crowds. Bareheaded, with jaw firmly set, Roosevelt was sworn in and then addressed not only the thousands of people on the crowded Capitol grounds, but millions clustered around radios all over America, who were waiting to hear what might be in store for them and the country.

"This is a day of national consecration. . . ."

His voice was strong and inspired confidence, whatever he might say.

"So, first of all, let me assert my firm belief that the only thing we have to fear is fear itself — nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance."

Gradually, as he talked on and on, a miracle occurred across the country. Millions of people began to take hope. Backs straightened. Despondency gave way to new resolve. That night nearly five hundred thousand people took pen or pencil in hand, or sat down to typewriters, and sent the man in Washington letters of congratulation, praise and thanks.

My Friends

But it was to get worse before it got better. Two days after his inauguration Roosevelt declared a "Bank Holiday," closing every bank in America. None could reopen until Treasury officials examined the books, and supplied enough liquid assets to withstand any run. In the large cities police leaves were cancelled. Some people were whispering a terrifying word: "Revolution!"

On the night of March 12, 1933, the President, surrounded by his advisors — now nicknamed by reporters "the Roosevelt Brain Trust" — sat at a table covered with microphones in the diplomatic reception room of the White House (the Oval Room) and when a radio engineer gave him the go-ahead signal leaned forward and in his warm, confiding voice began:

"My friends"

His audience that night was estimated at 60,000,000, by far the highest rating any radio program to date had achieved — sixty million nervous, worried Americans.

"I want to talk to you a few minutes"

"It is your problem no less than mine"

"Together we cannot fail"

Herbert Hoover while in the Presidency had delivered a total of 95 radio talks, but this was the first broadcast from the White House to which so many millions of people had listened so intently.

The Merit of the Microphone

Harry Butcher of CBS, nicknamed that talk a "Fireside Chat." The name stuck and was used for all other talks from the White House made by this man who really understood the merit of the microphone.

The talk on March 12 did much to still fear, but the struggle had just begun. Action had to supplement words, and so the New Deal was born. It involved drastic remedies for the virulent disease that now infected the body politic. Opponents would call some of the remedies "socialism" — and worse. It was a program that needed to be sold to the American public. There was only one way to do it. Despite the defeat the press had taken at the polls, most papers were still as hostile as ever to FDR. So he took to the air again and again — seven times during his first term — seven Fireside Chats. In his calm, inspiring voice he would explain the problem, outline the New Deal remedy, and ask the people for cooperation. Most listeners got the impression that he was right in their living room, talking intimately to them — giving them a personal report. So they listened, then gave the support he asked.

Radio's Power Proved Again

Overwhelming proof of the power of radio in the hands of someone who understands how to use it came in 1936. With many metropolitan papers still in opposition, the President won re-election by a landslide. (Roosevelt, 523 electoral votes; Landon, 8.)

When FDR broke with tradition and ran for a third term, he won by 449 electoral votes to 82 for Wendell Wilkie, which led the trade paper *Variety* to comment:

Unquestionably the biggest figure in all show business of 1940 was FDR, whose radio rating hit a new high with a Crossley rating of 38.7. His election for a third term demonstrated as nothing else could, the power of American radio. More than a political contest, the 1940 election was a battle between newspapers and radio to test which medium exercised the greatest influence on the American public. When the papers lined up almost 90 per cent solidly against the third term, Roosevelt took his case to the people by the airways. Newspapers denied that the victory had been a clear cut one, claiming that the Roosevelt voice and personality was as much of a factor in the victory as the medium of radio.

Two other world figures also discovered the power of radio in the 1930's, Benito Mussolini, former schoolteacher and newspaper editor, and Adolf Hitler, former paperhanger and house painter.

He Made Radios Tremble

Benito was a master of dramatic poses, the jutting jaw, the clenched fist, and theatrical actions. He considered himself the greatest Latin orator since Cicero. Often when he worked up to a great crescendo, radios all over Italy would vibrate until it seemed that they were about to explode with excitement.

Hitler and Mussolini both preferred addressing a mass of people from a balcony. But both were smart enough to realize the power of radio and see that a microphone or two was always present. The Nazi leader again and again tried to soften up some country he was about to take over by propaganda spewed into radio microphones.

Mussolini did one broadcast to America in English, in the 1930's. It was arranged by the Hearst organization as promotion for a series of signed articles Mussolini had written for the Hearst papers. In preparation for the talk, *Il Duce* (the Leader), as the Italians called him, took daily English lessons for months from an English lady residing in Rome.

Radio as a Revolutionizer

Great changes in the life pattern of mankind have resulted from each advancement in methods of communication. After hieroglyphics made it possible for people to write as well as speak, nothing was ever quite the same again. The invention of papyrus, paper, movable type, the telephone and the telegraph — each one reshaped the pattern. In the 1930's radio, even more suddenly and more drastically than those other inventions, made over modern man.

Nothing, not even the advent of the automobile and the airplane, obliterated state boundaries as radio did. Now people in isolated parts of the country who did not know a *scherzo* from a *czarda* were at least exposed to fine music. People who lived a two-day train trip from the nearest legitimate theater were able to listen to great drama. Information, entertainment and culture suddenly were within the reach of all, merely by turning the dial of their radio. No invention in history had ever served as such a leveler. Poor and rich alike, city man and country cousin, white-collar clerk and factory worker in overalls were all now listening to the same programs, laughing at the jokes of the same comedians, dancing to the music of the same bands, becoming sentimental over the songs of the same crooner, growing a little nervous over the news reports of the same foreign correspondents.

Of course everyone had his favorites. Within each category there was plenty of variety.

The Happiness Boys

The first radio comedian was some anonymous vaudevillian who stepped up to a microphone and told a joke. The chances are that few people heard him, fewer laughed, and no one remembers his name. But on October 18, 1921, WJZ put on radio's first scheduled comedy program. Ernie Hare and Billy Jones, without scripts or even notes, sang songs and told jokes for an hour and a half — 90 minutes non-stop. Fan mail poured in and soon they went on WEAJ as the Happiness Boys, sponsored by the Happiness Candy Stores, the first team to use a name on the air tied up with the sponsor. Their contract was for five weeks. They stayed on the air eighteen years, the first five and a half

for the same sponsor. They always signed off by singing a jingle that became so much a trademark that school children sang it:

How do you do, everybody?
 How do you do?
 Don't forget your Friday date,
 6:30 until 8.
 How do you do, everybody?
 How do you do?

Once they did a song about a four-leaf clover so effectively that within a few days their fan mail brought in enough real four-leaf clovers to paper the walls of the studio.

Amos and Andy

Then there was the team of Freeman Gosden and Charles Correll, whose first broadcasting job was singing songs and telling jokes on WGN, Chicago, from 10 a.m. until 2 a.m. the next day as Sam 'n' Henry. Because the station owned title to the names, they had to think up something else to call themselves when they switched to WMAQ, Chicago, so they became Amos and Andy. Soon they were on 45 stations.

By 1929 their annual earnings were \$100,000. The expressions they coined became part of the everyday language of the 1920's and 1930's: "I'se regusted!" and "Check and double-check!" Their humor was droll, slow-moving, with few belly-laughs. But their appeal was universal. Children enjoyed their black-face impersonations. University professors found them refreshing. For four years there was a standing order at the White House that President Coolidge was not to be disturbed while "the program is on." He was not the only one. All over the country were people who refused to answer telephones or doorbells between 7:00 and 7:15 p.m. EST, for fear of missing some of the conversation of the Kingfish, Madame Queen, Lightnin' or Amos and Andy, owners of the Fresh Air Taxi Company.

There were other teams: Fiber McGee and Molly, who kept the same sponsor for fifteen years; George Burns and Gracie Allen, who started in radio in 1932 and eventually carried over into television; and Lum and Abner, one of the most popular CBS programs.

Cantor, Bergen, McCarthy, Berle

Also there was Israel Iskowitz, who took the name Eddie Cantor. His first broadcast was on a New Orleans experimental station singing *Whispering*. A Methodist minister in Athens, Tenn., used to advance the hour for evening services so he and his congregation need not miss the Eddie Cantor program.

And Edgar Bergen, who started his ventriloquistic career playing voice-throwing tricks on his mother. During his last year in high school he paid



Ed Wynn, who became famous as "The Texaco Fire Chief".



Rudy Vallee, "the Vagabond Lover".



Amos 'n' Andy



Jimmy Durante, the famous "Schnozzn".

\$35 for a dummy that became Charlie McCarthy and helped him earn his way through college. By 1941 he and his sophisticated companion with the top hat, monocle, and white tie were drawing \$280,000 a year from Standard Brands, their sponsor. Charlie's classic that swept the nation was his growl: "I'll murder you! Ya, so help me. I'll mow you down!"

And Milton Berle, born in a Harlem tenement to an invalid father and a mother who was a detective in a department store. He began his career when he won an amateur contest impersonating Charlie Chaplin. He relished his reputation as a gag-stealer. One night he opened his network program saying: "I listened to Jack Benny on the radio last night. He was so funny I dropped my pad and pencil."

Crosby and Benny

Bing Crosby, christened Harry Lillis Crosby, got his nickname as a child playing cowboys with a broomstick for a horse and shouting "Bing!" at the top of his voice. In his first theatrical role he played the corpse in *Julius Caesar* and delighted the audience by coming to life as he jumped up to dodge the descending curtain.

Jack Benny's stock-in-trade was his reputation of being the stingiest man in the world. He once described the character he had created for himself as "a little bit of everybody, including yourself." Happily he made himself the whipping boy of the airwaves. He summed up his philosophy as a comedian saying: "The audience sees in us themselves. If someone pulls a gag on me about my having false teeth, 98 per cent of the audience with false teeth laugh. The other two per cent would, too, if only their gums weren't so sore." He had one firm rule: "If it hurts anybody it isn't funny." His first appearance, on March 29, 1932, had been on Ed Sullivan's talent show.

Hope, Wynn, Skelton

Bob Hope was a master at ad lib, yet he hired half a dozen gag writers to work on his program. One contract paid him a million dollars a year. Born in a London suburb he emigrated to Cleveland, where at first he taught dancing. He was 30 years old before he made his first radio appearance. His stock-in-trade was making himself the butt of his own comedy situations, and feuding with rivals. Example: on emerging from his home he bumps into mailman with a hand truck loaded with mail sacks.

"Fan mail, no doubt?"

"Yes . . . for Crosby."

"If they're for Crosby they must be girdles!"

Some of the stars twinkled brightly in the sky for a year or two or three and then faded. For a brief time fans across the country were imitating Jack Pearl's characterization of Baron Munchausen ("Vas you dere, Sharlee?")

Then Joe Penner's great question: "Wanna buy a duck?" became part of everyday slang.

More popular comedians also manufactured catch phrases. Red Skelton contributed: "I dood it!" Ed Wynn, as the Fire Chief, could say "Sooooo-o-o!" in a manner unique. Duffy's Tavern was so popular that everyone recognized "Duffy ain't here. Oh hello Duffy!"

Music, Music, Music

Some of the orchestras America danced to in those days, thanks to radio, were Fred Waring's Pennsylvanians, Rudy Vallee's Connecticut Yankees, the Cliquot Club Eskimoes, Spitalny's All-Girl Orchestra (with Evelyn and her magic violin, Evelyn being his wife), and bands led by Tommy Dorsey, Benny Goodman, Glenn Miller, Paul Whiteman, Horace Heidt, Sammy Kaye, Ben Bernie, Abe Lyman, and Rubinoff and his violin. (In the beginning Waring and his band played for \$1 a piece per night. They wound up grossing a million dollars a year.)

Overly plump Kate Smith, who had started out as a nurse, sang her way into the hearts of people all over the country, men, women and children alike. She capitalized on her weight. Once she summed up her professional philosophy thus: "I like to sing songs that everyone can understand and enjoy. I feel I'm making people a little happier, especially people in trouble." Her drawing power was such that she once increased her sponsor's coffee sales up by 25 per cent — to four million pounds a week.

More serious singers found favor, too. Lawrence Tibbett, son of a California sheriff killed in a duel with cattle rustlers, went into radio at the age of 29 on NBC, then switched to CBS. Although an opera singer, he liked to sing cowboy ballads, negro spirituals, and songs out of Tin Pan Alley, especially American songs by American composers.

Music Appreciation

To prove that radio could be cultural, NBC in 1926 presented Serge Koussevitsky conducting the Boston symphony. It was the first time any network had ever broadcast such a concert. The audience that listened was estimated to top a million. Then it employed Walter Damrosch, conductor of the New York Symphony, as its music counsel and gave him network time each week for a Music Appreciation Hour. CBS countered by taking on Deems Taylor, composer and music critic, to do the same on its network.

Then there was Nelson Eddy, one-time telegraph operator, cub reporter and choir boy, who became the great radio star of light classical music. And Milton Cross, the announcer with the great round voice and an amazing command of foreign languages and tongue-twisting musical names.

The 1930's saw the rise of a whole battery of news commentators who would help shape the thinking of Americans on world affairs. H. V. Kaltenborn (origin-

ally von Kaltenborn), the dean, was credited with a radio "first" when he broadcast a Spanish Civil War battle while hiding in a haystack, caught between the fire of Loyalist and Fascist troops.

Murrow, Shirer, Howe, Davis

Edward R. Murrow, who started out as CBS director of talks and education, became European director for CBS, then began his on-the-air career broadcasting the Austrian *anschluss* in 1938.

William L. Shirer, who first went to Germany in 1925, reporting the rise of the Nazis for CBS.

Elmer Davis, whose Hoosier twang and quiet wit made him a favorite across the country.

Boake Carter, who analyzed the news in a cultured and rather Oxford or Cambridge manner.

Quincy Howe, who had been an editor and author before coming to radio.

Fulton J. Lewis Jr., who pleased conservatives and angered others with his virulent attacks on people and ideas that displeased him.

There were other news men, not exactly commentators, who informed, educated, entertained, shocked or comforted their audiences:

Gabriel Heater, who built up an immense following because so many people liked his cheerful opening: "There's good news tonight!"

Drew Pearson, keyhole journalist, who talked as fearlessly on the air about scandal in high places as he wrote it in his newspaper column, *Washington Merry-go-Round*.

Winchell, Thomas, McNamee, Gibbons

Bombastic Walter Winchell, who could make the most trivial piece of news on a dull Sunday night sound world-shaking, with his clattering telegraph key in the background and his staccato delivery as he half-snarled into the microphone: "Good evening Mr. and Mrs. North America and all the ships at sea. Let's go to press!"

Suave Lowell Thomas, who "read the news," specializing in exotic stories from bizarre places.

Graham McNamee, who was called "radio's first reporter."

Floyd Gibbons, with a patch over one eye because of a World War I wound, about whom it was said "No war is official until War Correspondent Floyd Gibbons arrives," heard nightly over WEAJ on the Literary Digest Hour.

Intellectual Fare, Too

Some people in the 1930's would rather have missed eating than miss listening to *Information Please*, a program in which the emcee, Clifton Fadiman, and the unpredictable Oscar Levant, the erudite Franklin P. Adams, the sports-wise John Kieran and a guest defied listeners to ask them questions that some one



Drew Pearson



H. V. Kaltenborn



Edward R. Murrow



Floyd Gibbons



Walter Winchell



William L. Shirer

of them could not answer. In the course of the half hour there was always a great deal of lively repartee.

Also, for the serious-minded, CBS and NBC put on such programs as the University of Chicago *Round-Table*, *Invitation to Learning*, *American Town Meeting of the Air*, the *People's Platform* — all of them designed to increase knowledge, stimulate thinking, and promote discussion. As a result of network promotion, 15,000 discussion groups were organized around the country, made up of people who listened to the broadcasts and then, after sign-off, held their own group discussions of the subject. The *Round-Table* ran for 22 years without interruption. It was almost all talk, with no attempt at showmanship or theatricals. It set a pattern for intelligent adult discussion of a wide variety of pertinent subjects.

The Quiz Kids were in a class by themselves. They were child prodigies ranging in age from six to fourteen, who fielded questions that would have stumped most intelligent adults, even university professors. On one occasion they competed on the air with three United States Senators. U. S. Supreme Court Justice Douglas acted as referee. The evening's competition ended in a tie — so Justice Douglas decided. Judging by the audience reaction, even those represented in the country's highest legislative body by the three distinguished Senators were not bothered at their inability to out-answer the Quiz Kids.

Time Marches On!

Radio documentaries were born in the 1940's. Actual events were often re-enacted, with actors and actresses taking the roles of such people as Hitler, Mussolini, Roosevelt and Stalin. The best was *March of Time*, which appeared as both a radio feature and a motion picture, with Westbrook Van Voorhis's powerful voice declaring in unforgettable tones: "Time marches on!"

The success of such network programs encouraged individual stations to write and produce their own documentaries about socially significant local problems, and these programs often succeeded in arousing public demand for reform.

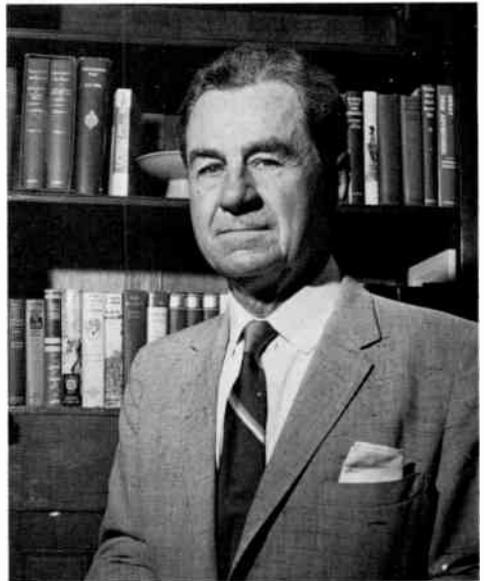
Dashboard Weepers

This was also the era of soap operas. Born in Chicago, they were properly called "daytime serials" but in the business they were often referred to as "dashboard weepers." They poured like a torrent from the Merchandise Mart and the Wrigley Building, pursuing each other in almost endless succession over all the networks.

Each program ran for twelve minutes, leaving two and a half minutes for the commercials, which were generally about soap in one or another of its various forms. The top listening audience for a soap opera was 20 million, which was not great, as radio audiences went in those days, but almost all 20 million were women who were regular purchasers of — soap.



Westbrook Van Voorhis



Lowell Thomas

At the peak of their popularity there were close to a hundred of these daytime serials, all of them designed to bring vicarious romance and adventure into the lives of women presumably bored with the routine of housekeeping, or to tell them stories of troubles and problems so much worse than their own that they would consider themselves lucky, no matter what their own life might be like.

Everybody Faces Life

The titles alone were clues to the content: *Against the Storm*, the *Guiding Light*, *Portia Faces Life*, the *Right to Happiness*, *Ma Perkins*, *John's Other Wife*, *Young Widder Brown*, the *Romance of Helen Trent*, *Mary Noble*, *Backstage Wife*, *Big Sister*, *Vic and Sade*, *Just Plain Bill*, *Road to Life*.

As uninspired and maudlin as most of them were, and as badly written as some of them were, they were generally well acted and well produced. Proof was in the illusion of reality they succeeded in creating. Millions of letters a year were sent in by listeners who wrote directly to the characters in the radio serials as if they were real people. The letters offered advice, warned of how to avoid further trouble, criticized or praised decisions, and in the case of an actor who appeared on two different serials, married in both cases, the letters indignantly accused him of bigamy, insisting that he must quickly rid himself of one of his wives.

Soap operas dominated daytime radio for many years. At one time NBC in the afternoon had twelve soap operas back-to-back, and CBS was almost as obsessed. Sponsors paid upwards of \$35 million annually for these show windows for their products.

Soap operas gave the language of Radio Row an expression still in use on television as well as radio: *cliff-hangers*, meaning "a serial dramatic program played at a high pitch of excitement and ending on a strong note of suspense."

Grim, Ghastly, Grisly, Gruesome

No situation was too grim, no tragedy too gruesome, no problem too hopeless for the soap operas. Day after day they dealt with greed, suicide, insanity, jealousy, alcoholism, hopeless domestic situations, arson, adultery, and assorted sin, major and minor. Some of the soap operas seemed designed to prove that there was nothing within the experience or even the imagination of the female listener as grisly or as grim as what was about (cliff-hanger!) to befall poor *Portia*, or noble *Mary Noble*.

Of course they also talked a great deal about love in its manifold manifestations (mother-, carnal-, unselfish-, unrequited-, puppy-, and romantic-) There were also frequent references to furs and riches, handsome men with titles and castles abroad, the glitter of Broadway and the glamour of Hollywood.

For the Men: Wrestling

Then there was wrestling. What many men thought about their wives' soap

operas, many women thought about the wrestling programs their husbands tuned in. Of all the legitimate sports, wrestling was about the last that should have attracted broadcasters, for when indulged in honestly, there is relatively little action and the whole proceeding is inclined to be as tedious as a chess match to everyone but those vitally interested. But in the 1930's promoters put a hypodermic needle to it. What resulted was a great deal of savage fakery, phony theatricals, and melodramatic but manufactured mayhem. Thus wrestling found its way onto radio and later into television.

Fame & Fortune for Announcers

The 1930's were mad, wonderful years along Radio Row. The depression had come to an end. Network and station income was going up and up. In 1936, for example, NBC's gross was \$34 million; CBS's, \$23 million. Talent fees had grown astronomically. Or so it seemed then. Major Bowes, who made dreams come true for amateurs seeking a career, was getting \$3,600 per broadcast; Eddie Cantor, \$7,500; Kate Smith, \$8,500. Such announcers as Jimmy Wallington, Phillips Carlin, Ted Husing, Milton Cross, Norman Brokenshire and Graham McNamee were gaining fame as well as fortune.

In the 1930's singing commercials suddenly made their appearance, causing a storm of protest from certain quarters, but many were so contagious that soon, often against their will, people were singing or humming about double this and double that, how V-8s go and go, how Pepsi hits the spot, and something about not putting bananas in the icebox.

For years — from the very beginning — everything on the networks and on most stations had been live. NBC had the strictest rule. Even President Roosevelt during his first two years in office was unable to record his Fireside Chats. But in 1934 the ban was lifted and NBC offered its stations electrical transcriptions of programs originating in its studios. The way was now open for the eventual use of the mass of recorded material that today is on networks and independent stations alike.

The Saga of the Singing Mice

Some of the madness of the 1920's continued on until the start of World War II. A. A. Schechter, NBC's director of news and special events, devoted fourteen pages of his book of reminiscences, *I Live on Air*, to his experience in arranging an international singing mice competition over the network.

One news story about the contest said NBC had screened 32,000 mice in selecting those with sufficient singing ability to qualify as title contenders. All stations on the NBC network were involved. After it was all over Director Schechter summarized:

“One reason the International Singing Mouse Contest (sometimes the title used *mice*, sometimes *mouse*) was considered a success was because announcers in many cities did a grand job of keeping the radio audience entertained. Their



Richard Hart, window-cleaner, with recorder hanging outside window of 102-story Empire State Building



Competitor in National News-Hawking Contest

skillful kidding of all concerned, including NBC, provided some of the best unplanned laughs of the year. Too often we think of announcers as voices rather than people. We made the discovery, for instance, that Mr. John Voice, whom we had always regarded as Old Sober-sided, had a swell sense of humor, and that Mr. Joe Voice, rated as a chap who had to have every syllable written out for him, could ad lib in an emergency. We discourage ad libbing as a practice, but it is reassuring to know that when something goes wrong (like the sudden decision of a rodent songbird not to sing after all) resourceful announcers know how to keep the audience amused."

Next, Talking Parrots

No sooner did NBC get over its singing mice (or mouse) contest than it launched a National Talking Parrot Competition. Thousands of listeners offered birds that they claimed could perform such feats as whistle, hiccup, give the Bronx cheer, sing *Frankie and Johnnie*, say "Your slip's showing, Mabel!", cry "Nice fresh peanuts!", talk Yiddish, exclaim "Hooray for the Irish!", say, "There's a fly in my soup, waiter!" or recite the Lord's Prayer. Of the two hundred auditioned, eight were chosen for the finals. The winner, not surprisingly, turned out to have been christened "Polly."

Much more intense than the rivalry between mice and parrots was that between press and radio. On the night of the first scheduled news broadcast in history — the KDKA election coverage in 1920 — the returns were freely given to the radio men by the local Pittsburgh newspaper. But when the press began to see radio as a threat — both in the news field and in the scramble for advertisers' dollars — a feud began. Not only did the papers, with few exceptions, henceforth refuse to list radio programs, but papers and press associations alike denied radio access to their news. It was the McCoy's and the Hatfield's all over again.

Golden Voice of News, But No News

Lowell Thomas, commonly referred to around the NBC news room as "the Million-Dollar Voice", was being paid a considerable salary to broadcast news. Now the problem was: Where to get the news? If Lowell Thomas' script writers slyly lifted news items from the papers, they were certain to get caught, for the papers made stenographic records and even took recordings of all NBC broadcasts, which were then checked against the day's papers.

Schechter, accordingly, decided to convert himself into a one-man news bureau. For ten or fifteen hours a day he was seldom off the telephone. He would call across the city, across the state, across the country, and (as soon as international lines were opened) across the world. Having had his early reportorial training on one of the best newspapers anywhere, the old New York *World*, he knew just what questions to ask to pull out stories. Gradually he built up a remarkable staff of reporters, every one of them unpaid. Among them were

governors, generals, district attorneys, prominent industrialists, police chiefs, judges. He recruited their help in an adroit manner.

"This is Lowell Thomas' office in New York City. Mr. Thomas wonders if . . ."

Magic Name, Magic Formula

The name was magical. Everyone knew Lowell Thomas. There was glamour about radio and even more glamour about being called by "Mr. Thomas' office in New York City." And so almost everyone cooperated, often giving Schechter news on the phone long before it was made available to the press. Once a judge indicated to Schechter what his verdict in a sensational case was going to be hours before he handed it down in court. The Governor of Maryland was one of the many important people who telephoned Schechter voluntarily and frequently with little and big pieces of news. The NBC news chief never left his office in the RCA Building in Rockefeller Center without half a dozen tickets for Rudy Vallee's next broadcast in his pocket. These often bought exclusive stories from policemen.

The system was so successful that often there was more news than Lowell Thomas could possibly use in his fifteen-minute broadcast, so the excess was passed on to other NBC newscasters, often to Walter Winchell for his Sunday night show.

Eventually the press-radio feud was settled with the creation of the Press-Radio Bureau, financed jointly by NBC and CBS and with the three major news services donating material for two five-minute news summaries per day. But there were many restrictions. No sponsors. No news broadcasts in the morning until 9 a.m., so that radio could never beat the morning papers. No evening broadcast until after 9 p.m., so radio could never beat the evening papers. Later these restrictions were eased, until finally all three wires services began selling news to radio, without many restrictions as to how and when it could be used.

No-Holds-Barred Battle

In the meantime, another feud got started: Schechter vs. Paul White. White was a United Press news executive, hired by the CBS president, Paley, to head the CBS news department and offer NBC some competition. The battle went along merrily for years. The competition between the two men and their networks was always fierce, often unscrupulous, and sometimes just plain ridiculous. For example:

CBS beat NBC again and again on the round-the-world flight of Howard Hughes. Stinging from this defeat, NBC obtained exclusivity on the broadcasting of all major track meets. CBS retaliated by sewing up all important golf tournaments. Then they fought each other over the Poughkeepsie Regatta on the Hudson River. CBS paid heavily for the exclusive right to broadcast from the

observation train that followed the shells down the river. so NBC chartered a plane, broadcasting from just *over* instead of just *beside* the racers. NBC had paid \$10,000 for the exclusive broadcasting rights to all national track meets for four years. On the day of the annual National Amateur Athletic Union Track and Field Meet, Ted Husing, CBS sportscaster, persuaded the pastor of a Lutheran Church located on the edge of the athletic field to permit him to erect a platform on the roof of the church school from which to broadcast as he watched the meet through binoculars. Schechter later admitted in print that he had seriously considered hiring a brigade of small boys to try to blind Husing by shining hand mirrors into his eyes. but finally decided against such extreme tactics.

The vendetta went on for years. Occasionally it even made the papers. This from the New York *World-Telegram* :

THAT SPORT BROADCAST FEUD AGAIN

Yesterday WABC (CBS) issued bulletins on how it had shouldered NBC out of the National Open golf tournament this week-end and how good the broadcast would be. Today NBC comes back with counter bulletins on what NBC stations are doing on sports events that WABC can just try and get into. Starting with the Louis-Braddock fight June 22, NBC lists everything down to a dog sled derby up in Canada next winter.

This battle to get exclusive rights to sports events is one fight, for a change, from which listeners will benefit. The fan will be assured of coverage on one network and the non-fan won't find his whole radio schedule cluttered up with golf or corn-husking on all stations.

Then Came REAL War

With Germany's invasion of Poland and the start of World War II, American radio became more mature than ever. Entertainment programs were not canceled, but now news was treated by network officials as an express train is by railroad dispatchers: it got priority over everything. In network news rooms, emergency cut-in equipment was installed. By pressing a large red button, a news man could interrupt any program on the air so he could send a flash or a bulletin out across the country.

As one European country after another fell to Hitler's Wehrmacht and Luftwaffe, Americans began to spend more and more time at their radios, listening to news commentaries, overseas pickups and roundup shows. Would London be able to hold out, now that she was almost alone? Three young CBS men — Murrow, Charles Collingwood and Bob Trout — began to build their reputations in blacked-out London. In Berlin, Bill Shirer, who had already written *Berlin Diary*, between doing broadcasts that were masterpieces of fine reporting, began filling his notebooks with material for what someday would be his greatest book, *The Rise and Fall of the Third Reich*.

The Hunger for Insight

America, long accustomed to splendid and happy isolation, even during the

years when Hitler was making ready, was suddenly forced to take an interest in what was happening in such places as Galicia, Hertzegovina, Dobrudja, the Pelopennesus, Tobruk. Radio needed men who could do something more than just "read the news." So radio took men from the faculties of universities, out of newspaper offices, from the press associations. CBS was the first network to call its foreign correspondents in each night on a round-the-world-news-roundup. Then NBC hired an erudite, bearded author and world traveler, John W. Vandercook, to emcee its fifteen-minute nightly pickup of reports from abroad.

The Day That Lives in Infamy

Then came that awful week-end, when a Japanese fleet steamed to a spot within 200 miles of Oahu Island and sent 360 carrier-based planes against Pearl Harbor, where seven American battleships and 87 other American warships were lying at anchor. It was Sunday afternoon. No newspapers until the next morning. And so it was that the news came first by radio. For hours and hours radio had the story all to itself. All afternoon, all evening and long into the night millions of Americans stayed close to their radios listening to the terrible details — 18 American ships sunk, 174 American planes destroyed, and more than three thousand casualties.

WAR!

Because of the war a certain popular brand of cigarets was forced to change its packaging and for months, morning, noon and night, the radio public heard the commercial:

"Lucky Strike green has gone to war!"

Radio's First Big War

Broadcasting went to war, too, only the broadcasters didn't talk as much about it as Lucky Strike did. Networks and independent stations were all put on a war footing. There was worry in some places about sabotage and subversion. A radio station can easily be blown up. Or at least put off the air. So a system of guards and passes was inaugurated. Most public participation shows were canceled, for fear spies would convey secret information to the Nazis or the Japanese by what they said into a microphone. Any guests who were to appear on local or network shows were carefully screened. Transmitters were under double guard, around the clock. FBI checks were made of all station employees.

On the positive side, radio began devoting more and more time to morale-building programs, to scrap iron collections, to letters-to-servicemen campaigns, to recruitment for the armed forces, and, especially, to the sale of war bonds.

\$39,000,000 in 18 Hours

In those days Kate Smith did more than any other one person to prove the influence of radio. On September 21, 1943, she began a marathon sale of U.S. war bonds, announcing that she would work at the microphone uninterrupted for

eighteen hours — from 8 o'clock in the morning until two o'clock the following morning. And she did! Her regular schedule was one daytime program per day, and one evening program per week. Her total weekly audience was estimated at 44 million. Most of them listened to part of her marathon performance, and many listened to it all. During the 18 hours she spoke for a minute or two once in every fifteen-minute time segment, urging, begging, demanding that her listeners buy war bonds. She told, in her own dramatic manner, of sacrifices by soldiers she knew and generosity by civilians she knew. She played on the themes of hate and of love. It was obvious to everyone that she was not working from a script. Listeners felt, as they did whenever FDR broadcast, that she was talking just to them. Often her voice broke with emotion and when it did people at their radios all over America would swallow hard or reach for their handkerchiefs. But they did more. By phone, telegram and letter they agreed to purchase a grand total of \$39,000,000 worth of war bonds. Grand total. Grand performance. Grand woman.

H Hour of D Day

At 3:32:09 a.m. on June 6, 1944, from London, on all networks, came the official announcement for which news men had been waiting all night:

Under the command of General Eisenhower, Allied naval forces, supported by strong air forces, began landing Allied armies this morning on the northern coast of France.

At 3:33:37 a.m. NBC Commentator Robert St. John gave the first network comment:

"Men and women of the United States: this is a momentous hour in history. This is the invasion of Hitler's Europe. This is zero hour!"

There was need, now, of war correspondents who could and would keep talking while the bombs were dropping. Radio found them. Many did a magnificent job of war reporting under almost impossible conditions.

War's Best Broadcast

Radio was well represented at the invasion. The most notable broadcast (in the opinion of war correspondents themselves) was done by George Hicks of ABC from the deck of a ship crossing the English Channel in the invasion armada. As bombs rained down from Nazi planes and as many vessels around him were hit and sank, Hicks kept talking, giving Americans a sample of what their sons in the invasion force were experiencing and giving it more vividly by word of mouth than all the newspaper dispatches, magazines articles and books that would be written could possibly give it.

Radio lost one of its best voices when President Roosevelt drafted Elmer Davis to head the Office of War Information (OWI), the country's new propaganda and counter-propaganda agency.

Atomic Secret Well Kept.

In 1944-45 radio cooperated in keeping the secret of what the Manhattan Project really was, and what was being constructed at Los Alamos, New Mexico. Many radiomen knew more than they ever admitted — even to wives and sweet-hearts.

In the spring of 1945 broadcasters took a mass of equipment with them to San Francisco to cover the creation of the United Nations, most commentators expressing the hope of people everywhere: that the fifty original signatory nations would do something — were doing something — to prevent it from ever happening again, for the world was indeed weary by 1945 of the sufferings and the heartaches of war.

On the afternoon of April 13, 1945, the bells on printer machines in network and station news rooms all over the country began to jangle, signaling that a flash was up-coming. Then the electrically-operated keys tapped out the words:

FLASH ROOSEVELT DIES

It was difficult to believe. It was true that his photographs ever since Pearl Harbor had shown him getting progressively older and weaker. Shots taken at Yalta, with Roosevelt seated between Churchill and Stalin, should have given the warning. Still it was hard to believe. Many a broadcaster that afternoon was so personally affected that he had difficulty keeping up his running commentary while waiting for more details from Warm Springs, where it had happened.

Those of us who put the flash on the networks and for the next eight or ten hours stayed at microphones reading subsequent bulletins and dispatches, remember best the story of Elizabeth Schoumatoff, an artist who was painting his portrait as he suddenly fell over in his chair and whispered his last words, just loud enough for her to hear:

“I have a terrific headache!”

Have No Doubts

Again and again that night we broadcast two sentences from the speech on which he had been working just before his death — a speech he was to have delivered into microphones the next day:

“The only limit to our realization of tomorrow will be our doubts of today. Let us move forward with strong and active faith.”

It was poetic justice that his first speech as President had contained the immortal words: “. . . the only thing we have to fear is fear itself. . . .” and the last speech should say: “The only limit to our realization of tomorrow will be our doubts of today.”

Many programs were cancelled that day, that night and on following days, and many commercials were eliminated out of respect for the man who had called his constituents “My friends.”

Godfrey's Finest Hour

Hundreds of reporters covered the presidential funeral in Washington, writing millions of words of description in newspaper stories and talking by the hour into radio microphones. But the broadcast most listeners remembered best was the one in which Arthur Godfrey, who had become the brightest radio star of the 1940's, broke down as he described the simple, flag-draped caisson, drawn by six white horses, moving up Pennsylvania Avenue.

In August, 1945, radio tried to explain to a stunned and bewildered public what had been done at Hiroshima and Nagasaki, and why.

Peace, Isn't It Wonderful!

After the bombing many broadcasters kept long vigils at their microphones, talking, talking, talking, as they waited for rumors to turn into actuality — as they waited for the positive flash that the most ugly war in the long expanse of time had finally come to an end. It was an off-again-on-again mishmash, with many false reports, conflicting announcements, bulletins, denials of bulletins, confirmations of the bulletins, denials of the confirmations, and confirmations of the denials. Many broadcasters ate and slept in or near their news rooms. One veteran of several world wars and numerous minor national and international misunderstandings decided that in view of his own age and his certainty that there could never possibly be another world conflagration, the surrender of the Japanese and the end of World War II would be the last really big story of his life, so he remained either on mike or within a few feet of the emergency broadcast studio for 72 non-stop hours.

Then it finally came!

Just as most Americans had received the Pearl Harbor news by radio, so did most Americans learn of the surrender and some days later of the surrender ceremony on board the battleship *Missouri* over their radios.

The Transistor Revolution

One of the most important post-war developments for radio was the invention of that small electronic device called a transistor that does the job of a radio tube by amplifying the signal picked up by an antenna, although it is only one-one hundredth the size and weight of radio's early tubes. Now radios suddenly became small enough to put in a coat pocket, or in a lady's handbag, or to carry in the palm of the hand.

Thanks to transistors and car radios the actual or potential audience jumped by millions. From now on, most Americans, wherever they might go, would never be out of contact with their local radio station. In the car, a flick of a switch would bring in the latest news from Washington, London or Vietnam, a report on what the weather would be in half an hour, or a helicopter description of traffic conditions a mile up the road. In the home, now, there would be at least



Arthur Godfrey

two or three radios, plus another, perhaps, in the garage. There were transistor radios to take swimming, or on a fishing trip into the north woods, or (and some did!) to football games “in order to listen to some *other* game if *this* game isn’t exciting enough” or (and some did) to take to a dance “in order to listen to some *other* rhythm when *this* rhythm isn’t hot enough.”

At First, Panic

The transistor and the rise of television forced many changes in the world of radio. At first there was mild panic. Television (detailed in the next chapter) was a step-brother of radio, at first ignored, then just tolerated. But as it grew and commanded more and more attention from its parents, it earned the bitter resentment of radio. Why should radio’s profits be plowed into TV? Why should the best talent leave radio for television? Why should television get the spotlight of publicity, the praise, the attention, and the sponsors?

In some radio circles it was called “the monster”. Pessimists said radio was finished; it could never survive. Others thought that all radio needed was great imagination and a new look. For a few years radio was obsessed. Mad ideas were tried, dropped, and then even madder ideas were conceived. One such was a system of interviewing called “stop-start taping.” To save wear and tear on a star interviewer — and thereby at the same time cutting down expenses — a stand-

in interviewer would ask the questions and the interviewee, trying his best to pretend that he was facing the star, would give the answers, which would be recorded on tape. When the show went on the air, the star, trying her best to pretend that she was facing a live guest and not just a piece of tape on a machine, would ask the question again and then the tape would give forth the canned answer. On one stop-start show Margaret Truman was the star interviewer; the guest with whom she was supposed to talk was Eddie Fisher, who, of course, had recorded all his answers with the stand-in days before and probably by now was on the other side of the continent. As the show opened Miss Truman breezily announced:

"My star companion today is Eddie Fisher. Hi there, Eddie!"

Dead silence.

"Hi there, Eddie!"

More dead silence, for Eddie's voice was caught somewhere in the tape machine in NBC's Radio Central.

Even worse was the day Walter Kiernan was talking with an invisible, far-away Rosemary Clooney, who had given all *her* answers on tape days ago to a stand-in.

"Did you and your sister Betty start in show business together, Miss Clooney?" Kiernan asked.

Back from the machine came the sweet voice of Rosemary:

"I certainly do and so does Joe. It's the only way to raise children."

Needed, a New Diet

Radio had some bad times in the 1950's and the 1960's. Then the program directors, station managers and network officials began to look at statistics and the situation. Radio was not dying. Radio was not even a little sick. Radio just needed a new and different diet.

In 1950 there had been fewer than four million television sets in use in the country. By 1960 there were almost fifty million. It was logical to assume that there had been a corresponding *drop* during the decade in the number of radios in use. In 1950 there had been some fifty million radios in use in the U.S.A. By 1960 the number was down to . . . ? *Down* to almost 150 million! One hundred and fifty million! Transistors had been partly responsible. And car radios. And the custom of having one radio in the bedroom, one in the kitchen, one in the basement workshop, one in the playroom and one out in the garage. Plus, maybe, one more somewhere else. Also, now there were radios in such public places as filling stations, small shops, the beauty parlor and the dentist's office. In the 1960's radios were outselling television sets two to one. A car radio had become as essential a piece of automotive equipment as a tail light or a rear-view mirror. Late in the 1960's F.M. radios for automobiles further increased the audience.

Radio Is for News

And so network officials, station managers and program directors, on the basis of all those statistics, began programming for the audience that actually existed, rather than for an audience they thought they had lost. They began catering to Americans on the move, Americans driving to work, Americans carrying transistors along the beach, or having lunch at a drive-in, or walking to school, or getting a permanent, or having a tooth filled.

Despite the brilliant performance of the Cronkites and the Huntley-Brinkleys, radio remains much the superior medium for news. During the war and in the post-war period, during Korea, during Vietnam, America got most of its news and information from the radio. Television had done nothing to change it. Networks and stations, aware of this, began giving their listeners more and better news coverage — direct reports from *where* news was happening *when* it was happening: fast interviews caught on the run with tape recorders, then edited so that the embarrassing pauses, the inconsequential and the nonsense were all eliminated before the interview was offered to listeners; wide coverage of special events; frequent summaries of the news, for the benefit of those just tuning in. Television with its cumbersome cameras, lights and sound equipment, and the need of processing the film before it was of any value, might be able to out-perform radio with an in-depth documentary, but it could never compete on fast-breaking news. Neither could newspapers and magazines, with their rigid deadlines and infrequent editions.

Yes, news was and is radio's meat.

Accent, Flair, Dimension

Instead of 15-minute commentaries, as in the past, radio began putting on three and a half minute and five minute news and background reports, each one devoted to a single subject. Also, rather timeless one-minute spots covering developments in such fields as: Education, Health, the Lively Arts, the American Scene, Behind the Headlines, Capitol Hill, This Modern Age, Women, the Business World, Science. The very titles of some of these packaged programs offered to network affiliates and independent stations were interest-compelling, even exciting: Accent, Flair, Emphasis, Dimension.

Many program directors concluded that while there were some areas of shadow in which the fields of television and radio slightly overlapped, radio was, is and would remain the better medium of the two for talk, discussion, conveyance of ideas.

Music with the Eyes Closed

Then there was music. How much does it add to the enjoyment of a great symphony orchestra to be able to see the musician's right hand every time he strikes the big bass drum? Also, listening to music by radio, one could still take a cake out of the oven, shave, or even read a book, without missing much.

Recorded music could give all four members of a family (a family with four transistors) the possibility of enjoying four different musical programs in four different rooms of the house: a symphony, rock and roll, a crooner, and something sentimental, all at the same time, over four different stations.

Sports (more and better coverage), stock market reports, instant weather, and, latest of all, editorializing (to be covered in a future chapter) — these were other answers the programmers gave.

Radio, well over its mild, temporary panic, became more vigorous, more healthy, and more prosperous than ever. In 1945, when television began its post-war growth, there were 943 licensed radio stations in America. By 1950, two thousand. By 1960, four thousand. By the end of 1966, approaching six thousand.

By 1966 there were 242 million radios in use in the country, with 31 million additional receivers being sold per year. And the end was not in sight, for transistors radios were being built into the brief cases of business men, into baseball caps, into hunting costumes, into bedroom furniture and even into kitchen appliances. Soon no home would be up-to-date without a radio-in-your-toaster and an electric stove that picks up FM music everytime the oven is turned on.

Now radio was more than ever Big Business. Spot radio income for 1965 was a quarter of a billion (billion, not million) dollars. One sponsor (Colgate-Palmolive) tripled its spot radio spending that year — from \$1,721,000 to \$4,335,000.

The Radio Advertising Bureau's president, after a tour of major markets, reported that radio was fast approaching the saturation point in spot availabilities for national advertising, a rather complicated way of saying that anyone who henceforth wanted to buy radio time for advertising purposes would have to get in line.

The communications editor of *The Saturday Review* wrote:

The added income radio will get from its enormously widening audience will mean added service to the listener, better programming, quicker pickups from every corner of the earth — and nothing television can do will ever be able to compete with radio for instantaneous communication. In short, radio is here to stay, as much a part of the new American way of life as convenience food and color TV.

Speaking of some of the new concepts in programming, one radio-television editor wrote:

Radio programming is now far better than it was in 1946; more honestly written, more intelligently conceived, freer of inhibition, fairer to its listeners, more imaginative in its use of instantaneous world-wide facilities and news.

More than all that, American radio had gone through a crisis and had come out of it free of government ownership, without political control, untroubled by bureaucracy, intensely independent, a great industry with its roots deep in every corner of America, from the largest metropolitan centers to towns inhabited by only a few thousand people — a vital and ever-growing force in American life.

6.

*Television:
The Dream Come True*

At the court of ancient kings a place of honor was always given to the crystal gazer who could stare hard at his glass ball and see (or claim to see) what was happening at some future time or in some far-away place. This was the measure of man's intense desire to see at a distance.

Television means "far vision" or "far-off vision." It is the dream of being able to see at a distance — the dream come true. In many ways it is the greatest of all the modern miracles. Yet, miracle though it still seems to a few, it has already become such an accepted part of everyday life for the many that when Americans travel to those areas of the world where television is still unknown, they feel as lost as if out of reach of running water or sweet-flavored toothpaste.

The story of television actually had its start hundreds of years ago, when scientists first began experimenting with electricity. It is not nearly as simple as the tale of how the telephone was invented. Many men in many lands played major roles. Like the splitting of the atom or the development of travel in outer space, television was perfected by group effort. It is not the one-man story of a Gutenberg, a Thomas Edison or a Henry Ford.

One of the many Nineteenth Century names that stud the story is that of a Swedish chemist, Jakob Berzelius, who in 1817 discovered an element he called *selenium*, but it was not for another fifty years that anyone realized the great value of selenium: that, although not a metal, it becomes a strong conductor of electricity when it is exposed to light. Further experimentation with this strange substance led to the development of the photoelectric cell, which converts light variations into electrical impulses, which in turn helped to make television possible.

Picture Sent by Wire

Meanwhile, in 1862, an Italian, Caselli, claimed to be the first person in the world to transmit a picture by wire. Thirteen years later an American named Carey designed the first television scheme using a group of selenium cells.

In 1881, Paul Nipkow, a Russian living in Germany, patented a *scanning disc* for transmitting pictures by wireless. It was a mechanical rather than an electronic device. Between the subject to be televised and a powerful light, Nipkow placed a disc with a spiral pattern of punched holes. Only the light passing through one hole at a time could shine on the subject. As the disc revolved, light from the first hole would pass across the subject, near the top; then light from the second hole, a little lower down. By the time the disc had completed a full revolution, the subject had been completely scanned. The light reflected from the subject fell on a light-sensitive cell, which set up a current of electricity varying in strength with the intensity of the light. This fluctuating current operated a lamp, the brightness of which changed in exact proportion to the variations in light reflected from the subject. A second disc, similar to the one used in scanning the subject, was placed between the lamp and the observer, who was thus able to view a reproduction of the subject. This was Nipkow's invention. It explains primitive television.

Transatlantic Coincidence

In 1925 Charles Francis Jenkins, originally from Dayton, Ohio, conceived the idea of transmitting a picture by combining photography, optics and radio, and using a scanning disc with vacuum tube amplifiers and photoelectric cells. It was one of the coincidences of science that at exactly the same time in England exactly the same experiments were being made by a British inventor, John Logie Baird. Because impulses were transmitted so slowly by the methods Jenkins and Baird used, their pictures were neither very clear nor very exciting.

Then came Vladimir Zworykin, a Russian-born scientist employed in the Westinghouse research laboratories, who applied for and received a patent on an electronic-beam television pickup which would eliminate mechanical scanning by making the pickup an all-electronic operation. This led to the iconoscope, or electronic camera tube. Some years later, Dr. Zworykin demonstrated a kinescope, which eliminated mechanical scanning from receiving as well as sending, thus providing the first all-electronic television system. Before long the iconoscope and the kinescope became standard television equipment.

The first television story with a little human interest to it is that of Philo Farnsworth, native of a town in Utah with a population of less than 2,000, who in 1922, at the age of sixteen, told his high school physics teacher about his own idea for a greatly improved scanning system. Some years later, when Farnsworth was still a student, now at Brigham Young University, Washington granted him a patent on his *image-dissector*, as he called it. It was many more

years before this and other Farnsworth inventions were finally put to commercial use in television.

First Scheduled Telecasts

Television transmissions over a wire circuit between New York and Washington were demonstrated by the Bell Telephone Laboratories in 1927. The next year, on May 11, WGY, Schenectady, became the first station to begin regularly scheduled telecasts, putting on programs three afternoons a week. One of the offerings was *The Queen's Messenger*, the first television drama ever to go over the air.

NBC began operating W2XBS in New York City in 1930 as an experimental station. Because television beams do not bend and follow the curvature of the earth, as radio beams do, one of the early problems of those sending out television programs — as well as those trying to receive them — was getting as much height as possible for antennas. It was natural, then, that even at this early date advantage was taken of the great height of the Empire State Building in the heart of Manhattan. This 102 story structure now began to bristle with pieces of metal which its architects and builders had never envisioned when they planned the building in the 1920's. (By the mid-1960's television antennas had added 222 feet to the height of the skyscraper, giving it an overall altitude of 1,472 feet.)



One of television's first performers, Felix the Cat, who whirled on a phonograph turntable in front of TV "eyes."

CBS started a regular schedule of television broadcasts from its new station, W2XAB, on July 21, 1931. Three months later NBC began transmitting from its Empire State Building studios. For nearly a decade the experimenting went on.

Coaxial Cable Invented

When Bell Telephone Laboratories announced officially that it had developed a coaxial cable capable of carrying TV signals across a state, or across the country, men began to dream of networks of television stations that might someday be as extensive as the radio nets were in the 1930's.

Seventeen experimental stations were in operation in the United States by 1937, which was the year German experimenters threw television pictures onto a screen eight feet wide.

The next year NBC made history by conducting the first sidewalk interviews, in Rockefeller Plaza. The sound and the picture were played from an RCA tele-mobile unit to the Empire State Building transmitter and then were telecast to the few thousand homes and apartments in the New York area equipped with receivers.

Bright Optimism — Black Pessimism

General Sarnoff was as optimistic about television as he had been about radio. In 1938, in a spirit of bright prophecy, he said:

“Television in the home is now feasible.”

But there were others who were not so clairvoyant. *Radio Guide* sent a century plant to a list of key advertisers with a note that said:

Plant it in a pot. Water it carefully. Expose it to the sunlight. When it blossoms, throw the switch on the new television cabinet your grandson will have bought and you may expect to see telecasts offering programs of quality and network coverage comparable to that of our (radio) broadcasts of *today*.

FDR on a Telecast

April 30, 1939, was a red-letter day for television. That was the day RCA-NBC inaugurated a regularly-scheduled television program, its cameras picking up President Roosevelt as he opened the New York World's Fair. Five million dollars had been spent thus far on experimentation by those two organizations alone, and millions more would still be poured in before there would be any income worth mentioning.

That summer and autumn pioneer television stations began trying to out-shout each other in claiming “firsts”. They were like KDKA and other pioneer radio stations back in the 1920's. The first major league baseball telecast. The first college football game. The first professional boxing match. The first this, the first that, the first something else.

Then Came War

When war broke out in September, 1939, it had a depressing effect on this infant industry. Experimentation did continue. Many technical improvements

were made. Some progress was registered, but it was slow.

A coaxial cable was used for the first time on June 24, 1940, between Philadelphia and New York, with success. Two months later CBS made the first experimental color broadcast. On July 1, 1941, the FCC gave its approval to commercial television, and WNBT and WCBW, both in New York City, became the first licensed transmitters. By the end of 1941 there were half a dozen stations, three of them in other parts of the United States, three in New York City. By that time there were 10,000 sets in the country, at least half within the limits of New York City.

Just a month after the Japanese surrendered, in the fall of 1945, RCA announced perfection of an image orthicon tube which would make for much more sensitive cameras. The number of lines per image was advanced to 525. Other major mechanical improvements were made. The way was now open for the great American television boom that might, perhaps, be in the offing.



Robert St. John, announcing Japanese surrender, 1945, over television.

Beyond Anyone's Wildest Dream

Many suspected what would happen when the tensions, the nervousness and the anxieties of war suddenly came to an end. Many surmised, verbally and in print, that America would eagerly turn to sports, amusement, spending, enjoying. But no one was correct in predicting the extent. Television was the great beneficiary of what did happen. People had money, and the time to spend it. They wanted new thrills, new pleasures.

Even though television sets in the mid-1940's were expensive by present standards, antennas began to sprout everywhere, even in the poorest districts. Sets could be had on the installment plan for a few dollars down, so why worry about the price! That is how the revolution in the world of entertainment began.

At war's end there were 16,500 sets in use and still only six stations on the air. On September 17, 1946, the first post-war television sets went on sale. By 1948 there were 102,000 sets, but two-thirds of them were in and around New York City. In the next three months the total doubled. By the end of 1948 there were a million sets in use, and they were widely scattered.

Remember the Crystal Set Days!

Television programs in the 1940's were often crude. The image was not always clear. Technical difficulties were many. But America was fascinated. Dealers were unable to get sets from the factories fast enough.

At first, because of the cost and the scarcity of receivers, the place to watch television was somewhere in public: a restaurant, a bar, a cocktail lounge, a hotel lobby. Then, gradually, America became obsessed with the novelty of seeing TV pictures right in the home. Sociologists were delighted, predicting that this would revolutionize American life: the family would become important again, for henceforth the family would spend the evening all together in the living room in front of the television set, all enjoying the same program.

Some Firsts

On January 3, 1947, the first telecast was made of Congress in session.

The next year fifteen television stations, from Boston as far southwest as St. Louis, carried the inauguration of President Truman.

On September 11, 1948, WTMJ-TV, the Milwaukee *Journal* station, announced it would carry programs of four major networks — NBC, ABC, DuMont and CBS, thus becoming the first TV station to affiliate with four networks.

Television now was beginning to expand and realize its potentialities.

On May 31, 1949, at the University of Pennsylvania, a telecast of a surgical operation was shown on a closed circuit.

When the Japanese Peace Treaty Conference was opened by President Truman in San Francisco on September 4, 1951, it was televised.

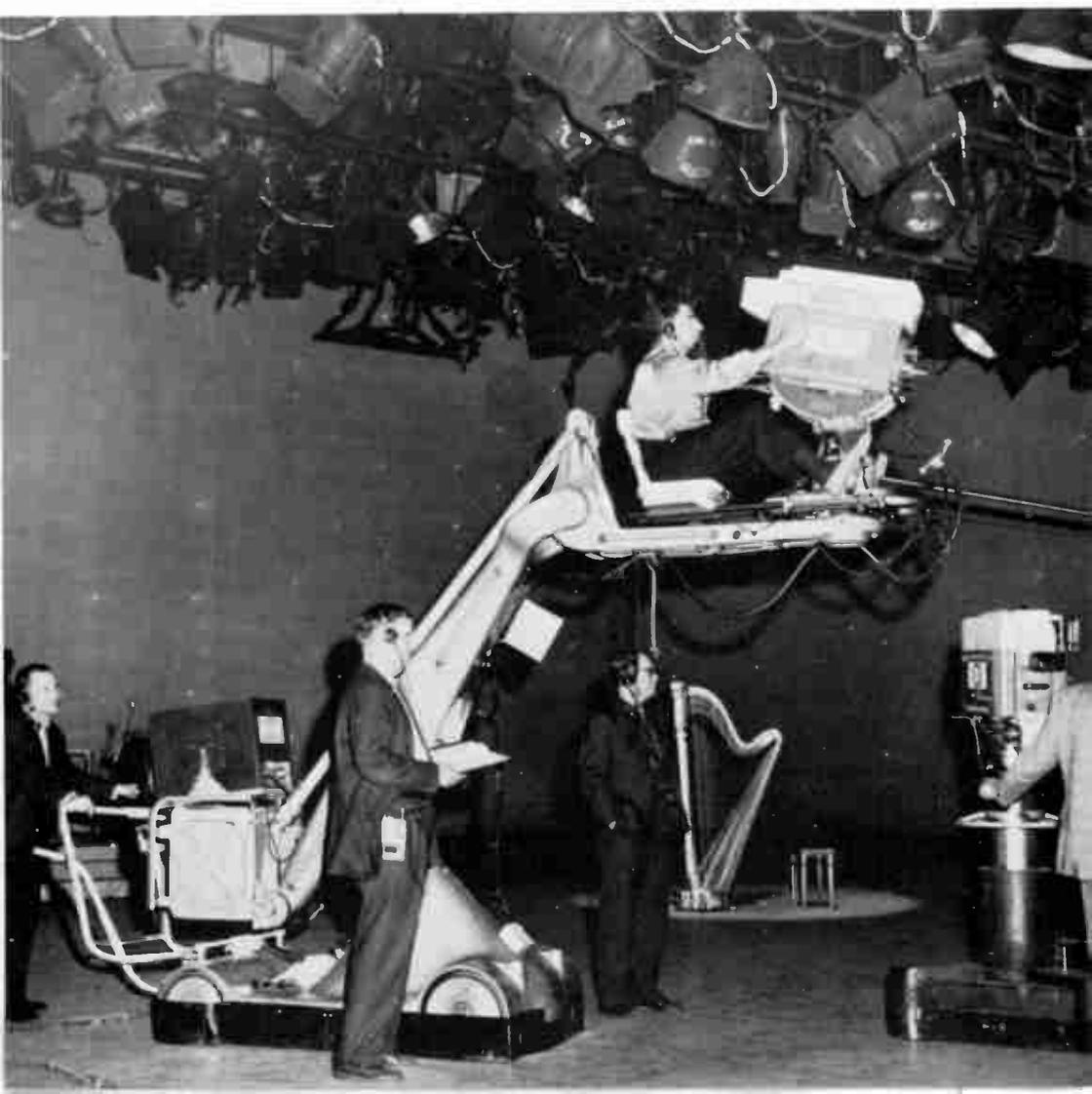
Then in 1952, for the first time the Republican and Democratic National Conventions were viewed by the ever-growing number of Americans with TVs.

The Stampede Begins

As advertisers began adding appropriations for TV to their budget, and as stations began to have money to spend on talent, the new medium suddenly became attractive to film, stage and radio stars, and they began switching over. Gradually television program directors discovered that there were many things besides wrestling matches and basketball games to televise, and programs improved perceptibly. The viewing audience grew larger and larger. Stations lengthened their telecast day from an hour or two to a full evening, then to a full day, and eventually, in a few cases, to round-the-clock transmitting.

Twenty years after the end of the war there were 738 authorized commercial television stations and 147 authorized non-commercial stations. Nearly 300 of the total were UHF.

Crane camera in ABC studio, New York.



Canadian TV Sets Some Records

Canadian television service became one of the fastest growing in the world. By the end of the 1959, stations had increased from 2 to 61 (11 of them CBC-owned). French and English networks were well established. Overall coverage had increased from less than 30% of the population to 91%; set ownership from 4% of Canadian households to 76%; CBC program service from 18 hours a week to more than 100 hours a week on the French and English networks combined. Consistently, most of this service was Canadian-produced.

In the early days of television in Canada, just as in the United States, there were problems. In Toronto, before the CBC television building was completed, training and rehearsals were carried out in an old barracks-type building that was something less than ideal.

For example, there was a pillar. It figured in every production in the old building. From the beginning every show that was produced had to have a part written into it for the pillar. It was like the sponsor's brother-in-law . . . it was included whether it belonged or not. Sometimes it was a tree . . . sometimes a bridge piling or a verandah post . . . but always there and always a test of the ingenuity and patience of the TV production staff.

Then Came Color

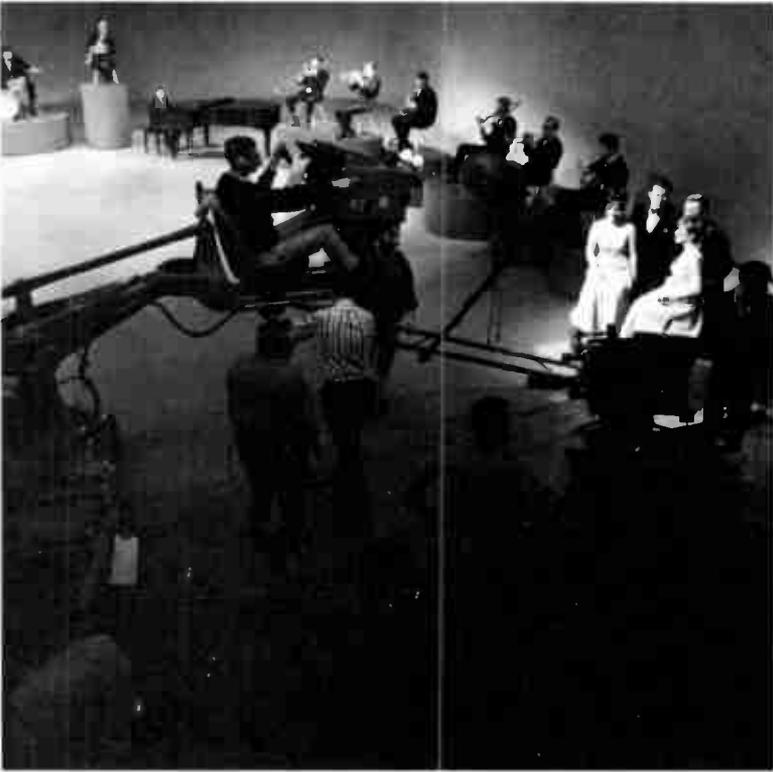
The first demonstration of color had been by the Englishman Baird back in 1928. The next year Bell Laboratories sent color pictures experimentally over a wire in New York City. CBS campaigned for color and did much experimenting. RCA gave an experimental color television demonstration in February, 1940. The conflict between CBS and NBC was over whether programs should be compatible, meaning that they could be clearly received in black and white on regular, non-color sets, as well as in color by color sets. The contest was long, expensive and bitterly fought. Finally, the National Television System Committee, representing the entire industry, proposed a set of standards for color TV, which was adopted by the FCC in 1953.

The first hour-long program in electronic color was broadcast on October 31, 1953. Two months later the Rose Bowl parade in Pasadena, California, became the first program to be broadcast in color on a national television network.

By 1955 the networks were broadcasting many programs in color. In 1956 WNBQ, Chicago, became the first station in the country to broadcast all its local shows in color. By the 1960's all-color programming had become common.

Almost Everyone Watches

By the mid-1960's 90 per cent of all the homes in America had television sets, more than the percentage with bath tubs. But manufacturers and dealers did not see this as the end. The industry kept after the other 10 per cent, as the drive



Scene from Canadian Broadcasting Corporation variety program.

Canadian Broadcasting Corporation television camera follows Canada's leading plastic surgeon as he remakes the hand of 17-year-old factory worker.



continued to put two or three sets in every home, and to get black and white owners to change to color.

In 1946 television's total income from advertising had been little over half a million dollars. By the late 1960's it was approaching two billion dollars a year.

Educational TV

Educational television (covered in a subsequent chapter) was given dramatic impetus in 1961 when lectures were sent to students in a six-state area from an experimental plane flying over Indiana. Each year saw more educational stations being licensed, existing stations expanding their activities, and financial support coming from more and more new sources.

International televising began in 1961 with the first live television program sent from Russia to Great Britain. The next year AT & T put into orbit a communications satellite christened *Telstar*, which was used to send live programs from one part of the world to another.

Ultra High Frequency television came into its own in 1962 when Congress passed a law requiring all manufacturers to equip all new TV sets so they could receive UHF as well as very high frequency channels.

In the 1960 presidential campaign television played a major role when Candidates John F. Kennedy and Richard Nixon debated issues before a nationwide audience.

Some Scintillating Statistics

At the end of World War II there had been 16,500 television receivers in the entire country. Twenty years later there were 51,000,000 and there was hardly a home that was out of the range of a television signal, in one form or another.

At the end of World War II color television was still a dream. Twenty years later 6,780,000 households had color sets — almost 13 per cent of the population — and every day the figures were growing.

Twenty years after the end of the war spot television advertisers were spending an average of \$14.56 for every television family in the country.

Networks were spending \$76,000 to produce the average, half-hour, prime-time show in color.

One network spent \$2,500,000 converting one of its Hollywood studios to color.

A cigaret manufacturer allocated \$7,500,000 for network and spot television, just to introduce to the public a new brand name.

A leading beer company decided to spend 100 per cent of its advertising budget on television.

Another beer company, while spending \$7,331,600 on television in a single year and \$1,668,000 on radio, spent a mere \$75,000 in newspapers.

Proctor and Gamble in a single year spent 90.6 per cent of its total advertising budget, or \$160,881,000, on television.

And what of the future?

Flash Trucks

Television will go after news as never before. Already one West Coast station (KNBC) has built a television-station-on-wheels called a Flash Truck; cost, a quarter of a million dollars. This mobile unit, with fire engine mobility, is able to go anywhere. It has maneuverability enough to fight rush-hour congestion. It can stay out all day and get coverage over the air via microwave, without help from outside sources. Other stations will probably copy the idea. Television will try to offer radio and newspapers intense competition in the field of journalism.

Flying Reporters

Next will come flying television studios — helicopters equipped like the Flash Truck, but unhampered by traffic and able to drop down onto a story; also equipped to transmit their own pictures.

Video Cruisers

The Video Cruiser is a battery-powered camera and sound recorder, which the reporter-photographer straps on his back like a knapsack. It weighs only 23 pounds with a full load of tape and rechargeable batteries, sufficient for making a 33-minute recording, plus 30 minutes of preview time, plus 60 minutes of standby. With this equipment the cameraman-reporter can navigate ladders, catwalks, narrow alleys, tight corridors, airplane cockpits and ski lifts, making him almost as mobile as a newspaperman with a notebook and a Rolliflex.

Smaller Transistors

Portable television sets will get smaller and smaller. The pocket set is coming. An electronic circuit the size of a matchbox has already been developed experimentally. The power to operate miniature sets may come from the human body. Solar batteries are used by satellites. The human body could supply heat enough to power a pocket TV.

Big Screens

Some television experts foresee the day when a television picture may cover the entire wall of a living room: eight to ten feet wide.

New Nets

As new television networks break into the field, the demand for technicians, talent and television material will increase by geometric progression. (When only three networks were competing, using up 30 hours of programs per day, television was buying, producing and consuming more than 10,000 hours of programs a year nationally. Add to this all the programs local stations were producing and consuming.)

Networks, already insatiable, will develop an evergrowing appetite for technicians, talent and television material.

Foreign Markets

If the saturation point is ever reached at home, there is always the rest of the world. Leading American manufacturers of color television sets expect to sell millions of such receivers per year in Western Europe, where color television is well on the road to becoming the new status symbol. After Western Europe, there is still the rest of the world.

Global Television

Some communications experts anticipate that within a few years it will become technically possible to broadcast directly into the listener's home from synchronous satellites, which will operate in the UHF band. If placed in orbit over the equator a single nuclear-powered satellite could broadcast to the entire population of an area of a million square miles. Thus, only one satellite would be needed to service all the television sets in Western Europe. One could cover most of India. Three or four could reach all of continental United States. To receive such broadcasts, only minor adjustments would have to be made in receiving sets. A clear signal could be received with a six-foot antenna.

Automatic Translations

Those who dream of television's future envision the day when a satellite system will have built-in, automatic language translation. Eventually, thanks to a worldwide system of communication, one universal language might gradually be substituted for the hundreds of languages spoken by mankind today.

If some of these predictions sound like fantasy, think of what your own grandfather would have said if someone had told him 75 years ago that the day would come when it would be possible for 500 people to get into a single supersonic flying machine and be whisked from New York to Paris in an hour or two . . . or that his grandson would live to see the time when human beings would walk in space and would land on the moon . . . or that someday an actress would sing in Singapore and be seen as well as heard a split second later thousands of miles away in Seattle.

In the words of Chaim Weizmann, British chemist:

“He who does not believe in miracles is no realist.”

7.

Broadcasting's Most Significant Hours

Someday play a game: ask three or four elderly people to name the dozen or more most exciting, most memorable, most significant broadcasts they ever heard — the broadcasts that kept them from lunch or dinner, or from going to bed — the broadcasts that sent them rushing to the telephone to call a neighbor and ask, excitedly:

“Are you listening? Turn your set on quick! You mustn’t miss it!”

If they were born about 1900 they will probably remember all fifteen on the list that follows. If they were born about the time of the first World War they ought to remember thirteen of the fifteen. Anyone born during the Depression will probably recall about half the significant broadcasts that radio and television have to their credit.

This is not a definitive list. These fifteen were not broadcasting’s only fine hours. They are, however, a sample of the high moments. These were fifteen times when broadcasting delivered something to its public that no other medium was able to supply. Sometimes it was simply the speed with which news of transcendental importance was given circulation. Sometimes it was the dramatic manner of the telling. Sometimes the broadcast was important because of the great relief it brought. Sometimes it was the horror of it, the brutality, the arrogance. Sometimes it was because the broadcast gave people fresh hope and courage to face an uncertain future. Sometimes it was because the broadcast expressed, better than the listeners themselves could, the sorrow in their hearts. Then there were those broadcasts which, by the miracle of sight and sound, took us off planet-earth and enabled us to imagine that we, too, were in Outer Space.

1920: The First Big One

In the horse and buggy days an automobile that went 20 or 30 miles an hour

was a whirlwind sensation. In 1920 the mere fact that a new wireless station calling itself KDKA was broadcasting election returns all evening was in itself exciting and significant. For people a half century ago, it was as if, never having seen anything in the sky but birds, they suddenly saw their first flying machine, or, never having heard of a talking machine, they suddenly listened as a human voice came from an immense tin horn, which was somehow attached to an apparatus fitted with a cylinder of hard rubber that turned round and round.

Ladies and gentlemen, it is now apparent that the Republican ticket of Harding and Coolidge is running well ahead of Cox and Roosevelt. At the present time Harding has collected more than 16 million votes, against some nine million for the Democrats. We'll give you the state vote in just a moment, but first we'd like to ask you to let us know if this broadcast is reaching you. Please drop us a card addressed to Station KDKA, Westinghouse, East Pittsburgh, Pennsylvania.

If it is difficult to re-create the scene or to imagine how excited the listeners in 1920 were, it is well to remember that a television program which seems vital and significant today will probably put people to sleep if they play it on video tape in the year 2050.

1927: A Spectacular

The *Spirit of St. Louis*, the single-engine Ryan monoplane in which Charles Augustus Lindbergh crossed the Atlantic in the spring of 1927, was not equipped with a wireless transmitter, or even a wireless receiver. For 33½ hours, up the eastern seaboard, out over the Atlantic, then across the British Isles and western France, the 25-year-old Michigan boy was alone, without radio to guide him, to encourage him, or to keep him on his bearings. But by radio the American public was kept in touch with his progress.

He took off from Roosevelt Field, Mineola, Long Island, New York, at 7:52 a.m. on May 20, 1927. There were radio broadcasts all day about the flight. People everywhere were asking aloud, or of themselves; the rhetorical question: "Will he make it?" Ten days earlier Lindbergh had set a coast-to-coast record, flying from San Diego, California, to Long Island in 21 hours, 20 minutes, but he had spent the night in St. Louis on the way. This time there would be no convenient, half-way resting place. Besides, to win the \$25,000 prize that had been offered by a New York City hotel owner, Lindbergh would have to fly the entire distance, New York to Paris, non-stop.

Early that evening radio gave interested Americans something to worry about. CHNS, Halifax, made a broadcast which was picked up by American stations and relayed around this country.

The government wireless station at Cape Race, Newfoundland, reported that Lindbergh passed overhead at 7 p.m. EST. The weather is reported as poor.

"The weather is reported as poor." Many Americans went to bed that night with those words beating through their heads. "The weather is reported as poor".

Pessimists were already answering the big question by predicting: "He can't possibly make it!"

The next morning almost every radio set in America was turned on. Little work was done in offices. Factually but sadly radio announcers reported the news — that there was no news.

WJZ, New York, George Hicks reporting. As Saturday dawns over the vast Atlantic, the Lindbergh plane is unreported since passing Newfoundland last night.

It was hours later that radio brought the exciting flash that he *had* made it, at least across the ocean:

This is Station 2RF Dublin calling. The American flier Lindbergh passed over Dingle Bay on the Irish Coast at a low altitude at 1:30 this afternoon.

Now Americans began asking new questions: Will he be able to make it to Paris? Has he enough gas? Will his luck hold out? Partial answer came in a shortwave broadcast from Paris, which was quickly translated by American stations into English for the benefit of American listeners, but was also put on the air just as it was picked up:

ICI RADIO PARIS. UN BATEAU A CHERBOURG A INFORMÉ QUE L'AVION LINDBERGH EST ARRIVÉ À LA COTE DE FRANCE

(This is Paris Radio. A ship at Cherbourg has informed us that the Lindbergh plane has arrived over the coast of France.)

It is nearly 200 air miles from Cherbourg to Paris. The *Spirit of St. Louis* had been doing only about 100 miles per hour, and so the American radio audience had another long wait before anyone could be certain that the slim young air-mail pilot from the Middle West had actually made it all the way and would be able to collect the prize money.

Lowell Thomas was one of those who narrated the triumphal chapter of the story when he took the air just at dinner time on May 21 with this script in front of him:

This is Lowell Thomas in New York. He made it! Charles A. Lindbergh — Lucky Lindy, as they call him — landed at Le Bourget Airport, Paris, at 5:24 this afternoon, thus becoming the first person to fly New York to Paris, non-stop.

Echoing the words of Lowell Thomas, millions of Americans said to themselves:

"Thank God he made it!"

Not many may have added, "And thank God for radio!" but they should have, for radio had enabled them to follow the 33½-hour story from take-off to the final landing in Paris.

1930: A King Speaks; the World Listens

In the autumn of 1929 the Stock Market crashed with a sickening noise heard round the world. Desperate speculators sold 16,400,000 shares in a single

day. By the end of the year government statisticians figured the crash had cost investors forty billion dollars. Unemployed men were selling apples on street corners. Banks were failing. Factories were shutting down. In January, 1930, one bright spot appeared on the horizon. The Great Powers seemed determined to cut the cost of militarism not only by limiting but by actually cutting their naval armaments. Optimists were saying that this might be the beginning of a new era of peace for the world. In this spirit American radio listeners followed the departure of the American delegation to the London Naval Conference and its arrival in England. Then, on January 21, 1930, they listened to an historic international broadcast. For the first time, millions on both sides of the Atlantic were able to hear, simultaneously, history-in-the-making.

A BBC announcer made the switch, saying:

"We now take you to the House of Lords, where His Majesty, King George the Fifth, will welcome the delegation of the great naval powers of the world to the five-power London Naval Conference."

Then came the royal but quite human voice of a man whose personality symbolized the unity of the world's greatest empire — a unity which would last for only a short time more.

It was 7 a.m. in New York — only 4 a.m. on the West Coast — but all over America people got out of bed to listen to this broadcast which inaugurated a new method of reporting world affairs.

In London, while the King was still talking, a mechanic in the BBC control room inadvertently tripped over a wire, causing it to snap in two. For a second or so the radio audience on both sides of the Atlantic heard nothing but dead air — silence. In that moment Harold Vivian, BBC control operator, with quick presence of mind picked up the two ends of the broken wire and held them in his hands, while an assistant made the repair. During this time the body of an obscure British radio engineer formed part of the circuit through which the voice of George the Fifth was reaching millions of people on both sides of the Atlantic.

1932: A Kidnapping

During the night of March 1-2, 1932, radio listeners were given the news that the 20-month-old son of Colonel and Mrs. Charles A. Lindbergh had been kidnapped from his cot in a second-story bedroom of the Lindbergh home at Hopewell, New Jersey, in the Sourland Mountains, northwest of Princeton, while the parents were at dinner. Had the victim been the child of some unknown person, there would never have been such public interest, but Lucky Lindy was still a national hero. It had been just five years since his epochal flight. Millions of people had read his first-person story, for which the *New York Times* had paid him a quarter of a million dollars, and his book, *We*, which had been a

best-seller. Most Americans felt as if they knew him personally. And so for days America talked about little else but the kidnapping. Would the baby be returned alive? Had the \$50,000 ransom money actually been paid? To whom? How? What sort of maniac was responsible? If he had only been after money why didn't he return the child?

Local stations in the area and the networks alike ignored custom, violated tradition, and sacrificed thousands of dollars worth of commercials to bring their listeners full coverage of the kidnapping. WOR, Newark, set a record by broadcasting news of the tragedy for 72 consecutive hours without interruption, immediately after the disappearance of the baby was discovered.

Newspaper circulation rose to record-breaking heights. But in between reading morning and evening papers, most Americans remained glued to their radios, well knowing that when there was a break in the case, the news would be flashed first by radio.

And it was. The break came two months and eleven days after the child's disappearance. The body was finally found — dead. But that was not the end of the story. Eventually there was the arrest of Bruno Hauptmann, the public debate over whether he was guilty or had been framed, arguments over what his motive had really been, his long trial, and finally the execution. It was four years, one month and seven days from the night of the kidnapping to the execution. During those 1,499 days radio covered the story as it had never covered news before, and as never before the public relied on radio to bring it instant and accurate flashes and bulletins, as well as commentary and courtroom coverage.

Although hundreds of reporters were present at Hauptmann's trial, Gabriel Heater's broadcasts were outstanding and won him not only several awards but increased popularity with the radio public.

1936: An Abdication

King George V of England died on January 20, 1936, and was succeeded by his eldest son, the Prince of Wales, who, although 42, a great traveler, handsome, debonair and popular because of his exceeding charm, had never married. On December 12, less than eleven months after becoming King Edward VIII, he abdicated. Other monarchs before him had given up their thrones for one reason or another, but never as dramatically as he did. It was a Hollywood-type love story, except that in this case it was as real as the Tower or the sound of Big Ben. On December 12 people all over the world stopped whatever they were doing to listen to the sympathetic, low-register voice of the man who was King no longer, telling why he had done it.

"At long last I am able to say a few words of my own."

People in London, in New York, Chicago, Melbourne, Singapore — people all over the English-speaking world — were clustered around radios in private

homes, clubs, restaurants, cafes and bars, hanging on every word.

"A few hours ago I discharged my last duty as King and Emperor, and now I have been succeeded by my brother, the Duke of York. My first words must be to declare my allegiance to him. This I do with all my heart."

In New York City it was 5 p.m. Mid-town streets, usually jammed at this hour with office workers hurrying to subways and buses, were strangely deserted. Men and women alike had left their desks early, so they would be home in time to hear the broadcast, or had remained in their offices to listen. For the ten minutes that the broadcast lasted even telephone switchboards, usually busy at that hour, showed hardly a light.

"You all know the reasons which have impelled me to renounce the throne. But I want you to understand that in making up my mind I did not forget the country or the empire, which, as Prince of Wales and lately as King, I have for 25 years tried to serve."

Historians would later record that no single event in the English-speaking world had ever transfixed so many people at one time. It was 10 p.m. in London, 9.30 a.m. in Bombay, 4 p.m. in Chicago. But everywhere there was a hush, as the world waited for him to make some reference to the real reason. Finally it came.

"But you must believe me when I tell you that I have found it impossible to carry the heavy burden of responsibility and to discharge my duties as King, as I would wish to do, without the help and support of the woman I love."

At this point many sentimental listeners burst into tears. This was what they had been waiting to hear. The intense emotion in the voice of a King who had abdicated for love was what made it a broadcast millions of people would never forget. Although it was, in some ways, strictly a British Empire story, America's interest had been great because "the woman I love" was Wallis Warfield of Baltimore, Maryland, who less than two months before the abdication had obtained a divorce from Ernest A. Simpson, an American insurance agent.

1937: A Disaster

Every reporter has had dreams of being in exactly the right place at precisely the right time to obtain an exclusive on some great news story. Few reporters have the opportunity experienced by Herbert Morrison, announcer, and Charles Nehlsen, engineer, of WLS, Chicago. On May 6, 1937, they flew from Chicago to Lakehurst, New Jersey, with recording equipment to test the practicability of recording a special event on the scene of action and then rushing the transcription back by plane to their station for broadcasting a few hours later. The special event they were assigned to cover was the arrival of the largest dirigible ever built, the 811-foot Hindenburg. It was a routine event, for the Hindenburg had crossed the Atlantic 36 times without incident.



King of England abdicates the throne because of the love of an American divorcee.

As the hydrogen-filled gas bag approached its mast on the Lakehurst field, Morrison began his recording:

The ship is gliding majestically toward us, like some great feather. We're standing here beside the American Airline flagships, waiting to rush them to all points in the United States when they get the ship moored. It's practically standing still — now they have dropped ropes out of the nose of the ship, and they've been taken ahold of down on the field by a number of men. . . . The rain has slacked up a bit. The back motors of the ship are just holding it just enough to keep it from — — (EXPLOSION) It's burst into flames! Get out of the way! Get out of the way! Get this, Charlie. Get this, Charlie. It's on fire! It's crashing! It's crashing terrible! Oh my! Get out of the way please. And the folks — — Oh! It's terrible! This is one of the worst catastrophes in the world! (EXPLOSION) Oh— oh—it's burning! The flames are going up four, five hundred feet into the sky It's a terrific crash, ladies and gentlemen! (SOBS) It's smoke and flames now, and the plane is crashing to the ground. Not quite to the mooring mast. Oh the humanity! Oh the passengers! All the people screaming around here. I can't even talk to the people. Those friends are out there. I can't talk, ladies and gentlemen. It's a mass of smoking wreckage. Everybody can hardly breathe and talk at the same time. I'm sorry. Honestly I can hardly breathe. I'm going to step inside where I cannot see it. I tell you it's terrible! Folks, I must stop for a minute. I've lost my voice. It's the worst thing I've ever witnessed! (PAUSE) Ladies and gentlemen, I'm back again. . . . It's still smoking and flaming and crackling down there and banging down there. I don't know how many of the ground crew were under it when it fell. There's not a possible chance for anyone to be saved. The relatives of the people who were waiting here — — ready to welcome their loved ones — — who came off this great ship are broken up and they are carrying them in to give them first aid and to restore them. Some of them have fainted. And people are rushing down to the burning ship. The fire trucks have all gone down to see if they can extinguish the blaze whatsoever. But — — but the terrible amount of hydrogen gas in it — — the tail surface broke into flames first. Then there was a terrific explosion and then followed by the burning of the nose and the crashing of the nose into the ground and everybody tearing back at breakneck speed to get out from underneath it, because it was over the people at the time it burst into flames. Now whether it fell on the people who witnessed it we do not know. But as it exploded they rushed back. Now it's smoking. A terrific black smoke, floating up into the sky. The flames are still leaping maybe thirty, forty feet from the ground, the entire eight hundred and eleven feet length of it. They're frantically calling for ambulances and the wires are humming with activity — — ah — — ah — — I've lost my breath several times during this exciting moment here. Will you pardon me for just a moment. I'm not going to stop talking. I'm just going to swallow several times until I can keep on. (PAUSE) I can imagine that the nose is not more than five hundred or maybe seven hundred feet from the mooring mast. They had dropped two ropes and whether or not some spark or something set it on fire we don't know or whether something pulled loose on the inside of the ship causing a spark and causing it to explode in the tail surface. But everything crashed to the ground and there's not a possible chance of anybody being saved. I wish to stop in just a moment and get my breath to see if I can get my breath again. And Charlie, if you'll fade it for just a minute I will come back with more description, ladies and gentlemen.

The two WLS men stayed on the job for almost three hours. Every fifteen or twenty minutes Morrison rushed out onto the field, found a survivor or two to interview, got a revision of the death toll (actually there were only 36 deaths

among the 106 persons aboard), or picked up a feature story, such as the one about the radio operator who jumped through a glass window, or the man who had all of his shoes blown off except the heels and the laces. Then he would run back to his microphone, often out of breath, and start talking again.

Late in the evening Morrison and Nehlsen packed up their equipment and took a plane for Chicago, where the next morning their full recording was put on the air, not once but often.

NBC at this time still had an ironclad rule against the use of any transcriptions on the network, no matter how good. That day an exception was made. The most dramatic parts of Morrison's eye witness account were broadcast over 114 NBC stations, coast to coast.

WLS has preserved for posterity the full broadcast on three, double-face, 12-inch platters. Reading the newspapers of May 7, 1937, and then listening to Morrison's description is the difference between reading about a bullfight and seeing one, or reading about a great ballet and seeing it performed on the stage. Although Morrison in his excitement violated many rules of good reporting, he passed on to the millions of people who heard his voice over WLS and over the 114 NBC stations the full impact of the tragedy — the sights, the smells, the sounds, the drama of a disaster.

1938: War Averted

In the early autumn of 1938 the world held its breath. Could a way possibly be found to avert a second, terrible global war? For fifteen days the fate of mankind seemed to hang in the balance. Twice in those fifteen days the British Prime Minister, Neville Chamberlain, went to Germany to consult the man most responsible for the crisis, Adolf Hitler. After his first visit he spoke these words into a microphone:

I have come back again, rather quicker than I expected. Yesterday afternoon I had a long talk with Herr Hitler. It was a frank talk, but a friendly one. I feel satisfied now that each of us understands what is in the mind of the other. You won't, of course, expect me to discuss now what may be the results of that talk. I am going to have another talk with Herr Hitler, only this time he has told me that it is his intention to come half-way to meet me. He wishes to spare an old man another such a long journey.

That speech was a *cliff-hanger*. It only increased the suspense and made the world-at-large even more apprehensive. The second Chamberlain-Hitler meeting was in Munich. When the British Prime Minister returned from that visit, he made this broadcast:

Tomorrow Parliament is going to meet and I shall be making a full statement of the events that have led to the present anxious and critical situation. But first of all I must say something to those who have written to my wife and myself in these last weeks to tell us of their gratitude for my efforts and to assure us of their prayers for our success. After my visits to Germany I realized vividly how

Herr Hitler feels that he must champion other Germans. He told me privately and last night he repeated publicly that after the Sudetan-German question is settled that is the end of Germany's territorial claims in Europe.

Many people in America, as well as many in England, after hearing that broadcast relaxed. Others did not. It was apparent that Hitler and Chamberlain had made an accommodation. The Munich Pact, as history would term it (*ap-peasement* as critics branded it) was Chamberlain's way of guaranteeing what he called "peace in our time." It brought exactly eleven months and one day of nervous non-belligerency. Then came the war anyway.

1941: War Not Averted

Americans, sitting at their radios on that tragic Sunday in December of 1941, learned the bare details of the Pearl Harbor attack. The question during that night and the next morning was: How will we, as a nation, react? There were few radios in the country not turned on to get the President's own words from Washington the next day. Never before had so many millions of Americans listened to the same broadcast, as the President reported:

Yesterday, December 7th., 1941, a date which will live in infamy, the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan. The attack yesterday on the Hawaiian Islands has caused severe damage to American naval and military forces. I regret to tell you that many American lives have been lost . . .

1944: Invasion

For many of those who went without sleep the night of June 5-6, 1944, to stay at their radios in order to catch every possible broadcast about D-Day, the high point was listening in on General Eisenhower's announcement to the continent. In a calm, friendly, yet extremely intent voice, he said:

People of Western Europe: a landing was made this morning on the coast of France by the allied expeditionary force. This landing is part of the concerted United Nations plan for the liberation of Europe, made in conjunction with our great allies, the Russians. . . . The hour of your liberation is approaching. . . . All patriots, continue your passive resistance, but do not heedlessly endanger your lives until I give you the signal to rise and strike the enemy. The day will come. . . . Be patient . . . prepare. . . . I call upon all who love freedom to stand with us. . . . Our arms are resolute. . . . Together we shall achieve victory.

1945: A President Dies

Different stations and different networks interrupted different programs to give the country the news that a four-time President was dead. CBS did it this way:

Adventure on the western frontier with a western family. . . . Daniel Boone in the exciting days following the American Revolution and — — We interrupt this program to bring you a special bulletin from CBS World News. A press association has just announced that President Roosevelt is dead. The President died of a cerebral (he stumbled over the pronunciation of the word) hemorrhage.

All we know so far is that the President died at Warm Springs, Georgia.

1945: A President Is Buried

What made Arthur Godfrey's description of President Roosevelt's funeral a great broadcast was not so much the verbiage as the quality of the man's voice, the obvious sincerity of his emotions, and the way he was able to pass on his own feelings to his listeners. Slowly, with dramatic pauses between every few words, he said:

The drums — — are wrapped in black crepe. — — They're muffled — — as you can hear. The pace — — of the musicians — — is s-l-o-w. Behind them — — these are the navy boys. — — And now — — just coming past the Treasury — — I can see — — the horses drawing — — the caisson. And most folks — — generally folks are having as tough a time — — as I am — — trying to see it. And behind us — — behind it is the car — — bearing the man — — on whose shoulders now fall — — the terrific burdens and responsibilities that were handled — — so WELL! — — by the man — — to whose body — — we are paying our last respect.

1945: War Ends

August, 1945, was a month that will always be remembered by those who at the time were mature enough to understand news broadcasts.

On August 6 radio gave America the first news that the first atomic bomb in history had been dropped on the Japanese city of Hiroshima. (Loss of life, more than 70,000.)

On August 8 Russia declared war on Japan and invaded Manchuria.

On August 9 (while most listeners were still trying to comprehend the full significance of atom-splitting, atomic warfare and the start of the atomic age) radio gave them news bulletins about the dropping of an atomic bomb on Nagasaki. (More than 36,000 people were killed.)

On August 10 Japan asked the Allies if unconditional surrender meant that Emperor Hirohito would have to give up his throne.

On August 14 (in the United States) the Allies received a message from the Japanese accepting surrender. All networks broadcast the news at about the same time. CBS announced it like this:

7 p.m. Eastern War Time. Bob Trout Reporting. The Japanese have accepted our terms fully. That's the word we've just received from the White House in Washington. This, ladies and gentlemen, is the end of the second World War. The United Nations on land, on the sea and in the air and to the four corners of the earth are united and are victorious. We got the information on a special line from the White House, and now it's beginning to come in on the wire services, too. President Truman announced it at 7 p.m. tonight, just a minute ago. And now, a flash! McArthur appointed Jap boss over the Emperor.

1951: America Discovers Crime

Television, in the opinion of some of its best friends, came of age in 1951 when it broadcast hour after hour, day after day, the hearings in New York City of the Senate Committee to Investigate Organized Crime in Interstate Com-

merce, known more simply as the Kefauver Committee, after its chairman. It was a field-day of sensationalism. Tough gangsters cringed. Racketeers who were also egomaniacs boasted of their nefariousness. The committee proved that nationwide criminal organizations were reaping immense illegitimate profits, and were using this money to enter legitimate business, and were "buying" politicians and public officials, large and small alike. Its preliminary report said gambling was taking in twenty billion dollars a year. The full report named two major crime syndicates in Chicago and New York.

Broadcasts of the hearings were sponsored by a weekly news magazine over nineteen television stations and were sent unsponsored to dozens of other stations across the country. One estimate placed the total audience at twenty million. As a result of the telecasts, crime suddenly became the No. 1 topic of discussion, not only in New York and Washington, but in many other parts of the United States. Suddenly almost everyone was an expert on how to handle crime — on "what to do about it."

After it was all over one commentator pointed out:

"Television, in short, has contributed not only to popular enlightenment, but, more importantly, to political maturity. . . . TV is a wonderfully potent instrument for arousing the populace, and in this case in arousing it against organized crime, a fairly non-controversial thing. Next time, though, the question might not be anything so open and shut as our opinions on criminals."

1954: Murrow vs. McCarthy

Senator Joseph R. McCarthy of Wisconsin was chairman of various Senate investigating committees. He attracted attention in 1950 by accusing the Department of State of harboring a number of communists. From then until 1954 he made investigations of alleged communist influence and infiltration into government, education, defense industries, and other fields. In 1954 McCarthy and Secretary of the Army Robert T. Stevens were the central figures in stormy Congressional hearings. Millions of Americans followed the telecasts of the hearings and McCarthyism became a subject of nationwide debate.

On March 9, 1954, Edward R. Murrow did what he himself and many others considered his most historic broadcast. Using film clips and tape recordings, he discussed Senator McCarthy's activities for half an hour on his *See It Now* CBS series. The Senator immediately demanded "equal time." CBS provided the time and production facilities. Senator McCarthy used his half hour to deliver a personal attack on Mr. Murrow, to which the CBS commentator replied:

"When the record is finally written, as it will be one day, it will answer the question who has helped the communist cause and who has served the country better, Senator McCarthy or I. I would like to be remembered by the answer to that question."

A few months later the Senate voted, 67 to 22, condemnation of Senator McCar-

thy, for contempt of a Senate elections sub-committee, for abuse of its members, and for insults to the Senate, "growing out of the Senator's investigation of alleged subversive activities."

1963: Assassination

One of the blackest chain of events that ever marred American history — the assassination of President Kennedy, the assassination of the man arrested as the assassin, then the funeral and burial of the President — presented broadcasting with an unusual opportunity to prove itself. And because it proved itself so well, the three-day period from the shooting until the night of the funeral has been called by many current historians "broadcasting's finest hour."

The events are too recent, the memory too fresh, for any recapitulation to be necessary. Radio and television threw every facility they had into coverage of the fast-moving tragedy, as the American people turned to the electronic media to keep them fully informed on each new development. Neither radio nor television could lessen the shock or ease the pain. But they did perform a tremendous service in keeping people from losing their heads; in preventing mass hysteria or mob violence; in clearing up confusion, as much as it could be cleared up; in trying to explain some of the weird coincidences and strange contradictions of the situation; in making America more united than it ever had been; and then in covering the last rites with a solemnity that won universal praise.

From the moment of the assassination until Monday night all networks suspended regular schedules, presenting only programs connected in some way with the death and funeral. This cost the networks \$22,000,000 in coverage expenses and loss of advertising revenue.

1960, 1, 2, 3, 4, 5, 6, 7, 8, 9 . . . Space

American scientists were caught napping when, on October 4, 1957, Russia launched Sputnik I, the first artificial satellite to circle the earth. So were American broadcasters. No network, no single station, had on its staff a well-qualified space expert able to take the air on a few minutes' notice and explain a bulletin about a new space development.

The year 1957 seems, even as this is being written, a long, long time ago. Since then most of the wildest imaginings of science fiction writers have become reality. Man has stayed days and days in orbit. Man has walked around in outer space, miles above the earth, as casually as if he were walking down a country lane. The moon, once an object of romantic nonsense, has become man's outer space suburbia.

Broadcasting has covered — and is still covering — these almost unbelievable events with maturity and distinction. Space experts have been hired or trained by the networks. Special television equipment has been brought into play to make space as visually interesting as possible. Every network news director knows that

from now on he must cover outer space as thoroughly as he covers fire stations or the police department, unless he wishes his medium to be left behind in the reporting of sophisticated news. meaning news of atoms, rockets, communication satellites, weather satellites, navigation satellites, scientific satellites, launch vehicles, cislunar space, translunar space, interplanetary space, interstellar space and, finally, intergalactic space.

8.

*How Broadcasting
Learned a Lesson*

One night in the autumn of 1938 broadcasters, in a most spectacular manner, learned two facts about their medium which the industry has never forgotten, but which need to be repeatedly emphasized for the benefit of newcomers.

1. Electronic communicators have much more power over the minds and behavior of their listeners than most listeners and many communicators realize.

2. Because of this power, panic can easily be generated, even unintentionally.

This chapter is a detailed description, step by step, of what caused all the trouble that Halloween night, how listeners reacted, and the morals that were drawn. It also includes the results of several surveys conducted some time later in which an attempt was made to answer the big questions: How could it have happened? Why did it happen?

What Happened

New York Sunday newspapers on October 30, 1938, in their radio columns carried this program note:

TODAY: 8:00-9:00 P.M. — PLAY: H. G. WELLS'S "WAR OF THE WORLDS" — WABC

The program listings of 91 other CBS stations around the country carried similar announcements.

That night listeners who tuned in at the appointed hour heard, first, an announcer who said:

The Columbia Broadcasting System and its affiliated stations present Orson Welles and the Mercury Theater on the Air, in a special radio adaptation of an imaginative novel, *War of the Worlds*, by the British author, H. G. Wells.

He then introduced the young actor, who, as the radio character "The Shadow," was frighteningly popular with millions of young listeners. Welles discussed for several minutes the possibility that human life exists on other planets.

Then — — the trouble began!

Those who tuned in late heard a routine weather report, followed by this announcement:

We take you now to the Meridian Room of the Park Plaza Hotel situated in downtown New York, for the music of Ramon Raquello and his orchestra. (There is a Park Plaza Hotel in New York, although it is not "downtown.")

Dance music continued for a brief time, then it was interrupted by the announcer:

Ladies and Gentlemen. We interrupt our program of dance music to bring you a special bulletin from Intercontinental Radio News. (There is no such agency, but it sounded authentic.) At twenty minutes before eight, CST (it would not be 7.40 CST for another 20 or 25 minutes) Professor Farrell of the Mt. Jennings Observatory in Chicago (there was no such observatory) reports observing several explosions of incandescent gas occurring at regular intervals on the planet Mars. The spectroscope indicates that the gas is hydrogen and is moving toward the earth with enormous velocity. Professor Peterson of the observatory at Princeton confirms Farrell's observations and describes the phenomenon as "like a jet of blue flame shot from a gun." We now return you to the music of Ramon Raquello playing for you in the Meridian Room of the Park Plaza Hotel situated in downtown New York.

When the orchestra came to the end of the piece, the announcer said:

Now a tune that never loses favor, the ever-popular *Star Dust*. Ramon Raquello and his orchestra. (MUSIC)

Frequently the music was interrupted by additional so-called news bulletins, all dealing with the approach of an object from Mars, which, said the announcer, was forty million miles from planet earth. Suspense was built up until the announcer, by now almost breathless, broke into the music with a flash that an immense flaming object had fallen into a farmer's field near Trenton, New Jersey.

Back to music.

Then a series of eyewitness reports from New Jersey describing how strange-looking creatures were emerging from the object, which was now being called a "space capsule."

I can see the thing's body. It's — — it's indescribable. The eyes are black and gleam like a serpent's. The mouth is V-shaped, with saliva dripping from its rimless lips, which seem to quiver and pulsate. The monster or whatever it is can hardly move. It seems weighted down by — — possibly gravity — — something. The thing is raising up. The crowds fall back. They've seen enough. This is the most extraordinary experience. I can't find words — — I'm pulling this microphone with me as I talk. I'll have to stop the description until I've taken a new position. Hold on, will you please. I'll be back in a minute. (FADE INTO PIANO MUSIC)

Slowly but effectively a sense of hysteria was being built up. Newspaper and radio stations scattered across the country later reported that it was at this point that they began receiving telephone calls from listeners, some of whom asked, frantically, such questions as:

“What should we do?”

“Is it really an invasion from Mars?”

“Why don’t they call out the U.S. Army?”

Back in the CBS studio in New York the music was interrupted again to put on the air the voice of a man supposed to be the commander of the New Jersey National Guard:

I have been requested by the Governor of New Jersey to place the counties of Mercer and Middlesex, as far west as Princeton and east to Jamesburg, under martial law. No one will be permitted to enter this area except by special pass issued by state or military authorities. Four companies of State Militia are proceeding from Trenton to Covers Mill and will aid in the evacuation of homes within the range of military operations. Thank you.

The announcer began referring to what was happening as “a great catastrophe.” The Martians, he said, were armed with a death-ray that enabled them to destroy everything in their path, buildings as well as living things. They had landed at Princeton. They were flooding Newark with poison gas.

A switch was made to Washington to bring in an appeal voiced by the Secretary of the Interior for calm “so we may confront this destructive adversary with a nation united, courageous and consecrated to the preservation of human supremacy on this earth.”

More space vehicles from Mars were reported sighted. In a voice almost out of control the announcer said:

I’m speaking from the roof of Broadcasting Building, New York City. The bells you hear are ringing to warn people to evacuate the city as the Martians approach. It is estimated that in the last two hours, three million people have moved out along the roads to the north. Hutchinson River Parkway is still being kept open for motor traffic. Avoid the bridges to Long Island. They are hopelessly jammed. All communication with the New Jersey shore was closed ten minutes ago. . . . Our army has been wiped out. Artillery, air force, everything has been wiped out. This may be our last broadcast. We’ll stay here to the end. . . . People are holding services below us . . . in the Cathedral. (VOICES SINGING HYMN) Now I look down the harbor. All manner of boats, overloaded with fleeing people, are pulling out from the docks. The streets are all jammed. The noise of the crowds is like on New Year’s Eve in the city. Wait a minute. The enemy is now in sight above the Palisades. Five great machines. The first one is crossing the river. I can see it from here, wading the Hudson like a man wading through a brook. A bulletin is handed to me. Martian cylinders are falling all over the country. One outside Buffalo. One in Chicago. One in St. Louis. They seem to be timed and spaced. Now the machine reaches the shore. He stands watching, looking over the city. His steel, cowlish head is even with the skyscrapers. He waits for the others. They rise like a line of new towers on the city’s west side. Now they’re lifting their metal hands. This is the end now. Smoke comes out, black smoke, drifting over the city. People in the streets see it now. They’re running toward the East

River, thousands of them, dropping in like rats. Now the smoke's spreading faster. It's reached Times Square. People are trying to run away from it, but it's no use. They're falling like flies. Now the smoke's crossing Sixth Avenue, Fifth Avenue. One hundred yards away. Now its fifty feet. Now . . .

That was the climax. A moment or two later:

ANNOUNCER: You are listening to a CBS presentation of Orson Welles and the Mercury Theater on the Air in an original drama of *War of the Worlds*, by H. G. Wells. The performance will continue after a brief intermission. This is the Columbia Broadcasting System. (FADE THEME 10 SECONDS) WABC, New York. (ENTIRE BREAK 20 SECONDS) ANNOUNCER: *War of the Worlds* by H. G. Wells, starring Orson Welles and the Mercury Theater on the Air. (MUSIC)

The second half-hour was in an entirely different vein. It was principally a dialogue between two of the very few survivors of the Martian invasion, a Princeton professor and a man called merely "The Stranger". They held a discussion so bizarre that anyone except a person under a hypnotic spell would have known it was make-believe. The surveys conducted later showed that the program had lost most of its audience by this time.

Audience Reaction

Between 8 and 8:45 p.m. thousands of listeners — perhaps tens of thousands — telephoned radio stations and newspaper offices for further details. The *New York Times* alone received 865 phone calls from frightened people begging for information about the catastrophe. Police stations and hospitals received many calls for inhalators and rescue vehicles. Other people called army posts to find out what was being done militarily to ward off the invasion. Some, worried about their children who for various reasons were not at home or about aged persons who lived elsewhere, rushed to "save them."

In many areas around New York, panicky people ran from their apartments and houses into the street crying, praying or screaming. Some carried blankets, food, bottles of water, and their most valuable possessions. Others, in the grip of emotionalism and irrationality, began moving out their furniture. Religious families held impromptu prayer meetings. Long distance telephone circuits were jammed as people tried to phone relatives in other cities.

"We all felt as if the world was coming to an end!"

That was the explanation most often repeated later to newspaper reporters.

In a single city block in Newark, New Jersey, twenty families were so panic-stricken that they rushed from their homes with wet towels and handkerchiefs over their faces to protect themselves from the effects of the gas they had been told the Martians were using. Hospitals in all parts of the country treated men as well as women for shock and hysteria. Some highways were blocked by the surge of humanity seeking safety in the country. In Providence, Rhode Island, frightened residents demanded that their city be blacked out. In the small town of Concrete, Washington, the power, by coincidence, failed at a

critical moment during the broadcast, which many took as substantiation of the invasion report. Widespread hysteria resulted. In Indianapolis, Indiana, a church service was dismissed when a woman dashed in screaming that she had just heard on the radio that New York City had been wiped out. In Memphis, Tennessee, the news staff of the *Press-Scimitar* was ordered to report for duty to put out an extra on the "bombing of Chicago and St. Louis and the threatened bombing of Memphis." In a hospital in Macon, Georgia, a patient became so agitated by the program that he leaped from his bed, tearing loose the stitches of his operation. In Pittsburgh, Pennsylvania, a man returned home from work to find his wife with a bottle of poison in her hand. When he demanded an explanation she told him:

"I would rather die like this than live like that!" and she pointed to the radio, which was still giving details of "the invasion."

Hundreds of members of the New Jersey National Guard reported to their emergency stations, although the radio had said that the Martians' death rays were "burning people to death like ants in a prairie fire." In many other states National Guardsmen telephoned their headquarters for instructions. The Associated Press issued a special bulletin trying to stem the growing panic.

The Day After

The next day newspapers all over the country carried large headlines, long articles, and (in retrospect) amusing feature stories about local nonsensical behavior. The New York Times headline, two columns wide at the top of Page 1, read:

RADIO LISTENERS IN PANIC, TAKING WAR DRAMA AS FACT

CBS and the 92 stations that carried the program received hundreds of extra sacks of listener mail in the days that followed. (It could hardly be called "fan mail," although on the whole those who wrote in were not bitter. However, some weeks later a listener in Los Angeles filed suit against CBS claiming he had suffered damages of \$50,000 from shock because of the broadcast.)

The next day Orson Welles held a press conference. The first seven words of his statement to reporters summed up his own bewilderment:

"I'm very sorry. I had no idea. . . ."

There was diversity of professional opinion. Dorothy Thompson wrote tartly in her column *On the Record*:

Nothing whatever about the dramatization was in the least credible, no matter at what point listeners tuned in.

But that was a minority opinion. Most other writers agreed that the broadcast was so realistic that it might have fooled — and did — even sophisticated and well-informed listeners, especially if they tuned in late.

New York Times

Copyright, 1938, by The New York Times Company.

NEW YORK, MONDAY, OCTOBER 31, 1938.

Radio Listeners in Panic, Taking War Drama as Fact

Many Flee Homes to Escape 'Gas Raid From Mars'—Phone Calls Swamp Police at Broadcast of Wells Fantasy

A wave of mass hysteria seized thousands of radio listeners throughout the nation between 8:15 and 9:30 o'clock last night when a broadcast of a dramatization of H. G. Wells's fantasy, "The War of the Worlds," led thousands to believe that an interplanetary conflict had started with invading Martians spreading wide death and destruction in New Jersey and New York.

The broadcast, which disrupted households, interrupted religious services, created traffic jams and clogged communications systems, was made by Orson Welles, who as the radio character, "The Shadow," used to give "the creeps" to countless child listeners. This time at least a score of adults required medical treatment for shock and hysteria.

In Newark, in a single block at Heddon Terrace and Hawthorne Avenue, more than twenty families rushed out of their houses with wet handkerchiefs and towels over their faces to flee from what they believed was to be a gas raid. Some began moving household furniture.

Throughout New York families left their homes, some to flee to near-by parks. Thousands of persons called the police, newspapers

and radio stations here and in other cities of the United States and Canada seeking advice on protective measures against the raids.

The program was produced by Mr. Weller and the Mercury Theatre on the Air over station WABC and the Columbia Broadcasting System's coast-to-coast network, from 8 to 9 o'clock.

The radio play, as presented, was to simulate a regular radio program with a "break-in" for the material of the play. The radio listeners, apparently, missed or did not listen to the introduction, which was: "The Columbia Broadcasting System and its affiliated stations present Orson Welles and the Mercury Theatre on the Air in 'The War of the Worlds' by H. G. Wells."

They also failed to associate the program with the newspaper listing of the program, announced as "Today: 8:00-9:00—Play: H. G. Wells's 'War of the Worlds'—WABC." They ignored three additional announcements made during the broadcast emphasizing its fictional nature.

Mr. Welles opened the program with a description of the series of

Continued on Page Four

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Two years after the night of the broadcast, a Princeton University research group, under a grant from the Rockefeller Foundation to study the role of radio in American lives, put out a full-length book, *The Invasion from Mars*, based on a lengthy, scientific study of the strange psychological aspects of the situation. The book contained not only this group's own survey, but also findings of the American Institute of Public Opinion.

Why They Panicked

Here are the comments of some of those interviewed, all of them highly significant for anyone in the broadcasting industry, then or now:

"It didn't sound like a play, the way they interrupted the music."

"I knew it was an awfully dangerous situation when the Secretary of State spoke."

"When he said, 'Don't use Route 23,' that made me sure."

"I believed the broadcast as soon as I heard the professor from Princeton."

"I have heard other programs interrupted the same way."

"I started to listen only when the farmer began giving a description of the landing of the tube."

"Even after this I still will believe what I hear on the radio."

"I looked in the icebox and saw the chicken I was saving for Monday night's dinner and I said to my nephew, 'We may as well eat this chicken. We won't be here in the morning to eat it!'"

Investigators' Findings

Among the findings of the various investigators were these:

About 42 per cent of the listeners interviewed tuned in late. Most of these people thought they were listening to news, not drama.

More than 88 per cent of those who heard the program from the start were aware it was make-believe.

Those who were especially frightened were New Jersey residents who recognized the names of towns, highways and streets used in the script.

Habitual readers of science fiction were more easily panicked than others.

Several hundred social scientists who analyzed the results of the surveys said they saw proof therein of the general intellectual and emotional immaturity of a majority of radio listeners.

A famous psychologist said most of the people taken in by the program were, to varying degrees, neurotic.

Many listeners apparently had been victims of "a contagion of fear."

Few People Checked

Only 20 per cent of the listeners analyzed the program themselves and decided not to be frightened because they recognized the voice of Orson Welles, an actor; or recognized the name of H. G. Wells as a novelist; or for other logical

reasons knew it could not be factual.

Another small percentage did what an intelligent listener should have done if he had had any doubts: looked in newspaper listings and discovered that it was a radio drama, or turned the dials and discovered that other stations were not carrying the "news."

Another small percentage did some checking and then became more panicky than ever, because they had "looked out the window and saw a traffic jam" or had "tuned in another station and heard people all praying" or had "opened the window and smelled gas" or had "seen a terrible greenish light outside", which turned out later to be the lights of a parked car.

Conclusions

The Princeton group concluded:

The first widespread use of radio in the country was to broadcast election returns. Since that time, important announcements of local, national and international significance have been repeatedly made. A few short weeks before this broadcast, millions of listeners had kept their radios turned on for the latest news from a Europe apparently about to go to war. They had learned to expect that musical programs, dramas and broadcasts of all kinds would be cut off in a serious emergency to inform or warn an eager and anxious public. A large proportion of listeners, particularly those in the lower income and educational brackets, have grown to rely more on the radio than on the newspapers for their news. The confidence people have in radio as a source of news is shown in the answers to a question asked by the *Fortune* poll: "Which of the two, radio or newspapers, gives you news free from prejudice? Seventeen per cent answered "newspapers" while 50 per cent believed radio news was freer from prejudice. The rest thought both media were the same or didn't know which was less prejudiced.

The New York *World-Telegram* expressed the fears of many people when it said in an editorial:

If so many people could be misled unintentionally when the purpose was merely to entertain, what could designing politicians not do through control of broadcasting stations? The dictators of Europe use radio to make people believe falsehoods.

This was 1938. The New York paper was referring, of course, to Hitler and Mussolini. Americans for years had been seeing at a distance the power of radio in subverting whole countries. Now, close to home, they saw that it could create panic as well as pleasure; that it could excite as well as entertain; that it could induce hysteria as well as happiness.

In some respects it was an expensive lesson. But perhaps it was well that it happened just when it did, without loss of life or property. From then on most broadcasters treated radio as the powerful instrument they now had proof that it was. From now on at least some listeners, as a result of the scare, listened more carefully and more intelligently to what they heard on the air.

9.

Critics:
Amateur & Professional

A true critic ought to dwell rather upon excellencies than imperfections . . . and communicate to the world such things as are worth their observations. — Joseph Addison, *The Spectator*, February 2, 1712.

*Don't view me with a critic's eye,
 But pass my imperfections by.*
 David Everett, 1791.

People ask for criticism, but they want only praise. — William Somerset Maugham, *Of Human Bondage*, 1915.

I do not resent criticism, even when, for the sake of emphasis, it parts for the time with reality. — Winston Churchill, January 22, 1941.

A man who is anybody and who does anything is surely going to be criticized, villified and misunderstood. This is a part of the penalty of greatness. . . . Elbert Hubbard.

Fie upon those who hear me yet do not have the wits to appreciate me; I will spit upon their faces with great delight and then go upon my own merrie way, unaffected by their oxen-like stupidity. — From the medieval miracle play. *Naught for Nothing*.

. . . one sees the critic as the real helper of the artist, a torch-bearing out-
 rider, the interpreter, the brother . . . a valuable instrument. — William James,
Criticism, 1893.

All creative people at some point in their careers have to adopt a personal philosophy about criticism. This is no less true of the creative person in broadcasting than of the author, painter, sculptor, actor or actress.

Who are the broadcaster's critics? The range is wide. It includes: radio-television editors, and columnists on newspapers, magazines and trade papers. Also, the articulate, communicative members of the listening audience, who use the telephone, Western Union and the postal service to praise, condemn or ask for autographed pictures. Also station and network officials, who, because they foot the payroll, feel they have the right to pass occasional judgement. Also those wives who think that the privilege of criticizing is an unwritten part of the marriage contract. Also such self-appointed critics as taxi drivers, doormen and elevator operators, who recognize the face or the voice, and have some opinions of their own to offer.

The taxi driver (if a New Yorker) will be most arrogant in his assumption that sitting with his cab radio going all day qualifies him to be a director-producer-critic.

Wives Are Predictable

Wives of broadcasters tend to fall into one or the other of two groups:

Those who greet their husbands at the door with face aglow, declaring ecstatically:

"Darling, it was positively the very best broadcast you have done in your whole life!"

Those who greet their husbands with some routine complaint about how tired they are and how troublesome the children have been all afternoon, and then add casually:

"How did things go at the studio today?"

One distinguished network news commentator, now deceased, after marrying a girl less than half his age, confided to his colleagues that neither periodic increases in salary, nor his normally complimentary fan mail, nor anything that network officials might say to him could equal, as a morale-builder, the eulogies he received from his starry-eyed bride when he returned home each night from his broadcast.

Beware of the Cranks!

While audience mail may not be a good indication of how many people are listening, it does give the broadcaster a sampling of what his listeners think and is therefore of extreme value, as long as the broadcaster remembers that as a rule more *Anti's* than *Pro's* write to their Congressmen or to their newspapers, as well as to those they see and hear on the air.

In different parts of the country and in different eras, various words have been used to designate a certain type of person who habitually writes letters: Crackpot, nut, screwball, crank, eccentric.

Unfortunately it is not possible to sort fan mail in two neat piles labeled:
CRACKPOTS **SERIOUS LISTENERS**

In any sack of mail there will be an overlapping, something like this:

CRACKPOTSERIOUS LISTENERS

During the fall of 1940 the NBC news department in New York received a letter that read:

Last evening about 6:40 I turned on your station to be ready when Lowell Thomas came on and to my utter amazement there was a man on who is either a Fifth Columnist, Bundist, Communist or Anarchist, or all, and after some of his anarchist and inflammatory remarks of hate of the President and Government and some unmitigated lies about the President and Acts of Congress all of which was highly applauded by a receptive audience that I was utterly disgusted and began to think that after all perhaps Hitler was right that we could not survive as a Democracy if we permitted such public speeches berating our Government. So I turned off, did not even wait to find out who it was.

Now I believe in free speech but I do not believe that Fifth Columnists, Bundists, Communists and Anarchists should be permitted to use the radio to spread their venom of the Government to an unwary public and therefore censorship of the radio should be more severe and inflammatory speeches of Hate of the President and Government should be barred by yourselves for just as long as you permit it to go on I can only believe you are in sympathy with these Fifth Columnists, Bundists and Anarchists.

The letter concluded with the words "Respectively yours" but this was followed by an obscene postscript in which NBC was called several unprintable names by the female listener.

Upon investigation, News Director Schechter discovered that the program she had heard was a campaign speech by Wendell Willkie, Republican candidate for President.

Press Animosity Died Hard

It took many decades for broadcasters and the press to get over the feud that began in the 1930's, when press associations agreed to give radio a modicum of news for broadcasting on the understanding that every newscast would be followed by the announcement: "For further details read your newspapers."

The more powerful radio grew, the more the press tried to pretend that the new medium did not exist. The argument was used that every word printed about radio simply made this new opponent stronger. The establishment or purchase of many stations by newspapers helped to put such nonsense to an end. When the circulation of magazines devoted exclusively to news about radio, gossip about radio people and program listings soared into the millions, newspapers realized their error. They began appealing to those of their readers who were also interested in radio, for radio now was as popular as a dance called the *Charleston* and raccoon coats at football games.

In this period radio critics on some metropolitan newspapers gradually became

almost as important as film, book and theater critics. Veteran of them all in New York was Ben Gross, who in 1965 at the age of 75 celebrated his fortieth year as radio (later radio and television) critic of the New York *Daily News* — a record that established him as the undisputed dean of critics.

1,039 Famous Friends

Just before this *Encyclopedia* went to press, Gross tuned in his 100,000th broadcast. Although he did not keep track with a mechanical counter, he figured that he had heard or seen all or a goodly part of ten programs a day, five days a week (sometimes six), for 48 or 49 weeks a year, beginning in 1925. In summary he said:

If under such a regime, one's aesthetic taste buds have not atrophied or if one's mind has not become a mere catalog of trivia, it is only by virtue of this precaution: one makes his memory a sieve through which all but the most important or interesting items drain off into the void of forgetfulness. Those events and personalities remain which live vividly in one's consciousness.

Plenty of people and events did live for Gross. In 1954 he wrote an autobiography, *I Looked and I Listened*, crowded with stories about 1,039 people who had already crossed his path. (The number was greatly augmented in the years that followed.)

Gross is not typical of all American radio and television critics, because there is no one pattern, but his career is worth studying, for he reached more people for more years with more reviews and comments on radio and television programs than anyone else in the country. Also, because no one even slightly interested in broadcasting can ignore or belittle the opinions and conclusions of such a man.

From Murder to Radio

Born in Birmingham, Alabama, Gross started as a newspaper reporter, practiced law for two years, then went to New York where, unable to crash the big-time, he took a job as a reporter on a relatively minor daily. Eventually he landed on the *Daily News* as a combination police reporter and labor editor. One day when he returned from covering a love-nest murder in New Jersey, he was told by his editor that he had to substitute that night for the radio editor, who was ill. Gross neither owned a radio nor had often listened to one. When he finally found the radio editor's receiver he was so ignorant of the mechanics of the machine that he had to get the building electrician to show him how to turn it on and adjust it. But his first column was so well done that 41 years later he was still advising *Daily News* readers what they should watch and listen to.

Mr. Radio & Mr. Television

Gross was asked by the editor of *The Encyclopedia* to think back over his

long career and answer five questions:

Q. Of all the thousands of voices you have heard coming over your loud-speaker in these 41 years, which was the greatest?

A. In my opinion Graham McNamee had the greatest voice on radio. During the early years of broadcasting, he was Mr. Radio himself, just as, later, Milton Berle became Mr. Television.

Q. What was radio's most golden moment?

A. It depends on what one is looking for. The coverage of the D-Day invasion of France was certainly the most suspenseful. Thousands had relatives in the invasion army. What would be their fate? Would they succeed or be driven back? They were playing for the highest stakes of all. I have never known, in all my years of listening, any series of broadcasts that aroused such anxiety. But VJ Day ran a close second. The radio conveyed explosive moments of joy and relief impossible to describe otherwise.

Television's Greatest

Q. What was television's greatest performance?

A. TV attained its high mark with its coverage of President Kennedy's assassination and funeral, each segment of which should rightly be regarded as part of the same story. Who can ever forget the early bulletins . . . the frantic scenes at the hospital . . . LBJ's departure from Dallas . . . the arrival of the body in Washington . . . the stark, stunning melodrama of Jack Ruby shooting Oswald as millions looked in on TV . . . and then the solemn pageantry of the state funeral?

Q. In your opinion what is the greatest entertainment program TV has thus far produced?

A. That depends on the category you happen to like: Drama, Playhouse 90. Variety, Ed Sullivan. Comedy Series, I Love Lucy. Comedy, Jack Benny. Late-Hour Divertissement, Jack Paar. Upper Echelon Cultural Entertainment, Omnibus. If I had to choose only one — which would be unfair, as the categories are as different as apples and turnips — I'd name Omnibus.

Q. What was radio's greatest program?

A. Again, it depends on the category. Variety, Fleischman's Yeast Hour, with Rudy Vallee. Comedy Series with Greatest Impact on Listeners, Amos 'n' Andy. Music, Arturo Toscanini's NBC Symphony Orchestra concerts. Wittiest Series, Fred Allen. Most Sensational Real Life Program, the Explosion of the Hindenburg. Popular Song Program, Ethel Merman and Mary Martin Special. All these were memorable, but the program impossible to forget is the first network show of American broadcasting — the one staged for the inaugural of NBC. This program, aired from the old Waldorf-Astoria on November 15, 1926, offered entertainment that would be difficult to equal even today: Mary Garden, Will Rogers, Walter Damrosch, the N.Y. Symphony Orchestra, Tito Ruffo,

Harold Bauer, Vincent Lopez, Ben Bernie, George Olsen, Ben A. Rolfe, etc., etc. It served notice that radio was no longer a hobby of school boys but would become a dominant factor in every phase of American life. This inaugural set the guide lines which would be followed by broadcasters for years to come. So I choose this program as the greatest of all.

Husing Versus the Critics

Feuds between critics and broadcasters are not uncommon in New York and on the West Coast. Some of them have reached almost murderous proportions. In 1935 Ted Husing, sportscaster, wrote a book of reminiscences, *Ten Years Before the Mike*, in which he quoted, verbatim, paragraph after paragraph of adverse criticism written about him by New York's radio critics, such as:

Mr. Husing, like several other current announcers, gives promise of being a pleasing radio personality; but very often the promise is never fulfilled.

The main stumbling block in Mr. Husing's vocal career is his inability to sound like himself on the air. . . His voice indulges in unnatural posings, and what would be most effective statements come out with a deadly stigma of over-smart affectation.

Mr. Ted Husing's announcements took him up countless blind alleys of verbosity in search of dubious points for altogether impossible quips.

After showing how unfairly (in his own estimation) the critics had treated him, Husing set out to demolish them. He did not spare even Gross, who had long been a friend and whose criticisms had been as mild as saying that Husing had a love affair with a dictionary and that "he was and is enamoured of words, a circumstance not entirely to his discredit, considering the colorless and limited vocabularies of some of his colleagues."

Husing was in a safe position, he thought, because at the time he wrote the book he was off the air. It was inevitable that the critics, being human, would wait for an opportunity to take their revenge. It finally came. As Gross put it:

Many of the tribe repaid him in kind when, after a long absence from the air as a sportscaster, he returned in this role on TV. Because his wordage was as lavish on TV as it had been on radio, his detractors doused him with arsenic and vitriol. I, however, would not go to such extremes, recalling, as some of my colleagues failed to do, that Ted had contributed immeasurably to the development of broadcasting in this country. There is not one successful practitioner of the art today who is not his debtor.

It was typical of the majority of New York critics that they used "arsenic and vitriol" on Husing. It was typical of Gross that he did not. For new young broadcasters there is a moral to the story. The power of the press may not be all that it once was, but it is still dangerous to flaunt it.

Cantor Versus the Critics

The feud between the comedian Eddie Cantor and the New York critics

was more serious, lasted longer, and created deeper wounds. Always sensitive to adverse criticism, Cantor finally lost his temper and in an interview with a fan magazine struck back by declaring that all the New York radio critics except one were either "chiselers" or "log-rollers." The quickest reaction came from Nick Kenny, radio columnist of the New York *Daily Mirror*, who wrote brilliantly and succinctly:

"Thanks, Eddie, for the compliment!"

The *Mirror* was the tabloid rival of the *Daily News*, and so, in a spirit of upmanship, the managing editor of the *News* instructed Gross and his assistant to file suits for \$100,000 each, on the ground that as long as Cantor had not repudiated Kenny's statement, it was proof that his accusations must include the two *Daily News* men, as well as all the other New York critics. The case was fought up to the New York State Court of Appeals, which finally held that as there were only a limited number of radio critics in New York, each could contend that he had suffered damages through the blanket accusation. This decision opened the way for many other groups besides the critics to bring suit for group-libel. Cantor settled for a nominal amount, but he had to pay a considerable sum in legal expenses and court costs.

Sentimental Postscript

The postscript to that broadcaster-critic story illuminates the character of the two principals in the case. When Gross completed his 25th year as a radio critic, NBC gave an elaborate luncheon in his honor and Cantor accepted an invitation to be one of the guests. During a luncheon broadcast, heard by millions, Cantor shook Gross' hand and said:

"Ben and I had a slight misunderstanding some years ago. But you would never have guessed it from reading his comments on my shows. I may not always agree with him, but he has been a fair-minded and honest reporter."

What Jonah Said to the Whale

In listening to 100,000 broadcasts, Gross has heard, then written about many slips and fluffs. His favorite radio story is about Billy Sunday, the pulpit-thumping evangelist, who was delivering a sermon over a New York radio station. At the climax of a hellfire and brimstone talk he shouted into the microphone:

"Brothers and sisters, I ask you, what did Jonah say to the whale?"

During the dramatic pause that followed, some engineer pushed a button by mistake, bringing in a commercial from another studio, so that what Billy Sunday's radio audience heard next was a persuasive voice saying:

"Take Carter's Little Liver Pills!"

May a Million Ants Eat You!

Once at the height of Rudy Vallee's popularity Gross wrote in his daily column:

"After all, Rudy Vallee is not the *only* great singer the world has known.

What about Enrico Caruso?"

When the reader-mail began coming in, Gross felt a little like an innocent lamb that had made the error of trying to charge head on into an express train. One of the mildest reproofs he received said:

"I'd like to tie you to a post and turn loose a million man-eating ants on you!"

The Singing Dog Fiasco

Rudy Vallee was indirectly responsible for a near catastrophe in Gross' life. A man whose wife kept the family radio blaring every time the crooner and his Connecticut Yankees were on the air, had to let someone know how he felt, so he wrote to Gross, saying that he had a hound dog that could yowl better than Vallee could sing. Gross printed the letter. That started a deluge of communications by phone and mail from readers who said they had dogs that could yowl to a piano accompaniment or could actually sing. In a thoughtless moment Gross suggested that all those with singing dogs bring them to his office at 3 p.m. the next Friday. They did. Dozens and dozens. They came from Manhattan, Queens, the Bronx, Brooklyn, Staten Island and even from New Jersey. Poodles, fox terriers, wirehairs, pointers, bulldogs, setters, cocker spaniels. Children and adults brought them by private cars, taxis, buses or smuggled under coats on the subway.

If the dogs had behaved themselves and just demonstrated their singing ability it might not have been a disaster, but a cocker and a terrier began fighting, then the others joined in. Gross later reported that men and women came from all parts of the vast *Daily News* building to the corridor leading to his office to peer, and then to run. It was his last attempt at a stunt.

Housewife Wins a Contest

Every now and then politicians get tempted to put up for high office a man who is so average that he thinks, looks, talks and behaves exactly like the average voter. Publishers are occasionally bitten by the same idea, the theory being that a housewife who reads a book now and then ought to be better qualified than some college professor to serve as a literary critic, for she should know what would appeal to other women. Years ago the *Daily News* ran a contest for the best radio column written by a reader, the prize to be Ben Gross' job. The contest was won by the attractive young wife of a chain store manager in a New Jersey suburb. The *Daily News* put a two-way teletype machine in her home on which each day she would tap out her column. Gross, at the New York end of the teletype, would take it from the machine and deliver it to the composing room. His orders were: "Don't change a word or even a comma! What we want is real housewife stuff!"

At first her columns were naive and homespun. Then, under the influence of press agents and publicity cocktail parties, they became more sophisticated,

less refreshing. Finally the night came when the same managing editor who had taken Gross off a murder story and made him radio editor reinstated him.

Bryan, Columbus or Moses?

Once Gross asked his readers this question:

"If radio had existed since the dawn of time, and if it had been possible to broadcast and record the great events of history, which of these would you have liked to hear today?"

"William Jennings Bryan delivering his Cross of Gold Speech,

"Socrates as he drank the hemlock,

"The words of Christopher Columbus on sighting the New World,

"The remarks of the Pilgrims as they landed at Plymouth,

"The Flood,

"The Creation,

"Moses proclaiming the Ten Commandments,

"The three Wise Men as they followed the star, or

"The Sermon on the Mount."

That is not the order in which they were listed in the paper, but inversely it is the order in which the readers voted, most of them wishing they could hear the Sermon on the Mount; second, the Three Wise Men; third Moses.

One of the Most Remarkable

Gross was one broadcasting critic who felt he should call a spade a spade when he thought it was a spade. He found Senator Huey Long of Louisiana an extremely colorful radio personality — a jovial, back-slapping salesman, with his slogans "Share the wealth" and "Every man a king." But he also felt Long was a dangerous American Fascist — and said so. He wrote that one of the most remarkable broadcasts he ever heard was the one in which the self-styled Kingfish began with this announcement:

This is Huey P. Long, Senator of the United States from the sovereign state of Louisiana talking to you. Now I want you to do me a favor. Go to the phone and call up four or five of your friends and tell them to tune in to this station. They're going to hear something very important. In the meantime, I'll just be talking along to fill up time. So go right ahead now and call your friends.

And he did. And they did — many thousands of them. That was the broadcast in which the Kingfish also asked his listeners to telephone John D. Rockefeller, because Long was trying to get the oil multimillionaire to sponsor his broadcasts.

Perfume by Television?

At one time Gross was disturbed about the effect of television on the mores of America — and said so.

. . . soon there may come a time when even young sweethearts will convey their thoughts only through gestures or some special sign language. We may well be

the ancestors of a race of silent men, who will be listeners and observers rather than talkers and doers. Perhaps one reason for the popularity of the late-hour disc jockeys who discourse volubly on every topic under the sun is that they lift the burden of conversation from their listeners.

Yet Gross knew that television was here to stay and years ago made these predictions: Television will someday transmit odors, such as the fragrance of the perfume that is being advertised and the smell of sizzling bacon. By television, machinery will be set in motion to boil coffee, fry the ham and eggs, draw the bath water, start the dish washer, propel the vacuum cleaner across the floor, and if a housewife sees something advertised by a department store on television, she will merely press a button on her receiver and a few minutes later will find the parcel in a special TV receptacle on the roof of her apartment building.

Gross also predicted the invention of a device which will enable television viewers to react to what they see on their screens. When a politician is talking they will be able to applaud or boo. When a comedian is performing they can laugh or shout their disapproval. And such reactions will be heard back in the studio. Organizations that now measure radio-TV audiences would be put out of business, of course, and so would television critics. The audience would measure itself and be its own critic.

A Program Elevator

Another veteran critic was Herschell Hart, who was radio (later radio and television) editor of the *Detroit News* from the 1920's until his death in 1960. Writing about him in *The Education of a Broadcaster*, Harry Bannister, general manager of WWJ, Detroit, for years, said:

He was the only broadcasting editor of a daily newspaper I have ever encountered who made a conscious effort to evaluate programs from the point of view of the audience.

Being a critic of broadcasting for a newspaper or magazine is a frustrating way of life. The criticisms carry no weight, and are interesting only as reading material. Critics of plays, movies, music, books and art have the power to influence acceptance or rejection by the public. In New York, for instance, the opening-night review of a play can often make or break it. The television critic has no such power, nor has the radio critic. Furthermore, most programs will never be seen again, except possibly as a summer "repeat." Therefore the criticism will neither add nor subtract one viewer. Television critics are prone to feel sorry for themselves because a cruel fate condemns them to watching television. I am sure most people would regard it as a pleasant way to earn a living.

Herschell Hart's philosophy of criticism was that it was part of his job to try and improve broadcasting and that he would do it not only by praising good work but also by encouraging all who tried. He felt that by so doing in time, the bad would get better, the mediocre would become good, and the good might even become great. Sympathy, kindness and understanding were apparent in his every word. Herschell Hart's daily column in the *Detroit News* and his daily gossip show on WWJ brought him recognition and standing throughout Detroit, which, as far as I know, has not been accorded any other critic anywhere.

Bannister's opinion that radio-television critics have no power and that their criticism "neither adds nor subtracts a single viewer" is not shared by everyone in the industry.

***Variety* Is a Bible**

For years *Variety*, the weekly newspaper of show business, has run reviews of radio and television shows that are read nervously, eagerly and respectfully by people in both advertising and broadcasting. The radio-TV editors of *Variety* and other publications that make an honest attempt to evaluate what goes out over the air have tremendous power and their judgement is not ignored by the men who decide whether to renew contracts for programs already on the air, or whether to produce another show patterned after one which had won the applause of critics and the public alike.

Critics Are Important

A radio-television editor who analyzes thousands of programs a year has an authoritative basis for his judgments. When he points out what in his opinion is wrong with radio and television, he does so hoping to improve the medium not to destroy it.

Announcers, entertainers and even the owners of stations owe each radio-television editor thanks for the ever-continuing notices he gives them. It was publicity-wise James A. Farley who once said, "I don't care how you spell the name, boys, as long as you use it!" Whether the radio-television editor attacks, denounces, praises or eulogizes, he is constantly keeping broadcasters' names before the public, and that is what is important.

This comment on the Cantor Case makes another good point about critics:

When Eddie Cantor recently pulled his sword and did a Douglas Fairbanks by challenging all the New York City radio editors single-handed, he at least focused nationwide attention on a caste of newspaper workers whose efforts on behalf of the betterment of broadcasting is not sufficiently credited. Some radio editors may be inclined to think that their colleagues in the East, being so close to the radiating centers, use mainly honey in their inkwells. The Cantor case proves how incorrect this assumption is.

Artistry vs. Salesmanship

In addition to passing judgment on specific programs and giving publicity to individuals on the air, most radio-television editors feel it is their rightful duty to express periodic opinions on how broadcasting is doing. For example, Del Carnes, radio-television editor of the *Denver Post*, recently wrote:

If television is to improve appreciably (it *is* improving now, but far too slowly) programming decisions must be made by those whose business is showmanship, not those in the sales department. Artistry and salesmanship are incompatible.

In an angrier, more pyrotechnical spirit, Si Steinhauser of the *Pittsburgh Post* wrote:

There ought to be a law! Against high-hat announcers. Against affectation in speech. Against employment of sustaining entertainers without pay. Against hysterical sports announcers, who call themselves "reporters" when they're not. Against more than half a dozen press agents for one network star. Against repeating gags (and they are rightly named!) more than ten times in one evening and 3,650 times per year. Against putrid advertising blurbs by actors pretending to be medical and beauty experts. Against smart-alec slang. Against the stupid and oftentimes putrid conversation of amateur broadcasters. That done radio might lift its head.

Those who write the scripts for television were taken to task by Charles Staff, radio editor of the Indianapolis *News*:

The quality of the writing is poor. Good performers, generally, and good production values, even some good aims. But the writing is gutless, pointless, witless. Most of it sounds as if it had been pushed through so many strainers that nothing of substance was left.

Poor programming was attacked by Dean Simpson, radio editor of the Fresno (Cal.) *Bee*:

All three networks excuse their dreary programming with the reasoning that they are giving the public what it wants. Is it the job of television to cater to the lowest common denominator in taste or should it be the job of networks (and sometimes individual stations) to attempt to upgrade the often admittedly low public taste?

And by Harry Glover, the Reading (Pa.) *Times* critic:

Same old complaint, year after year. Not enough range and boldness in programming.

"Too many commercials" is the complaint of many radio-television critics, and yet the very columns in which they make this point — especially if they appear on Thursday or Friday — are often almost impossible to find, because they are buried among so many food and department store ads in 60, 80, or 100-page papers that seem to be about 90 per cent "commercials".

John L. Weber, radio editor of the *Daily Sentinel* of Wellston, Ohio, put it this way:

Too many commercials in poor taste, and sound level of too many commercials still too high.

On the same theme, Vernon Scott, UPI radio critic in Los Angeles:

It's outrageous the way the volume is increased for commercials during the course of almost all television shows. Commercials should be broadcast at the same sound level as the entertainment part of the show.

Gossip & Brilliance

Radio critics of the now-defunct New York Daily *Mirror* (there were many, at different times) titillated their readers by writing keyhole gossip about broadcasting stars. Their revelations often skirted the edge of libel, and occasionally may have fallen into that slime-pit. The paper's hope was that the victim would know the Farley rule and decide not to sue.

For years the radio critic of the more-recently-defunct New York *Herald-*

Tribune was John Crosby, native of Milwaukee, who left Yale for newspaper work, first on the Milwaukee *Sentinel*, then to New York as a police reporter, then a radio critic, although by accident. Home from World War II, he found New York City swarming with out-of-work reporters, so when he was offered a job as a radio critic he took it, albeit he had never owned a radio and rarely listened to radio. But he wrote brilliantly and within several years his syndicated column was being read by 18,000,000 people.

Attacks Missouri Singer

Crosby, unlike any of the other critics herein mentioned, built his following not by being informational, or sensational, or controversial, but by being entertaining, generally at the expense of broadcasters.

When President Truman's daughter, Margaret, sang with the Detroit Symphony Orchestra, on March 16, 1947, she was introduced, discreetly, as a young American singer from Washington, who had been born in Missouri. Ten million radio listeners heard her. The next day Crosby wrote:

It was the policy of the Detroit Symphony, declared the announcer, to encourage promising young American singers and that, he implied, was why Miss Truman was there. There was no mention of the fact that Miss Truman lived at 1600 Pennsylvania Avenue or that it was a Page 1 story, or that some fifty newspapermen were sent to Detroit to cover the debut of this promising young singer from Washington.

Four years later, when Miss Truman did another concert, Crosby dipped his pen in vitriol once more and wrote:

The defects of the voice observed four years ago are still there and perhaps a little worse. Miss Truman still can't seem to hit a note anywhere near the center. The voice is harsh, thin and uninteresting and still gets into grave trouble in the upper registers. I just can't help thinking that Miss Truman got on "The Big Show" because she's the President's daughter, a thought which has probably never occurred to anyone else, especially the people at NBC who booked her.

Shattering, Terrifying!

Readers liked Crosby's style, for the circulation of his column grew and grew, but those connected with a show that he was reviewing often trembled as they read his acidulous comments, such as this review of *Romeo and Juliet*:

William Shakespeare and the U.S. Steel Corporation, two institutions of massive respectability, clasped hands last summer (1948) in a Theater Guild of the Air production of *Romeo and Juliet*, which means, of course, that Shakespeare has finally arrived.

Nevertheless, after hearing Miss Reed declaiming, "Help! Help! Juliet's dead!" I felt absurdly comforted for not having been present at the fall of Jericho. The blare of trumpets on that memorable occasion could not possibly have been more shattering or more terrifying. With those four words she made a mockery of all radio. The line would have been just as effective if they had turned off ABC and opened the windows.

While some radio-television critics give the impression of enjoying their work, Crosby made no secret of his own personal reaction:

The worst aspect of the job, I suppose, is the monotony. Nothing resists criticism so strenuously as radio. A radio columnist is forced to be literate about the illiterate, witty about the witless, coherent about the incoherent. It isn't always possible. My drawers are stuffed with notes about programs which are neither bad enough nor good enough to warrant comment of any sort. They hover, these programs, in a sort of nether-world of mediocrity and defy you to compose so much as a single rational sentence about them.

The quotations at the start of this chapter have been put there so that critics and the criticized alike can take solace. Among those seven aphorisms there is one to fit almost any situation. The critic who feels his efforts to improve broadcasting are unappreciated may therein find comfort, as well as the broadcaster who suffers because he has been unfairly dissected.

10.

P.R.O. =

P.A. =

P.T.

Phineas Taylor Barnum, the world's most celebrated showman, with typical modesty called his circus "The Greatest Show on Earth." He was the inventor of *ballyhoo*, defined as "a way of bringing a product or a personality quickly and strikingly to the public's attention." Imagination was what the Nineteenth Century circus man had in abundance. Once when his circus was playing Madison Square Garden, New York, he hired a "public relations staff" of men in shabby clothes to walk each day from various points of the compass in the direction of Madison Square Garden dropping shiny pennies through holes in their trousers' pockets onto the sidewalk. By the time they reached the Garden they always had a following. Barnum ("P.T." to his friends) died in 1891, but he bequeathed to the Twentieth Century the early tricks of press agency.

Today it is estimated that there are 100,000 public relations specialists in the United States, many of them occupying key positions in great corporations. The growth of their profession has been rapid. In 1931, when Paul Garrett went to work for General Motors in Detroit he was the only public relations employee on the payroll. When he retired 25 years later there were 200 men and women in the G.M. public relations department operating on a budget of more than a million dollars a year. The Public Relations Society of America has a membership of more than 5,000. Many of its members shudder when they hear the expression: *press agent*. They tolerate P.R.O. (Public Relations Officer.) They prefer Public Relations Consultant, or Public Relations Advisor.

The Engineering of Consent

Whatever they may be named, the men and women engaged in what has been called by one of their number "the engineering of consent," are of vital importance to broadcasting. Every network and large station has a press or public relations department of its own. (CBS has entirely separate staffs for promoting its news department and its other programs.) The range of their activities may extend from the routine task of turning out accurate and readable biographies and glamorous glossies of their stars, to conceiving the idea of sending a cable to Hanoi asking Ho Chi-minh how he feels about peace, on the long chance that he will reply and give the network an exclusive broadcast. They also try to smooth the troubled waters when a network or station finds itself in the center of a storm because of the temperamental misbehavior of one of its performers, or because a star resigns in a huff over being censored by Continuity Acceptance.

Edison & Chaplin Bagged

The most celebrated of the networks' publicists was Alfred F. ("Hollywood") McCosker, who had once been an office boy for Arthur Brisbane, and later a publicity man in Hollywood. He was credited with luring two microphone-frightened celebrities into the studios of WOR in the days when he was that station's public relations genius. One was Charlie Chaplin, who adamantly refused to be interviewed on the air but finally agreed to do an act. In quick succession, to the delight of those in the studio as well as the radio audience, he performed first on a piano, then on a violin, then on a clarinet and finally on a cello. The other was Thomas A. Edison, who had been indirectly responsible for the miracle of radio, but was as shy as a schoolgirl about appearing on mike. McCosker, who had a nose for news and P.T.'s love of a stunt, eventually became president then chairman of the board of Mutual.

Create an Image

In the intense competition for popularity, broadcasting stars employ their own personal press agents in an effort to get more publicity than their rivals — even those on the same station or network. (In Chapter 9 a radio-television critic protested against "more than half a dozen press agents for one star.") It is these personal press agents who often go to amusing, sometimes questionable extremes to keep a star's name on Page One, knowing that good reviews by the radio editor and even spicy paragraphs in gossip columns are not enough to create the image that will result in a mass following. (The press agent's rule of thumb is that a one-column bold face news headline on Page One is worth a dozen items in the gossip columns, which in turn are worth a hundred puffs. (*Puff*: an empty expression of praise, esp. one in a public journal. — Webster.)

One of radio-television's most popular singers throughout the 1960's worked diligently, with the assistance of his press agents, to create the image of a two-fisted character who would fight at the drop of a hat or the sound of a slightly insulting word. Result: much publicity. Result: greater popularity.

A Lamb in a China Shop

Another press agent put Fred Waring's picture in all the papers by having him lead a live, snorting bull into a Fifth Avenue china shop to prove that there is nothing to the old adage. The stunt worked. The bull cooperated by behaving as benignly as Mary's little lamb.

The kidnapping of Edgar Bergen's Charlie McCarthy from a New York hotel room landed both the top-hatted dummy and his master on front pages for several days.

Dinah Shore once led a goat down Fifth Avenue, in the interest of sweet publicity.

Offers a Tender Daughter

To publicize Dave Ellman's radio show, *Auction*, his press agent had an Appalachian mountaineer write in that he was so poor — so in need of a little quick cash — that he was willing to have his fair young daughter auctioned off to the highest bidder.

To introduce a new young singer named Bing Crosby, a dinner party was held in New York for radio editors, during which one of the guests (later revealed to be a comedian noted for his "iron stomach") suddenly went down the table with a pair of scissors snipping off pieces of the other guests' shirt collars, which he promptly ate. (The collarless victims were later taken to a nearby haberdashery and given the choice of any shirt in the shop.)

Alimony Dodger Entertained

The relationship between radio editors, press agents and broadcasting stars is such that years ago, when a well-known New York radio-television publicist went to Alimony Jail for an indefinite time for failing to keep up payments to his ex-wife, critic Ben Gross rounded up a dozen top radio entertainers, headed by Bob Hope, and took them to the jail, where they entertained the incarcerated man for an hour or two, out of consideration of all he had done for them.

But broadcasters in small cities, as well as in New York, Hollywood and Chicago, have still another connection with these gentlemen of subtle persuasion. The average radio listener or television viewer may never wonder how the emcee of an interview program finds all the people to go on the air with him every day or every night. A single program like the Merv Griffin Show or NBC's *Tonight* consumes interviewees at the rate of dozens per week, hundreds per year. Of

course all guests are carefully screened, then extensively brain-picked, and finally meticulously briefed, but the raw material is supplied by press agents for book publishers, music publishers, record companies, non-profit institutions, fund drives, lecture agencies, night clubs, restaurants, roadhouses, eleemosynary organizations and educational enterprises. Also labor unions, dance schools and trade associations.

“Oh Get Me Exposure!”

Not all the 100,000 public relations specialists in the country are interested in getting their employer's ideas, products or personalities publicized on the air. Some few have the even more difficult task of discouraging or preventing public discussion of their employers' this or that. But enough of them are concerned with what is called “exposure” to form a long parade past the doors of any broadcasting house.

Once, the less scrupulous indulged in subtle forms of bribery. Sometimes they actually attempted to pass money under the table. But this form of persuasion is rare today. The relationship between the producers of a television show and the agent is two-way. Such men as Johnny Carson and Merv Griffin are eager to put on a good show. They are always on the lookout for characters who can make the audience laugh, cry, shout, scream, shudder or react in any way short of fainting. (No sponsor wants to lose even part of his audience like that.) If the agent can produce such a personality, he is assured a place on the program, even though some mention will have to be made of his latest book or the nightclub in which he is currently singing.

Competition Is Fierce

In the case of women's daytime interview shows, the competition for articulate guests is especially fierce. At times, even in New York, the supply is so far behind demand that a guest may appear on two or three competing programs the same week.

Authors, lecturers, singers and musicians on tour are good material for broadcasters in cities they pass through. If their press agents are good and have an up-to-date list of stations, they will write or wire ahead, giving availability dates, time of arrival, time of departure, hotel, and the line of interest.

If a broadcaster has the time, ambition and inclination to by-pass the press agents, or to augment their offerings by doing some scouting on his own, he can make his program much more off-beat, much less like every other interview program in the country. This is possible in the big-time or on a small station far from the beaten path. But it takes work and a technique. Meanwhile, the Established System manages, somehow, to feed enough talent into the maws of the hungry machine so that it can continue to function, even though the demands are ever-increasing. For *that*, the machine should be grateful to the descendants of old P.T. and all the other pioneers of ballyhoo.

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Supervision and Ethics

In the early days of radio there was a station in New York that was outspokenly anti-Catholic, anti-Negro, anti-Jewish and anti-liberal. When New York's Governor, Alfred E. Smith, ran as the Democratic candidate for President, he and his political associates were the victims of weeks of smear broadcasts over this station. The American Civil Liberties Union begged, urged, and tried to insist that equal time on the air be set aside for presentation of the other side of the story. The station owner replied that there was no other side to the story and shouted about "freedom of speech." Everyone, from the Mayor of New York City to members of the newly created Federal Radio Commission (fore-runner of the present Federal Communications Commission) was afraid to take drastic action, fearing the charge of "censorship."

At the height of Eddie Cantor's popularity, his script for an NBC network evening show called for his female vocalist, Nora Martin, to sing a current song, *We're Having a Baby, My Baby and Me*, and then turn to her husband (played by Cantor) and thank him for the fact that she was "expecting." Cantor was to smile and reply that he deserved no thanks. "because it was a pleasure!" Then he was to add: "The next one will be on me."

NBC's Continuity Acceptance Department deleted this dialogue from the script and when the show went on the air cut the sound during the singing of *We're Having a Baby, My Baby and Me*.

Cantor raised the cry: "Censorship!"

Years ago NBC's Director of News and Special Events advised all his radio commentators to be "provocative but not controversial." But who would decide



Eddie Cantor, the critics' critic.

exactly where to draw the thin line between the two?

The comedian Fred Allen once submitted a script to his network's Continuity Acceptance in which he poked considerable fun at a mythical town that his writers decided to call "North Wrinkle." CA insisted on elimination of the name on the ground that somewhere in some remote corner of some state there just might be a town called North Wrinkle, even though no map showed it.

Fred Allen called it: "Stupid censorship!"

Years ago a member of the Izaak Walton League wished to do a broadcast in praise of the worm, as opposed to the traditional fly so dear to the hearts of most trout fishermen. Controversial? Yes, but at first glance a non-political, non-religious, non-dangerous controversy, involving nothing more volatile than worms vs. flies. But the year was 1927. President Calvin Coolidge, whose favorite sport was fishing, was on a holiday in the Black Hills of South Dakota — fishing. One day he had called in reporters and handed them each a slip of paper on which appeared the stark words:

I DO NOT CHOOSE TO RUN FOR PRESIDENT IN 1928.

Now a Draft-Coolidge movement was underway. Coolidge was a devoted user

of worms instead of flies, so the station manager denied the air to the Izaak Waltonite, on the ground that the broadcast he proposed to deliver was a subtle way of talking about a highly political controversy — Mr. Coolidge.

Too Hot to Handle

At certain times on certain stations in certain parts of the country the following subjects have been considered too hot to handle and a ban was in effect, at least locally, on any mention of them on the air:

ASTROLOGY	FAMILY PLANNING	PREGNANCY
ADAM & EVE	FORTUNE TELLING	THE POPE
BEDS	GOAT GLANDS	RABBIS
BLOOD	HARD LIQUOR	SEX
BIRTH CONTROL	INFECTIONS	STOMACH
CHIROPRACTIC	KINGFISH LONG	TOWNSEND PLAN
FEMALE LEGS	MONKS	WETBACKS
FATHER COUGHLIN	NARCOTICS	WCTU

These disjointed paragraphs illuminate the most worrisome clutch of problems that American broadcasting has. Many other countries eliminate such troubles in advance by the simple device of putting radio and television broadcasting in the hands of the government. In such countries a supreme broadcasting authority makes arbitrary decisions from which little or no appeal is possible — depending on how much voice the people have in choosing the political leaders who appoint the men who make the broadcasting decisions.

The Democratic Solution

The solution reached in the United States is typical of what happens in a democracy such as ours. Gradually over the years, by trial and error, as the result of a strenuous tug-of-war between forces pulling in two opposite directions, a system has evolved which may not please anyone 100%, and which may not function perfectly at all times, but which, like all democratic compromises, has obviated open warfare between those with different points of view.

This system is partly government control, through the FCC, and partly self-control and self-discipline on the part of the stations and networks themselves, through the formation of a trade association and the adoption by members of that association of a code of ethics and a set of specific rules governing the conduct of the extremely delicate business of “utilizing electro-magnetic waves for the widespread dissemination without charge to the general public of intelligence and entertainment appealing either to aural or visual senses, or both.”

How FCC Came to Be Born

Here in a nutshell is the history of government regulation of broadcasting:

In 1910 Congress passed a Wireless Ship Act covering radios on ocean-going vessels. (See Chapter 4.) In 1912 Congress passed the first domestic law for the control of radio in general. These two acts were the forerunners of more than a hundred resolutions or acts passed by Congress in the ensuing half century.

When Herbert Hoover became Secretary of Commerce in the cabinet of President Harding in 1921, there were fewer than 50,000 radio receiving sets in the entire country. Within ten or twelve months the number had jumped to almost a million, while the first few stations had suddenly mushroomed to 300. As the transmitters increased power they began drowning out each other. In some areas it was impossible to get one station at a time. Stations came wholesale — two or three at the same place on the dial.

Hoover Lays Down the Law

So Secretary Hoover called a conference of manufacturers, broadcasters, amateurs, government agencies and representatives of the listeners, and told them:

It becomes a primary public interest to say who is to do the broadcasting and under what circumstances and with what type of material. It is inconceivable that we should allow so great a possibility for service and for news, for entertainment and education and for vital commercial purposes to be drowned in advertising chatter! There is the necessity to establish public right over the radio bands.

The legislation that Secretary Hoover suggested did not get passed for six years — not until 1927. By that time there were a thousand stations, some of them engaged in open piracy on the air waves. One Chicago station even took another's wave length and defied anyone to do anything about it. So the Dill-White Act was passed, giving President Coolidge the right to appoint a Federal Radio Commission, which quickly reduced the number of stations to 708. But everyone did not respect the authority of the FRC, especially not Aimee Semple McPherson, California evangelist, whose Temple was almost as much a tourist attraction as Disneyland would later become. She not only took in an average of \$10,000 a night from sinners who came to repent — and from tourists who came to watch the sinners repent — but on the side ran a radio station and sold cemetery lots. When her station engineers began treating the air as if it were as free as air had been before the FRC, other stations complained. The FRC several times told Miss McPherson to keep her station on its proper wavelength. Finally, going over the head of the FRC, she sent Secretary Hoover a telegram:

ORDER YOUR MINIONS OF SATAN TO LEAVE MY STATION ALONE. YOU CANNOT EXPECT THE ALMIGHTY TO ABIDE BY YOUR WAVELENGTH NONSENSE. WHEN I OFFER MY PRAYERS TO HIM I MUST FIT IT IN WITH HIS WAVELENGTH RECEPTION. OPEN THIS STATION AT ONCE.

Others had more respect for the FRC, but that body lacked the authority to deal properly with the situation. In 1934 it was superceded by the present

seven-man Federal Communications Commission which, while occasionally be-
 rated and denounced by individuals who have felt themselves unfairly treated, for
 a third of a century has regulated all forms of radio, television, telephone and
 cable communication within the United States and between this country and
 foreign points in a manner generally free of any trace of dictatorial tendencies.
 The FCC has left it up to the broadcasters themselves to do their own program-
 ming, manage the business end of their operations, and act as their own censors.
 Thus radio and television stations and networks have remained private enter-
 prise, while at the same time operating in an area — the air — that is legal-
 ly considered the property of the people.

Even on the part of some people in broadcasting, there is confusion and un-
 certainty about the powers the FCC has, what it can and cannot do, and how it
 functions. Here is a summary, drawn largely from FCC publications. (See
 Section III for a complete bibliography.)

What Is the FCC?

It is the United States Government agency charged with regulating interstate and
 foreign communication by means of radio, wire, and cable.

What Is the Object of FCC Regulation?

To provide for orderly development and operation of broadcasting services;
 to make available a rapid, efficient, nationwide and worldwide telegraph and tele-
 phone service at reasonable charges; to promote the safety of life and property
 through the use of wire and radio communication; and to employ communication
 facilities for strengthening the national defense.

Is the FCC Under Any Government Department?

No. It is an independent Federal establishment created by Congress and, as such,
 reports directly to Congress.

What Are Its Major Activities?

Allocating bands of frequencies to non-Government radio services and assigning
 frequencies to individual stations; licensing and regulating radio stations and
 radio operators; regulating common carriers engaged in interstate and foreign com-
 munication by telegraph and telephone; promoting safety through the use of radio
 on land, water and in the air; encouraging more effective and widespread use of
 radio; harnessing wire and radio communication services to the national defense;
 and helping to establish a space communication system.

How Is the FCC Administered?

By seven commissioners appointed by the President with the approval of the
 Senate. No commissioner can have a financial interest in any business which the
 commission regulates. Not more than four commissioners may be members of the
 same political party. Appointments are for seven years. The salary of a com-
 missioner is \$27,000 a year. The chairman receives \$28,500.

What Does the FCC Field Staff Do?

It is engaged largely in engineering work. This includes monitoring the radio
 spectrum to see that radio station operation meets technical requirements, inspect-
 ing radio stations of all types, conducting radio operator examinations and issuing
 permits to those found qualified, locating and closing unauthorized transmitters,
 furnishing radio bearings for aircraft or ships in distress, and tracing and reme-
 dy-ing causes of interference to radio communication.

How Many Persons Does the FCC Employ?

About 1,500 regular employees, of which more than one quarter are engaged in
 field engineering.

What Does FCC Regulation Embrace?

Consideration of applications; assignment of frequencies, power operating time and call letters; inspection of equipment; passing upon changes in ownership and facilities, and renewing licenses after reviewing station operation.

Is the FCC Concerned with Space Communication?

The commission's regulation of international common carriers operating in this country, and its obligation to promote new uses of radio, require it to play an important role in the development of the United States portion of a space communication system for public and private use between the United States and other nations; approving carrier participation and, later, regulating their rates and services. Communication is possible over greater distances by being relayed from man-made earth satellites. Such communication will, in effect, be an extension into space of present international telephone and telegraph services.

Can Aliens Hold Radio Licenses?

The license privilege, in general, is limited to citizens of the United States. It is denied to corporations having an alien officer or director or with more than one-fifth of its capital stock owned or voted by aliens. In the interest of air safety, waivers may be granted to non-citizen pilots of aircraft flown in this country.

What Are Some Types of Broadcast Services?

The list includes the older standard or AM (amplitude modulation); FM (frequency modulation); both commercial and non-commercial educational, including stereophonic broadcast; TV, commercial and non-commercial educational, also test pay-TV on the air; international (other than those operated by the Government); supplemental services such as FM functional music, TV translators, remote pickup and studio-transmitter links; and experimental and development services. The commission does not license CATV (community antenna) or closed-circuit (wired) TV systems, since they do not transmit over the air.

Does the FCC Charge for Its Services?

The commission charges fees for the filing of applications in most of its licensing activities, such income going to the United States Treasury.

Does the FCC License Networks?

Not as such, only individual stations. However, its licensees are subject to the chain broadcasting regulations adopted by the commission in 1941 to further competition in broadcasting.

How Does the FCC Prevent Monopolies?

The commission prohibits the same interest or group from operating more than one network, or more than one AM, FM or TV station in the same locality, or more than seven AM, seven FM or seven TV commercial stations throughout the country. Not more than five of these stations may be in the VHF band.

Does the FCC License Receivers?

The commission does not license sets that are used for reception only. However, it does impose limitations on their radiations which may interfere with radio or TV service.

How Are Call Letters Assigned?

International agreement provides for the national identification of a radio station by the first letter or first two letters of its assigned call signal, and for this purpose apportions the alphabet among different nations. United States stations use the initial letters K, N, and W exclusively, and part of the A series. Broadcast stations are assigned call letters beginning with K or W. Generally speaking, those beginning with K are assigned to stations west of the Mississippi River and in the territories and possessions, while W is assigned to broadcast stations east of the Mississippi.

During radio's infancy, most of the broadcast stations were in the East. As inland stations developed the Mississippi River was made the dividing line between K and W calls. KDKA, Pittsburgh, was assigned the K letter before the present system was put into effect. Most of the early broadcast assignments were three letters.

When this combination became exhausted, a fourth letter was added.

Since many AM licenses also operate FM or TV stations, a common practice is to use the call letters of the AM station, followed by a dash and FM or TV.

Licenses Are for How Long?

Broadcast stations are licensed to serve the public interest, convenience and necessity. Because radio channels are limited and are a part of the public domain, it is important that they be entrusted to licensees who have a high sense of public responsibility. The normal broadcast license period is three years, but in 1960 Congress authorized the commission to make shorter grants at its discretion. Applicants must be legally, technically and financially qualified and show that proposed operations are in the public interest. The commission may fine licensees up to \$10,000 for willful or repeated violations.

Does the FCC Control Program Content?

Under the Communications Act it is the responsibility of each broadcast station to arrange its program structure so that operations will be in the public interest. The commission does not prescribe any percentages of time which should be devoted to particular subjects, such as news, education, religion, music, public issues, etc. That is something which can vary with the locality and is at the discretion of the individual station. However, the commission does periodically review the overall performance of a station — engineering and otherwise — usually when it applies for renewal of its license, to determine whether it has lived up to its obligations and the promise it made in obtaining permission to use the public airwaves.

What Are a Station's Obligations?

The FCC says that the major elements usually necessary to meet the public interest, needs and desires of the community include: (1) Opportunity for local self-expression, (2) Development and use of local talent, (3) Programs for children, (4) Religious programs, (5) Educational programs, (6) Public Affairs programs, (7) Editorialization by licensees, (8) Political broadcasts, (9) Agricultural programs, (10) News programs, (11) Weather and market reports, (12) Sports programs, (13) Service to minority groups, (14) Entertainment.

What About Free Speech?

The commission does not have authority to direct a station to put a particular program on or off the air. The Communications Act states: "Nothing in this Act shall be understood or construed to give the commission the power of censorship over the radio communications or signals transmitted by any radio station, and no regulation or condition shall be promulgated or fixed by the commission which shall interfere with the right of free speech by means of radio communication." The commission has held that freedom of speech on the air must be broad enough to provide full and equal opportunity for the presentation of both sides of public issues.

Does the FCC Regulate Advertising?

The commission does not pass upon individual commercials. However, it does consider whether there is over-commercialization contrary to the public interest. Under a cooperative arrangement with the Federal Trade Commission, which has jurisdiction over false and misleading advertising on the air, the commission notifies stations of advertising cited by the FTC so that these stations may take any necessary action consistent with their obligation to operate in the public interest.

What About Political Broadcasts?

The Communications Act provides: "If any licensee shall permit any person who is a legally qualified candidate for any public office to use a broadcasting station, he shall afford equal opportunities to all other such candidates for that office in the use of such broadcasting station, provided that such licensee shall have no power of censorship over the material broadcast under the provisions of this section. . . . The charges made for the use of any broadcasting station

for any of the purposes set forth in this section shall not exceed the charges made for comparable use of such station for other purposes." The Act was amended to exempt from the equal-time requirement appearances by candidates on bona-fide newscasts, news interviews and other news coverage.

What Is the Payola Amendment?

The Communications Act was amended in 1960 to make it illegal to plug records and other commercial services over the air without identifying those instances in which money or other consideration is received for so doing. Also, penalties are provided for those who broadcast deceptive programs purporting to be based upon knowledge, skill or chance.

Are Lotteries Permitted?

The United States Criminal Code prohibits broadcasting information concerning "any lottery, gift enterprise, or similar scheme;" also utterances of obscene, indecent or profane language.

Must a Station Sell Time?

A broadcast station is not required to sell or give time to all who seek to go on the air. Because programming is primarily the responsibility of broadcast stations, the commission does not ordinarily monitor or pass upon individual programs, or require the filing of scripts. However, broadcasters are required to keep a program log and a technical log, and a record of all requests for political broadcast time. The commission does not maintain surveillance of the day-by-day internal management of stations, or regulate their time charges, profits, artists' salaries, or employee relations. It licenses only the stations owners and their transmitter operators.

NAB Enters the Picture

In 1922, when radio was still in its swaddling clothes, a group of station owners banded together and formed the National Association of Broadcasters, which today serves as the self-regulating body of the industry and represents stations and networks in their relationship with the White House, Congress, the administrative agencies of government, church groups, electronic manufacturers, educators, recording companies, music publishers, and political parties.

In those early days the principal problem was the undisciplined use of the air waves by the new medium of communication that was suffering from such acute growing pains. Without adequate channels or frequency separations, radio was becoming a hodgepodge of sounds in the night, and appeared unlikely to be able to fulfill its role as a great medium of mass communication. Laws regulating radio were inadequate because they had been drawn up primarily to cope with ship-to-shore communications and the safety of human life at sea.

Radio Act of 1927

Partly through the efforts of the new association, passage was obtained of the Radio Act of 1927, which laid the foundation for the present-day American system of broadcasting, through station licensing, while at the same time avoiding government control of the station's business operation and programming.

Since those pioneer days, the NAB has grown until in 1966 its membership included nearly 3,500 radio and television stations throughout the fifty states,

and the District of Columbia and Puerto Rico, as well as all seven national radio and television networks.

The NAB has always reached high in its search for superior leadership. Most of its presidents have previously held public office. One of its outstanding leaders was former Governor Le Roy Collins of Florida, under whose aegis the NAB grew greatly in size and influence.

NAB Accomplishments

The NAB lists among its accomplishments to date:

Instituting voluntary codes for radio and television, which provide broadcasters with guideposts in determining acceptable programming and advertising practices.

Upholding the American system of broadcasting, free from government censorship.

Combating discriminatory legislative proposals.

Obtaining more liberal acceptance of radio and television coverage of public proceedings.

Improving the industry's relationship with public service groups.

Achieving fair labor relations laws and wage-hour regulations.

Radio Code

In 1937 an NAB committee hammered out a Radio Code which has been revised many times since then. In recent years, because of rapidly changing conditions, revisions have been made almost every year.

The Radio Code is prefaced by a Radio Broadcaster's Creed, which is reproduced in this chapter, rather than in Section III, because of its great importance. Not only is it radio's own Declaration of Independence, but it contains the principles that any good broadcaster should follow in his professional life, stated succinctly and epigrammatically, and in a style reminiscent of such celebrated documents as the U.N. Charter and the American Declaration of Independence.

THE RADIO BROADCASTER'S CODE

We believe:

That radio broadcasting in the United States of America is a living symbol of democracy; a significant and necessary instrument for maintaining freedom of expression, as established by the First Amendment to the Constitution of the United States;

That its influence in the arts, in science, in education, in commerce, and upon the public welfare is of such magnitude that the only proper measure of its responsibility is the common good of the whole people;

That it is our obligation to serve the people in such manner as to reflect credit upon our profession and to encourage aspiration toward a better estate for all mankind; by making available to every person in America such programs as will perpetuate the traditional leadership of the United States in all phases of the broadcasting art;

That we should make full and ingenious use of man's store of knowledge, his talents, and his skills and exercise critical and discerning judgement concerning

all broadcasting operations to the end that we may, intelligently and sympathetically:

- Observe the proprieties and customs of civilized society;
- Respect the rights and sensitivities of all people;
- Honor the sanctity of marriage and the home;
- Protect and uphold the dignity and brotherhood of all mankind;
- Enrich the daily life of the people through the factual reporting and analysis of news, and through programs of education, entertainment, and information;
- Provide for the fair discussion of matters of general public concern; engage in works directed toward the common good; and volunteer our aid and comfort in times of stress and emergency;
- Contribute to the economic welfare of all by expanding the channels of trade, by encouraging the development and conservation of natural resources, and by bringing together the buyer and seller through the broadcasting of information pertaining to goods and services.

As a sample of what the Radio Code covers: it places a voluntary ban on astrology, fortune-telling, mind-reading, numerology, character-reading, occultism, vulgarity, smut, slang words derisive of any race, color, creed or nationality, and the use of words and sound effects (such as "bulletin", "flash" and "we interrupt this program to bring you") except on legitimate news programs.

Television Code

In the spring of 1952 the first NAB Television Code went into effect. It, too, has undergone revision almost annually.

As a sample of the problems tackled by those who formulated the rules and regulations for television, the code says that TV must not attack or ridicule in any way any religious faith; that reference to physical deformities must be avoided; that cruelty and greed must not be portrayed as praiseworthy; that care should be exercised so that "cigaret smoking will not be depicted in a manner to impress the youth of our country as a desirable habit worthy of imitation;" that suicide shall not be depicted as an acceptable solution of human problems, and that illicit sex relations shall not be treated as commendable.

There are several hundred other rules governing religious programs, controversial public issues, political telecasts, news, public events, children, education, culture, community responsibility, premiums, contests, station breaks, and advertising — rules designed primarily to keep television from being offensive to any group, large or small, and to help television serve the public interest.

(The full text of both the Radio Code and the Television Code are printed in Section III.)

Although all broadcasters do not subscribe to the codes, the latest count showed their acceptance by 2,350 AM and FM radio stations and all four radio networks, and by 394 television stations and three national television networks.

100,000 Hours of Monitoring

To demonstrate to the world that self-regulation is not only possible but that it is a basic principle of the broadcasting industry, the NAB monitors

more than 100,000 hours a year of broadcasting, on the lookout for violations of the codes. These violations are brought to the immediate attention of the management of offending stations and generally cease at once. Otherwise appropriate action is taken.

Two review boards are responsible for keeping the codes up to date. Although membership undergoes periodic changes, the 1966 boards are listed below to show their wide representation:

TELEVISION CODE REVIEW BOARD

CLAIR R. MCCOLLOUGH, Steinman Stations, Lancaster, Pa. *Chairman*
 ERNEST LEE JAHNCKE, JR., National Broadcasting Co., New York, N. Y.
 DOUGLAS L. MANSHIP, WBRZ, Baton Rouge, La.
 WILLARD A. MICHAELS, Storer Broadcasting Co., Miami Beach, Fla.
 REEVE OWEN, WTVC, Chattanooga, Tenn.
 ROBERT E. SCHMIDT, KAYS-TV, Hays, Kans.
 ALFRED R. SCHNEIDER, American Broadcasting Co., New York, N. Y.
 HAROLD P. SEE, Chronicle Broadcasting Co., San Francisco, Calif.
 WILLIAM H. TANKERSLEY, CBS Television Network, New York, N. Y.

RADIO CODE BOARD

RICHARD M. BROWN, KPOJ, Portland, Ore., *Chairman*
 JOHN ALEXANDER, WFLA, Tampa, Fla.
 MICHAEL J. CUNNEEN, WDLA, Walton, N. Y.
 CLINT FORMBY, KPAN, Hereford, Tex.
 MORTON H. HENKIN, KSOO, Sioux Falls, S. D.
 J. ALLEN JENSEN, KID, Idaho Falls, Ida.
 MISS GRACE M. JOHNSEN, American Broadcasting Co., New York, N. Y.
 JOSEPH F. KEATING, Mutual Broadcasting System, New York, N. Y.
 ANDREW M. OCKERSHAUSEN, WMAL, Washington, D. C.
 MRS. JASON T. PATE, WASA, Havre de Grace, Md.
 JAMES H. QUELLO, WJR, Detroit, Mich.

Every year — sometimes every month — new problems confront a self-regulatory board such as the NAB. One of the most recent was the tendency on the part of some television advertisers to engage in what the NAB labeled “derogation.” The two code boards adopted a greatly strengthened provision urging advertisers to offer products and services on their positive merits and to refrain from discrediting, disparaging or unfairly attacking competitors, competing products, or other industries, professions or institutions.

Testimonial advertising also came under close scrutiny and to the codes were added provisions that personal endorsements shall be genuine and that the endorsers must actually have used the product.

Panel of Medical Experts

A scientific panel of medical professionals was formed to help evaluate claims and statements made in commercials pertaining to the medical profession.

Toy advertising was studied and resulted in an improvement in the content and treatment of toy commercials.

The use of hypnosis on the air was forbidden, as was the drinking of wine and beer, and also the use of physicians, dentists and nurses in commercials for

products involving health considerations. Certain words were put on a black list. The Radio Code was changed to provide that on a news program the listener must be able to distinguish between the news and the advertising. Henceforth the words "safe" and "harmless" must be avoided in medical commercials.

These are samples — small indications — of the way in which the NAB strives to keep on its toes, ever eager to spot abuses before outsiders do, and to eliminate them in the interest of good broadcasting.

The Choice: Code or Laws

The comment on the codes that has pleased the NAB more than any other was made by Senator Peter Dominick of Colorado:

"If you didn't have your codes, many of the FCC proposals would be a matter of law."

That is exactly what the NAB seeks to avoid: any more laws — any more control by government. It was therefore with great pleasure that NAB members listened to Vice President Hubert H. Humphrey say:

"I think that those of you in broadcasting are more than just good businessmen. You're professionals. And, therefore, you must be bound by professional ethics, professional responsibility, and professional honor to serve the public interest. . . .

"Government cannot do this for you. And government shouldn't do it if it could."

12.

How Audiences Are Measured

If an advertiser wishes to buy space in a newspaper or magazine, he has no trouble ascertaining whether 1,987,654 or 1,500,000 copies of the publication's last issue were printed, distributed and sold. Of course, if the ad he places appears on Page 89, he has no certain way of discovering how many readers will reach Page 89 before falling asleep. However, printed media do have a big advantage over radio and television: their circulation figures are positive, definite and precise.

In the early days of radio there were four interesting if not exact ways of measuring the popularity of a program and therefore the effectiveness of radio commercials:

1. How much of a spurt there was in the sale of the product advertised.
2. The reaction of wholesalers and dealers.
3. Press comment about the program.
4. Fan mail.

Letters by the Ton

In the 1930's the networks considered No. 4 so important that they hired trustworthy mail room employees whose sole task was to keep an accurate count, hour by hour, of how many pieces of mail arrived for each performer. All networks treated their mail count as top secret. When the postals, letters and telegrams finally reached the star to whom they were directed, he, of course, could make a count himself, before his secretaries disposed of the communications, but it was as difficult to try to get someone else's mail count as it would be at a later date to learn how many atom bombs the Pentagon had in its stockpile. Once CBS did, however, give out its grand total: 13,000,000 for that year.

It had cost the senders over a million dollars in postage and telegraph charges.

This was the first important "rating system." Mail proved that people were listening. Obviously, the more mail, the more listeners. If X was getting twice as much mail as Y, he must have twice as many listeners and so was worth twice the salary, and time on his show ought to be twice as attractive to prospective sponsors. If X's mail count kept growing, while Y's kept sliding, obviously Y was losing his popularity, while X was gaining.

There was one fault with this primitive system. It was discovered that a program beamed to those with the least education, the lowest cultural interests and the minimum income often received the most mail, while Toscanini directing the NBC Symphony might draw few, if any, fan letters.

Experience also proved that it was possible to beg for mail on the air and get it, which might be a good measure of the emcee's personality-appeal, but not an accurate measure of the size of the audience. The Ward Baking Company program once enrolled 20,000 children in a puzzle contest in four weeks, while WOR's Uncle Don received in a limited period 100,000 pieces of fan mail from the children he called his nieces and nephews.

Even BBC Likes to Know

The ignorance in those early days about exactly *who* was listening was disturbing, for anyone addressing an audience likes to know how much of an audience he has — two people or 2,000. Even the British Broadcasting Corporation, while wholly non-commercial, conducted audience studies as elaborate as those made by profit-seeking broadcasters in the United States.

The eagerness for some even vague idea so obsessed some of the networks that they put their own phone operators to work making random calls and asking sweetly of whomsoever answered:

"Excuse us, but what radio program are you listening to?"

Naturally, Network A never mentioned the results of such amateur surveying if a majority of those called happened to be listening to Network B or C.

First Poll — A Dud

The first poll even remotely resembling those now used to measure broadcasting audiences was conducted in July of 1824, the year of a presidential election, when a straw vote was taken in Delaware. (The expression is derived from the habit of throwing a straw into the air to see from which direction the wind is blowing.) The results led the Harrisburg *Pennsylvanian* to predict that Andrew Jackson would be the next President of the United States. In the election Jackson actually did get more votes (155,872) than any of his three opponents, but as he failed to get a clear majority the contest was thrown into the House of Representatives, which chose John Quincy Adams. This first technical failure of a poll to pick the winner did not discourage other newspapers and magazines, which, during the next century, used the sampling of

public opinion as a circulation-stimulator.

The *Literary Digest* was to the 1930's what *Time* and *Newsweek* are to the present decade. It was a weekly with a tremendous circulation and wide believability. In the presidential election of 1936 the Republican candidate was Alfred M. Landon, who had been elected Governor of Kansas in 1932 despite the Democratic landslide, and had been re-elected in 1934. Now he was opposing President Roosevelt in a bitterly fought battle. The *Literary Digest* mailed out more than 10,000,000 sample ballots, approximately a quarter the total number of ballots cast in the 1932 election. The returns were awaited almost as eagerly as if it had been the election itself. On the basis of its poll the *Digest* predicted Landon's election. On election night the colossal error was revealed. Landon had been snowed under, getting eight electoral votes to Roosevelt's 523. (The popular vote: Roosevelt, 27,751,597; Landon, 16,679,583.) Partly as a result of this blow to its prestige, the *Literary Digest* soon thereafter went out of business.

The error was explained by the fact that the magazine had compiled its mailing list from telephone books and lists of automobile owners. Families that had neither car nor phone — about one-third the total population — were overlooked. And it was this one-third that had voted overwhelmingly for Roosevelt.

Pollsters Not Discouraged

This failure of forecasting did not, however, put an end to the sampling of public opinion. Elmo Roper, George Gallup and Archibald Crossley had, long before this, begun making surveys based on carefully chosen quota samples and intelligent personal interviewing. Their polls accurately forecast Roosevelt's re-election in 1936. Although all the leading polls in 1948 incorrectly predicted that Governor Thomas E. Dewey of New York would defeat Harry S. Truman by a substantial number of electoral votes, the modern scientific polls established a record for a high degree of accuracy, one organization claiming an average error of less than three per cent over a 25-year period.

That is the story of polls in general. Now about polls as applied to broadcasting. A few years ago there were 82 sizeable and reputable organizations engaged in measuring radio and television audiences in various ways, plus hundreds of others, many of them also reputable if not so sizeable.

Hardly a Love-Fest

At times the pollsters have fought each other as intensely as if they were rival gladiators in a Roman arena, but without them broadcasters all these years would have been at a great handicap in trying to sell their product — time — for sponsors demand to know something about who's listening, even if two feuding organizations supply utterly conflicting figures because of the different methods used.

Before personalities and organizations are introduced, here are the five prin-

cial methods of obtaining information. (There are other methods, but they are minor or peripheral.)

1. Next-Day-Recall

This involves calling people during the day and asking them what programs they listened to and enjoyed during the past 24 hours. The advantage of this method is that it is inexpensive, for one call produces information about a whole day and evening of listening. The disadvantage is that there is too much reliance on memory. People tend to remember the names of shows that have been on the air a long time, but are often unable to remember the new ones, even though they listened to and enjoyed them. This method is not generally used anymore.

2. The Telephone Coincidental

Under this method people are asked not what they *have* listened to but what is on their radio or television *at this moment*. Advantages: It is quick and economical, and with the present-day high percentage of telephones in most areas, it is more reliable than it was years ago. Also there is no trusting to memory. Disadvantages: The interviewee is likely to be annoyed because he has been called away from his radio or television, and his replies are likely to be curt or even intentionally misleading. Also, calls cannot be made during church hours on Sunday, or late in the evening or early in the morning for fear of bothering people. Also, the phone is generally answered by the housewife and it is her reaction alone that the interviewer obtains. Also, this method does not measure listening by car radio or transistors out of the home.

3. Personal Interviews

The interviewer goes directly into the home and asks such questions as:

"Were you watching television last night?"

"What program did you watch between 7:00 and 8:00?"

"Between 8:00 and 9:00?"

Some organizations using this method give their interviewers lists of programs that can be shown to interviewees to jog their memory. (This is called aided-recall.) Advantages: Round-the clock information can be obtained. Also, the number of people watching or listening can be determined. Also, their ages, sex, who liked the program and who did not, and why. Also, it is possible to ask questions about which commercial had the greatest appeal and which was found offensive, and even what products are used in the home. Also, the interviewee can be given more time than by the telephone interview to think up his answers. Also, radio listening in the car, or in public places, can be measured by this service, as by no other. Disadvantages: This method is slower and more expensive than interviewing by phone. It is also more subject to human error, because the interviewer can influence the listener's responses by the way

he presents his lists of programs and the way he frames his questions about the program's appeal. Also, this method is not effective in higher income neighborhoods because of the unwillingness of many people to be interviewed. Also, there is a tendency for interviewees to upgrade themselves by claiming they looked at or listened to better calibre programs than they actually did.

4. Diaries

Printed forms are supplied to carefully selected households. Payment either in money or merchandise is sometimes made to those filling in the forms, which show what programs were watched by each member of the family over a given period. Advantage: The diary may be designed to obtain a wide variety of information, in addition to listening habits: it covers all broadcast hours; it can report what individuals are doing vis-a-vis their radios or televisions, not just what the set is doing. Disadvantages: It is slow, because the diary must be returned by mail, then processed, before its findings are of any value. Also, a high percentage of diaries are worthless because the people who kept them were neither prompt nor accurate.

5. Mechanical Devices

This method is similar to the diary except that the information is recorded electronically on meters or machines attached to the radio or TV. Advantages: There is no guesswork or reliance on memory. The tendency of the listener to prevaricate is obviated. Disadvantages: Just because a set is on does not mean that anyone is watching. Also, there is no report of reaction to the program. Also, mechanical systems are expensive to install and maintain, thus limiting them in number. Also, sample homes are changed less frequently than with other methods, giving the same family pattern over and over.

Those are the cold facts about methods. But the story of ratings is also the story of the organizations that put these methods into effect and the personalities that did battle for the millions of dollars that sponsors and advertising agencies were and are willing to pay (sometimes are *eager* to pay) to find out something mathematical about this communication giant with the large appetite that they are feeding with their advertising dollars.

Crossley Began It

First there was Archibald Crossley, an experienced public opinion researcher, who in 1918 conceived the idea for what he called CAB (Cooperative Analysis of Broadcasting.) He did not get into radio research until 1927 when an advertising agency asked him to check a Davis Baking Powder radio program to see how it was being received. One side result of this first attempt at rating was Crossley's discovery that some of the baking powder time was being stolen for local commercials. Other advertisers asked him to provide a check on their

audiences. He replied that if thirty companies agreed to pay \$60 a month apiece he would do it. They did, and he did, starting on March 1, 1930. Interviews were made during two weeks of each month, listeners being asked what they had been listening to during the past 24 hours. Ratings were sent out twice a month to networks and advertising agencies. They were based on thousands of calls made in 33 cities. For some years Crossley had the field entirely to himself.

Hooper Was Next

In 1931 a handsome young man out of Amherst and Harvard, Claude Ernest Hooper, who as a schoolboy had always had trouble with mathematics, began competing with Crossley. He hired as interviewers former telephone operators who had become housewives and people who had difficulty finding work because they were physically handicapped. They were coached in telephone manners before they were permitted to make their first calls.

Hooper developed techniques to adjust for busy signals, refusals, and not-at-homes. But his most important innovation was to have people asked not what they *had* listened to, but what was on their radios at the moment. Each month he published a list of the ten top shows. By the late 1930's the stock greeting when two broadcasters met socially was:

"How's your Hooper?"

The reply might come back:

"Mine's up a point this month. How's yours?"

President Roosevelt became so Hooper-conscious that after he delivered one of his Fireside Chats he would wait up long into the night for a report on how many people Hooper estimated had been listening. He kept a Hooper chart in his study, showing the curve of his own radio popularity. Hooper rated all of FDR's important speeches, starting in June, 1936, when he figured the total listening audience at slightly over six million, to December 9, 1941, when he estimated 62,100,000 heard the President's war message.

The only two Hooperatings Mr. Hooper himself ever kept in his head were Roosevelt's 79.0 and the Louis-Conn fight rating 67.2. (The fight was on June 18, 1941.)

Hooper Made and Broke Them

In those days such stars as Fibber McGee and Molly, Walter Winchell, Fred Allen, Jack Benny, Kate Smith and even Mayor LaGuardia swore or gave thanks — gained or lost sponsors — saw their incomes mount or descend — all because of their Hoopers. Frank Sinatra and Danny Kaye at one time were dropped by their networks because of their drooping Hoopers.

Many people, knowing vaguely something about Hooperatings, could not understand why they had never received a call. Once, while lecturing in Cleveland, Mr. Hooper was challenged by a woman in his audience who asked irately:

"Why haven't I ever been called?"

Patiently Hooper tried to explain.

"We are interviewing in Cleveland, madam, at the present time, but because of the manner in which we distribute the calls, the chance of your phone ringing at this moment is about the same as your chance of being struck by lightning."

"But I *have* been struck by lightning!" the woman screamed back.

Margaret Truman & Hooper

When Miss Margaret Truman appeared on the Detroit Symphony Hour, which normally had a Hooperating of 2 or 3, the program's Hooper went to 21.1 while she was singing, but when she concluded her part of the program it dropped to 13.3 for the rest of the show.

Another rating oddity: There was one show on the West Coast which obtained a consistent Hooperating of 0.0, meaning that Hooper interviewers were unable to find a single person who had ever listened to the program.

The editors of at least one dictionary admitted Mr. Hooper to their columns as a common noun:

HOOPERATING (name of American deviser of the method): a rating of the popularity of a radio or television performer or broadcast, determined by a sample telephone poll taken during the broadcast.

Comedians began to make him the butt of their jokes. Fred Allen was known to watch his Crossleys and his Hoopers the way a hypochondriac watches a fever thermometer. On the air he once quipped:

The next time you see a radio comedian gray before his time, his cheeks sunken and his step halt, please understand he isn't dying. His wife hasn't left him. His children aren't sick. He isn't going bankrupt. He's been caught with his Hooper down, that's all.

On another occasion Allen was asked by his wife, Portland:

"Mr. Allen, who is Mr. Hooper?"

"Mr. Hooper," Allen replied, "is a fellow who can look in the bottom of the bird cage and tell you exactly how many grains of sand there are in the Sahara Desert."

On still another occasion he called Hooperatings "mythical figures which should be paid attention to only by mythical people."

Bob Hope's Definition

On the air Bob Hope once gave his definition of a Hooperating: "An ulcer with a decimal point."

Once at a White House press conference the subject of Hooperatings came up and a newspaperman asked what they were, to which a colleague replied:

"They are an attempt to measure something that cannot be measured in less time than it takes to measure it."

Radio Critic Jack Gould wrote a column in the *New York Times* entitled: *The Curse of the Ratings*, in which he said in part:

Over the years the ratings have come to fulfill the sinister function of being the final and absolute critical standard for radio programming, and it is at this point that they may be considered detrimental to the medium. . . . Instead of programs making the ratings, the ratings are determining the nature of programs. . . . It is as though a Rembrandt, a Beethoven symphony, a burlesque comic, a Tin Pan Alley ballad, a Keats sonnet and a pulp magazine serial all were to be weighed on the same scales. That would seem to be too much of a package deal even for radio.

For twelve years Crossley and Hooper, although personal friends, fought an intense battle. The principle at stake was which is better, the Next-Day-Recall Method or the Telephone Coincidental? Hooper finally won and in the summer of 1946 took over CAB. When Crossley was asked what accounted for his defeat, he said:

"The fact that my name doesn't rhyme with anything!"

He was referring, not quite accurately, to the fact that radio slang by now was well larded with such Hooper words as: Hooperchondriac, Hooperanemia, Hooper-happy, Hooper-pressure, Hooparade, Hooper-Dooper, Hoopercents, Hoopermania, Hooperace.

Nielsen Appears on the Scene

About this time the rating business was invaded by Arthur J. Nielsen, who had been a marketing consultant, but now decided to start measuring broadcast audiences with a mechanical device. An audimeter had been developed in 1936 at Milwaukee Institute of Technology. It was an instrument that could be installed in a set and would record on tape the exact time at which the set was turned on or off and the frequency to which it was tuned. Each two weeks each householder who had agreed to the installment of the device would receive a new tape, which he would insert into the audimeter, sending the old one back to Nielsen headquarters. As the householder changed tapes, a quarter would drop from the machine into his hand, as payment for his kindness.

Nielsen purchased rights to the audimeter for a million dollars and spent much more perfecting it. Then he placed 1,500 in homes across the country to measure audience flow. He also had his representatives — while they were in each home — ask questions about such matters as family income, religious affiliation, type of automobile owned, brand of toothpaste used, how much was spent on groceries last week.

Democracy in Action

Nielsen called his system "democracy in action," likening television ratings to votes in an election. He said "they preserve the public's voice in TV programming by reporting what people prefer to watch." Defending measurement of the nation's entire television audience by analyzing the viewing habits of

1,500 families he said:

"People by the millions have witnessed the high accuracy of the political polls, which are based on samples of about the same size as ours."

Call for a Merger

In 1948 Edgar Kobak, president of Mutual Broadcasting, took a full page ad in *Variety* and *Radio Daily* to say:

First we had CAB, then a little later Hooper entered the picture. Two methods, two different sets of results, two sets of costs to achieve one purpose. Then confusion, misapplication of statistics and a tangle. Finally CAB bowed out. But look, Nielsen hove in sight. So again, two methods, two sets of results which don't coincide, double cost. . . . We should have only one rating service. I think Hooper and Nielsen should merge.

The Hooper-Nielsen feud was even more bitter than the Hooper-Crossley fight had been, finally reaching the personal level when Hooper charged Nielsen with having inspired publication of a joke in a New York newspaper's radio column about a man who was being interviewed on the telephone by a Hooper representative:

"What program do you have on?" the Hooper man asked.

"The Happiness Boys," the man replied.

"But they haven't been on the air for years and years," replied the surprised Hooper man.

"I know. But you see, I've got quite an old radio."

Fire Dept. Standing By

About this time *Advertising Age*, commenting on the fact that Nielsen and Hooper were appearing on the same platform as speakers at a convention, reported:

"Of course the fire department is standing by."

Finally, in 1950, Hooper sold his national service to Nielsen, retaining the right to do ratings for local markets.

During the 1950's Nielsen dominated the national ratings field. But one by one other national raters found their way in.

American Research Bureau

The American Research Bureau had been established in 1919. It began using the diary method to report on 240 television markets scattered across the country. It also now uses a mechanical device called an Arbitron, a small electronic unit placed in approximately 125 sets in the New York area, connected by direct wire with ARB headquarters in New York. At frequent, evenly-spaced intervals during each quarter hour, an interrogation signal is transmitted to each Arbitron, which replies instantly, disclosing whether the set is turned on, and if so to which channel. A computer receives this information, then analyzes and tabulates it.

One of ARB's specialties is called "The Arbitron Overnight Special." A report is given to a client the morning after a telecast, based on instantaneous Arbitron measurements, plus estimates received from coincidental telephone inquiries conducted at selected sampling points across the country. Eventually ARB hopes to provide instantaneous Arbitron service on a nationwide basis.

Trendex

Another speed service is that offered by Trendex, which uses Hooper's telephone coincidental method in major metropolitan markets, tabulating the returns overnight and giving a TV popularity rate the next morning.

Pulse

Operating in 250 markets containing 70 per cent of the United States population, Pulse claims to provide the largest cumulative sampling of any research service. "Because we interview personally, we can measure not tuning but listening; not sets to which nobody may be attentive, but the attention itself, by all members of the family. They enable us to elicit information regarding audience makeup, buying habits, product use and interest, at the very same time we measure listening." Where there are minority groups of a racial or ethnic character, Pulse attempts to have families interviewed by a member of their own group. Listening done between 6 a.m. and 6 p.m. on Tuesday (for example) and between 6 p.m. and midnight of the preceding day (Monday) is surveyed between 6 p.m. and 9 p.m. on Tuesday.

Schwerin

An entirely different method of measuring the radio-television audience was inaugurated in 1946 by Schwerin Research Corporation, headed by Horace Schwerin, who during World War II was credited with saving the country \$110,000,000 with studies he made for the Army on how to conserve food. Three hundred men and women, chosen at random, are invited to spend an hour or more in a Test Theater, serving as members of a jury. First they are asked to fill in a questionnaire giving such personal information as age, education, occupation. Then they are given an opinion ballot and a reaction sheet on which to score programs that are presented to them on a large screen. When numbers flash on the screen, they are to take their pencils and record their reaction by making check marks. One of the early forms gave them these choices:

Interested Mildly Interested Not Interested

In 1966 Schwerin introduced an innovation he called Channel Choice. Two screens were installed in full view of the audience. Each respondent (Schwerin calls members of his audience respondents) is given earphones and a switching device which he rests on his knees. He can look at either television screen and switch to the sound of either program. As he does, his choice is recorded

on tape and the entire audience's behavior is summed up on a totalizer. Channel Choice makes it possible to determine how many people switch to Screen No. 2 when the commercial appears on Screen No. 1.

This method of testing is recommended for stations or networks interested in picking a stronger replacement for a program that is faltering on the air, or determining which teaser scenes get the program off to the best start, or for screening actors for the leading roles and supporting parts in a new series, or for testing alternative titles and stock openings, or for deciding whether the introduction of a fresh secondary character will strengthen an established program.

Tricky Commercial Testing

Before exposure to a commercial, each respondent checks which of several major brands of a product he wishes to receive if he is the winner in a drawing. The prizes are substantial (perhaps \$10 worth of food) so the respondents generally think long before making a choice. Then the drawing is held.

Next the audience views a 30-minute control program that has not yet been shown on the air. It contains the commercial being tested and two other commercials of non-competing products. After the program ends the respondents are given a second chance to choose a brand and a second drawing is held. The difference between the before and after choices is called the measure of the commercial's effectiveness. Sometimes a commercial will bring no significant change-preference and occasionally one will boomerang, fewer people choosing the brand after seeing the commercial than had chosen it before.

Some of the questions SR tests attempt to answer are: Can shorter commercials be used without loss of efficiency? Can a single commercial sell more than one product? What copy appeals should be stressed? What programs are the right vehicles for the product?

Several thousand commercials a year are tested in the SR centers in New York, Chicago, Toronto and Hamburg. So far more than 35,000 in all have been tested, plus many programs. If the test calls for a specialized group, invitations are sent only to children (for example) or teenagers, or smokers, or car owners.

Many, Many Others

Media/scope, a trade paper published by Standard Rate & Data Service, recently listed what it considers the twenty most important services that measure broadcast or print audiences. The list includes, in addition to those already named:

BRAND RATING RESEARCH CORPORATION: Based on interviewing 10,000 adults, its reports cover 100 nighttime and 50 daytime network television programs. Data is also provided on radio.

BRUSKIN ASSOCIATES: Interviews 2,500 homes six times a year on product and brand usage and advertising recognition before and after viewing of television.

GALLUP & ROBINSON: Collects information on recall commercials the day after telecast through telephone interviews from a probability sample of 1,000 adult women and 1,000 adult men in the Philadelphia area.

HOME TESTING INSTITUTES/TVQ: Produces three services dealing mainly with network television programs, including information on awareness and degree of enthusiasm for network TV programs.

ERIC MARDEN ASSOCIATES: Collects information concerning awareness of products and attitudes toward products before and after television viewing through 2,000 completed double telephone interviews.

MARKET EVALUATIONS: Reports one to four times a year on a total of 1,800 interviews on reaction to advertising.

MEDIA STATISTICS: Carefully selected people record in diaries their own radio and television activity no matter where or when it is done.

ALFRED POLITZ MEDIA STUDIES: Provides a semi-annual national survey of the performance of individual television programs in terms of reach, frequency and selectivity.

PSYCHOLOGICAL CORPORATION: Collects information on national and local television audiences by means of television interviews conducted the day after the telecast.

W. R. SIMMONS & ASSOCIATES RESEARCH: Publishes annual television report based on sampling 18,000 adults about all daytime and evening network programs.

SINDLINGER & COMPANY: Makes telephone interview calls over WATS long-distance lines from five central locations throughout the country. Currently, 550 interviews a day in over 450 counties.

SRDS DATE DIVISION: Conducts 875 interviews each month about television viewing for previous six days, using roster and *TV Guide* to jog the memory.

VIDEODEX: Makes reports based on diaries kept by 600 persons on local television programs.

Misuse of Ratings

The men who do the rating complain that the information they supply is often misused. The American Research Bureau, for example, says:

"Rating alone cannot and should not carry the entire burden when appraising a show for sponsorship or continued broadcasting. Fortunately, however, the growing sophistication on the part of both advertisers and broadcasters has minimized this problem in recent years."

One example of the fact that low-rated shows are sometimes the best buy for sponsors is the experience of advertisers with daytime women's shows, which disclose that the program, the personalities, the commercial message and the product may be so well matched that they reach and sell a large part of a comparatively small, loyal audience of housewives, proving that the lowest cost per prospect is not necessarily found in the highest rated programs.

Another problem of ratings was brilliantly illustrated by Hugh Beville, Jr., NBC vice president of research and planning, when he said in a public address:

What is the most popular show on Broadway? This question came up not long ago when I was having lunch with a group of friends. Their answers illustrated the problems of measuring popularity, whether in a Broadway show or television.

One of them chose *The Seven Year Itch*, which had run more than 800 performances, longer than any show then playing. Another said the most popular

show was *Pajama Game*, which was the hardest to get tickets for. Still another said that the number of standees was the acid test, and on this basis he put *Tea-house of the August Moon* on top of his popularity roster. A fourth picked *Can-Can* because this show had grossed a million and a half dollars more than any other. For my part I chose *Peter Pan*, which first opened in 1905, and in revivals since then had been seen by more people than any show running.

So there we had five different answers to a simple question. The correct answer, of course, was that there is no single answer. It depends entirely on what you are trying to measure. This applies to television just as it applies to a Broadway play.

Evidence that no one is quite certain *what* everyone is trying to measure was given by James W. Seiler, director of the American Research Bureau in a public address in which he said:

Still another problem is that the industry has never defined exactly what it wants measured. . . . in some 20 odd years in the measurement business I have never yet heard a definition, an official definition, of what a television viewer is — and we are measuring television viewers. We don't know what one is; whether it is someone who lives in a house where a set is on, whether it is someone who is exposed to the sound and picture of the set in the room and paying attention — for one minute, two minutes, ten minutes, ten seconds — or whether it is someone who can hear the audio but isn't watching the picture. How do you classify these people? We don't know. No one has ever really defined to us what should be measured.

Congressional Investigation

Concern over the quality of the rating services resulted in a Congressional investigation in 1963. A special investigation sub-committee of the House Committee on Interstate and Foreign Commerce held hearings for five and a half weeks in Washington. Among the complaints investigated was one that ratings were susceptible to manipulation. The practice is known as "hypoing" and was blamed largely on the local station which learns, because it is paying for the survey, the precise dates its market is being checked — and acts accordingly.

Another complaint, in the words of the chief counsel for the committee, was that once the field work, such as it is, gets back to the rating company, all kinds of fascinating things happen. Certain techniques, variously described as "editing," "weighting," "averaging" and "smoothing out unexplained fluctuations," came in for considerable criticism by the sub-committee. . . .

The committee counsel told the Advertising Research Foundation in its 1963 annual conference that a congressional investigator, when he sets out to try to understand the broadcast audience research business, is reminded of the definition of a philosopher:

A philosopher is a blind man in a dark cellar at midnight looking for a black cat that isn't there. He is distinguished from a theologian in that the theologian finds the cat. He is also distinguished from a lawyer, who smuggles in a cat in his overcoat pocket, and emerges to produce it in triumph.

The most important document submitted to the House Committee was prepared by a study group appointed at the request of the committee chairman by the

president of the American Statistical Association, made up of three eminent authorities on statistics and ratings, which came to this conclusion:

“. . . in overall evaluation of the rating services . . . they are, on the whole, doing a good technical piece of work for the purpose to be served.

Martin Mayer, author of *Madison Street, U.S.A.*, in a booklet published by the Advertising Research Foundation and entitled *The Intelligent Man's Guide to Broadcast Ratings*,* says that an ideal rating service would employ 2,000 well-trained, reasonably intelligent, highly responsible ghosts.

What with the length of the broadcast day, and the fact that a rating service can offer most interviewers only part-time employment, there would be about 500 ghosts on duty at any one time. Each . . . would be assigned, say, six homes to visit every quarter-hour. To do its work the ghost would enter the household, note the channel to which the television set was tuned, and the number, age, sex, etc. of the people sitting before it, estimate the degree of intensity with which they were watching, and by trained examination (supplemented, perhaps, by a dip into whatever family papers may be visible through the desk drawers) slot the family into appropriate categories of size, income, education, and so forth.

A skilled ghost could do all this quickly, without influencing in the slightest the habits of the family, which would not even know it was there. If speed was desired, the ghost could communicate the findings immediately, by extrasensory means, to a programmed ouija board which would promptly pass on to clients, every 15 minutes, detailed information about who is watching what.

At a blow a ghost service would eliminate almost all the problems faced by existing ratings suppliers:

There would be no problem of non-response. The ghost would simply drift through the walls of every home in the sample and observe.

There would be no problem of false response: no interviewer effect, no plain or fancy lying.

There would be no problem of insufficient response. The ghosts' reports would give not only numbers but also the sort of demographic and psychological information that makes numbers meaningful. It might even be possible to relate the contents of the family larder and drug cabinet to the commercials observed on the screen.

A ghost ratings service would drive every existing service out of business within a matter of weeks, if not days. One can just hear, from far off, the disembodied voice of the sales manager for the service:

"I've been human, and I know how tough it is. I think our competitors are doing a marvelous job — given their limitations. But if you want Total Information, there's no substitute for ghosts!"

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13.

Educational

thering. Many of Houston's leading citizens were aware that it was an event of great future significance. The first television station in the world committed to an educational and cultural purpose. Almost on schedule, an event that was supposed to put the station on the air. It happened. Then a technician gave a non-functional test a lusty kick, and the station stuttered into

operation on the date: June 8, 1953. This first ETV (Educational Television) was dedicated to the University of Houston and the Houston area.

By the end of 1966, in June of 1966, there were 115 educational television stations in operation, reaching a population area of 140,000,000 Americans, and by this time it was estimated that 15,000,000 students in more than two thousand educational institutions — including elementary and secondary schools, and institutions of higher learning — were receiving at least part of their instruction through television.

The Neglected Step-Child

Even more important, in the autumn of 1966 educational television, until then the neglected step-child of the communications industry, seemed about to fall heir to a great deal of money from various sources. As a result there were loud predictions that finally the dreams of the visionaries would begin to be realized — that the most exciting communications medium mankind had yet devised was soon to be put to really significant cultural and educational uses.

Behind those facts and figures lies the story of how American educators failed to seize their opportunities in the early days of radio, and how they were almost left behind when the television era first began.

Universities Were Pioneers

In many parts of the country university engineers had helped to construct some of the nation's pioneer AM broadcast stations and many early AM licenses were issued to educational institutions. By 1925 educational groups and institutions held 171 such licenses, but for various reasons they went off the air, one by one, until, when the FCC was created in 1934 to regulate the industry, there were few of them left. Those still in existence then made the fatal error of giving the owners of commercial stations the impression that they might constitute a threat to radio-for-money. A proposed amendment to the Communications Act, which would have set aside 25 per cent of all radio frequencies for educational purposes, contained a clause that would have permitted an educational station to "sell part of the allotted time to make the station self-supporting." That was what ultimately caused the defeat of the amendment, for commercial radio saw therein a double threat: first, the more good wavelengths that went to educational stations, the fewer there would be left for commercial broadcasters, and, second, even if they were called "non-profit-making," it would cut into the potential of the commercial stations if they were permitted to sell any of their time at all. And so the bill, known as the Wagner-Hatfield Amendment, was defeated, 12 to 23.

The FM story was not so grim. In 1941 the FCC allocated five channels for non-commercial FM broadcasting, and by the autumn of 1966 there were more than 300 educational FM radio stations under license, as well as 24 educational AM stations.

ETV Lobby Made Hay

The freeze on television channel locations in effect from 1948 until 1952 gave educators a chance to organize one of the most successful lobbying campaigns they had ever staged. Fortunately for their cause, they were able to enlist the support of a sympathetic FCC commissioner, the late Frieda Barlin Hennock, who made ETV her own special interest. They received full support from the United States Commissioner of Education. They employed able attorneys to present their demands, one of which was that a VHF (very high frequency) channel for education be set aside in each of the 168 metropolitan centers with a population of 30,000 or more, plus an additional channel for each of the nation's 46 major education centers. This meant they were asking for 20 per cent of all available channels.

ETV paraded 71 distinguished witnesses before the FCC: Senators, Congressmen, labor leaders, medical men, important men and women from every walk

of life. They introduced into the record communications from such people as a former president of Harvard and the Governor of Illinois, Adlai Stevenson. Only one of the 71 made the error of suggesting that ETV should have the right to sell some advertising time.

The opposition, organized by commercial broadcasters, introduced 76 witnesses, but only five of them opposed setting aside channels for ETV.

ETV Allotted 12%

When the FCC in 1952 decreed an end to the freeze and opened up hundreds of new channels so television could expand, 212 channels — almost 12 per cent of the total allocations at that time — were given to ETV. (This number was later increased to 309.) At that time the FCC said:

... many of the educational institutions which are engaged in aural broadcasting are doing an outstanding job in the presentation of high quality programming, and have been getting excellent public response. . . . the potential of television for education is much greater and more apparent than that of aural broadcasting, and the interest of the educational community in the field is much greater than it was in aural broadcasting. . . . The public interest will clearly be served if these stations are used to contribute significantly to the educational process of the nation.

But the figures belied the actual situation, for 184 of the channels allotted to ETV were ultra high frequency (UHF) and even a decade later only 15 per cent of the TV sets in use in the country would be equipped to receive UHF.

A Slow Start

There were some dreamers who imagined that all available channels would be quickly snapped up by educational and community groups, and that almost immediately many hours per day of exciting and culturally-important programs would be available over ETV stations for anyone in America to enjoy. But it did not happen quite that way. Three years later there were still only 18 educational TV stations in operation. Fourteen years later there were still only 116. This led to pressure by commercial interests to reconvert some of the valuable VHF channels back to commercial use, a move that was defeated largely through the efforts of Senator Charles W. Tobey of New Hampshire, for years a champion of ETV.

Gradually during the 1950's and 1960's ETV grew. Established commercial stations began to see that ETV was no real threat and that having channels reserved for ETV was for them a safeguard, since if those channels were to be released for commercial use and were used by new stations, it would mean additional commercial competition for the commercial stations already on the air, whereas, under the law, ETV stations could never pose an economic threat. And so not only did opposition to ETV drop off, but many commercial broadcasters actually helped ETV stations get started in various parts of the country, by contributing to them millions of dollars worth of equipment.

ETV Operation Described

Exactly what is an ETV station? How does it function? In what ways does it differ from a commercial station? Is a small ETV station an expensive operation? Who supports ETV? Many people in commercial TV are unable to answer such questions and so here is a summary.

An ETV station has certain precise characteristics that distinguish it from the others. It does not operate to make money. It is forbidden to sell any of its time to anyone. It cannot carry advertising. About one-third of all ETV stations are owned by private community groups, one-third by colleges or universities (most state universities own ETV stations) and the final one-third by school systems, (as in Denver and Miami) or by the State Department of Education or a State Television Commission (as in Alabama and Oregon.)

At first virtually all were VHF but by 1966 more than half the total on the air were UHF.

ETV programming varies considerably from station to station. It ranges from in-school instruction to performing arts programs for the home-viewing audience. Cultural programming is broad in scope and includes public affairs programs, many of a probing and controversial nature, interviews with people from all walks of life, presentations of the performing and plastic arts, and programs for special groups, such as children, teen-agers, and adults with various special interests. Educational television does not usually compete with commercial television, for it does not attempt to reach a mass audience with programs representing a common denominator. Instead, it tries to reach a large spectrum of minority-viewing groups with special interest programs.

Eight Hours a Day

A typical community station is on the air eight hours a day, Monday through Friday, devoting morning and early afternoon hours to classroom instruction in such subjects as history, science, mathematics and foreign languages. In the late afternoon there may be a program of home economics and just before dinner a program designed to appeal to children, such as a popular series entitled *How It Began*. During the dinner hour there may be a concert of semi-classical music. The early evening program will include such offerings as a play, folk dancing, lectures, and discussions of controversial local, national and international problems.

Few if any ETV stations can afford to subscribe to the various professional rating services, so the exact size of their audiences is only a guess. Some universities, however, have made surveys and estimate that ETV stations often reach a quarter of the total listening potential with at least four programs a week.

The cost of equipping even a small-sized station approaches a quarter of a million dollars and the annual operating cost will run from an absolute

minimum of \$80,000 up to as much as \$2,000,000, with the average about \$370,000.

Financing Is the Big Headache

Stations operated by colleges and universities and by school systems obtain 75 per cent of their income from direct budgeted support; those operated by state agencies get 95 per cent of their funds from state appropriations; community stations receive 75 per cent from gifts, grants and services, the latter primarily for the production of in-school programs.

From the start the FCC recognized that most ETV stations would have serious financial problems, but predicted that they would somehow ultimately be solved.

Newton Minow, appointed chairman of the FCC by President Kennedy, gave in his book, *Equal Time*, an example of the unique financial problem of ETV stations. WETA-TV, Washington, D.C., was assigned a UHF channel at a time when very few sets were equipped to receive UHF and when a converter was too expensive for most people to afford, so WETA struggled through its entire first year on the air "on a budget less than the cost of one hour of commercial network prime-time programming." Somehow it survived. Despite such problems, said Minow, only one ETV station had ever failed and gone dark.

Ford Foundation Plays Fairy Godmother

Late in 1955 the Ford Foundation made a grant of \$6,250,000 to the Educational Television and Radio Center, to act as coordinator for the exchange of programs among ETV stations. Later the foundation gave each ETV station a valuable video tape recording unit. By 1966 the foundation had given a total of \$100,000,000 to ETV and was continuing its support at the rate of \$10,000,000 a year.

The Educational Television Facilities Act of 1962 provided matching federal funds grants of a maximum of \$1,000,000 per state (a total of \$32,000,000) for the construction and expansion of ETV stations.

In 1966 the National Council on the Arts awarded ETV \$875,000 of federal funds if the money was matched by private contributions.

Networks Go into Operation

By 1966 network ETV was on its way. The first regional network in operation was EEN (Eastern Educational Network) supplying live evening programming (as well as in-school programming) to stations in Maine, New Hampshire, Massachusetts and Connecticut, with plans to cover, eventually, New York, Delaware, Pennsylvania and the District of Columbia as well. Midwest Educational Network was about to go into operation that year. NET (National Educational Television) was providing its 100 affiliates with five hours per week of newly produced programs, two and a half hours of children's programs,

and access to a large library of re-runs. NAEB (the National Association of Educational Broadcasters) had established a tape network arrangement. Various regional associations were also supplying ETV stations with material. The ETV stations of almost every state in the country either had established or were planning to establish an inter-connected state network. Oregon was one of the first pioneers in the live network exchange of instructional material. Most states by 1966 had established educational broadcasting offices or commissions. Virtually every college and university in the country had a person or a group responsible for ETV development or use.

Instructional Television

From the start educators themselves were not in full agreement about how/whether/when/if television should be used for instructional purposes. One professor remarked: "An electronic tube can never understand a child!" Others, however, were aware of the potential value of the tube as an academic aid, and of its possibilities in helping to solve the problem of teacher scarcity.

In 1961 the Midwest Program for Airborne Television Instruction Inc. (MPATI) experimented with transmitting educational programs by UHF from a plane flying over Montpelier, Indiana, to students in schools in Indiana and parts of Ohio, Kentucky, Illinois, Michigan and Wisconsin. Each day a DC-6 would circle lazily overhead, beaming video-taped instruction to thousands of children in the six states. During winter storms the plane had a better attendance record than the average live teacher and it was "absent because of illness" less frequently than many teachers. In 1966 MPATI's application for six ITFS (Instructional Television Fixed Service) channels was approved.

Advantages of ETV Instruction

After hundreds of experiments in all corners of the country, it was generally agreed that ETV instruction can equal and sometimes even surpass conventional teaching, and that a resourceful teacher can now do a better job for children in less time and at less cost than ever before, because of instructional TV, which can now take a superior teacher, by air, into remote rural schoolhouses. The big, unanswered question seemed to be whether educators could and would exploit the potentialities of this powerful new means of instruction to its limit.

Spotlight on ETV

During the summer of 1966 a spotlight was suddenly turned on ETV. McGeorge Bundy, who had been a White House adviser, went to the Ford Foundation as its new president. Fred W. Friendly, who had resigned from CBS after officials of that network had decided not to interrupt a commercially sponsored program to put on an important Senate hearing about Vietnam, became the foundation's television advisor. Friendly conceived and Bundy presented a proposal that a non-profit satellite system be set up, which would use

the earnings from the relay of commercial TV programs to finance educational TV. Suddenly newspaper editorial writers, columnists and politicians, many of whom had given little thought until now to ETV, were uttering or writing such statements as these:

When the FCC and Congress finally make their policy decisions, we trust they will, while protecting the public from monopoly, open opportunities for educational television with the financial strength to offer the people programming of unexcelled quality.

By stepping out of its role of poor relation to the mass media, educational television could begin to play an effective part in elevating public tastes and underpinning public knowledge.

The practice of talented professionals and performers moving readily from commercial to educational television, without leaving affluence for the poorhouse, would strengthen both branches. It would also make up for the paucity of imagination that has contributed to the sterility of much of educational TV up to now.

As the debate over how to finance ETV went on, one thing was certain: finally there was agreement that educational television is here to stay; that it must somehow receive adequate support; that it can do much to provide the public with a different sort of television fare than that being offered by commercial stations.

Meanwhile, educational television officials, always on the lookout for bright young broadcasters with imagination, talent and ambition, pointed out that ETV is a field which will probably be expanding much more rapidly in the next few years than commercial television, and that while it may never offer as high talent fees and salaries as its more wealthy relatives (the commercial stations) it does give the opportunity for exciting employment to those who have imagination and are looking for an opportunity to put it to use.

Some of ETV's Firsts, Oddities & Peculiarities

Educational television came to the metropolitan area of New York City in 1963 when WNDT began transmitting from the top of the Empire State Building.

The Parma (Ohio) Board of Education and the Mineola (Long Island) School District were the first to go on the air with instructional television. Date: Sept. 28, 1964. Two years later twelve systems were broadcasting and construction permits had been issued for 150 more.

The first non-commercial educational TV grant was made July 23, 1952, to the Kansas State College of Agriculture & Applied Science (KSAC-TV) at Manhattan, Kansas, but the station was never built.

Operation of low power (10 watt) FM educational stations was authorized in 1948 by the FCC. With such low-power equipment easily installed and operated, a school system may begin broadcasting to an area with a radius of five miles for an outlay of a few thousand dollars, adding higher power equipment as funds may come available.

Some educational stations have unique methods of raising money for their own support. KQED, San Francisco, raises more than \$100,000 a year with an annual auction of goods and services contributed by local merchants.

Although most college and university stations are ETV, several colleges and universities hold commercial TV authorizations. This means that they carry advertising and yet it does not, necessarily, mean that they are run for profit. The advertising revenue may simply take the place of gifts or endowments, and enable the station to break even.

Although there are no FCC regulations which specify how many hours an ETV station can or must broadcast, all ETV stations are subject to most of the other rules that apply to commercial stations, such as station separation, antenna height, power, etc.

By 1966 more and more ETV stations were beginning to explore color possibilities and NET was already planning ETV color programming.

One of NET's most memorable programs was called Prospects of Mankind, with Eleanor Roosevelt as moderator.

14.

FM, CATV, COMSAT, PAY-TV

This chapter concerns many technical matters, most of them popularly designated by letters or nicknames. Whole books could be written — and in some cases have been written — on each of these subjects. The brief treatment which follows is merely an introduction to each subject, giving the reader a concise, non-technical explanation. The *Suggested Reading List* in Section III gives the names of many technical volumes, for those interested in pursuing any single subject more thoroughly.

Frequency Modulation (FM)

AM is the radio industry's abbreviation for amplitude modulation, which, in the simplest possible terms, means varying the strength or amplitude of the transmitting wave to agree with the fluctuations in the sound being transmitted. All authorized commercial radio broadcasting in the United States until January 1, 1941, was by AM.

FM is the abbreviation for frequency modulation, which keeps the amplitude of the transmitting wave constant, but varies the number of times the radio wave vibrates, or its frequency. FM has many advantages over AM, and several disadvantages. On the plus side, it increases the variety of sound vibrations that can be transmitted and received. An ordinary AM set transmits only those sounds which vibrate from 30 to 5,000 times a second, whereas FM transmits sounds from 30 to 15,000. What this means in sending voices and music over the air is apparent when one knows that a man's voice has a range of 120 to 7,000; a piano, 68 to 7,000; a violin, 192 to 17,000. Obviously, some qualities even of a male voice or a piano are lost on AM. Music sounds much better on FM because it is not distorted by the elimination of the high frequencies, as on

AM. Other FM advantages are that virtually all static is eliminated, making clear reception possible despite thunderstorms and the interference often caused by electrical equipment.

FM's greatest disadvantage is that its signal does not follow the curve of the earth. FM stations can be received only as far as the horizon. This defect, however, can be remedied by booster stations, some of which operate automatically, without the need of engineering personnel to regulate them.

Although a patent on frequency modulation was issued in 1902, the FM principle had been known long before that, but its advantages for broadcasting were not developed until shortly before World War II. The FCC in October, 1940, granted construction permits to fifteen FM stations simultaneously. By the end of the year 25 authorizations had been issued. FM broadcasting began January 1, 1941.

FM stations originally were assigned call letters followed by numerals, but in 1943 the present letter system was adopted. The optional suffix FM is used to distinguish FM and AM stations under joint operation.

Originally all applicants for FM licenses who were already operating AM stations had to agree to broadcast for at least a few hours a day programs different from those carried on their AM stations. The industry finally persuaded the FCC to drop this requirement.

To enable FM broadcasters to obtain additional revenue, the FCC in 1955 authorized them to supply supplemental background music to subscribers, for reception on special sets in such places as factories, offices, restaurants and other places of business. The FCC called it *piggy-backing*.

In 1961 the FCC authorized FM stations to engage in stereophonic broadcasting. This involves dual transmission and reception to give more realistic effects to music and other sound. The day stereo FM became effective. June 1, 1961, two stations began regular operation: WGFm, Schenectady, N.Y., and WEFM, Chicago.

Because the high frequencies on which FM operates do not ordinarily reflect back to earth on ionospheric waves (skywaves) it is possible for many scattered FM stations to use the same frequency without interfering with each other.

FM cannot be heard on AM receivers without special adapters, because of the difference in their spectrum locations and the systems used. Likewise, AM broadcasts cannot be heard on sets made for FM. There are, however, combination sets covering both bands and both systems.

One development late in the 1960's that greatly increased the potential FM radio audience was the decision of some automobile manufacturers to equip new automobiles with FM radios. A nationwide survey conducted in 1966 disclosed that 41.1 per cent of adults do some FM listening, while 40.2 per cent of them said they now listened to FM more than heretofore.

Community Antenna Television (CATV)

Community Antenna Television is almost as old as television itself. It is a system of bringing a clear, perfect signal to homes which find it difficult if not impossible to get satisfactory television reception because of their location. CATV is similar to a master antenna on top of a hotel. It takes off the air programs from a number of channels and pipes them over a cable into individual homes. Subscribers are generally charged an installation fee, which may be as much as \$100, and then a monthly subscription fee, which may be as low as \$2 or \$3 or as high as \$10 or \$15, with the average about \$4.

During the 1950's and 1960's CATV mushroomed into a multi-million-dollar industry. Even a daily newspaper would be reckless to publish statistics about CATV, because, before the ink on the paper was dry, the figures would be wrong. By 1962 CATV had passed the million mark in the number of homes served. At that time there were more than 500 separate companies in the business, with an investment approaching a million dollars each. They were billing their customers more than \$51,300,000 a year in subscription charges. But during the following few years the growth of CATV was so great that each of these figures was more than doubled.

Broadcasting, the trade magazine, often prints a solid page in fine print headed *Community Antenna Activities* of news about companies applying for or receiving franchises for new CATV services. Here is a typical report:

■Jeannette, Pa.—WHJB Cablevision (Mel Goldberg, president), Greensburg, Pa., (WHJB), has been granted a 25-year exclusive franchise. The firm will provide 10-12 channels, one to be set aside for weather, news and community services programs; monthly service charge is \$4.75. WHJB will pay the city 3% of gross revenues up to 1,499 subscribers; 4% up to 2,999; 7% up to 4,500; 10% up to 5,000 and 13% thereafter. Council rejected a bid from Centre Video Inc., State College, Pa., which offered a flat 3% of annual gross receipts.

CATV has faced many knotty legal problems during its short existence. Owners of CATV systems contend they are not in the business of producing and selling programs; that they are, in effect, merely in the transportation business. But the American Society of Composers, Authors and Publishers disagrees and says CATV should pay music-licensing fees. A New York federal judge agreed with ASCAP and ruled that CATV systems were liable for copyright fees. Another legal question was whether the networks have property rights in their own programs. CBS and NBC in the past have claimed they do. If so, they have a legal right to prevent these programs from being piped through CATV systems.

In 1966 the FCC asked Congress for authority to regulate CATV directly. Meanwhile, the FCC's control extended only to preventing CATV from interfering in any way with licensed radio and television stations. For example, a San Diego (Cal.) TV station complained that three CATV systems were ad-

versely affecting its business by piping into San Diego TV programs from Los Angeles stations. The FCC issued an order against the CATV systems, which was overturned by a federal judge.

Some amateur prophets predicted that such legal in-fighting would go on indefinitely, while others foresaw the possibility that CATV operators would eventually become "cable-casters," originating programs of their own, especially for communities that now get no local coverage on their nearest TV stations.

Pay-TV

Nothing in the entire history of communications has ever caused quite such a controversy, such name-calling, such emotionalism, as the proposal for pay-TV. One indication of the confusion is the fact that there are at least a dozen nicknames for it, among them: fee-see, subscription television, coin video, box office television, pay-see. Also, there are many names copyrighted by corporations hoping to make a fortune out of pay-TV, such as: Subscriber-Vision, Phonovision (sometimes called Phoney-Vision by its critics), International Telemeter, Subscription Television Inc., Teleglobe.

It began as far back as 1931, when Commander Eugene McDonald, founder of Zenith Radio Corporation, unhappy with the state of radio, advocated quality programs for which subscribers would pay a fee. Twenty years later he began testing the idea as applied to television. He proposed sending programs over telephone circuits so scrambled that they would be unintelligible to anyone whose receiver was not equipped with an unscrambling device. McDonald died in 1958, but his place was taken by others who perfected inventions, organized corporations, sold stock, and predicted that the millenium in entertainment would arrive as soon as the government authorized pay-TV and the public accepted the idea.

In 1957 the FCC announced it would accept applications from commercial stations that wanted to conduct pay-TV experiments, but there were many restrictions. The trial period would be one year. Authorizations would be limited to cities which already had four existing commercial TV stations. Each proposed pay-TV system could be tried out in only one city. No more than one system could be tried out in any one area. Until the FCC decided whether to authorize pay-TV on a regular basis, the public must not be called upon to purchase any special equipment.

Before any applications were received, a storm broke. The FCC was deluged with mail. So were Senators and Congressmen, who in a short time introduced 27 bills into the 85th. Congress, most of them condemning the whole idea. None of the bills was passed, however. The angry chorus of opposition was largely based on misunderstandings and misinformation.

The proposed systems differed mainly in the manner in which the programs would be sent over the air in scrambled form and how they would be decoded

by a special device attached to the subscriber's set. Under some systems the decoder would be rented; under others, purchased. The systems differed in whether coin boxes, punch cards or a tape recording would be used in determining the cost to the subscriber. But all systems provided that the subscriber would pay a set fee to watch a play, a sports contest or a cooking lesson, just as one pays to attend a movie.

One misapprehension was that the subscriber would be blacked out from receiving regular commercial programs. The FCC specifically ruled that the subscriber must not be restricted to pay-TV alone.

On February 24, 1961, the FCC, after a hearing, granted an authorization for toll-TV to WHCT, Hartford, Conn., and the station began sending its programs on June 29, 1962. On October 3 of that same year a second test authorization was given to KCTO, Denver, Colo.

During the 1960's there were many experiments with pay-TV, by cable and over the air. Some were deemed successful; some were utter failures. In the latter class was the experiment in Bartlesville, Oklahoma, population 28,000, where 800 homes were wired and subscribers were charged a flat fee for a single program service, take it or leave it. The experiment lasted only eight months. The company lost almost a third of a million dollars.

Even those advocating pay-TV had their disagreements, especially over methods. A wired system avoided FCC control, but it required permits from the city, the possibility of regulation by a public utilities commission, and a capital investment of as much as \$50 for every home wired. Another problem was getting enough programs so superior that subscribers would consider them worth paying for. While a family might eagerly pay several dollars for an evening of *My Fair Lady*, how often does such a play come along?

Pay-TV was fought by the motion picture theaters, commercial television, and by many individuals and their political representatives who liked television just as it was. It was supported by those who expected to make money out of it, including writers, actors, actresses, musicians, and motion picture producers, and by many individuals and their political representatives who did not like television just as it was.

Rodney Erickson, director of radio and TV for one of the large New York advertising agencies, made this prediction:

"Pay-TV: It's inevitable for bringing first-run movies into the home uninterrupted by commercials. It'll tip-toe in via CATV systems. Pay-TV will not take away from free TV. But it will be a substitute for going out of the home."

COMSAT

Who owns outer space? That question was hotly debated on the floor of Congress in 1962 during a filibuster against passage of the Communications Satellite

Act. Specifically, the question was whether a satellite system should be publicly or privately owned. The act was finally passed, despite the filibuster, and was signed by President Kennedy. It authorized what has been nicknamed COMSAT, a corporation half owned by the general investing public, half by private communications companies. It is regulated by the FCC and three of its fifteen directors are appointed by the President of the United States. Its purpose is to develop a communications satellite system for the transmission of telephone conversations, television pictures, and business communications across oceans and continents.

In 1962 the United States had orbited Telestar, a communications satellite owned by AT&T, to send television programs around the world. Thanks to Telestar millions of people here and abroad saw live and simultaneously the Ecumenical Congress, big league baseball games, sessions of the UN, and night life in Paris. During its first four months of continuously successful operation Telestar circled the globe 1,242 times, before becoming silent, due to the effects of radiation on its transistors. It was succeeded by Relay, which carried to Europe the unveiling of the Mona Lisa by President Kennedy and the awarding of honorary U.S. citizenship to Winston Churchill.

In 1965 Comsat launched the world's first commercial communications satellite, Early Bird, owned by an international consortium of 17 nations, with Comsat representing the United States. It was a prototype, designed to gain information for a commercial system scheduled to begin operation the end of 1967 or the start of 1968. On May 7, 1965, President Johnson spoke to Europe via the satellite and eleven days later Early Bird beamed the first color transmission sent across the Atlantic via satellite. Early Bird also enabled Europe to see on television Pope Paul's visit to the U.N. and a heart operation in a hospital in Houston, Texas.

EMERGENCY BROADCAST SYSTEM

The Emergency Broadcast System (EBS) consists of broadcast stations and inter-connected facilities which have been authorized by the FCC to operate in a controlled manner during a war, threat of war, state of public peril or disaster, or other national emergency. Those stations authorized to participate in the EBS, upon receipt of an Emergency Action Notification, will immediately begin operations in accordance with the terms of their National Defense Emergency Authorizations and current operating instructions. All other broadcast stations must observe radio silence in accordance with the EBS plan. Tests are made by stations once each week on an unscheduled basis between 8:30 a.m. and local sunset.

Section
II.
The
Techniques of
Broadcasting



15.

The Human Voice, A Wondrous Apparatus

Voder, short for Voice Operation Demonstrator, is an electronic mechanism that imitates human speech. When an operator presses various keys, devices using two special-type vacuum tubes create almost lifelike sounds. The voder can imitate the voice of a man, woman or child, as well as the bleat of a sheep, the grunt of a pig and the tapping of a woodpecker. It can pronounce even such difficult words as *Albuquerque* and can enunciate entire sentences.

Someday, in the mechanized, computerized 21st or 22nd Century, such machines may to a certain extent replace the human voice, but it is unlikely that the day will ever come when a machine can be devised that will be able to perform the miracles that are built into the voice of man.

Almost all animals have voices and many of them use sounds to communicate with each other. Dogs whimper when begging, growl when angry, and bark eagerly when happy. Chimpanzees are even more highly developed in their use of voice. But only man — using innumerable arrangements of consonants and vowels — is able to convey every possible nuance of thought and emotion to his fellow man by the sounds that he sends through his lips.

Hitler Proved Something

The voice alone can command attention, hold interest, convey a message, and overwhelm the listener with fear, hope, despair, or even hatred. The owner of the voice need not be seen — the words that the voice utters need not be understood — for the voice to have a profound effect. Anyone who ever heard the voice of Adolf Hitler delivering one of his major radio addresses in the 1930's remembers how, in rapid succession, he could be bitingly sarcastic, thunderingly angry, quietly pleading, or plaintively self-pitying. He was able

to hypnotize a whole nation, not so much by what he said (his speeches are dull and unconvincing when read in translation) but because he knew so well how to use his voice and obtain exactly the effect he wanted. He spoke slowly and incisively when he set out to demolish an enemy with sarcasm. His pitch rose and fell and rose again as he made a bombastic appeal to patriotism and emotionalism. Never was there better proof of how easily specious ideas can be sold to the public if the man doing the selling is a good psychologist, knows his audience, and, most importantly, has the ability to use the human voice for all its worth. Good ideas can be advanced in the same way. It is concomitantly true that poor delivery — ignorance of how to capitalize on the magic powers of the human voice — can result in defeat for the most noble cause in the world.

One great fault with many speech teachers and experts in diction is that they turn out assembly-line voices — young men and women who may have mastered the techniques but in the process have lost their personalities, and read a dramatic speech or a radio commercial exactly like all the rest of the class. Such people may become successful, but only in a moderate way. They will go much farther than untrained people, but they will never be outstanding.

What Is the Common Denominator?

Consider what it is that the following men and women have or had in common: Milton J. Cross, David Brinkley, Bill Stern, John Cameron Swayze, Bob Trout, Chet Huntley, H. V. Kaltenborn, Gabriel Heatter, Fulton J. Lewis Jr., Walter Winchell, Ulmer Turner, Eddie Cantor, Gracie Allen, Fran Allison, Walter Cronkite, Arthur Godfrey, Ed Wynn, Westbrook Van Voorhis, Mary Margaret McBride, Howard Miller, Ted Husing, Mel Allen, Martin Block, Grantland Rice, Earl Gillespie.

Most of those men and women today have a broadcasting income somewhere between \$100,000 and \$1,000,000 a year — or did have, at the height of their careers. These are a few of the outstanding successes in broadcasting. These are the men and women who made it.

Before deciding what it is that distinguishes them, go over the list, pause at each name, and try to recreate the voice in your ears. As you listen, ask yourself this question: Did these 25 people parading past your ears sound like a class in a school of dramatics or oratory? If not, what was it they had in common?

The most obvious answer is that they all sounded different: that they had *nothing* in common. Superficially that is true. And yet their very difference is exactly what they do have in common. Each one is a distinct personality.

Perfect Command of the Voice

When Arthur Godfrey is talking you know you are not listening to Chet Huntley. Fran Allison sounds not a bit like Gracie Allen did. When you hear Walter Winchell you know it cannot possibly be anyone else but — Walter Win-

chell. Each one is a dynamically different individual.

But there is another common quality less obvious to the non-professional: all these men and women have (or had) perfect command of their vocal organs. They know exactly how to get the effects they are after; when to turn on volume; when to whisper; when to speed up; when to slow down; how to use the voice to make their own excitement contagious; how to read an earth-shaking piece of news without causing the audience to panic; how to read a minor piece of news and make it seem important; how to do a commercial in such a unique manner that it will stand out from all the run-of-the-mill commercials and really sell the product.

They tell a story around Radio City, New York, of how a young woman named Grace Allen in 1930 applied for an audition at NBC. Across the report of her audition the examiner wrote: "The voice is absolutely unfitted for radio. Much too squeaky." Several years later, after having appeared as guests on the Eddie Cantor Show, Gracie Allen and her husband, George Burns, were grossing \$10,000 for every broadcast they did.

It's Personality That Counts

The moral of the story is that a woman may have such a great personality that even a squeaky voice is not an impediment to success. The squeaky voice may even be an essential component of the character. But to achieve success the personality must know exactly what to do with the squeaky voice — how to project it, how to make it perform and obey commandments. That is where training comes in.

When one listens to the great personalities of broadcasting, the theater, Hollywood or the lecture platform, they often sound so "natural" and appear to be speaking with such little effort that one feels they never had as much as even one hour of instruction in what to do with the voice. They just seem to be talking. This proves conclusively that their training was good. The man or woman on the air who sounds as if he or she has just completed an eight-month course in elocution is not likely to be heard often again.

It's like ice skating, or running a restaurant, or playing a violin, or writing a book. When done by someone who has undergone months, maybe years of training, it looks so easy that people instinctively say to themselves:

"There doesn't seem to be anything to it at all. I'll bet I could do it myself, if I half tried."

Before the Swan Dive, Comes . . .

When Huntley and Brinkley talk back and forth so easily, when Winchell snarls out his bits of gossip, or Godfrey chats about a commercial product as if he were sitting on the back fence talking to a neighbor, you can rest assured that these men spent years in perfecting their timing, tempo, pitch, phrasing, inflection, intonation, and all the other intricacies of voice-use.



Chet Huntley



David Brinkley

Another point that needs making: You can't do a swan dive or a jack knife until you have learned how to swim. You can't write the great American novel until you have learned the fundamentals of English grammar and how to use either a typewriter, a pencil or a pen. And with rare exceptions you can't become a network broadcasting star until you have learned to use the tools of the announcer's trade, the most important of which is the human voice, and until you have served an apprenticeship. This may perforce be on a 250-watt station in some remote spot where the staff announcer is expected to have an average-good voice capable of handling everything from a memorial service for some deceased local dignitary to a red-hot sports contest. On the first and second, and perhaps even the third job, there may be little opportunity to be anything more than a thoroughly competent announcer with a well-trained voice — "and no attempt, please, at throwing your personality around." But on the way to stardom, that first or second job is essential.

Don't Be an Imitator

Part of voice training involves studying the work of those who already have achieved success — listening to them on radio, watching them on television — just as a man who wants to write reads books by such successful authors as Hemingway, Faulkner, Truman Capote and a man named Shakespeare. Some of the tricks of the successful can be learned. Some of their mannerisms may brush off and enrich the style of the newcomer. But such watching and listening will be ruinous if the newcomer becomes a mere imitator.

A good voice should be. . . ? Each of the networks has its own list of the attributes that the perfect NBC, CBS or ABC voice ought to have. Advertising agencies and sponsors have their own ideas, too. So do many managers of stations, large and small.

If a voice had even 50 per cent of the qualities which follow, it would be good. If it had 75 per cent, it would be great. If it had 80 per cent, it would be the voice of a Franklin Delano Roosevelt, a Charles Laughton, or a John Barrymore. If it had 90 per cent, the owner of the voice could probably write his own ticket on any network in the world.

Personality

Every voice is as different from every other voice in the world as every personality is different from every other personality, for voice is a projection of personality. While it is impossible to define exactly what would constitute the perfect personality, it is likewise impossible to define the perfect voice. Yet there are some characteristics that an audience finds attractive, others that create negative reactions. Voice training consists partly of stressing the positive and obliterating as far as possible the negative, thus making the bad better; the fair, good; the good, wonderful.

Some experts say that vitality is so important to personality that the two words are interchangeable; that personality *is* vitality. A voice without personality is like a gun without a bullet, or a fire without a flame. Being vital means having a healthy, intense interest in the subject at hand — the sports event being reported, the commercial being read, or the child being interviewed — and then passing that enthusiasm on to the listener. This is done principally with the voice.

Enthusiasm

There is a difference between vitality and enthusiasm. Enthusiasm is more subtle. It involves, more than vitality does, belief, whether in a cause or a product. Inner conviction. In the case of a radio announcer, enthusiasm is vitality under intellectual control. It is almost impossible to be enthusiastic about a thing or a person, an idea or a product, without knowing a great deal about the object of the enthusiasm. That's why the best commercial announcers are those who *know* their products and even make daily use of them, because they honestly believe them to be good.

Rapport

The entire concern of anyone on the air — on radio or television; male or female; actor, commercial announcer, newscaster or sportscaster — is to communicate with his audience. If the man behind the microphone is not communicating, a great deal of somebody's money and electricity is being wasted. In order to communicate, the man behind the microphone must establish a rapport with his audience. He does it by acquiring or developing all the qualities on this list. He does it, even on television, principally with his voice. If the voice fails to establish this rapport, the script, the commercial copy or the lines of the play will be wasted, no matter how brilliantly written. The CBS instructions for prospective announcers stress that "the announcer's manner of speech must not hinder communication; must be acceptable to the listener in his most relaxed surroundings — his home, his car, etc." This is another way of saying that rapport must be established.

Friendliness

Radio is the most personalized form of communication there is, between strangers. Often the announcer and the listener are alone together, under most intimate conditions — perhaps in a dimly lit living room or a totally dark bedroom. Without the television picture to destroy illusion, the listener can let imagination run wild. (And it often does, as any broadcaster's fan mail will reveal!) Because of this intimacy, the radio broadcaster has a special responsibility. He must constantly remind himself that he is not addressing a political rally or a football stadium full of people. He may be a guest at the dinner table

with only two or three others present. More often he is alone with the listener, driving down a country road in an automobile, or taking a bath, baking a cake, working in a basement hobby shop, or tossing in bed unable to sleep. This is one reason the radio announcer must have an intimate, friendly voice. It should be so friendly that the listener will now and then actually want to answer back. Because of the greater intimacy of the medium, radio broadcasters generally receive more fan mail and telephone calls than those on television. Radio listeners have always identified themselves closely with the broadcasters to whom they listen. They send them not only letters full of compliments (or complaints) but gifts, good wishes, and other evidences of friendship. (The author of this *Encyclopedia* used to end his quarter-hour NBC broadcasts with a semi-humorous news item — “my favorite story of the day.” One morning in 1945 he apologized to his listeners for dispensing with the *whipper-snapper* (a term then used to describe such terminal stories) saying: “It is impossible to be funny this morning, for I am on my way in a few minutes to Illinois to attend the funeral of one of my favorite listeners. She never failed to tune in this program. She was my mother.” Fans of those days still write occasionally and say: “We very well remember the morning your mother died.”)

It is the duty of the broadcaster to reciprocate the friendliness of his listeners by the friendliness he puts into his broadcasting voice. This friendliness involves liking people. Although there is one radio character who has commercialized on his dislike of people and his ability to snarl at his listeners, his success is one of the few exceptions to the general rule. Broadcasters who have a contempt for people had better quickly change vocations, for the microphone with its great sensitivity will strip him naked before his public and reveal him for what he is.

Sincerity

The most apocryphal story in radio is the one about the emcee on a children's program who said a sweet, sentimental good night to his little listeners and after signing off, in a relaxed mood, thinking the microphone dead, sighed and said: “Well, I guess that *that* ought to hold the little bastards!”

Only the microphone was not off and his words were heard by all the little — children.

The story originally was told on WOR's Uncle Don. He repeatedly denied that it had ever happened. Then another fat, jolly favorite of the children in Atlanta, Georgia, was purported to have been the one who said it. He, too, issued formal and informal denials. It is an amusing but unlikely story, for it is improbable that anyone could be as successful as Uncle Don was with millions of children and still have the contempt for them that the remark implied.

The story was told of a world-famous golfer who was playing before a large gallery in an important tournament. After a bad putt, he called for a cigaret.

Someone, aware that his face and endorsements were appearing in hundreds of full page ads for Cigaret X, offered him a package of that brand. He threw the package to the ground, shouting, for all to hear: "I wouldn't put one of those damn things in my mouth! Give me a Y!" (naming a rival brand.) The gallery laughed.

No radio announcer could get away with such insincerity and become successful. One of the best salesmen on the air is Arthur Godfrey, simply because his listeners are convinced that he really means what he says when he talks about a product.

Warmth

Many of the qualities in this list overlap. Warmth is a component of friendliness.

The voice of Ben Grauer, NBC's veteran announcer, is an example of warmth without any hint of what would corrupt it — condescension or intrusiveness. Grauer's secret is that whether he is announcing a symphony concert or doing a sidewalk interview, he makes the listener feel that he is a friend of the orchestra conductor, or the child being interviewed, and the listener as well.

Culture

When this word is applied to voice it has a special meaning. Ed Herlihy, for almost a quarter of a century an NBC announcer on such programs as *Strike It Rich*, the *Sid Caesar Show*, and the *Children's Hour*, has listed voice-culture as one of the three most important qualities that an announcer should have.

Voice-culture does not mean talking like a Beacon Hill Brahman or an Oxford professor. It does not necessarily have to do with correct pronunciation or not talking through the nose. It does not mean that a male announcer should sound like the program chairman of a ladies' literary society. It does mean that the voice should have what the advertising world calls "quality."

Color

This quality can be partly voice, partly material. When Lowell Thomas, in one of his evening news broadcasts, mentions some exotic place he knows intimately from having adventured there, his voice suddenly takes on an entirely different quality. With voice-color, as well as with the descriptive words he uses, he begins to paint a picture which he makes so vivid that even the dullest wit among his listeners could hardly fail to react in some way. Voice-color can turn the most ordinary broadcast into an exciting listening experience, if used with skill and restraint.

Cheerfulness

Joseph Alsop, Washington columnist and occasional broadcaster, justly or

unjustly acquired a reputation as an apostle of doom. Other writers and broadcasters have tried to relate the truth, even when the truth as they saw it was bitter and difficult to take. At the other extreme was Gabriel Heater, who used to start every broadcast with the catch-phrase: "There's good news tonight!" (Sometimes during World War II, when American and allied troops were in retreat, the opening seemed more ironic than realistic.)

Voice-cheerfulness does not mean distorting the news, or being saccharin-sweet at all times. It *does* mean waking people up in the morning in a manner that makes them glad to be alive. It means putting an up-beat rather than a down-beat tone into the voice. It could mean the difference between contract-renewal and contract-cancellation.

Intimacy

Actors, actresses and lecturers often have trouble on radio and television because they have difficulty in adjusting to the idea that they are no longer speaking to or in front of several thousand people. Surveys show that the average radio audience is a small fraction over one person per radio, while the average television audience is 2.8 persons. Also, the broadcaster is never more than a few feet from his audience.

Arthur Godfrey, while in a hospital recuperating from an operation years ago, spent hours each day listening to radio programs. This experience led him to the conclusion that some announcers are far superior to others because they create a feeling of intimacy. After he left the hospital, Godfrey put the observation into practice, with a spectacular effect on his popularity and his financial success.

Relaxation

Proper use of the voice cannot be achieved unless the broadcaster is relaxed, but it is also important that the man behind the microphone gives his listeners the impression that he is relaxed. Most listeners are uncomfortable if they sense strain or undue tenseness, for no apparent reason, in the voice to which they are listening.

Authoritativeness

Bob Stanton, a pioneer announcer who broadcast the first Army-Navy game and the first World Series on television, and for years announced *Robert Montgomery Presents*, has often said that "the ring of authority" is one of the most important qualifications that a young announcer should have. But, adds Stanton, the announcer should remember that he did not invent the sport he is reporting.

The words *authoritative* and *authoritarian* have two quite different meanings. They are used to describe a well-grounded, well-informed person who gives the impression that he knows from study and personal experience what he is

discussing, or a person who is arrogant and dictatorial, because he thinks he knows it all. It is possible, whatever the announcer is doing with his voice, to give it the positive qualities of authoritativeness, without being negatively offensive.

Adaptability

The announcer's first job *may* call for more versatility than he will ever be required to show again. The smaller the station the more true this will be. Adaptability means the ability to use the voice in many different ways, suiting style to program requirements. Flexibility is another word for it. The voice an announcer uses on a wake-up program at 6 o'clock in the morning should not be the same voice he uses to broadcast an exciting basketball game at 8 o'clock in the evening or to announce slumber music at midnight. The problem is to become a man of many voices without losing that Identifiable Personality.

Interest

Blasé is a French word that has been taken over and made part of the English language. It means having one's interest so dulled by experience that one is no longer able to enjoy those things that normal people enjoy. This is something to be avoided at all times by all announcers. The voice quickly tells the listener whether the speaker is blasé or really interested in his subject.

Interest can be cultivated. Next time you are in conversation with someone, try to show interest in what the other man is saying, instead of just listening half-heartedly while waiting for a chance to talk yourself. Also, when you are speaking, try, by the use of voice-intensity, to give your own words a ring of interest. Suddenly, even idle conversation will take on a new dimension.

Spontaneity

Try reading this sentence aloud: "As I was walking down Main Street on my way to the studio early this morning, I suddenly noticed a most amazing sight in the corner of a large department store window."

When the speaker conveys to his audience the sudden excitement of something, without restraint, that is VOICE-SPONTANEITY.

Conviction

C. Y. Harrice, announcer on such popular programs as *Right to Happiness* and *Cavalcade of America*, advises young announcers that not only must they know what they are talking about, but they must use "voice-conviction" in communicating with their listeners.

Salesmanship

Instructors in salesmanship like to tell the story of the small boy who tried selling afternoon newspapers by going from room to room in a large office

building saying to everyone he approached: "You don't want to buy a paper, do you mister?" And almost everyone gave the boy the reply he asked for, by the way he framed his question: "No, sonny, I don't!" Another boy with identical papers, working an adjacent building, sold his entire bundle of papers in a few minutes, using a positive rather than a negative approach.

Voice-salesmanship involves putting a positive instead of a negative quality into the voice.

On radio and television the salesman has an extremely limited amount of time in which to (1) gain the listener's attention, (2) hold the attention while making his sales appeal, and, (3) stir the listener to action, which may mean persuading him to go to the telephone and call someone for an appointment, or write down the address of a store or office.

What NOT To Do With the Voice

1. *Don't kill your chance of becoming a personality in your own right by aping your favorite voice on the air.*
2. *Don't let your voice convey the impression that you are bored, blasé or aloof.*
3. *Don't exude so much vitality that you cause trouble for the engineer at the controls.*
4. *Don't let irritability, a headache, morning-after-troubles, or what your wife said to you as you left home for the studio, show in your microphone voice.*
5. *Don't be so natural and relaxed that the voice loses all its vitality and color.*
6. *Don't let your voice betray insecurity or ignorance, for then all believability will be lost.*
7. *Don't give the listener the idea that you are talking at him, rather than to or with him.*
8. *Don't let your voice give the impression that you are cocky or over-impressed with your own importance.*
9. *Don't talk as if you were addressing a crowd in Madison Square Garden, or even a hundred men at a meeting of the local Rotary Club. Instead, pretend you are sitting across a table from a good friend, explaining something to him. (Or "her" if that makes it more pleasant.)*
10. *Don't let the voice ever sound either colorless or monotonous, remembering always how little listener-effort it takes to change the position of the dials.*

16.

The Voice: How To Use It

Only one in every twenty persons has a pleasing and effective voice. Most Americans are notoriously sloppy speakers, slurring, mumbling, dropping letters or whole syllables, and talking so indistinctly that their messages are often incomprehensible.

Realizing the importance of being able to talk properly, large industrial organizations have employed teams of speech specialists to train executives and salesmen alike in the use of their voices.

Many graduates of broadcasting schools, who have gone into work other than announcing, because of the offer of tempting salaries, have found that the voice instruction they had received gave them great advantages over associates who had never had such training, and as a result of these advantages they progressed more rapidly and climbed more quickly into high income brackets.

How the Mechanism Functions

Some men and women know instinctively how to make their vocal mechanisms work for them, but it helps even such people to know something about the organs involved.

Man's main sound-producers are his vocal cords — two small bands of tissue extending across the larynx or voice box, one on each side of the windpipe opening. The vocal cords are stretched or relaxed by muscles in the larynx.

When a man breathes, he relaxes his vocal cords, forming a V-shaped opening that permits the passage of air. To speak, he uses the larynx muscles to pull the vocal cords and narrow the opening. Then, as air is driven from the lungs through the larynx, it vibrates the tightened vocal cords and the result is

sound. The more tightly the cords are stretched, the higher the sound. The more relaxed the cords, the lower the sound.

Pitch is determined by the size of the larynx. The reason women's voices normally are higher than men's is because the vocal cords are shorter. The vocal cords of boys and girls are approximately the same size until the boys reach puberty, whereupon their voice boxes suddenly grow larger and so their voices grow deeper.

Sounds are shaped by the tongue, lips and teeth, while the nasal cavity gives the voice resonance and color. Straining the voice affects the vocal cords. So does general muscular tension, which may be caused by nervousness.

It is generally agreed that it is more important to be able to control the voice machinery than to have exceptional voice quality. Most essential is the ability to relax the vocal cords and the muscles of the throat and neck. otherwise the range of the voice is greatly limited and effective intonation is impossible.

Breathing

Watch a sleeping baby. What rises and falls is not the chest but the abdomen, which forces the air in and out of the lungs. This is the natural way to breathe. And the natural way is the correct way for a broadcaster.

Many people are dissatisfied with their speaking voices. The most frequent complaint is that they are too high-pitched. Even worse, the pitch seems to go up still further as the day progresses. One-third of the trouble is tension. The other two-thirds results from chest breathing.

To practise breathing with the diaphragm, push the abdomen out, in order to force air into the lungs. Stretch the ribs fully on each deep breath. When exhaling or speaking, the diaphragm should act as a bellows. This is an exercise that can be practised in odd moments while riding a bus, waiting for an elevator, or standing at a street corner watching for the traffic light to turn green. Gradually deep breathing will become a habit.

Old-time orators were taught to take deep breaths through the open mouth. This is impossible for an announcer, because the sound would be picked up by the microphone. The broadcaster must inhale more quickly, through the nose or above the tongue. If the breathing is done properly, the listener will never be conscious of it, but if done improperly, it may be so distracting that it will ruin the program.

The broadcaster should never empty his lungs completely. It is especially important for the commercial announcer to have a reserve supply of air, because of punch lines that require more volume than do the words of a routine news show or weather report.

Some professional broadcasters make a practice of singing in the bathroom while shaving or taking a shower, reaching for the highest and lowest possible

notes. They claim this not only makes the vocal organs more flexible, but also teaches proper breathing.

Many broadcasters just before going on the air take half a dozen deep breaths, filling the lungs to their utmost capacity, and then do a neck exercise by bending the head over to one side as far as possible and rotating it slowly in a wide circle. This makes for relaxation, which in turn aids proper breathing.

Pitch

The first step in attempting to bring color into the voice is to cultivate the lowest tones that the voice can possibly reach. A man should be able to reach four or five whole notes below the central pitch of his voice. The central pitch is the normal pitch to which the voice returns after emphasizing a word. "How *are* you?" The pitch of the voice as it returns to the word *you* is the central pitch.

It is the habitual pitch of an individual's voice that classifies him as a tenor, a baritone or a bass; a woman as a soprano, alto or contralto. Singers are judged by the range of their voices. A soprano who can go from middle C to C above high C is said to have a two-octave singing range. Range is important in a speaker as well, for the wider the range the more varied and subtle are the effects that can be achieved by changing the pitch of the voice.

A lullabye, with all the notes within a limited range, is monotonous and therefore sleep-producing. By contrast, wide variations in pitch can be refreshing and attention-compelling.

Many people have never used the lower tones of their voice and at first may experience some difficulty in producing such tones. They often mistake their own lower middle tones for their lowest tones, which they have seldom heard.

Use of the tones produced by abdominal breathing will pay rewards in the greater relaxation of the speaker and lessening of tension. Professional singers and broadcasters have known this for years.

The young announcer should practice his lower tones even during ordinary conversation with friends. In a short time he will find that his voice has taken on added depth and authority.

Variations in pitch are attention-compelling and can keep a broadcast — almost any broadcast — from sounding monotonous.

The most pleasing pitch for the male speaking voice on radio or television is in the baritone range; for women, the contralto range. The proper pitch for any individual is the lowest pitch he can achieve with comfort. But a little leeway should always be left, so that the broadcaster can throw his voice still lower if he wishes to emphasize a certain word or phrase.

Volume

The most obvious voice-control is that of volume. Even a child knows the

effectiveness, on occasion, of shouting or whispering. Each person has his own natural volume level — the loudness of his voice under normal conditions. Some voices are naturally heavy or thin, strong or weak.

One advantage a broadcaster has is that the volume as well as the pitch of his voice, as it goes out over the air, can to a certain extent be controlled mechanically and electronically by the sound engineer. But it is still important that the broadcaster himself keep his volume within certain well-defined limits. This is technically known as “maintaining a level.” This does not mean that the voice must be monotonous. However, the two unpardonable offenses in the eyes of the station engineer are not coming up to level, or, in engineering parlance, *bending the needle*, which means exceeding the volume limit.

In testing voices for radio or television, talent scouts are always on the lookout for voices that are a little heavier than the average in volume.

There are limits to how much difference training can make in both pitch and volume — limits imposed by the size and shape of the individual’s voice organs. But everyone, if he tries diligently enough, can greatly improve the end-product of the voice that nature gave him.

A safe rule-of-thumb for an announcer is to speak into the microphone with about the same volume he would use while engaging in conversation with a friend in the quiet living room of his home.

Resonance

In music, resonance is the intensification and enriching of a musical tone by supplemental vibrations called overtones. If a human voice has color, warmth and vitality we call it resonant. If the sinuses and nasal cavities are larger than normal, the voice may have great resonance; if smaller, the voice may lack resonance. Training cannot change such physical peculiarities, but it can increase resonance by overcoming bad voice habits and such psychological causes of resonance-deficiency as nervousness and lack of self-confidence.

Tempo

Broadcasters must be masters of time, in many ways. Variations in timing constitute one of the best ways of achieving emphasis. A word can be spotlighted by pausing just before or just after enunciating the word. Or the word itself can be stretched. The same technique can be used on a whole phrase or even a sentence.

Accelerated tempo, if used with discretion, is a most effective way of gaining listener-attention, or of conveying excitement. The veteran sportscaster, Clem McCarthy, was a master of this device. The most valuable skill in any announcer’s bag of tricks is change of pace.

In reading commercials it is customary to decrease the tempo slightly for the punch phrase. In reading the speed-up passages of a commercial, the ex-

perienced announcer will glide lightly over those words he considers of minor significance.

Time is important in quite another way. The red sweep-hand on the studio clock rules the life of every broadcaster.

One morning in an NBC studio in Rockefeller Center, New York, the director turned to the black-bearded commentator who had just finished his daily quarter-hour commentary and said:

"Maybe it will make you happy to know, St. John, that you are the favorite commentator of nearly all the NBC directors."

With his chest swelling out like a bantam rooster, the commentator put his arm around the shoulder of the director and said warmly:

"You really like my comments, do you?"

To which the director replied, gruffly:

"Who said anything about your comments? I mean, you get on and off on time!"

It is essential that a broadcaster know how to stretch or to speed up. On television, when a program is nearing its conclusion and suddenly starts running behind schedule, the announcer may be called upon to give the credits in one-half the previously allotted time, and still keep them intelligible. This calls for a special sort of skill. Or the announcer may be asked to stretch it.

When stretching, the inexperienced broadcaster will put the *white space* — the pauses — between words, phrases or sentences. The expert will actually stretch out the words themselves, thus avoiding dead air. If the announcer is working on his own, without a director and producer, he must know how and when to stretch or speed up. A good sense of timing is inherent in some people. The rest of us can acquire it.

One-minute spot announcements generally run 100 words; 30 second spots, 50 words; 20-second spots, 35 words. Announcers average 140 words a minute on scripts that run to any length. Some newscasters occasionally reach a speed of 225 words a minute. Franklin D. Roosevelt, who, incidentally, was a tenor, spoke 100 to 125 words per minute. Ted Husing once reached the almost unbelievable record of 400 words per minute. NBC requires its announcers to average between 135 and 140 words a minute. On American radio the average is about 160.

Too fast a pace results in slurring, in unconsciously dropping the final letters of words, and in the voice getting ahead of the eye, on the script. Too slow a pace results in loss of audience-interest and eventually in loss of audience.

An announcer on a small station may be called upon to change his tempo frequently. A newscast, a slug commercial, a sportscast and the introduction of slumber music would each require a different speed of delivery.

A newscaster who reads his own commercials should make it a point to change

his tempo, especially just before and just after shifting from reading news to doing the spot announcement.

Enunciation and Articulation

Webster defines them like this:

ENUNCIATE: *To pronounce with distinctness of articulation.*

ARTICULATE: *To utter in distinct syllables.*

The key word in those definitions is *distinct*. Faults of enunciation become habits, such as dropping the final *g* in words ending in *ing*; not giving the full value to the vowel tones in the diphthongs *ou* and *ow* (as in *how* and *you*); hissing the letter *s*; popping the letter *p*; telescoping syllables (as in *comfortable* and *particularly*); dropping consonants (as in *probably*, *government*, *hundred*, *recognize*); dropping vowels (as in *figure* and *peculiarly*); under-articulating *d*'s and *t*'s.

One cause of blurred articulation is lip-laziness, jaw-laziness, mouth-laziness.

Vocal exercises should be done in front of a mirror so the formation of words can be watched. Notice that many words are formed at the front of the mouth, that some require the puckering of the lips, that some require a great deal of jaw-action. Amateurs tend to keep all their voice organs too tight for good articulation. The jaw, especially, should be relaxed. Many broadcasters, just before they go on the air, do an exercise of simulated yawning and intensive jaw-wagging.

One trick to improve voice techniques is to talk to family or friends for a quarter of an hour a day, entirely in whispers, yet loud enough to be heard across a dining room table. This will force you to open your mouth wide, activate the tongue and extend the lips, and it will help overcome the normal tendency to slur and garble words by poor articulation.

Emphasis

Practically everyone who reads the Gettysburg Address emphasizes the three prepositions in the sentence:

. . . this government *of* the people, *by* the people, and *for* the people . . .

But a man who was present at Gettysburg disclosed before his death that Mr. Lincoln himself did not stress the prepositions, but instead emphasized the word *people* each time:

. . . this government *of the people*, *by the people*, and *for the people* . . .

Another example of emphasis. A new NBC newscaster, doing a program sponsored by the Peter Paul Candy Company, was drilled for hours on how to read a commercial for Mounds candy bars that wound up:

WHAT A BAR OF CANDY FOR FIVE CENTS!

He was told that the sponsor insisted the word *what* be hit with the force of a

sledgehammer. The first day he did all the rest of the commercial perfectly, but when he came to the final punch line, he read it like this:

WHAT? A BAR OF CANDY FOR FIVE CENTS?

P.S. That was the last commercial he was ever given to do.

Another example. Read the following sentence three times, putting the stress the first time on the first word, the second time on the second word, etc.

I am going!

I *am* going!

I am *going*!

Notice how you have given three entirely different meanings to that short sentence, all depending on emphasis.

Emphasis can be bestowed on a word, a phrase or a sentence by using pitch, tone, volume, timing, quality, inflection or change of key.

Rhythm

Every language has a rhythm or combination of rhythms all its own. Modern Hebrew tends to accent the last syllable of each word. This gives the language a unique cadence or rhythm. Englishmen pronounce the proper name Cholmondeley: as if it were spelled *CHUM-ley*, and St. John as if spelled *SIN-gin*, which illustrates their tendency to sluff off the last one, two or five syllables of a word. People in the Deep South tend to telescope words, calling you-all *yawl*, which gives their dialect a distinct rhythm.

The language spoken by a majority of Americans has an exceedingly strong rhythm. Foreigners, with their objective ears, hear melody in our language which we may not recognize ourselves. The good broadcaster will make sure that he does not destroy the natural rhythm of the prose he is reading.

Diction

Good diction implies the absence of such speech faults as excessive sibilance, fuzziness of enunciation, excessive nasality, affectation, or regionalism. It also implies the positive qualities of accurate pronunciation, polished articulation and careful choice of words to express the precise thought being communicated. The highest compliment a broadcaster could hope to receive would be that he had excellent diction.

Prolongation

This is a voice trick to bestow added importance upon a word or phrase. It imparts an aura of distinction to what is being talked about. It consists of emphasizing the word or phrase, while at the same time slightly increasing volume, slightly lowering pitch, and inserting a decided pause before and after the word or phrase.

Quality

If a voice has quality, it captures the listener's attention immediately, because it is rich, pleasant, inoffensive, interest-compelling, and free of those ugly voice qualities that grate on the ears of a sensitive listener. It is *quality* which sets one voice apart from all others. But the one characteristic of a voice with quality that will kill all the advantages will be for the owner of the voice to give the impression that he *knows* he has a voice of quality.

Naturalness

The man driving home from work listening to his car radio wants the broadcaster to talk to him as if he were in the car beside him, making a personal report to him on the news, the weather and the stock market situation. To achieve the naturalness demanded, the announcer must get himself into a state of complete relaxation.

The arms and body should be moved just as freely as when talking to a live audience. This will make for more naturalness and will help in the emphasis of important points. (The wife of a certain Chicago commentator knew his style and mannerisms so well that she could tell, just by listening on the radio, what he was doing with his hands, arms, shoulders and eyebrows.)

Being natural does not mean being colorless and dull. It means being gay when the occasion permits it, seriously informative at other times, or enthusiastic and excited if that is the mood of the program.

It is also important to smile as much as possible while doing most radio broadcasts. This will not only relax facial muscles, but will help generate a warmth of personality that the listener will subconsciously feel. But beware of insincerity, for the microphone — even the cheapest — is sensitive enough to pick up the slightest trace of "putting on an act."

Inflection

Altering the pitch or tone of the voice is called inflection. It is done for emphasis or to express feelings as diverse as disbelief, indecision, or irony. A rising inflection implies: "I have more to say on this subject. Don't go!" A falling inflection implies that the speaker has concluded that thought.

Read these two sentences aloud:

Rain is desperately needed. For example, three suburbs of Boston have already rationed water.

Rain is desperately needed. Three suburbs of Boston have already rationed water, for example.

Notice the upward inflection that you automatically used on *for example* in the first sentence, and the downward inflection in the second.

Young announcers should guard against falling into inflectional patterns. Even in reading poetry, the repetition of rhythmical patterns results in monotony.

Phrasing

The world of music gave the world of broadcasting the word *phrasing*, which originally meant: "Act, method, or result of grouping the notes so as to form distinct musical phrases." In like manner the words of a broadcast must be grouped, to allow for breathing and to permit the main ideas to be stressed while the minor ones are treated in a subordinate manner. In addition to the usual punctuation marks of written English, the broadcaster makes extra use of slash marks, dashes, series of dots, parentheses, and frequent underlinings to indicate to himself when he is to make a short pause, a long pause, drop the voice, raise the voice, throw away a group of words, hit a word lightly, or drive a word home.

In any well-written commercial, news story or other radio script, the words naturally fall into groups. *This is John Jones, foreign correspondent for* would fall into one group, while the next words, *Station WTIP, Charleston, West Virginia,* would fall into a second grouping. These are called "breath groups." Phrasing has a double purpose: for the broadcaster, it permits him to breathe, to cast his eye ahead in his script, and to decide exactly how he is going to "play" the next grouping of words; for the listener, it enables him to comprehend and react to what has just been said, while waiting the small fraction of a second for what is to come.

Silence

In England before the introduction of commercial broadcasting, BBC seldom worried about dead-air, because it had no competition and it was impossible for the listener to turn to any other wave-length, except another BBC wave-length. Therefore, it was not unusual, after one program ended, for there to be as much as a full minute of utter silence before the next program began.

In the United States radio has always had a dread of dead-air, because dial-twisters tuning in at that particular moment might go on to another station.

Nevertheless, silence is a most effective tool of the broadcaster, if he uses it with discretion. A good commercial announcer is well aware that a definite pause is often needed to permit his machine gun barrage of facts to sink in, before he goes on.

Silence on radio is like white space in newspaper advertising. A rock-and-roll station that clutters up the air with continuous, uninterrupted noise for a full 60 minutes in every hour is like a popular department store that fills every square inch of space in a newspaper ad with descriptions and prices of bargains, each item trying to outshout all the others on the page. By contrast, there is a quality shop on Fifth Avenue that often buys an entire newspaper page and uses one square inch in the very center of the page to advertise something like a \$50,000 necklace, leaving the rest of the page blank. This technique, applied to radio, means using silence for emphasis. A pause before a word or phrase

makes what follows seem much more important. It whets the listener's appetite. It creates suspense and encourages expectancy. It is a very effective form of billboarding. A pause after a word or phrase gives what has been said a chance to be intellectually and emotionally masticated. The proper length of such pauses? Only experience can answer. The more expert the broadcaster, the better he will know the answer.

Voice Tricks

There is no end to the surprise effects the voice can produce. Breathiness, breathlessness, hoarseness, huskiness, exaggerated pitch and whispering are just a few. They can illustrate a commercial, enliven a news report, or startle listeners into attention. But they should be used very discreetly.

Avoid These Voice-Traps, If You Wish To Succeed

- 1. Don't stress words on the air that you would not stress in private conversation. If you do, you'll soon damage the illusion that you are talking intimately in a conversational manner with your listeners.*
- 2. Be careful not to treasure individual words in a script. It's the necklace that is important, not the individual pearls.*
- 3. Don't be so natural and folksy that you become careless with the English language.*
- 4. Avoid pitch patterns and pitch inflexibility.*
- 5. Remember that it is the mark of an amateur to read a minor news item with the excitement that should be saved for the biggest story of the century.*
- 6. Don't ever breathe directly into the microphone, unless you are intentionally trying to imitate the sound of a tornado or blizzard.*
- 7. Work hard to avoid talking through the nose. This is a common national failing, which still does not make it o.k. for a broadcaster. The most important nasals, m, n and g, should be sounded distinctly. One way to remind yourself would be to write "income" in your script inn-come, "speaking speakingn. etc.*

17.

Announcer Techniques

Every occupation, every profession has its tricks-of-the-trade. There is an easy way to change the ribbon in a typewriter, as every good typist knows. If two pieces of iron pipe seem impossibly rusted together, an experienced plumber knows exactly how to separate them. A well-trained lumberjack can make a tree fall exactly where he wants it to fall. Until the novice learns these techniques of the trade his mistakes will mark him as a bungling amateur.

Because broadcasting is “just talking,” the outsider may think that there is “nothing to it.” But the chronometer-like precision of most network broadcasting does not just happen. It is the result of exactly what is responsible for a successful rocket launching — excellent training and skillful performance. This chapter aims at giving the reader some of the techniques currently used by top broadcasters.

Mike Fright

If a broadcaster says he has never been nervous just before going on the air, he is either not telling the exact truth or he is a very rare person. If he tells you that he remains nervous all the time he is reading his lines into the microphone, he is either not telling the exact truth, or he is a very rare person, or he is an amateur. For nearly all professionals, once the director has given them the go-ahead signal, lose their mike-fright as they concentrate on the job-at hand.

Oldtime radio engineers, directors and producers in New York say Ed Wynn was the most frightened man who ever faced a microphone, the first time. His script called for him to use the word “So.” What came out was “So-o-o-o.” In his nervousness he could not seem to shut it off. What was worse, at the same time his voice went falsetto. Some astute director persuaded him to make

this falsetto "So-o-o-o-o" his trademark, and he did. It had a great deal to do with Ed Wynn becoming a multi-million-dollar radio personality.

Helen Morgan was so nervous the first time she appeared on mike that she burst into tears. Helen Hayes began her stage career as a small child facing large audiences, yet for years, as an adult, she had cold chills before every radio appearance. Claudette Colbert, another veteran of Hollywood and Broadway, had a complete nervous breakdown as she was about to speak into a microphone the first time. Ford Bond got a sudden tightening of his throat muscles just before beginning his broadcast of every big-time football game.

The worst time for any broadcaster is the final sixty seconds before airtime. The heart seems to beat faster, the palms get moist, breathing becomes more difficult. A partial cure is to loosen the collar and tie, take long deep breaths, and concentrate on exactly how you are going to articulate the first few lines of the script.

Mike fright is principally the result of a mental state. Most people become self conscious as they grow from childhood into their teens. As proof, children almost always behave much more naturally and spontaneously than adults, when they are before a microphone. Self consciousness of this type usually disappears with practise and experience.

Mike Position

Most announcers — especially when doing commercials — prefer to stand. An opera singer is often required, because of the action involved, to sing important arias in peculiar positions — lying in bed dying of tuberculosis, or being carried across the stage like a sack of grain in the arms of the villain. But the ideal position for either singing or speaking is standing, with one foot slightly ahead of the other, but with the weight evenly balanced on both feet. The head should be tilted slightly back, the chest out, the spine fully extended, the abdomen and lungs uninhibited in the task they must do.

Most commercial announcers like to talk *up* to the microphone, holding their scripts up and beyond the mike. Talking with the head bent down, the chin pressed against the chest, causes the throat to become tense and strained. If the announcer switches from radio to television, he will be required to talk standing up, so he had better get used to it on radio. If it is necessary to broadcast sitting down (perhaps while interviewing a guest or emceeing a panel show) sit as straight as possible so as not to cramp the diaphragm. As one speech teacher put it: "Sit tall, stand tall!"

Mike Technique

There are many types of microphones, with many different pickup patterns. A good announcer will spend as much time as necessary getting intimately acquainted with all the various microphones on which he will be working in a new station. Some pick up sounds from all angles; others are effective only

in a heart-shaped area. In large stations engineers handle the placement and movement of the mikes and will advise on the proper technique for each. On smaller stations the announcer himself must make the adjustments and work out the techniques.

The ideal number of inches between mouth and mike depends on the microphone itself, the person broadcasting, and the type of program. Supreme Court Justice Charles Evans Hughes had such a booming voice and was so accustomed to public speaking in pre-radio days, that station engineers in Washington, D.C., would require him to stand at least six feet from the microphone.

Women, because their voices are generally weaker than men's voices, must work closer to the mike. But men's voices vary greatly in pitch and projection, and so mike distance is different with each individual. In general, six to twelve inches is ideal.

Whether the mike is directional or not, it is well to talk directly into the center of the instrument. A broadcaster with a perfect voice can and should stand close to the mike and aim his voice at the heart of the instrument. The microphone will pass on his voice not only without distortion but with its resonance enhanced. A less-than-perfect voice is often made to sound better if the speaker stands at right angles to the mike.

Watch an experienced singer working with a microphone. He or she will move close in, on intimate bars of the song, and then back far away when going into a great crescendo. A speaker can do likewise *if* he is able to keep his mind on his script and what he is saying, while at the same time giving thought to his mike technique.

In general: body position may be shifted at will, as long as the distance between the lips and mike is not changed. Bobbing, weaving, and turning the head while speaking are habits that infuriate any engineer. Do not rock back and forth, because when you sway backwards your voice will grow weaker, and when you come forward, you may create a *blast* — a sudden surge of volume — which is the unpardonable sin in the book of most engineers. (Blast is an overloading of the equipment, which results in discordant noises that are passed on all the way to the listener.)

If it is necessary to look at the studio clock, the eyes should be raised but not the head. Nothing and no one should be permitted to touch a mike when it is live. (Governor Alfred E. Smith of New York was so uncontrollable in his use of gestures that he habitually knocked over the microphone on the table in front of him, until engineers learned to bolt it to the table when they knew he was going to be on the air.)

Some Other Suggestions

Never put a watch on the studio table during a broadcast and do not wear a

watch on the wrist of the hand holding the script. (Microphones seem to delight in picking up and amplifying the tick of a watch.)

Guard against heavy breathing, gulping and sudden inhalations.

Mike Mentality

One of Announcer André Baruch's suggestions to young announcers is that even if they are not the best in the business, when they get before a mike they must at least *think* they are, in order to have that self-confidence so necessary in such an extrovert field.

All professional announcers are aware of the danger of paying so much attention to delivery — to how the copy is being read — that the meaning of the words is ignored. Also, if the copy is familiar, having been used many times before, the announcer's mind may wander from it. To avoid this trap, he should concentrate on the meaning of the words and the mood they are supposed to be creating. Or he can concentrate on his listeners.

Reading the Script

The ambition of every public figure who uses a prepared text in delivering a speech is (or should be) to read and yet appear not to be reading. This also, should be the aim of the good announcer. If his listeners get the impression he is reading, something is wrong, and he may soon not have many listeners.



Harold W. Arlin, world's pioneer announcer

Even in the best universities, professors complain constantly about the inability of students — including those who have passed College Board Entrance Examinations with high grades — to read intelligently.

The simplest sentences in English have subjects, verbs and objects. *Boy hit dog.* But sentences written for the ear may lack a verb. *What a bar of candy for five cents!* The person reading the sentence must get in tune with the person who wrote the sentence, in order to be able to convey what the writer was trying to say.

Some announcers — even on the networks — read with correct pronunciation, accenting the right syllables, and yet their voices betray that they really have no comprehension of the true meaning of the words. A *good* announcer gets out of each word he utters its full meaning and value.

Some announcers read a piece of copy as if they had never seen it before, hopping from word to word, phrase to phrase, like a grasshopper. If the announcer fails to grasp the full meaning of the message he is trying to impart, his listener is not likely to, either.

If a young announcer can find someone to listen — wife, sister or mother — he should spend at least half an hour a day reading aloud, to train himself in comprehension of the written word and in that most important of the three r's: reading.

Script-Marking

There are no fixed, official, international rules about marking up a script. (Most good broadcasters would not think of going on the air without spending considerable time annotating a script.)

Proper names can be marked diacritically, or can be spelled out phonetically just above the typed word.

A sample marked-up script is shown on another page in this chapter. Here is an explanation of the markings:

- PARENTHESES (): A throw-away phrase or sentence. Drop the voice.
- HYPHEN (-): Connects words that are to be run together.
- STROKE (/): Pause for breath.
- FIGURES (20): Elapsed number of seconds to this point.
- CAPITAL LETTERS: Emphasize. Hit it!
- ELLIPSES (. . .): Pause.
- PARAGRAPH MARK (¶): Change of thought.
- TEPEE (^): Build up to crescendo.
- CIRCLE AROUND A WORD: Be careful of this word!
- WIGGLY LINE: This is all one thought.
- QUOTATION MARKS (" "): Use prolongation on this word.
- SINGLE UNDERLINE OF WORD: Emphasize.
- DOUBLE UNDERLINE OF WORD: Strong emphasis.
- TRIPLE UNDERLINE OF WORD: Extra-strong emphasis.

The announcer should use any device or symbol on his script that will help him give a better interpretation to the piece of copy.

NOVEMBER-~~THE~~-ELEVENTH/. VETERANS DAY/. PARADES/. MARTIAL MUSIC/.
FLAGS/. SPEECHES/. SPECIAL SERVICES AT THE TOMB OF THE UNKNOWN
SOLDIER IN ARLINGTON NATIONAL CEMETERY HERE ON THE EDGE OF
WASHINGTON. AND YET/ HOW MANY ARE AWARE OF THE HISTORY OF
 VETERANS' DAY? # ON NOVEMBER THE SEVENTH, 1918, A GERMAN 20

ARMISTICE DELEGATION WENT TO THE HEADQUARTERS OF FRENCH
 MARSHAL FOCH IN THE FOREST OF COMPIEGNE, FRANCE/ AND WERE
 GIVEN THE ALLIED TERMS ^{KON-PYEN-Y} EVACUATE-ALL-ENEMY-TERRITORY,
 SURRENDER-ALL-ARMS-AND-WARSHIPS, WITHDRAW-ALL-FORCES-WEST
 OF-THE-RHINE, RETURN-ALL-ALLIED-PRISONERS, PERMIT-ALLIED-40
 TROOPS-TO-OCCUPY-GERMANY. # THEY WERE GIVEN 72 HOURS TO REPLY.

ON NOVEMBER NINTH THE KAISER ABDICATED AND FLED TO HOLLAND.
 THEN ON NOVEMBER 11 (48 YEARS AGO TODAY) (IN A DRIZZLING
 RAIN) THE GERMAN DELEGATES RETURNED AND IN A RAILWAY CAR
 IN THE FRENCH FOREST / SIGNED THE ARMISTICE // FIGHTING STOPPED ①

AT 11 A.M. ON THE ELEVENTH/ WORLD WAR ONE (THE MOST TERRIBLE
 OF ALL WARS UP TO THAT TIME) WAS OVER. // THERE WAS DANCING IN
 THE STREETS OF A THOUSAND CITIES! 37 MILLION CASUALTIES/ BUT

THE WAR WAS OVER! THE WAR TO END ALL WARS! # BEFORE THE NEXT
 YEAR WAS OUT/ PRESIDENT WILSON PROCLAIMED NOVEMBER 11 AS 20

ARMISTICE DAY... "A DAY ON WHICH AMERICANS WILL BE REMINDED
 OF THE TRAGEDIES OF WAR." IN 1954 ITS NAME WAS CHANGED
 TO "VETERANS DAY.. TO HONOR ALL U.S. VETERANS. # VETERANS DAY

IS A GOOD TIME TO MENTION A CERTAIN WARD IN WALTER REED
 HOSPITAL, HERE IN WASHINGTON/ TO THIS WARD HAVE BEEN BROUGHT 40
 VETERANS OF VIETNAM WHO HAVE LOST HANDS/. ARMS/. FEET/. LEGS/.
 AND/ OR EYES/ NO MAN IN THE WARD HAS ALL OF THOSE THINGS THAT
 NATURE GAVE HIM/ EVERY ONE OF THEM IS MISSING SOMETHING.. AN

Directors' Signals

Networks and larger stations employ directors whose task is to get the program on and off on schedule, to keep the pace lively, and to give instructions to those on the air by hand signals. Some directors devise their own code of signals, but the following are in general use:

Index finger pointed directly at broadcaster: Start talking.

Index finger on end of nose: You are exactly on time.

Wiggling of all ten fingers: Show more life, more animation.

Fingertips barely touching, then hands pulled slowly apart, as if stretching a rubberband between them: Stretch it out; you are ahead of schedule.

Letter T formed by one finger on top of another: Begin the theme song.

Circular motion of index finger: Speed up.

Raising one hand, palm up: Increase the volume.

Lowering the hand, palm down: Make it softer.

Lowering both hands, palms down, then spreading them apart: Fade.

Upraised fist: Play to the end of the selection.

Hands extended, wrists crossed: Stop the rehearsal.

Forming a circle with the thumb and index finger, held at arm's length: Perfect!

Three fingers held aloft: Three minutes left to go.

Crooked finger held aloft: Half a minute to go.

Index finger drawn across throat: Cut.

Index finger of right hand tapping palm of left hand: Read commercial.

Hands moving across each other to form letter X: Cross fade.

Ad Libbing

This is a special announcer technique requiring quite different qualifications than those stressed up to now.

You are covering a space launching and have written out enough carefully prepared copy to fill the time that has been allotted to you, and you are just ready for the count-down, when suddenly it is announced that there is going to be a ten-minute delay. Over your earphones your news director sends you this three-word instruction: "Ad lib it!"

Or you are a disc jockey and have been quite successful because of a jokebook from which you have been "stealing" the material for the *fill* between records, but one day just before air time you discover that someone has taken the book.

Or you are covering the arrival of the President of the United States at your local airport and just as you get the air it is announced that the plane will not land for another five minutes.

Or you are on your way to the studio from a routine assignment with a tape recorder slung over your shoulder when a disaster begins to take shape in front of your eyes — perhaps a tornado or a fire.

Or — or — or —

To be a competent ad libber a man must have, first of all, a quick eye that can take in a hundred details at a single glance. Second, he must instinctively realize which details to ignore as irrelevant and uninteresting, and which to stress because of their importance or human interest appeal. Third, he must have the ability to transform what he is seeing into words which the listener, when he receives them, will be able to transform back into a visual image. The broadcaster thus performs the same function as a television camera and transmitter that transform something visual into electrical currents that are transformed back to something visual again when they go through a receiving set.

While Herb Morrison's description of the Hindenburg disaster is a classic of American radio (see Chapter 7) broadcasting has come a long way since then and is now much more mature. Any New York, Chicago, or Los Angeles radio-television news man who got as rattled as Morrison did and violated as many rules of good reporting would probably lose his job.

The ad libber must have good news judgment, an appreciation of human values, a knowledge of what will interest and what will bore, and then he must be able to put it all into vivid, grammatical English, with no ah's, eh's or awkward pauses, no repetitions, no split infinitives or other speech errors, and not too much slang.

Before his eyes will be passing an ever-changing series of images. It will be like watching a movie film being run at double speed. He must put each one of these *frames* or pictures into words so brilliantly vivid that they will make the listener think he is watching it himself. The ad-libber needs to have an extensive and flexible vocabulary, a rich background, and an understanding of the effects of the occurrence he is describing.

While ad libbing it is easy to be unconsciously offensive — to make a remark that later you would be willing to give a thousand dollars to be able to withdraw. One day in 1934, Ty Tyson, assistant manager of WWJ, Detroit, and one of radio's earliest announcers, was broadcasting a baseball game between the Detroit Tigers and the Boston Red Sox. At an exciting moment in the game he was unable to resist this quip:

"We have Greenberg batting, Wahlberg pitching and Moe Berg catching. I wonder where's Ginsberg?"

The innocent but thoughtless remark was taken by some members of the Jewish community of Detroit as offensive. Harry Bannister, WWJ manager, later said the incident taught him the lesson that what is important is not so much the motive of the broadcaster as the effect on the listener. It is also a lesson in the dangers of ad libbing.

Trademarks

Read the following quotations and then write on a piece of paper the name of the person you identify with each numbered quotation:

1. So-o-o-o- (The answer has already appeared in this chapter.)
2. So long until tomorrow.
3. Sorry about that.
4. Goodnight, Chet. Goodnight, David.
5. That's the way it was, Tuesday, November 13th.
6. I'ze regusted.
7. Heigho, everybody.
8. I love to spend this hour with you.
9. There's good news tonight.
10. I dood it.
11. Ya wanna buy a duck?
12. Hello everybody. L — — — — speaking.
13. Well as I live and breathe.
14. Good evening Mr. and Mrs. North America and all the ships at sea. Let's go to press.
15. I'm a ba-a-a-d boy.
16. This is — — — — — and all the lads wishing you a bit of pleasant dreams.

If you have failed to identify any of them, show the list to father, mother, uncle, aunt, or grandparents, for some have not been current for years. If you wish to check your answers, turn this page upside down.

1. Ed Wynn
2. Lowell Thomas
3. Don Adams in *Get Smart*.
4. Huntley & Brinkley
5. Walter Cronkite
6. Amos and Andy
7. Rudy Vallee
8. Eddie Cantor
9. Gabriel Heatter
10. Red Skelton
11. Joe Penner
12. Vincent Lopez
13. Fred Allen
14. Walter Winchell
15. Lou Costello
16. Ben Bernie

Those sixteen broadcasters put themselves into the \$100,000 to \$1,000,000 a year bracket partly by creating trademarks of a few words each by which the public would identify them. In some cases they used them as a sign-on or a sign-off. Tip to young announcers: As well as striving to be a personality, think up some identifying words you can use on the air as your own personal trademark.

Tips from the Pros

Here are some suggestions from broadcasters with many years of radio and/or television experience, from the world's first radio announcer, from the father of electrical communication, and from a celebrated speech coach:

HAROLD W. ARLIN, *the world's pioneer announcer, KDKA, Pittsburgh, written especially for readers of the Encyclopedia: The best advice I can give young announcers is to articulate well, remain calm under all conditions, be familiar with your broadcast subjects, and always be courteous.*

WESTBROOK VAN VOORHIS, *the original voice of The March of Time: A wise broadcaster will always see that a second copy of his script is in the hands of the engineer. An engineer is one of your toughest critics and can be one of your best friends.*

PAUL MILLS, *actor and speech coach for radio and TV: We hear most of what we say through our head bones, not our ears. So if you will bend one ear over and forward, holding it tight against the head, you will hear yourself exactly as others hear you. I venture to say you will not be pleased.*

FRAN ALLISON, *of Kukla, Fran & Ollie fame and Aunt Fannie on the Breakfast Club: Do you enjoy other people? Do you find it easy to communicate with others? Radio and television mean communication. Are you observant? Are you a good listener? When interviewing it is a very important thing to listen.*

BOB STANTON, *veteran TV announcer: Remember that you are the guest in millions of homes, so talk and act as if you were there in person.*

ULMER TURNER, *40 years a radio and television news analyst: When broadcasting wear shirts half a size larger than you normally wear, for nothing inhibits easy breathing as much as a tight collar. For the same reason suspenders are better than a belt. Just before starting to talk, wet both the upper and lower lips with your tongue.*

BILL DOBSON, *Free-lance TV announcer: Reconcile yourself to becoming a slave of time. The broadcasting industry uses a stop watch in place of a whip. If you are not willing to become a clock-watcher, you had better choose some other profession.*

ALEXANDER GRAHAM BELL, *inventor of the telephone: Consonants give intelligibility to speech, but vowels give beauty of utterance. Consonants constitute the backbone of spoken language — vowels the flesh and blood. You cannot do without either.*

18.

Television Announcing

Television is still a very young industry — a wide open field — a land of rich opportunity. On any given day of the month, the FCC in Washington has, in hearing, license applications for dozens of new television stations. The total is often as high as sixty or seventy. In addition, waiting in line for consideration, are generally a hundred or more applications from individuals and corporations wishing to open new stations. The demand for television announcers is, therefore, constant and continuous.

A television announcer must have all the talents of a good radio announcer (intelligence, reading ability, microphone personality and a good voice) and in addition must have stage presence, some acting ability, a pleasing appearance, the ability to memorize, even better mastery of the voice than radio requires, more broadcasting experience, and must be able to get through a month with very few bloopers and errors chalked up against him. Some of these prerequisites are considered in detail below.

An Announcer's Functions

The television announcer serves as the thread that links together the various elements of a television program. He opens the show, introduces actors and actresses, does off-camera commentaries, reads the commercials, interviews guests, reads the credits, and signs off the show. He is, without any question, the most important person on the set.

Off-Camera Announcing

The chores of television announcing are performed off-camera, from the announcers' booth. They include reading some off-camera commercials, giving

stations breaks, talking over slides and films, doing promotional spots, reading narration, and handling openings and closes. Because of his radio training, any experienced announcer will be able to perform these chores with ease.

When working with slides and film, precise timing is essential, for the words must be fitted exactly to what is being seen. This is generally done by watching the monitor.

One new technique the TV announcer needs to learn, even when off-camera, is taking cues by voice over earphones, instead of by hand signals.

Appearance

Television has been in business long enough now to have proven that neither men nor women need look like Hollywood movie stars to be a success on TV. What counts most is a pleasant, honest, sincere face, an average body, with no marked physical deformities or defects, and an out-going personality. Because the television broadcaster will often be working with other people on camera, he (or she) should not be excessively tall, short, thin, fat, or be eccentric in any other way. These are general rules. It is possible that as these words are being set into type some new television star will appear on the horizon who is homely, fat, short and has a noticeable physical defect. If so, the success is due to a personality that overshadows all those minor qualities.

While the radio announcer can come to work looking like a Greenwich Village beatnik, and loosen collar and tie (if any) while on the air, the television announcer, when he steps in front of the camera, must be impeccable, with hair well combed, clothes neat and in order, mustache (if any) well trimmed, and makeup (if any) on correctly, for he will be judged now not only by what he says but by how he looks.

Dress

Directors the country over have their own ideas about what should be worn by those appearing on camera, but these are rules that apply in general everywhere: **MEN:** Avoid ties, shirts and sports jackets with designs that are too *busy*. Black and white are also out of favor. White *flares* or *bleeds*. (See Dictionary, Section III.) The perfect shirt for black and white TV is pale blue. **WOMEN:** Dresses with large floral patterns are to be avoided. Black and white contrasting costumes should never be worn on TV. Pastel colors are o.k. Medium shades are best. Remember that on black and white TV, red comes out black.

COLOR TV: Both men and women should check with the director to make certain that colors and fabrics being worn harmonize with what is being worn by others on the set. Some materials reflect the light in a most undesirable manner and should be avoided. Women should avoid accessories such as handbags, hats, veils and jewelry that will detract attention from the woman herself and what she is saying.

Makeup

In the early days of television makeup was much more important than it is today, thanks to improved photography, lighting and television techniques. But even today, in every network studio and on big city stations at least one professional makeup man is available for every important show, to do whatever he deems necessary to make the broadcaster appear at his best on camera. It may mean tinting a beard or mustache that is so white that it glares. It may mean touching up some gray in the hair, which, untouched, looks like a bald spot when the light hits it. It may mean, for a woman, a thoroughly Hollywood or Broadway job. A pancake base may be daubed on the face of a man who has to shave often, in order to avoid the appearance of "five o'clock shadow." Men and women with deep set eyes will have to lighten up the entire eye area with makeup. Old-fashioned stage grease paint is never used in television. Pancake, which is standard, comes in various shades, each bearing a number. Most women will instinctively know what number they should use. The makeup expert will tell male broadcasters what their proper numbers are. There is a special makeup technique for use on men with a receding hairline. Although most men resent the idea of using makeup it is a necessity for achieving a natural appearance on television. Actors playing character roles may have to sit in the makeup chair for thirty or forty minutes having lines put in or lines taken out.

Idiot Boards and Tele-Prompters

The Tele-Prompter is a mechanical device fastened to the front of the television camera. It resembles the two rolls on which the film is wound in an ordinary, old-fashioned camera. The sheet of paper that travels from one roll to the other has the text of the commercial printed in letters large enough to be read at a considerable distance. The rolls are turned — the paper moves — at the exact speed the announcer sets by the tempo of his reading.

Cue cards — in television slang called *Idiot Boards* — are of heavy paper or cardboard. On them are written simply cues, or the entire text with many words abbreviated, or the complete text, all written out. The cards can be as small as 5 x 9 inches, or several feet square. The larger they are, the farther from the camera lens the announcer can be.

Thirteen top announcers not long ago collaborated on an excellent book, *How to Announce for Radio and Television* (see Suggested Reading List, Section III). In it they agreed on many matters, but there was much divergence of opinion about whether it is best to memorize a television commercial, and if not, whether to use cards bearing simply a few cues or idiot boards bearing the entire commercial.

Bob Stanton (*Robert Montgomery Presents*) said he used cue cards because "it's better to be safe than sorry." C. Y. Harrice (*The Right to Happiness*, the

Cavalcade of America) was on the side of complete memorization, contending that the extra degree of assurance an announcer gets from knowing that he does not need to depend on anyone else for his lines is so great that the average listener feels it. Also, it enables the announcer to look directly into the eyes of his audience. This makes his message that much more convincing. Even if cue cards are held as close as possible to the lens of the camera, the announcer's eyes (as when he uses a Tele-Prompter) are not looking directly into the eyes of the viewer. Also, memorization ends the nervous agony of — "What will happen if the Tele-Prompter turns too fast or someone mis-shuffles the cards?"



John Cameron Swayze on a commercial set.

Yet it is true that there is a disastrous rupture of communication between viewer and announcer if the latter, at the height of his pitch, suddenly forgets a word and starts fumbling.

Announcers who read news-shows from a script held in the hand or spread out on a desk in front of them, soon learn how to establish as much eye-contact with the audience as possible. The rule-of-thumb is that the eye should be on the camera at least for thirty seconds out of every minute.

What To Do In An Emergency

On television, far more often than on radio, things go wrong, because there are so many props and pieces of equipment that can malfunction. The tendency to do more and more video taping of shows keeps the viewing audience from seeing many of television's most embarrassing moments. But the announcer should remember that although the cameras can be stopped and a re-take ordered, it may cost the station or the sponsor a pretty penny in time costs.

If your guest suddenly develops stage fright and words no longer come from his mouth, or if the Tele-Prompter breaks down just as you reach your big crescendo, or if the door of the refrigerator you are using in your commercial refuses to open, the moment has arrived when you and everyone else will see whether you really are a pro. The amateur will bumble, mumble and stumble. The pro will have at the tip of his tongue the perfect *bon mot* to get him gracefully out of the embarrassing corner.

Don't Declare War on the Camera!

The amateur on television makes many mistakes in his relationship with the camera. First, if two or three cameras are being used, the announcer should make sure which one is on him at the moment. On the front of every camera, not far from the lens, there is a red light called the *telly light*. When it goes on, it is a signal that this camera is being used — that what this camera sees is going out over the air. When the director switches to another camera, this light will go out.

There is nothing quite as amateurish-looking as the announcer who, halfway through a spot, suddenly realizes he is looking into a dead camera and turns in embarrassment (for all to see) to the live camera.

As the director changes from camera to camera, the professional announcer shifts his gaze smoothly from one to the other.

The announcer should also be careful that the camera does not suddenly catch him in some very unattractive pose, doing something quite embarrassing as he waits for a cue that has already been given but which he missed.

On Broadway and in Hollywood, actors and actresses are trained never to look directly at the audience, except in special cases, for the action ordinarily is supposed to be going on quite independent of who may just happen to be looking on. This is also true of television dramas. It is the world of make-believe. But

the newscaster, the sportscaster and the commercial announcer are all required to do the exact opposite — to try to establish an eye-to-eye relationship with the viewers, the more intimate the better.

Facial Expression

The facial expression should be a pleasant one — a radiation of goodwill and *camaraderie*. But beware the perpetual smile! The insincerity of it will be apparent to almost all viewers.

The face should be relaxed as much as possible. Tenseness will make the viewer tense, too. The expression should change according to the mood of the copy. The facial expression should also be a projection of the announcer's own personality. And the personality should be a friendly one. The announcer should never give the viewer the impression that he is staring at him.

Don't Fight the Pictures

Perfect television is a happy marriage between sound and sight — between voice and pictures. An amateur announcer often behaves as if he considered the visual elements of the show as competition. There needs to be a pleasing balance between what is said and what is seen. They must complement each other. Often the announcer will have to pause, to let the picture establish itself, or to ease off the power he puts into certain lines, to permit the action on the screen to do the real *punching*. But in the end, it is up to the announcer to clinch the argument with the final word. The picture is still nothing without the voice that explains it and sells it.

Microphone Technique

Even on the smallest station an engineer will decide how he wants the microphones arranged. If the announcer is on-camera he will work with either a lapel mike, or a small microphone hung around his neck, or over a boom mike. The boom mike — its position, its height, its very presence — should be completely ignored. That is the engineer's concern. Never look at it. Forget it is there. Inexperienced television announcers, if they have had some radio training, worry because the boom mike is so far from them and give their voices much more volume than they should. This is unnecessary, for the ribbon mikes used on booms are sensitive enough to pick up the drop of a pin.

Movements and Gestures

Nothing is more important in television than naturalness, for naturalness leads to believability, and believability enables the announcer to sell his product. All movement of limbs and body should be easy, graceful, relaxed and without affectation. Television broadcasters should practice standing, walking, sitting, getting up and greeting people with an easy dignity.

The amateur's worst problem is what to do with the hands. One suggestion:

hold a pen or pencil. But hold the object unobtrusively. If you continuously fiddle with the object you are holding you will drive director and viewers alike into distraction. The hands should be used in an easy natural manner when the announcer is actually talking, but remember that television is intimate. Gestures should be small and tight. The gestures of a political orator on a platform are utterly out of place on television.

In general, try to behave on television as if you were a guest in the home of a good friend, with two or three other persons present. Do not act as if you were on a lecture platform.

Registering emotion by facial expression is a perfect television technique. The lifting of an eyebrow, the wrinkling of the forehead, the slightest shake of the head will often make a point better than anything else you can do. But be warned that the camera will catch every nuance, so the facial gestures must be natural and should not be exaggerated.

Mannerisms

Few of us are aware of our own mannerisms. Often they are *the* distinguishing marks about us that are best remembered. That does not mean they are good. Actually they may be very annoying to our associates. This is especially true on television. The announcer who is always pulling the lobe of his ear, or scratching his head, or twitching an eyebrow, or blinking his eyes, or playing with his nose is interfering with the communication he is supposed to be establishing, even if he may be creating a trademark. He is like the shopkeeper who put a sign in his window reading:

**I PAY \$15 FOR
1930 PENNIES**

Whenever anyone came in with a 1930 penny, he would demand:

“Where are the other 1,929?”

It brought a great many people into the shop, but the end effect was not very good; it won him more enemies than new customers.

Ask your best friend to tell you frankly what your annoying mannerisms are. (Only your best friend is likely to tell you.) Then try to abolish them.

Talent Fees

If an advertiser specifically requests that a certain staff member be assigned to do a certain commercial, the station will generally pay a special talent fee, over and above regular salary. Such a fee will range from as low as a dollar up to a considerable sum on a metropolitan station. When an announcer is offered a job on a TV station, he should always ask if the station pays talent fees and how much they are for specific shows and commercials.

Television Tips

1. Always be on time for rehearsals.
2. Be prepared to work long and strange hours.
3. Try rehearsing commercials at home before a full-length mirror.
4. See and hear yourself on video tape whenever possible.
5. Remember: the smaller the station the more varied the experience.

19.

Words In Action

Words rule the lives of modern men. They are more powerful than swords, biological weapons or hydrogen bombs. Everywhere we turn, words spring at us — from billboards along the highway, from car radios, from television sets, from public address systems. Words-in-print, like waves of the ocean, roll in on us unceasingly, sometimes almost engulfing us — a ten-pound Sunday newspaper, a plethora of paperback books, a mailbox full of magazines, direct-by-mail advertising, letters appealing for funds.

Words are the tools of teachers, preachers, public officials, politicians seeking office, and other communicators. But they are also used as poison by demagogues and tyrants seeking to pervert and corrupt the minds of free men.

Words at War

In the late 1930's, the Spanish Civil War was an excuse for Germans and Russians to test their latest military devices. It was also used for trying out a relatively new communications device — radio. Battles were fought with microphones as well as with machineguns and rifles. Government stations kept up a steady bombardment of the rebels with words, and whenever the rebels captured a radio station they returned the verbal fire.

When the Nazis took Austria, their first move was not to murder Chancellor Dollfus (they did that later), nor to silence the press, but to seize the powerful Vienna radio station.

Almost every time in the past quarter century that a government has been overthrown by revolution in Europe, Asia, Africa or Latin America, the rebels have seized the country's broadcasting stations first of all, knowing that public opinion can be controlled and the masses moved to action by loudspeakers.

In some military courses, soldiers are taught to take a machine gun apart and reassemble it while blindfolded. When one is using words as a lethal weapon, or as a tool in a constructive enterprise, or as a means of earning a living, it is important to know their nature, their peculiarities and what it is possible to do with them, as well as the soldier knows the component parts of his gun.

There's Beauty in a Cellardoor

Joseph Conrad, celebrated British sea story writer, was born Josef Theodor Konrad Maecz Korzeniowski, in a town near Kiev, Russia, and his mother tongue was Polish. He chose English as his adopted language after overhearing two British sailors talking in the dark.

The British novelist John Galsworthy once said that English would sound like a friendly language even to someone who could not understand a word of it.

A Spanish lady who knew no English was asked to listen to two Englishmen conversing and to interrupt them when she heard them use a beautiful word. She held up her hand for silence when one of them said:

“Cellardoor.”

Words Are for Enjoyment

Read these sentences aloud:

Round the rugged rock the ragged rascal ran.

What weird womanly whim led him to whimper, whisper and whine?

She sings sibilant slumber songs sonorously as she saunters slowly, seductively and sensuously along the shaded seashore.

Buy bread, buns, butter and bacon for breakfast.

Lefty Louie lugged lots of lifted lumber lengths to the last, lofty, land-locked lighthouse.

Theophilus the successful thistle-sifter, while sifting a sieve full of unsifted thistles, thrust three thousand thistles through the thick of his thumb. See that thou, when sifting a sieve full of unsifted thistles, thrust not three thousand thistles through the thick of thy thumb.

These are all exercises in articulation, but they are more than that. Each contains commonplace English words, which, as they are slowly mouthed, take on the same simple beauty that the Spanish lady heard in *cellardoor*. Listen again to *rugged rocks* and *womanly whim* and *sibilant songs*. These are phrases that a poet could use and a broadcaster should not “throw away.”

Some of the best words in the English language are one-syllable Anglo-Saxon words that are used so constantly and so thoughtlessly that no one really *says* them anymore and few of us *hear* them at all — that is, the sound of them. Take, for example, *good*. It has been so over-used and has come to mean so many conflicting things that it has no meaning at all. But say it slowly, at the same time making a forceful, downbeat gesture with the hand and putting full-bodied meaning into the enunciation. Suddenly it takes on depth and real meaning for the first time, and implies much more than the negative virtue of

not cheating at cards or violating the seventh commandment. If a broadcaster senses the inherent beauty in individual words, he can give a much richer interpretation to phrases, sentences and whole scripts.

Like a Tree, It Grows

English is a vibrant, living language, especially the English spoken on this side of the Atlantic. It is constantly adapting itself to changing customs and new world conditions. Wars, disasters and the adventures of Peace Corps volunteers add strange place-names to our vocabularies. Science invents new terms. LSD becomes an accepted word — as much as if it had a vowel, like its more conventional neighbors in the dictionary.

The good broadcaster must keep abreast of *living* English, and perhaps occasionally make his own contributions to the language, while at the same time remaining aware of the great responsibility that rests on his shoulders of keeping it uncorrupted. Cartoons, comic books, popular magazines and even respectable newspapers often cheapen the language, but the broadcaster is expected to pronounce words properly, use correct grammatical constructions and set an example in how the American language ought to be spoken.

The Power of Words

Read the following sentence quickly:

WE SAW PRESIDENT JOHNSON LAST WEEK

Which of the six words did you subconsciously stress? Why?

Read the sentence again, stressing the *first* word. (You mean it was *you*, not someone else.) Read it again stressing the *second* word. (You mean you *saw* him, you didn't just hear him.) Stress the third word. (You mean you saw *President* Johnson, not some other Johnson.) Stress the fourth word. (You mean you saw President *Johnson*, not the President of Mexico, who also was in town.) Stress the fifth word. (You mean *last* week, not *this* week.) Stress the final word. (You mean it was last *week*, not last month.)

Now notice what can be done with a little two-letter word: *No*. Say it with a *rising* inflection. You have put a question mark after it and have made the word express doubt. Say it with a *descending* inflection. You have put an exclamation mark after it and have made it definite that you mean *No!* Now say it sarcastically. This time you have given it an up-and-down inflection. One little two-letter word: three meanings.

Sloppy Joe English

You climb into a taxi and the driver asks: "*Wur-ya-wanna-go?*" ("Where do you want to go?") At work a fellow worker doesn't understand something and asks: "*Watcha-doon-ere?*" (What are you doing there?). Other examples: "*Doncha?*" ("Don't you?") "*Idinnical.*" ("Identical.") "*S'pose.*" ("I suppose.")

Many people commit a double atrocity by using incorrect grammar or slang, then slurring it into an incoherent mass. For example: "*I-yea-go-no-soop.*" ("I ain't got no soup" which should have been, "I don't have any soup.") Or, "*Bar-me-a-buc.*" ("Borrow me a buck," meaning, "Lend me a dollar.")

We have heard these and other common expressions so often that we generally understand each other. But many times we are completely unaware of just how incoherent our speech has become. If our words become garbled and slurred because of lazy, careless speech habits, we are not communicating as well as we should. Our meaning may be lost and our efforts wasted.

In *printed* advertising the potential customer can re-read, if he misses something. Not so on radio and TV. He hears the message once, with no chance to go back if he fails to grasp the meaning of something. This is why every word must be pronounced correctly and distinctly. The mispronunciation of a single sound in a single word can change the meaning of a whole sentence, and even of an entire commercial.

Dialects and Regional Pronunciation

Most people are unaware of their own accent-peculiarities, because perhaps no one ever called them to their attention. The "other person" is the one who speaks queerly. (It was a Quaker who is supposed to have said to his wife: "All the world is queer save me and thee; and sometimes I think thee is a little queer.")

Language authorities estimate that 26 million Americans speak the various dialects of the South; 10 to 11 million speak dialects of New England and other eastern areas, while 90 million speak what is called General American, described as the language of the Central and Western states. The remaining millions speak various other regional accents.

The question of accent or regional dialect is tackled head-on in the introduction to the second edition of the *NBC Handbook of Pronunciation*, edited by Dr. James Bender and published by Thomas Y. Crowell. (The third edition, published in 1964, is available through booksellers everywhere.) Dr. Bender, now dean of the School of Business of Adelphi University, Garden City, New York, says in the introduction:

That pronunciation is best which is most readily understood and that pronunciation is most readily understood which is used by most people. Thus a standard of pronunciation for the American radio and television broadcaster is reasonably based upon the speech heard and used by the audience that the broadcaster reaches. This means the broadcaster would use the pronunciation that is spoken by the educated people of the area served by the station. If the station is a local one, the broadcaster would do well to pronounce words as the educated people of his community pronounce them. Otherwise he might run the risk of being difficult to comprehend or of alienating the approval of his audience. When a broadcaster speaks over a powerful station or on a nationwide hookup, he desires to use a pronunciation that is most readily understood by the majority of his listeners. In such event, the broad-

caster would be well advised to use a pronunciation widely known among phoneticians as *General American*.

Dr. Bender describes General American as the way English is spoken by educated persons among the 90 million who speak without distinct dialects. This is the only pronunciation used in the *NBC Handbook* and is the one appearing first in most other dictionaries.

English Without an Accent

In the days of President Franklin Roosevelt, most speech teachers pointed to the language of his Fireside Chats as a good example of General American English. Professor Lee Emerson Basset, Department of Speech, Stanford University, said of him:

No one could say he comes from the South, the East or the West. He is just an American citizen who uses English well. He is an example of what speech can and should be — the speech of an educated and cultured man.

Broadcasting schools discover that many of their students are aware of how to speak correctly, but are too self-conscious, or too afraid of being considered a snob, to correct their own speech faults.

Governor Alfred E. Smith's trademark was his East Side New York mispronunciation of such words as *thoid* for "third," *choitch* for "church" and *hoid* for "heard". He received more than 15 million votes when he ran for President, and yet it is doubtful whether he could ever have gotten a job as a radio or television announcer.

Correct pronunciation, like good English, is a mark of the educated man. Radio and television announcers have a place in the communities in which they work, no matter how small or how large, because it is assumed they know what is going on; they know the news before anyone else does; they know what weather to expect; they know whether the sponsor's product is really good. But to maintain this respect they must *sound* intelligent. This means, principally, speaking correctly. And speaking correctly means pronouncing words as they are pronounced by most cultured people in the community, or in the country at large.

Pronunciation Test

The second edition of the *NBC Handbook on Pronunciation* gave a pronunciation test for broadcasters. It is reproduced below with the permission of the editor and the publishers. It is to be read at a normal reading speed, preferably into the microphone of a tape recorder, in order to check your pronunciation with the *NBC Handbook* or a dictionary later.

Penelope Cholmondeley raised her azure eyes from the crabbed scenario. She meandered among the congeries of her memoirs. There was the kinetic Algernon, a choleric artificer of icons and triptychs, who wanted to write a trilogy. For years he had stifled her risibilities with his dour moods. His asthma caused him to sough like the zephyrs among a tamarack. He insisted on being the cynosure

even after a virulent attack of alopecia areata left him glabrous. He was an economical donor to her eleemosynary interests. Yet he had his facets: he taught her the alveolar and palatal consonants. (She was always a devotee of Thalia.) He decorated her draughty cabana with two mischievous-looking borzois and with really Herculean efforts gave his castoff clothes to her infantile nephew. Yet she was glad to give him his congé, for he left her with cervicodgnia.

A most extraordinary personage was her bovine viscount, a polyglot cosmopolite with sybaritic propensities. His gustatory delectations ranged from minestrone *avec fromage* to gooseberries flavored with thyme. After an equestrian morning he was wont to lunch alfresco. For years he had vanquished senility by playing the xylophone and arranging the leprechauns of Eire in categories. Truculent as a ghoul in goal, he would go berserk, fulminating against the argot of philately or the cerements of geisha dancers. But his trades were never really risqué, never sacrilegious. He was avuncular, obese and plethoric as Santa Claus. Oh pshaw, she said, my psychiatrist would call this all quite schizophrenic! I must get down to business and amass the details of my autobiography. I'll use mnemonic devices to resurrect the dramatis personae of my rococo existence. Her chef-d'oeuvre would be published in de luxe format, promoted by her infamous impresario, Joe Green, who liked to be called Giuseppi Verdi. (At times he would assume an alias and travel incognito.) Naivete would be taboo. Hers would be a style comme il faut. And she was obdurate anent other details, too; she would omit her cicatrix, carved by an appendectomist's scalpel during an umbilical contemplative mood. Neither would she mention the saturnine anaesthetist who talked about syndromes in a gibberish that smacked of Elizabethian jargon.

Shaking her head in dubiety, our heroine cascaded her pyramidal coiffure down the nape of her columnar neck, leaving her a psyche between two petite, conched auricles. "I think I'll affect this coif instead of a chapeau in the Caribbean scene and wear my furred redingote in the Himalayan montage," she said. With these words came the decibelic echoes of the maestro's baton, and she must hide her autistic reveries behind more rouge pomade. With languor she headed for the camera, resolution high that today her pantomimic efforts would be Promethean. "Carpe diem," she sighed, "and I must not forget to be photogenic either."

If, after checking your pronunciation of any doubtful words, you find you made some mistakes, be not disturbed. No one ever makes a perfect score on that test. Ten mistakes or less is good. Seven or less is excellent. Five or less is phenomenal. The one word you may not be able to check is *Cholmondeley*, but you should have known the correct pronunciation from having read Chapter 16 of this book.

Make It Simple!

Hyperbole (from a Greek word meaning to "over-shoot") is "an extravagant exaggeration of statement." Euphuism is "artificial elegance of language; high-flown diction."

Anyone who uses *tonorial parlor* for barber shop, or *nuptials* for marriage is guilty of both those rhetorical sins. Even more common is the habit some of us have of using three-, four- or five-syllable words when a one- or two-syllable word will do just as well — perhaps even better. The words in the second and fourth columns on the next page should not be eliminated from your vocabulary. There is nothing wrong with them. But the words in Columns 1 and 3 will do the same job even better. It is not always a question of length, but rather of

familiarity. *Id* and *erg* and *ut* are short words that are unknown to most people, whereas newspaper and radio reports of divorce trials have made *in-compatibility* common, and bridge has made *vulnerable* known to most people.

ASK	inquire	HELP	assist
ATTACK	assault	HIDE	conceal
AWARE	cognizant	HOLE	aperture
BEGIN	inaugurate	HOME	residence
BREAK	fracture	INCLUDE	comprise
BRUISE	contusion	JAIL	incarcerate
BURIAL	interment	LIE	pervaricate
BUY	purchase	LOSS	bereavement
CALL	summon	NEED	require
CHARITY	benevolence	OIL	lubricate
CLASS	category	OWN	possess
CUT	laceration	PAY	remunerate
DEAD	deceased	PEOPLE	populace
DRINK (v)	imbibe	POSSIBLE	feasible
DRINK (n)	beverage	QUESTION	interrogate
END	terminate	RAISE	elevate
ENOUGH	sufficient	RIDDLE	enigma
FACE	visage	SAY	remark
FALL	cascade	SEE	witness
FEAR	trepidation	SEND	transmit
FLOOD	inundate	STEAL	purloin
GAIN	acquisition	THINK	ponder
GET	obtain	TOOTHPASTE	dentifrice
GIVE	contribute	TRY	endeavor
GIVE UP	relinquish	WET	moisten

Shun the Flowery Phrase

There is a single word which will express just as well — perhaps better — what these phrases are trying to say. Write the word in the white space after each phrase.

- AFFIXED HIS SIGNATURE
- ALL AND SUNDRY
- ALL TOO SOON
- A SUFFICIENT NUMBER OF
- AT THE PRESENT TIME
- AT THE INTERSECTION OF
- AT ONE FELL SWOOP
- BEAT A HASTY RETREAT
- DURING THE PERIOD FROM
- ENGAGE IN CONVERSATION
- FAIR SEX
- IN THE EVENT OF
- IN THE IMMEDIATE VICINITY OF
- IN NO UNCERTAIN TERMS
- MADE HIS ESCAPE
- MANY AND VARIOUS
- NIPPED IN THE BUD
- PUT IN AN APPEARANCE
- RENDER A SELECTION

SNARE AND DELUSION
 TOOK ACTION
 WAS THE RECIPIENT OF
 WITH BATED BREATH
 WITH LITTLE COMMOTION
 WRAPPED IN MYSTERY

Avoid Gobbledygook

Broadcasters must deal with all sorts of people. Many of them, especially in government, will have been bitten by the great bug Gobbledygook. (The word was created by Congressman Maverick of Texas, after the gobbling of turkeys, to mean "inflated, involved and obscure verbiage characteristic of the pronouncements of officialdom.")

The broadcaster does not have the right to change the wording of official statements, but in writing a news story in his own words, he should always avoid the stilted language of bureaucrats. No ordinary man in his daily conversation uses such words as *promulgate*, *facilitate*, *expedite*, *implementation* and *finalize*. These are gobbledygook words. There are plenty of simple, one-, two- and three-syllable words for each of them.

Eschew Journalese

When radio in its early days set up its own news departments, it hired newspaper reporters and rewrite men, who had been trained to write for the eye rather than the ear. They brought with them all the slang and trade expressions of written journalism. Radio (and now television) has had a difficult time, even after twenty or thirty years, shaking off this influence. Some newscasters still talk on the air about "going to press" (even Walter Winchell, because he is essentially a newspaperman, has been guilty of this), and about "headlines," and about news "hot off the press" — expressions that are meaningless in the world of electronic communication.

When a man on a newspaper copy desk writes a headline, he often has a space problem. The word *investigation* is too long to fit into most headlines, so the word *probe* was devised. *Accord* will often fit, where *agreement* would not. There are hundreds of other short headline words, among them: quits, slays, quiz, flees, hails, clears, cites, curb, bar (for prevent), blast (for criticize), scan (for scrutinize), score (for criticize), rift, bare (for expose). This list may be augmented by looking over any edition of any newspaper in any city in the country. These are words seldom used in conversation and therefore should be avoided on the air, for the broadcaster is supposed to be talking the language of his listeners.

The Oxford Accent . . .

Nick Kenny, radio editor of the now-defunct New York *Daily Mirror*, once recommended "banishment, drawing and quartering, strangulation and incinera-

tion for all Americans affecting the Oxford accent." What he was protesting especially was radio announcers pronouncing *plan* as if it were spelled *p-l-a-h-n*. Or *passage* as if it were spelled *p-a-h-s-s-a-g-e*.

George Bernard Shaw said that while it was supposed to be a compliment to say someone spoke "the King's English," if the King himself were ever to talk over the radio with an Oxford accent (this was in the days before Elizabeth) "his people would instantly arise in rebellion and proclaim a republic."

Words to Watch

In English, perhaps more than in any other language, there are words which look or sound so much like other words, that some people use one when they mean the other, often to their own great embarrassment. Here are some pairs of similar words. If you ever use any of them, be sure you use the one you mean.

ALLITERATE	ILLICIT	MARITAL
ILLITERATE	ELICIT	MARTIAL
ANTIDOTE	IMMIGRANT	MORALITY
ANECDOTE	EMIGRANT	MORTALITY
CALVARY	INGENUOUS	NAVAL
CAVALRY	INGENIOUS	NAVEL
CORRESPONDENT	INTERVAL	PRECEDENCE
CORESPONDENT	INTERVALE	PRECEDENT
DEPRECATE	INTERPOLATION	STATIONERY
DEPRECIATE	INTERPRETATION	STATIONARY
EUPHUISM	INTERPRETIVE	THESPIAN
EUPHEMISM	INTERPRETATIVE	LESBIAN
GOURMET	INTIMATE	VAPID
GOURMOND	INTIMIDATE	VAPOROUS

Proper Names

A Guide to the Pronunciation of Proper Names and Place Names will be found in Section III. A word of caution, however. Names of cities that are spelled alike may be pronounced quite differently, depending upon location.

In Egypt it is KY-roh, but in Illinois it is KAY-roh. In Austria it is Vih-EN-uh, but in Georgia it is VYEN-uh. In Spain it is Muh-DRID, while in Iowa it is MAD-rid. In France it is Ka-LAY; in Maine, KAL-uhs. Prague rhymes with frog in Czechoslovakia, but in Oklahoma it rhymes with plague. In France it is Ver-SIGH, but in Kentucky, Ver-SAYLZ. In France there are almost as many Pierres as there are Johns, Williams or Georges in the United States and they all call themselves Pe-AIR, but the capital of South Dakota is plain PEER. Most of the Berlins in America (and there are many!) are called BER-lin, although the original in Germany is Ber-LIN. In Ohio and New Jersey it is NU-erk, but in Delaware it is NEW-ARK. The Greeks in Turkey call Ismir SMUR-nuh, but

New Smyrna in Florida is called NEW SUH-MERN-uh (three syllables, please.) It is Gruh-NAH-duh in Spain and Nicaragua, but Gruh-NAY-duh in Mississippi. Then there is Elgin. In Illinois the *g* is soft, where in Texas and Scotland it is hard.

Diacritical Markings

In Section III there is a table of diacritical markings. These are the signs used over letters in most pronunciation guides to indicate how the word is to be pronounced. These are the same markings used in most dictionaries, except Webster's New Seventh Edition. For a further study of the American pronunciation of English, the reader is referred to the preface of most collegiate or unabridged dictionaries.

Announcers should also be aware that there is an International Phonetic Alphabet (IPA) which transcribes all sounds into symbols. In this new alphabet there is one symbol for each different sound. IPA is used in the *NBC Guide to Pronunciation*.

Dual Pronunciation

The accent on many words changes, depending upon whether the word is used as a noun, an adjective or a verb. For example: *desert* is accented on the first syllable if a noun, on the second if a verb; *produce* on the first if a noun, the second if a verb. Sometimes the change is in pronunciation of vowels or consonants rather than in accent. *Use* as a noun is pronounced *use*, but as a verb it is *uz*. Here are some other words which can be looked up in a dictionary, if you cannot call to mind the two different pronunciations of each word, and which is which: *Absent, abstract, accent, addict, aged, adept, alternate, annex, buffet, compact, insult, minute, produce, progress, refuse, subject*.

Consonant Errors

There are many common consonant errors such as:

DROPPING A CONSONANT: *libary* for *library*; *eas* for *east*; *deps* for *depths*; *goin* for *going*; *beginin* for *beginning*; *sugesion* for *suggestion*; *rekonize* for *recognize*; *musmelon* for *muskmelon*; *sumarine* for *submarine*; *punkin* for *pumpkin*.

WRONG CONSONANT SOUND: *indiviyaul* for *individual*; *likorish* for *licorice*; *architect* for *arkitekt*; *cellist* for *chellist*; *concerto* for *concherto*; *crescendo* for *creshendo*; *awright* for *alright*; *awready* for *already*.

SOUNDING A SILENT CONSONANT: *glisten* for *glisn*; *toward* for *tord*; *often* for *ofen*; *comptroller* for *controller*.

Accent Errors

Many pronunciation errors result from accenting the wrong syllable of words.

It is amazing that a word used as frequently as *cement* should ever be mispronounced, yet some people insist on putting the accent on the first syllable instead of the second.

Here are some words, all properly accented on the first syllable, which are often mispronounced by accenting the second or third syllables: *comparable*, *autopsy*, *affluence*, *admirable*, *deficit*, *formidable*, *infamous*, *intricate revocable*.

Here are several words properly accented on the last syllable: *adept*, *crevasse*, *robust*.

Perhaps some will be surprised to know that:

The only possible pronunciation of *gelatinous* is with the accent on the second syllable.

Gondola, whatever its meaning, must be accented on the first syllable.

If you accent the second syllable of *hospitable* it will be all right in England but not in the United States.

If you pronounce *impotent* with the accent on the second you not only will be wrong, but you may be accused of being intellectually *IM-potent*.

Many people incorrectly pronounce *incognito*, with the accent on the third instead of the second syllable.

A word commonly used on the air and commonly mispronounced is *narrator*, which can be accented only on the second syllable.

Vowel Errors

The most common errors of pronunciation are of vowels. Is it *ul-ti-may-tum* or *ul-ti-ma-tum*? (Answer: The *a* is long, as in *may*.) Is it *to-may-toe* or *to-mä-toe*? (Both are correct.) Can *roof* be pronounced *ruf*? (No. It is *roof*.)

There are hundreds of others. Listen to other broadcasters and to educated people around you. Whenever you hear a pronunciation that conflicts with your own, check it in the dictionary or pronunciation guide.

Speech Exercises

There are five speech agents: the teeth, lips, tongue, hard palate (just behind the front teeth on the roof of the mouth) and the soft palate (the softer area of the roof of the mouth, lying back toward the throat.) Most people neglect their speech agents, permitting them to grow weak and lazy through lack of use.

Beneath the skin of the face lies an intricate network of nerves and muscles which enable one to move the various areas of the face. To speak clearly, distinctly and with no regional accent, one must learn to control the facial muscles, especially those around the mouth.

The best speech exercise is to practice contorting the face. Look in a mirror and see how many faces you can make at yourself. Bring the lips forward, hard, as far as possible. Then draw them back in a semi-smile as far as possible, saying the word "Why? Why? Why?" From this position, bring them forward

again, saying, "Yeow! Yeow! Yeow!" Try working the lips forward, then backward, then forward, saying, "Why, Yeow. Why, yeow. Why, yeow." Don't worry about feeling foolish or embarrassed. Work hard at loosening up the muscles of the mouth. Work on all the speech agents. Make them as pliable as possible. This is just a beginning. Invent your own variations. Try to bring every muscle of the face into play. Practice this every day.

Paul Mills, veteran actor and speech coach for radio and TV, has this basic rule: "To improve your speaking voice be mellow, like a cello." He explains that a cello's rich tones come from its long, thick strings (similar to vocal cords) and its large, hollow body (similar to the spaces in the throat, mouth and nose.) By opening the mouth wide and moving the lips vigorously, the size of the voice takes on a deeper, richer quality. Richness can be acquired, also, by stressing consonants, such as the first letters of *ww*wonderful, *yyy*oung, *rr*ich, *ll*oving, *mmm*umering.

Remember, your voice is what you make of it.

20.

Reporting The News

In 1917, when President Woodrow Wilson asked a joint session of Congress for a declaration of war, the news did not reach some remote regions of the country until weeks later.

In 1941, when President Franklin D. Roosevelt asked a joint session of Congress for a declaration of war, radio listeners in the mountains of north-east Oregon heard his voice sooner than Congressmen in the back row of the hall in which he spoke.

The power to transmit news instantly and to the farthest corner of the land has had profound effects on the lives of Americans. Broadcasters regard news as their chief responsibility. It has been of prime importance since the day in 1916 when Dr. Lee deForest broadcast to a few amateur radio enthusiasts the early returns of the Wilson-Hughes election, and two years later when Station 8MK Detroit (now WWJ) broadcast Michigan's primary election results, and a few months after that, when KDKA did its celebrated night of broadcasting the Harding-Cox returns.

From those first pioneer news broadcasts to the instantaneous, worldwide news coverage which broadcasters are now able to provide by bouncing signals off communication satellites orbiting through Outer Space, the story is one of almost half a century of spectacular progress in informing the American people electronically about what is happening in the world around them.

As more and more newspapers die or disappear through consolidations, broadcasters have an increasingly happy opportunity to demonstrate their ability to handle news. Forty years ago there were 522 cities in the United States

with competing newspapers. Today there are only 55. In nearly half the states in the country there is not a single city with competing newspapers. At the rate of more than one per year, metropolitan newspapers are being swallowed up by rival papers or are simply going out of business. And rarely is a new daily paper started. This has created and is continuing to create an ever-greater vacuum, which is being filled by electronic news reporting.

What Is News?

There is a myth about the word *news* — that it is an abbreviation of the four points of the compass. While it is true that news does flow in from north, east, west and south, the word is actually derived from *new*, with an *s* added. One of the best definitions of news says it is “tidings or intelligence of new and hitherto unknown things.”

An entire book could be written just answering the question: What is news? It depends upon many considerations. News for whom? What is news in Milwaukee is not necessarily news in Moscow or Madrid. What is world-shaking news to a woman (a decree by Paris fashion houses that hemlines will go down six inches) may be utterly boring to a man, while what is vital news to many men (a drastic change in federal interest rates) may be of no interest whatsoever to a woman. What is news to a farmer (a frost prediction) may be of no interest to a teacher. What excites a prince may bore a pauper.

For generations newspaper editors have told young reporters that while stories involving sex, murder, mystery and rags-to-riches (a London charwoman winning a million dollars in a lottery) may be of interest to *x* percentage or *y* percentage of their readers, the weather is the perfect story, because it is of interest to everyone. Yet even this generalization is false, for patients in a hospital may not have the slightest interest in the outside temperature or the possibility of rain.

What are the qualifications for something to be considered news by a broadcaster? There are nine fundamental elements. Rarely will any one story have all nine. Many that make the air have only one of the nine.

Timeliness

News is more perishable than a pail of ice cream on the back porch on a sizzling summer day. Or, news is like a cheese souffle; it must be served up while it is still hot.

Radio news has killed the “extra” editions of newspapers, and one-minute, two-minute and five-minute spot news broadcasts throughout the day have gone far in lessening the readership of lengthy newspaper articles. The script of last week’s radio news show is as worthless as last week’s newspaper — except for lighting a fire.

News has been called *history on the wing*. Yet if someone walked into a radio station with a well-authenticated letter written by Lee Oswald telling

why he was going to assassinate President Kennedy it would still be a big news story, despite the lack of timeliness, just as the discovery of the Dead Sea Scrolls or the opening of King Tutankhamen's tomb were once news, although both concerned ancient history. The future can also be news. Example: if a scientist were to predict that within ten years, by use of a new atomic discovery, the Sahara Desert would be converted into a Garden of Eden.

Propinquity

Surveys prove that the word used more than any other during telephone conversations is *I*, with *me*, *my* and *mine* the runners-up. *My* car. *My* family. *My* friend. *My* house. The more intimately the news affects the life of the listener, the more interest there will be in it. That is why stories about the weather are the most important items of all. Anything that affects the listener's pocketbook is also high on the list.

Propinquity can also be geographical. The publisher of the Philadelphia *Record*, now defunct, used to tell his staff: "A runaway horse on Broad Street, Philadelphia, is of more interest to readers of the *Record*, than ten thousand people drowned in a flood in China."

If Albert Einstein were to have said that American teen-agers are more intelligent than any other young people he ever met, it would have been worth a sentence on a newscast over Station XYZ, Anytown, U.S.A. But if Einstein, on a visit to Anytown, had said in an interview that he considered the teen-ager of Anytown more intelligent than any other young people he ever met, the story would have been worth far more than a sentence on Station XYZ.

A meeting at which the City Council of Anytown decides to purchase voting machines and build a municipal swimming pool is likely to be of more interest to Anytown listeners than a U.N. meeting in Geneva at which a decision is taken that will settle the fate of several small nations. Yet a U.N. meeting may suddenly take on great importance for Anytown if a decision is reached that will bring thousands of American soldiers home from remote parts of the world, including a number of men from Anytown.

Prominence

The prominence may be of *people*. If the daughter of the mayor of Anytown is kidnapped it is obviously a more important story than if the victim is the daughter of an obscure family, whereas it would be even more sensational if the girl were the daughter of the President of the United States.

The prominence may be of *place*. The most important street in the world is the street on which the listener lives. If an accident occurs on that street, it is of more interest than if it happened on the other side of town. In like manner, if someone falls from the top of the Empire State Building or the Statue of Liberty — structures known to all radio listeners — it is of more interest than if he fell from the roof of a factory in Brooklyn.

Certain place names have more interest than others. Listeners know (or know about) The Strip, Las Vegas; the casino, Monte Carlo; the Loop, Chicago; Fifth Avenue, New York; Pennsylvania Avenue, Washington; the Champs Elysees, Paris; Picadilly Circus, London.

- There is more news appeal if the violin that was lost was a Stradivarius; if the painting that was stolen was a Picasso; if the manuscript of an unpublished novel just discovered was by Hemingway.

The Cult of the Personality in America does not mean what it means in some other parts of the world, but it does mean that radio and TV listeners are interested in names — in people — in famous athletes, actors, actresses, mountain climbers, explorers — yes, and broadcasters, too. Interested in what they eat, with whom they elope, what they wear to sleep, how they made their first dollar, where and how they would like to spend their last hour on earth.

Tens of millions of people in the summer of 1966 spent tens of millions of hours watching on television the wedding of President Johnson's daughter. A great many other girls were married that same day, but the public showed slightly less interest in them than in Luci Baines Johnson.

Conflict

War is conflict. So is a sports contest. Every conflict has listener-appeal, even if it is only a conflict between man and nature, which is what a flood is, or a fire, a tornado or a sea disaster. The most common conflicts between humans are wars, revolutions, race riots, strike troubles, street fights, cops-and-robbers battles, and husband-wife altercations. An election contest is conflict. So is a proxy fight of stockholders. So is a Miss America beauty contest or a squabble between two Washington dowagers over which is going to have the Vice President for dinner on the thirteenth.

Suspense

Interest in a news story builds. There was worldwide interest the night of the kidnapping of the Lindbergh baby. But as days went by and there was no trace of the child, interest mounted and mounted. Few news stories in American history have had the elements of suspense over so long a period as the Lindbergh case — until the body was found, then the kidnapper was captured, tried and finally executed. There is suspense when miners are trapped underground, or an explorer is entombed in a cave, or rescuers try to reach injured mountain climbers on the top of a Swiss Alp. Murder trials often have interest because of the suspense over what the verdict will be.

Consequences

Provincialism has come to mean the quality of having the limited interests of an isolated, rural part of the country. But airplanes, radio, television — rapid transportation and instantaneous communication — have obliterated provin-

cialism in America. In Anytown there may be as much interest in national and world affairs as in New York or Los Angeles. Also, there is an ever-growing awareness that what is done in Congress, in the U.N. Building in New York, or in international meeting places thousands of miles from these shores, not only *may* but surely *will* affect what Johnnie will do when he leaves college, and whether the family will be able to afford a new car next year, and what life will be like after Dad retires on his pension. Stories about new drugs, space achievements, unusual uses for computers and atomic energy, and transportation developments are all of interest because of probable consequences in the life of Everyman.

Oddity

The fundamental rule of American journalism is that if a dog bites a man, it is not news, but if a man bites a dog it is. If twins are born in a helicopter, if a deacon robs a church, if a "dead man" appears at his own funeral, if a police chief is arrested for speeding, if a temperance leader is found guilty of intoxication, if a bridge player with thirteen spades loses his bid, if an iceberg appears off the coast of Florida — that's news! An exotic, off-beat story about a haunted house, a flying saucer, a ghost, a pirate ship, buried treasure, or a reformed cannibal going into the restaurant business is always welcome, as a kicker at the end of a newscast.

Human Interest

Stories that appeal to basic human emotions are said to have *human interest*. A dog that takes up a vigil beside the grave of his master. A duck that leads seven ducklings across a busy highway, while hundreds of cars screech to a halt. A child who runs back into a flaming building to rescue her doll. The artist without arms who has his first exhibition of watercolors. There is no end to stories that pull at the heartstrings, cause laughter, stir sympathy, create envy, spark a burst of generosity, or cause the listener to say: "Now wasn't that just too wonderful for words!"

Sex

The word *sex* is taboo on some stations, but the subject cannot be avoided. The male-female relationship underlies news stories of crime, romance, marriage, divorce, and sometimes even politics and international affairs. In whatever guise, it has great listener-appeal.

The Lindbergh Kidnapping

The reason radio news editors devoted more attention to the Lindbergh kidnapping case than to any news story until then was because it combined all nine of those elements. Timeliness was in the frequent fresh developments. Proximity was in the identification that parents all over the country made

with the case. ("What if it had been *our* baby?") Prominence was in how well known the Lindberghs were. Conflict was in the police-kidnapper battle of wits, as the man responsible for the crime was being hunted. Suspense was in the many long weeks it took to catch him. Consequences was in the fact that the case would eventually lead to passage of a federal anti-kidnapping law. Oddity was in such angles of the case as the home-constructed ladder left behind by the kidnapper. Human interest was in such side-stories as the one about the mother of twin boys who offered to give one of them to the Lindberghs to take the place of the murdered child. And there was even romance, for only three years earlier the public had followed with great interest the courtship and marriage of the modest young flier and the daughter of a millionaire official of the banking firm of J. P. Morgan and Company.

Speed

News has been called "history in a hurry." All reporters work against clocks — or calendars. But broadcasting reporters have special problems. The newspaper in Anytown may have three editions, so the reporter has to meet just one of three different deadlines. The television reporter may be working to get his film shot and processed in time for a 7 p.m. news show. But the radio reporter's goal is to get the story onto the air at the earliest possible moment. He has no deadlines of any sort. He is always "right on a deadline." The radio reporter has competition from all sides: from newspapermen, from television reporters, and from rival radio stations. All the more reason for speed!

This need for speed gives the radio reporter the most exacting and difficult of all news-gathering tasks. He rushes to the scene of the story. If he is going to use a tape recorder, he may have certain mechanical details to worry about, such as a strong wind fouling up the tape, or the batteries suddenly going dead. If he is working with a mobile unit, there may be even greater technical problems. Yet he must go after facts the way a hound dog does after a rabbit.

Reporters are rarely on the spot when something happens. The first tip probably comes from a listener. At the scene the reporter finds a thicket of hub-bub and perhaps even hysteria. He must push his way through the crowd, using his police and radio credentials, and start collecting facts from policemen, firemen, doctors and rescue workers. He should try to question the top man on the spot — the fire chief, the senior police officer present, the driver of the death car, or the prisoner who has just been arrested for the murder. Whatever the nature of the story, he must remember the reporter's old Five-W-Rule: Who? Where? When? Why? What? To which should be added: How?

Accidents

Whether it is an automobile accident, the collapse of a scaffolding or a railroad wreck, the prime questions to ask are, in the order of their importance:

How many killed? Their names and addresses.

How many injured? Their names and addresses.

What caused the accident?

Exactly what did eyewitnesses see?

What is the property damage?

Have there been any arrests yet?

Will an investigation be made?

After those questions have all been answered (or while in the process of getting the answer) the reporter may begin picking up human interest angles. The seriously injured child still clutching her doll. The newspaper on the front seat of the death car with a big headline about an almost identical accident. The fact that the accident happened in front of 1313 Thirteenth street, on Friday the thirteenth.

Be careful in reporting the accident not to place the blame on either car involved in the collision. Do not say that Car A *crashed into* Car B, or that either driver was on the wrong side of the road, went through a traffic light, or was driving under the influence of liquor, or even that he was speeding. These are judgments that only a court can make.

Should a broadcaster announce on the air, before next of kin have been notified, the name of someone killed in an airplane or automobile accident, or who met death in a disaster, or who was found murdered? Neither FCC regulations nor NAB Code rules cover this point. It is a matter of policy — the policy of the individual station or of the local authorities, who may refuse to give out the names of the dead until the news can be broken to relatives more gently than by letting them hear it by radio or television.

Fires

Most of the accident questions also apply to fires, explosions and similar occurrences, but these additional questions should be asked:

Were any firemen overcome by smoke or injured? How? Get names and company number.

How many fire companies responded? Was it a 3-11 or 4-11 alarm?

How much of the property loss was covered by insurance?

Even if there were no deaths, injuries or great property damage, there may be a story in off-beat circumstances, such as the explosion of a bottle of nail polish remover in a beauty shop, sending terrified lady clients with their hair in curlers rushing into the street.

Suicides

Great caution should be taken in reporting what may appear to have been a self-imposed death. In the case of a fall from a high building, there is often uncertainty as to whether it was an accident or suicide. If there were no

witnesses, no one may ever know positively what happened. If the reporter says *fell* it implies an accident; if he uses *jumped* it makes it intentional. The safe word, although trite, is *plunged*. Always quote by name someone — preferably a police official — as saying what happened. To avoid encouraging others to commit suicide, details should never be given of the method used, such as saying that the poison taken was a certain brand of weed killer obtained at any hardware store.

Disasters

On every news room wall there should be posted a complete list of all news sources and contacts, kept up to date, including the name, address and telephone numbers of all hospitals; local, county, state and federal law enforcement agencies; civil defense and relief organizations; the Red Cross and the National Guard; airports, air line offices and air traffic control towers; city, county and federal officials living in the community. In the case of organizations, the names of at least two key individuals in each one should be listed, with home addresses and phone numbers.

At the first report of a disaster, calls should be made to the competent authorities, offering the services of the station in informing the public, assisting in rescue work, and preventing the spread of panic. Most officials will be eager to cooperate, knowing that in such an emergency radio is the one communications medium that can get information quickly to the public and help mobilize the community's resources.

Interviews

There are three ways of interviewing: by telephone, by personal confrontation and by mass interview, such as a White House news conference. The interview may be news worthy because of the importance of the person being interviewed. (An exclusive interview with the President of the United States would be a real scoop, even if he said nothing more important than that he was now doing some landscape painting in his spare time.) Or because of the importance of what the interviewee says. (Even if a minor official of the Federal Aviation Agency said that the airport in Anytown was to be closed permanently, it would be important news on Station XYZ.) Or the entertainment value of the interview may make it news worthy. (A small child might give such amusing replies to serious questions that the interview would have wide listener-appeal).

In any community, however small, there are men and women who would make good subjects for interviews, if the reporter has the imagination to ask questions that will produce news-worthy answers. Then there are always people passing through town: a well-known athlete, inventor, explorer, scientist or film star, who may have come to deliver a lecture, visit a sick relative or attend a convention.

If there is enough advance notice, the radio-television reporter should prepare for the interview by looking up the background of the celebrity and writing out questions to ask that will lead the interviewee into revealing, commenting or predicting in a news-worthy vein. The questions should be on subjects the interviewee is qualified to discuss. Generally, an architect should not be asked about women's styles, nor a Paris dress designer about flood control, nor a film actor about American foreign policy, although at times an interview can be given a fresh twist by doing exactly that.

The broadcasting reporter has an advantage over his newspaper colleagues if he is working with a tape recorder, because he does not have to scribble with a pencil. He can focus all his attention on the interviewee. He can look him directly in the eye when asking questions, and he can at least *pretend* to be interested in the answers. Also, if his words have been recorded on tape, the interviewee cannot claim later that he was misquoted.

News Conferences

For years the pen-and-pencil reporters resented the presence of electronic reporters at news conferences, because the cameras, lights, wires, microphones and other equipment interfered with the old question-and-answer routine. By now they have learned to live with these annoyances, just as they earlier learned to tolerate the annoyance of photographers' flashbulbs.

If there are no microphones present, the interviewee may give some off-the-record answers to reporters' questions. The expressions *for background only* or *not for attribution* means that the answers may be printed but the reporter himself must take responsibility for the statements, or must attribute them to a *government spokesman* or some other semi-anonymous source, not even implying the identity of the real source. Reporters are on their honor not to violate such agreements.

Sidewalk Interviews

Long before the days of radio and television, newspapers conceived the idea of printing short, thumbnail interviews of several sentences, generally on a single subject, under a caption *The Inquiring Reporter* or *The Inquiring Photographer*. The question asked is generally about some local matter, such as: *Do you think Anytown should have a new municipal swimming pool?* Inquiring Radio Reporters and Inquiring Television Cameramen have put new life into this form of interviewing.

In doing sidewalk interviews, keep the questions short. Encourage short, snappy replies. If the tape recorder does not have *balanced input*, judge carefully the strength of the interviewee's voice and hold the microphone at the correct distance from his or her mouth. Be sure to ask name and full address. Tell where the interview is taking place. Don't let the answer dribble off in a series of *ah's* and *eh's*. Break it off clean with a bright "Thank you!"

Lectures and Speeches

Hardly a day or an evening passes, in even the smallest community, during which talk does not make news. It may be an outstanding sermon by a minister, priest or rabbi; statements made at a political rally, a convention, a lodge meeting, a revival, a Rotary luncheon, a session of the City Council or a public lecture. Sometimes radio and/or television will cover such events *live*. Or a tape recorder may be used and pertinent excerpts used on a newscast later. Or the radio-television reporter may cover the event with pencil and notebook.

Most speakers, especially politicians and public officials, speak from prepared texts and supply reporters with copies in advance. If a news report is based on such an advance, care must be taken to use such expressions as "prepared for delivery at . . ." for the speaker may become ill, drop dead, send his regrets, or change his mind and say something quite different from the text.

Shorthand

Public speakers will rattle off as many as 200 words per minute. Writing longhand, it is difficult to take down more than forty words per minute. Yet direct quotations are valuable. They enliven the report of a debate or a speech. This raises the question: Should a reporter know shorthand — Gregg, Pitman, Speedwriting or one of the other complicated systems? Some news directors say "No!" because it makes mere stenographers out of reporters. Others think it is an advantage. Most experienced reporters have their own private shorthand systems. Here is how a reporter's notes might look:

Robt. J'son VP NH sav & loan as. 350 m/g Rot. H-R
 "Sinc Feb en O suff gt stag cr nw bngg
 aff US/Ess IF ex cr. vs live gt. r. fund
 + Eur. LA vs clay link intgr. ec-y."

Translated into broadcast-English, the notes mean:

Robert Johnson, vice president of the New Hampshire Savings and Loan Association, addressing 350 members and guests at the weekly Rotary Club luncheon today in the Hilton Hotel, declared:

"Since February, the entire world has been suffering from a great strangulation of credit, which is now beginning to affect the United States. It is essential if we are to have credit expansion, for us to have a great revolving fund, with western Europe, Latin America and the United States closely linked in an integrated economy."

Quotations

Direct quotations improve any story, but great care must be taken that every

word quoted is exactly as uttered. There is one exception to this rule. It is standard practice on newspapers, as well as in radio-television reporting, to clean up the English of the speaker. Even the most polished and best-educated speakers, when talking extemporaneously, make grammatical errors. If the quotation is on tape, it must be used as uttered, but when a reporter in his own voice quotes a speaker, it should be in proper English.

Objectivity

Reporters are human beings, each with his own private collection of hopes, fears, dreams, likes and dislikes, phobias and prejudices. Reporter A may be a white Catholic of Irish background, a conservative Republican, father of five children, strongly opposed to birth control, socialized medicine, admitting Communist China to the United Nations, parking meters, women wearing slacks and bussing children to integrated schools. Reporter B may be a Negro Baptist, a liberal Democrat, with one child, and an ardent advocate of birth control, socialized medicine, Chinese membership in the U.N., parking meters, women wearing slacks and bussing children to integrated schools. Each of these men is put to a test when reporting a political rally or a debate in which subjects are discussed about which he has strong feelings. Yet objectivity is an essential of good reporting.

Listener Tips

Because the human voice is more intimate than the printed words, radio newsmen soon acquire a much greater personal following than do newspapermen, and they often receive tips by telephone. These calls must never be considered as anything more than clues to tracking down a possible story. Nothing should ever be put on the air based merely on a tip from a listener. Even if the call purports to come from some official, the information should not be used without calling back, unless the newsman knows the voice well enough to be certain he is not the victim of a hoax. Radio stations receive much false information, especially if they encourage listeners by offering prizes for news tips. Some stations pay policemen, firemen, taxi drivers and minor officials for tips, either openly or "under the counter." In some cities radio stations have working agreements with certain newspapers, involving the exchange of news tips. In other cities there is cut-throat competition between radio-television stations and the press.

Alibi File

Every radio-television newsman should have two folders in his desk, one marked *Current* and the other *Last Month*. In the current file he should put the raw material of all his stories: texts of speeches, handouts, his own notes, etc. On the last day of the month the contents of *Last Month* should be thrown away, and the contents of *Current* put in the *Last Month* folder. This is called an

Alibi File. In the event of a complaint about a news story (for example, from a speaker who claims he was misquoted) the Alibi File may enable the reporter to prove that his story was correct as broadcast. (If there is never any need to refer to the Alibi File, so much the better.)

News by Mail

The news department of any well-established station is flooded each day with so-called news releases, from commercial firms, non-profit organizations, clubs, committees, boards, commissions, agencies and leagues for this-and-that. Ninety per cent will be (should be) consigned to the wastebasket. But each day somewhere in this mass of printed material may be a good item for a local news show. There are no rules for dealing with this flood of words. Much depends on the nature of the station's news format.

Calendar of Events

Many stations devote a specific period each day (or each hour) to reading notices of forthcoming local events that have been sent in by program chairmen and those in charge of meetings, luncheons, dinners, lectures, dances, conventions and other non-profit-making affairs. This can win many friends for the station. If overdone, it can also lose many listeners who tune to another station for news or music.

Morgue

To an undertaker a *morgue* is a place for dead bodies; to a newspaperman it is the paper's library and reference room. Many large broadcasting stations have established such rooms. Nothing is more valuable to a reporter who, for example, is about to sit down to write a story about the death of the mayor, than to be able to look over an envelope full of newspaper clippings about the subject of his story. In addition to clippings, the envelopes in a broadcasting morgue should contain carbon copies of previous broadcasts about the subject. How much manpower is expended keeping a morgue up to date depends on the station's finances, on how much importance is given to news, and on whether management is aware of how valuable a morgue can be in a news operation. If the morgue is a good one, the envelopes or folders under the letter *D* might be headed:

DALE, ROBERT
DANISH CONSULATE
DAUGHTERS OF THE AMERICAN REV.
DAYLIGHT SAVING TIME
DELTA AIR LINES
DEPT. OF DEFENSE
DISTRICT ATTORNEY
DISTRICT COURT

DODD, MAYOR JOHN

DOGS

DOLFFUS, A. B.

DRAFT BOARD

News Room Library

If there is no morgue, there at least must be certain books available in the news room. If the station can afford only one book, it should be the first on the list; if only two, the first and second; etc.

UNABRIDGED DICTIONARY. This is the bible of anyone using words as a tool.

THE WORLD ALMANAC. Approximately 900 pages of invaluable reference material. An annual.

AN ATLAS. Should contain maps of each state as well as of foreign countries.

WHO'S WHO. Published every two years. Invaluable.

N.Y. TIMES INDEX. Even if no file of the paper itself is available, the Index at least tells exactly when and where things happened.

WHO WAS WHO. This is made up of the biographies removed from *Who's Who* after people have died.

YEAR BOOK. Each encyclopedia publishes an annual, covering events of the previous calendar year around the world.

ENCYCLOPEDIA. The *Britannica* is the most exhaustive, but it can also be exhausting for anyone looking for a quick fact. The *World Book Encyclopedia* is kept more up to date than any other, each of the 21 volumes being revised annually. Most entries are short and concise.

FACTS ON FILE. Pages to be inserted in a looseleaf binder are sent bi-monthly.

They give a summary of the news for that period by date, place and subject matter. Cumulative indexes are supplied monthly, quarterly and annually.

READER'S GUIDE TO PERIODICAL LITERATURE. This gives a list of all magazine articles published, by subject matter.

THE BIBLE. It is often necessary to check Biblical quotations.

Plus state and local year books, directories and guide books.

Futures File

It can be a box file, a drawer in a steel cabinet or a large date book, but whatever form it takes, it is the most important accessory of the news director of a broadcast station. If it is a file, there must be a folder or compartment for each of the 365 days of the year. Into this file will be put letters, news releases, notifications, reminders of events occurring on that particular day which may be worth reporting. These may concern such diverse matters as a divorce trial, a special Rotary meeting, a church revival service, the start of Jewish high holidays, a partial eclipse of the moon, a basketball game, an important marriage, the opening of the fall session of court.

It Happened Today

A good one-minute to five-minute spot can be written each day if the news room library is equipped with one of the many books available that give, chronologically, from January 1 to December 31, the various events that have happened in the past on that date. Look over the various books of this category in your local public library then send for the one that pleases you best. At the same time the alive broadcaster will start compiling a date book of local events and anniversaries. Include the birthdays of prominent local people, who will be flattered to have their birthdays mentioned on the air along with those of such important people as the President, Einstein, the Governor, Lincoln, Washington, Roosevelt and other world figures. From other sources the broadcaster should compile lists of special days and weeks. (Groundhog Day. National Poetry Week.)

Exposés

How much initiative a station shows in handling news may vary from the extreme of just tearing copy off a press association machine and reading it on the air periodically, to the other extreme of editorializing (see Chapter 36) and conducting periodic exposés and crusades. A few stations have won prizes, have greatly increased their listening audience, and have helped revolutionize community life by campaigning against certain local conditions or local abuses. The exposé can be of such diverse matters as bad housing, corrupt politics, overcrowded jails, inhumane treatment of patients in a mental hospital, fire-traps, dirty beaches, vote frauds, payroll padding, prostitution, nepotism, gambling or unsanitary conditions in local restaurants. Reporters and photographers are assigned to gather facts and film, which are blended into provocative documentaries. Such exposés can be either on radio or television or both. They can spark weeks of controversy, follow-up stories, local excitement and possibly ultimate reform.

Some newspapers carry a *Platform* under the masthead at the top of the editorial column. Some radio and television stations have also devised, publicized and broadcast platforms for a Better Anytown.

Invasion of Privacy

Newspapers, fiercely competing for circulation, have often violated their own code, which says: "A newspaper should not invade private rights or feelings without sure warrant of public right as distinguished from public curiosity." Radio-television newsmen have thus far been less guilty.

Wives and children of criminals and those involved in unsavory news stories should not be hounded by reporters and photographers. However, it is a matter of station policy whether the names of victims of rape or attempted rape should be used; whether to mention the place of employment of arrested per-

sons; whether to use on the air the name of a hotel or place of business in which a crime has been committed; whether to use the names of juvenile first offenders.

Respect Confidences

Important news is often given with the understanding that its source will not be disclosed. There have been court cases in which an attempt has been made to force reporters to violate such agreements. In general, a newsman should and must respect confidences if he expects to be given inside tips.

Whether it is legitimate for a reporter to use subterfuge to gain news is an ethical question that each newsman will have to decide for himself, taking into consideration all the circumstances.

The Two Extremes

The NAB, as an illustration of the extremes in the handling of news, describes two actual operations, although the call letters of the stations are not given:

A top power radio-TV outlet in a highly competitive Midwestern metropolitan market employs 34 in its news department. This department functions for both radio and television. Sixteen staff news writers prepare newscasts. Three two-man camera crews and two film editors supply the ingredients for four 15-minute TV shows daily and two half-hour TV local summaries on weekends. Among those working under the news director are a TV news editor, a radio news editor, an assignment editor, a special events director, and a three-man news bureau. This particular station also subscribes to a 40-reporter news bureau in its city. A dozen radio newscasts ranging from five to 15 minutes each are produced daily. One writer is assigned to each radio and TV news show.

A low power radio station in an East Coast summer resort consistently scores local "beats" against heavy competition from a nearby big city. Yet this station operates with only a one-man news staff, plus the help of the program director on special events and feature stories, and the legwork of all other station personnel whose cars are equipped with police radios and two-way broadcast units.

A Typical News Room

In between those two extremes is WFAA-TV, a very progressive station in Dallas, Texas. Travis Linn, news manager of WFAA-TV, wrote the following description of his operation for the *Encyclopedia*:

The WFAA-TV news department consists of nineteen men, most of them "photographer-reporters" who primarily move around the city and the area, gathering and filming news. A handful of specialists stay in the shop for writing, editing and production.

The television news department works closely with a seven-man radio news department. While both departments work in the same room, they are kept separate in their functions. Frequently, both will cover the same story independently, then share the results of their coverage. At other times, they'll cover a story together. So, while they are separate departments, they are not competing departments.

Whenever a story of major importance or interest to Dallas-Fort Worth develops, WFAA-TV usually puts together a topical "news special" on the subject.

For example, the station recently aired a special on encephalitis, while the epidemic was at its peak. A special unit composed of a photographer and a writer-producer handles this task. The special unit also puts together approximately twelve documentaries each year on a more long-term basis.

The television news department supplies news for an early morning news summary at 6:55 a.m., forty-five minutes of news at 5:45 p.m. and a thirty-minute news block at 10:00 p.m. This, of course, is in addition to network news programming.

Plans for the future include increasing the amount of news on the air, and concurrently increasing manpower and facilities in the news department. The so-called "instant specials," such as the special report on encephalitis, are considered very important, and an increased effort will be made to make them meaningful and current.

Radio-TV Scores a Scoop

Shortly before noon on August 1, 1966, a student at the University of Texas went berserk and turned the campus into a shambles, shooting from the highest building in Austin with a rifle at those he spotted through a telescopic sight. It was one of the most sensational shootings in the annals of American crime. The part that radio and television played in getting the news to the world was told by *Broadcasting*, the business weekly of television and radio, in its issue of August 8, 1966. The article is reprinted below with permission of the copyright owners:

THE AUSTIN STORY

It wasn't very long ago that the broadcast newsman would be the last man anyone would call to find out what was going on when a big story unexpectedly broke in any community. Now he's apt to be the first.

Take, for example, the story that broke in Austin, Tex., on Aug. 1 when Charles Whitman began shooting from the University of Texas's tower. The main source of news for the nation and the world was KTBC-AM-TV Austin.

KTBC broadcast its first radio bulletin on the sniper at 11:59 a.m., four minutes after the first police report of firing, and its first television bulletin two minutes later. Within 20 minutes it went live, on both radio and TV, to the university campus, and stayed there until the assassin had been killed and taken from the tower. (KTBC-TV's coverage was enhanced by the use of a live camera provided by the educational TV facility at the university. KTBC has no live remote TV camera of its own.)

In addition to programming its own stations, KTBC provided audio feeds to CBS Radio and to hundreds (nobody kept an exact count) of radio stations that called from all over the U. S. and Canada. It supplied a four-minute edited television feed to CBS-TV and NBC-TV for their early evening news and provided action footage that was used later that night on a CBS-TV news special and the next day on NBC-TV's *Today* show and a special report.

For a while, during the siege on the campus, the United Press International bureau in Austin quit filing its own reports to UPI's Dallas regional office and simply put a radio set tuned to KTBC by a telephone connected to Dallas.

KTBC's own 6 p.m. regular evening news show was devoted entirely to coverage of the murders. At 10:30-11:30 p.m. the station broadcast an hour special that included tapes and films of the scenes of the shooting, live interviews with key figures in the story and reports on Whitman's background and the notes he had left—a detailed wrap-up of a shattering story that had begun less than 11 hours before airtime.

KTBC was able to rise to an occasion it could never anticipate because of the journalistic talent it has attracted and kept—a dozen newsmen who can report, shoot film and appear on the air, headed by Neal Spelce, director of television news, and Joe Roddy, radio news chief. Several of the station's journalists have advanced degrees, and others are studying for them.

There are many other stations that could do as well—and for the same reasons. The spread of professionalism through broadcast journalism has made the difference between a medium that once took its news from someone else and a medium that everyone else now turns to.

It's a long time between stories as big and terrible as Austin's story of Aug. 1. But there is plenty of other news—less dramatic but probably more important—going on all the time in every community. It is worth covering as expertly as KTBC covered Whitman, and it demands quality work from qualified journalists.

Libel

Accuracy and objectivity are not always enough to protect the reporter from being sued for having committed the sin and the crime of libel. The Supreme Court has ruled that while the First Amendment guarantees freedom of speech, no one has the right to "infringe upon the rights of another" or to injure another's "private reputation."

The libel situation is different in each of the 50 states. A conscientious broadcaster — who also wants to stay out of jail — will ascertain exactly what is and is not permitted under the libel laws of the state in which he is working. For example, some states forbid attributing depravity, criminality, in chastity or lack of virtue to members of religious or racial groups.

In order to collect libel suit damages, it is not necessary to prove that a deliberate attempt to injure someone was made.

If a broadcaster says: "Mr. X says that Mr. Y is a thief" and if Mr. Y sues the broadcaster, it is not enough for the broadcaster to prove that this is exactly what Mr. X said. The broadcaster must further prove that Mr. Y is, in fact, a thief. The moral is, the broadcaster must never quote a person as saying something that he, the broadcaster, knows to be untrue or even questions. He should ask himself: "If sued, could I prove that what he is saying is true?"

Here are some words that are libelous *per se* (in themselves) if used about a person who has not been convicted of the crime: firebug, quack, drunkard, gambler, shoplifter, traitor, loan shark, scab, smuggler, thief, abortionist, degenerate, conspirator, forger, deserter, cardsharp, adulterer, crook, imposter, grafter, burglar, counterfeiter.

It may be libelous in your state to say a person is or was a Communist, a *pink*, a fellow traveler, an anti-Semite or a Nazi, unless there is proof that will stand up in court.

Street addresses are important elements of a story, but a reporter can get himself and his station into great trouble by making an error of even one digit, saying "1234 Main street" when it should have been "1236 Main Street." Some stations skirt around this danger, as some newspaper also do, by instructing

their newsmen never to use the precise address, but to say, for example: "the 1200 block on Main Street."

In general a dead man cannot be libelled, but there is an odd exception. A son can sue (and probably collect) if a broadcaster says that his deceased father had a venereal disease, because most venereal diseases are hereditary and this would make the son the victim of the libel.

The best defense in a libel case is to prove (a) that the statement was true, (b) that it was privileged (made on the floor of Congress, in court, or in an open meeting of a governmental body, or by the head of a law enforcement agency), or (c) that it was used with good motives for justifiable ends.

Under the law in some states, the amount of damages may be reduced if an apology has been made and is given the same importance as the original statement. Some insurance companies will insure broadcasters against damage suits.

In-Depth Programs

Television's greatest contribution in the news field has been in presenting periodic quarter-hour or half-hour programs that explain in words and pictures the background and significance of a current news event. All the networks now have such programs, which take weeks of planning, filming, cutting, editing and voicing, and may involve thousands of miles of travel by a large crew of photographers, newsmen, producers, directors and technicians. Such a program may be about a single situation in a single country, or may be a patchwork of film shot on the same subject in many different parts of the world; for example, a documentary on the conversion of sea water to fresh water by atomic energy.

News Directors

The key man in any station's news operation is the news director, who should have (and generally does have) these qualifications: (a) a good background in actually reporting, writing and broadcasting news, (b) good executive ability, (c) a knack for making quick decisions when news is breaking fast, (d) an extrovert personality that will help him win the cooperation of a small army of tipsters, (e) the imagination to create new programs, different from those of the competition, (f) a keen sense of curiosity, and (g) an interest in people, who are the raw material of every news story.

How to Get a Scoop

A scoop is the act of obtaining a piece of news before one's competitors get it. Ulmer Turner, veteran Chicago broadcaster, who has had many amazing scoops in his years on the air, gives this recipe for *How to Get a Scoop*:

Scoops result from hard work and digging out the facts yourself, or from tipsters along the way. Cultivate sources of possible tips, such as police officers, city or village fire fighters, hotel clerks, in large cities hotel press agents, neighbor-

hood druggists, lifeguards at public beaches, and especially railroad conductors, engineers and porters. (You'd be surprised how many really good tips newsmen have had in the past from this source!)

Police all over the nation are more astute today than they formerly were. Many have college degrees; some have post-graduate degrees. Treat them accordingly and next time an officer has a scoop, he just might call you!

All the tipsters in the world, however, would not be of any use if they couldn't reach you the moment they think they have a good hot tip. Naturally you will have your personal calling card to give to any and all possible future news sources. On this card, include two things the average newsman seems to overlook. In addition to your office or station phone number, give them your home phone number and one other number where you may be reached if you are not to be found anywhere else. News is a 24-hour operation. Play it that way. Let your tipsters be able to reach you, night and day.

Some Do's and Don't's

Some of the following taboos are unwritten rules of reporting, whether for newspaper, radio or television. Others are based on legal prohibitions. Some apply only to the electronic media.

1. Avoid any words referring to race, color or religion that would be offensive, such as *greaser*, *nigger*, *spick*, *dago*, *wop*, *mick*, *kike*, *wetback*.
2. Avoid using dialect, such as *faith an' begorra* (Irish), *dese and dem* (Brooklyn), *you-all* and *suhs* (Deep South), *jolly good show*, (English), *ach and ja* (German), *mamma mia* (Italian), *velly-velly* (Chinese).



News caster Ulmer Turner

3. Avoid profanity and obscenity. (Newspapers can be subtle and use dashes. "He called him a ————." or "War is h———." Electronic reporters must either invent their own subtleties or avoid even implying.)
4. Beware of stories about epidemics, riots, ghosts, miraculous cures, invasions from other planets, and predictions of the end of the world.
5. Never broadcast rumors, even to deny them.
6. Remember the jingle of the British editor:
"Thrice blessed is he whose statements we can trust,
But four times blessed is he who gets his news in fust."

A Newsman's Prerequisites

Paul White, for years the aggressive news director for the entire CBS network, once said that the radio-TV newsmen needs integrity, curiosity, energy, good health, intelligence, objectivity, resourcefulness, "and the ability to survive innumerable toasts at a Russian banquet."

Why the Electronic Impact

Harry Reasoner, one of the top CBS newsmen, once made these remarks about broadcast-news in addressing a group of aspiring young broadcasters:

Broadcast-news if it is carefully and imaginatively built by people who believe in what they are doing can dramatize the events of our time in a way no newspaper or magazine can do. It has an impact when it is done right that should give everyone connected with it a feeling of reverent respect. It can also be dull and cowardly and inconsequential. If you come into the news-reporting fraternity, see that it gets better.

What Makes for Success

Lowell Thomas, who broke into broadcasting in 1930, once gave the secret of his third-of-a-century of newscasting success in these words:

I avoid gossip, scandal and as much crime as possible. One should first of all, I believe, attempt to entertain. Except in time of war, crisis, plague or catastrophe, information should be put across in the form of entertainment. A brilliant statesman once told me, "My boy, you'll win if you'll always buoy your philosophy on a sea of humor." I try to play the role of troubadour, giving the story of the day-by-day adventures of mankind. I try to avoid mannerisms in my delivery. I think stylized speaking is good only as a novelty. It's all right for once-a-week broadcasting, but it is tiresome if heard every day. I try to avoid the pontifical, both in material and delivery, for some of my listeners always know more about the subject than I do.

Shirrtail

As the NAB puts it:

. . . we will succeed or fail as media of communication according to the skill, accuracy, objectivity and speed with which we cover the news.

We must accept the responsibility of constantly improving our use of radio and television's reportorial tools — the microphone, camera and other technical equipment — in covering public affairs.



Harry Reasoner



Sander Vanocur



Percy Saltzman



Mike Wallace



Frank McGee



Robert Trout



Martin Agronsky



Merrill Mueller



Roger Mudd



Larry Henderson

21.

Writing and Broadcasting The News

Foreign correspondents scattered around the world and reporters in every corner of the United States feed an endless stream of news to the Associated Press and its rival news agency, UPI. After being processed, rewritten and put into language for the ear, this news is distributed to almost six thousand radio and television stations over machines that resemble electric typewriters. They click and bang and rattle away, day and night, activated by electric impulses that come in over copper wires. These are the machines that enable broadcasting stations to keep the public informed about what is going on at all times and everywhere — in the next county, halfway around the world, or even in Outer Space.

But the six thousand stations do not all do the same thing with the endless miles of yellow paper they tear from the machines. On some small, understaffed stations the one man who is combination station manager, staff announcer, receptionist, and engineer, may, once an hour, take the latest five-minute news summary from the machine and read it into a microphone, consigning all the rest of what the machine has turned out to the wastebasket. At the other extreme there are big-city stations employing what newspapers would call rewrite men, who take the press association copy and use it as the raw material for original news shows, which they write in their own style and in their own language, playing up stories they decide are significant, putting a local angle into other dispatches, brightening up a feature with a twist or phrase the AP man in New York somehow didn't think of.

Something for Everybody

There are some radio stations so small that they may not even own a typewriter and why should they, for there is no time for any sort of writing. But there are other stations that turn out as much as a hundred thousand words of original copy a day. This chapter will be of no interest to those two extremes. It is meant, instead, for men and women who are working (or soon will be working) on stations in between — stations in which at least some writing is done.

Both AP and UPI supply a wide variety of material: 15-minute world and national news roundups, five-minute world and national newscasts, one-minute headline summaries, besides bulletins and flashes when big news is breaking. Then there are sports features, farm shows, weather news, market reports, science news, religious programs, business news, women's programs, commentaries, news analyses, and even a disc jockey special. All this copy is designed to be read just as it comes from the machine. But many large stations, in cities where the radio-TV competition is keen, want to sound different from the thousands of other stations getting this same material. So they employ writers.

Newscasters, Analysts, Commentators

The men who put news on the air can be divided into three general classifications: announcers, who are often called *newscasters* when they are doing a news show; *news analysts*, who are supposed to broadcast "factual and balanced analyses of the news without direct personal editorial comment," and *commentators*, who generally have clearly defined opinions and range from far-right conservatives to far-left liberals, and who are privileged to interpret the news from their own personal points-of-view.

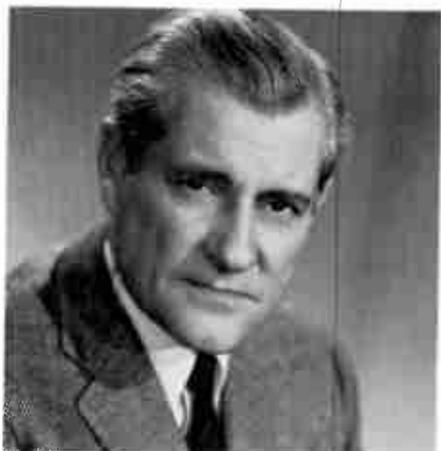
Whereas newscasters and even news analysts may be anonymous, a commentator is generally a newsman with years of experience at home and abroad, whose name is well known, who has probably written books on foreign affairs, whose background qualifies him to make comments on what has happened or is likely to happen, and who is billed by his network or station accordingly.

In principle news analysts and commentators write all their own scripts, although they often have writers to assist them. They select which news items to use, concentrating on those that will provide springboards for their comments.

This Is How They Differ

The news analyst who does his job well does not rely entirely on the press wire for his facts, but does some independent research, perhaps in the city library or the station's morgue. When he writes his script, he discusses the pros and cons of the subject and gives all the various points of view, then permits his listeners to make up their own minds on the matter.

The commentator will pad out the bare skeleton of news items he uses with



Eric Sevareid



Howard K. Smith



Walter Cronkite



Bob Considine



Edward P. Morgan



Paul Harvey

some of the wealth of information he has, from having been in the place mentioned, from having known the persons involved, or from having studied the situation carefully over a long period.

Some commentators will actually say: "I think that. . ." or "My opinion of the matter is that. . ." Others will editorialize more subtly.

A newscaster or news analyst should never make predictions. A commentator often will, on the basis of his own knowledge or on information he has received from his own reliable sources.

A fair and conscientious commentator will make it clear to his listeners which statements in his broadcast are factual and which are strictly opinion. Some network commentator programs are divided by a station break and a commercial or institutional announcement, to make the division between fact and opinion even more clearcut.

Selection of News

The selection of what news items to include in any specific broadcast depends on such factors as: (a) length of the broadcast, (b) time of day, (c) the interests of the audience (for example, at 10 a.m. the average audience would be predominantly women and this should affect the selection of news stories for the program), (d) the material available.

The radio newsman covering a local story has a much more difficult task than a reporter on a local paper. Because he is working against time, he has little chance to sort out his notes, analyze his thoughts, and decide what facts to emphasize and what to discard and how to organize his story. Often he must be on the air the minute he has finished writing his story. He therefore must combine the skills of reporter, rewrite man and copy desk editor, for unless the station is a large one, there will be no one to check his script before he makes the broadcast.

Writing the Local News Story

Any child who has finished grammar school can write, but to write effectively is both a science and an art. It takes experience and skill. Writing for radio and television is quite unlike writing for the eye.

Let's take it step by step, starting with putting the piece of copy paper into the typewriter. Set the left hand margin at *zero* and leave it there permanently. Now type this line:

THIS IS FREDERICK JACKSON, STATION WCAB, ANYTOWN, BRINGING YOU ANOTHER

Those are ten average-length words. Notice that the right-hand margin now reads 70. If when you start work each day you make sure your left hand margin is at zero and your right hand margin at 70, you can type fifteen lines of script to a page and know that you will have a total of 150 average-length words on the page, or one minute, at the average speed of the average announcer in reading average news copy. (Of course some lines will run a few letters over 70 and some will run a few letters short of 70, but they will balance out.)

Now set the machine for triple spacing. This will allow plenty of room for making corrections and voice marks.

If you are going to estimate the length of news scripts by counting lines, do not indent for paragraphs. You can mark pauses and breaks in other ways. (See Chapter 17.)

You Must Be Involved

To write a good story, for radio, television or any other medium, the reporter should be interested as a person in the story he is reporting. He ought to feel the urgency, pathos, excitement, humor or importance that makes the event newsworthy. Then he must make the listener feel likewise.

But even more important is accuracy. Check and recheck all figures, facts and name-spelling. Make certain you tell the listener the source of the information. When accusations or charges are made, or controversial issues are discussed, be doubly sure you put all responsibility on the person making the statements quoted.

Remember Orson Welles

Be careful in handling inflammatory situations, such as racial disturbances or situations which might contribute to community unrest. The same is true for hurricanes, floods and tornadoes. If you sensationalize the news, you can panic entire communities. Never go beyond the words of official sources.

Economic items are another sensitive area. The fact that employees have been laid off at a local industrial plant should not tempt you to talk of recession or depression or to hint that the plant may move or shut down. If industry or union officials comment, their balanced statements are significant. You must never go beyond the facts. You should always try to view the entire picture, and keep it in sharp focus.

Hear How It Sounds

As you write the story read it aloud. This will assist you in getting the proper meanings in your head and the proper inflections in your voice. It will also give you an idea how it will sound on the air. Also, any tongue-twisting words and phrases will be uncovered. (Sometimes they are difficult to spot just looking at the typewritten copy.)

If you are writing a lengthy and involved story about the local mayor, for example, and are reporting his views on a subject, you should identify the remarks as being the mayor's several times during the story. The item might start out: *Mayor Smith said today that. . .* A little later he should be identified again by saying: *The Mayor said. . .* or *The Mayor added that. . .* And again, several sentences later: *The Mayor stated. . .* At the conclusion of the story the remarks should be identified a final time as all having come from the Mayor. Repeating the name so often keeps the listener from being in any doubt about the source of the remarks. Also, any listener tuning in late will not be perplexed.

A Suspect Is Not a Criminal

In writing about crime remember that under American law a suspect is innocent until proven guilty. It would be safe to say: *William Smith was arrested and questioned.* But it would be libelous to say *Thief is caught!* or *Police have found the criminal.* When no indictment, information or warrant has been issued, the story should be a simple statement of the actual facts: *William Jones was arrested and is being held in connection with the case.* Remember, until a charge is filed, circumstances do not usually permit more than a statement that the police are holding whomever it may be for questioning in connection with a crime that has been committed.

To Sparkle Is No Crime

Let us not look down our journalistic noses at the word *entertaining.* A good news presentation must have plenty of sparkle. If it is dull, the listener

may turn to another station. A reader who has paid for a paper or a magazine may feel obliged to read it, but a listener is likely to tune out one station and tune in another the instant he is annoyed by something. The newscaster may have only a fleeting crack at the man who has his fingers on the dial.

Each item in a newscast should be short. The shorter, the more items, making possible the variety that most listeners seem to like, even in a one-minute news summary.

No news story on radio or television should contain too many ideas. Before starting to write, pick out the most news-worthy feature of the story and forget the rest.

Take advantage of the fact that radio is immediate in its reporting. Use phrases like: *Just a few minutes ago the mayor announced that. . .* or *As this program went on the air. . .* or: *Just minutes before air time. . .*

Boy . . . Hit . . . Dog

When writing for the ear it is essential to remember that the mind of the average listener may be on the cake she is baking, or the traffic light that is about to turn green, or other distractions that leave you and your broadcast with perhaps no more than 10 per cent of the listener's attention. Also, the listener cannot do as we all do when reading — occasionally go back and read a sentence over again.

The simplest construction for the ear to take in is: subject, verb, object: *The boy hit the dog.* When the sentence begins with the subject, the ear subconsciously listens for the verb. (The boy did *what*?) When the verb comes, the ear and mind are ready for the object. (The boy hit *whom*?) After the object has been given, a secondary fact can be added: *after his mother told him not to.* If the adverbial phrase is put first, as sometimes happens in writing for the eye, it becomes much more difficult for the ear and mind to follow the thought. (*Although his mother told him not to, the boy hit the dog.*) And so, in general, the more simple the sentence construction, the better.

Short But Not Choppy

Robert Louis Stevenson once wrote: "If there is anything said in two sentences which could have been as clearly and as engagingly and as forcibly said in one, then it's amateur work."

When writing for radio or television, treat words as if they were costing you a rental fee of \$10 per word. When you go over your own script with a blue pencil, see how much you can save by eliminating unnecessary words.

Sentences should be kept short. But a broadcast entirely of short, choppy sentences can be as annoying as the rhythm of machinegun fire. The good broadcaster varies the length of his sentences — some short, some medium-long.

Most high school composition teachers and even some college professors insist on complete sentences, but in radio there is no such rule. Often incom-

plete sentences are the most effective. (*There was no sound as the caisson bearing the President's body came in sight. Silence. Dead silence. Bare-headed crowds. People weeping. And silence.*)

Pronouns Are Dynamite

Pronouns in a radio script are as dangerous as dynamite. Shun them unless they are absolutely necessary. There are always people just tuning in, who have no idea whom you mean by *he* or *she*. Repeat the name or the title of the person as often as necessary.

When writing for the eye it is acceptable English to say:

"After I finish this address, I am taking a plane for Texas," the President announced at today's White House Conference.

But this would be bad broadcast-writing. Always put who said it before the quotation, instead of at the end or in the middle.

At today's White House Conference, the President announced: "After . . . etc."

Save the Superlatives

Adjectives should be used sparingly; adverbs even more so. It is enough to say a woman is *beautiful*. It is not necessary to say *very, very beautiful*, or even *very beautiful*. Superlatives are the most obvious characteristic of amateurish writing. A rough Chicago city editor once wheeled around on a young reporter who had just turned in a story about an underworld murder and in a voice dripping with sarcasm said:

"Mr. Jones, I am well aware that this murder is one of the most important, sensational, exciting, stupendous news stories of all time, and I am delighted that you used so many superlatives in describing what happened, but you should have saved just a few of them, because you are young and while it is doubtful that a story to equal this murder will ever occur in your lifetime, it is just possible that you will live to see the second coming of Christ, and so you ought to save just a few superlatives for that story."

Active, Present Tense Verbs

Use active instead of passive verbs. (*The policeman struck the prisoner* is better than *The prisoner was struck by the policeman*.)

Use the present tense whenever possible, (*The President is in Anytown this morning* is better than *The President came to Anytown this morning*.) The present tense gives a sense of freshness and immediacy.

Avoid writing into a script words that will be difficult to articulate on the air. *Especially* is better than *particularly*. Sibilants like *reminiscences* are bad. Words that look simple on paper, such as *wrist* and *thrust*, are difficult to say aloud.

Use round numbers whenever possible. (*Nearly one million dollars* is better than *\$898,675*).

Write out one-word figures. (*Eight dollars and ten cents. But: Nine dollars and 97 cents.*)

Use three dots to indicate a pause or a break in thought. (*It rained today . . . tonight it was still raining. Or: In Havana . . . Prime Minister Castro tonight said . . .*)

We, Us and Ours Are O.K.

It is impossible to avoid all figures in news broadcasts, because often the figures are the essential element of the story. (*Ten dead in. . . A five per cent increase in taxes. . .*) But avoid figures whenever possible, because the ear is not nearly as good as the eye in conducting figures to the brain.

The words *we, us* and *ours* are seldom used in newspapers, but they are acceptable on radio, because radio is a much more intimate medium.

Use words that are familiar to such people as the 16-year-old next door, the man who delivers the milk, and the woman who cleans house for your mother, because these people listen to radio, as well as the preacher, the doctor, the lawyer and the president of the First National Bank.

If the nature of the story makes it necessary to use an uncommon word, explain its meaning parenthetically.

Qualify, But Carefully

It is dangerous to put a qualifying phrase at the end of a sentence. (*The world will come to an end in ten days, a speaker at the Rotary luncheon said today.*) The danger is that some listeners will turn off the radio, switch to another station, or be interrupted before they hear the qualifier, and will quote the broadcaster as the one who said "The world will end in ten days."

But it is equally dangerous to put the qualifier at the start. During the Lindbergh kidnapping case, there were many rumors that the child's body had been found, days before it actually was. The wire services would put out a denial and radio stations would put the denial on the air instantly:

THE NEW JERSEY STATE POLICE ANNOUNCED TONIGHT
THERE IS NO TRUTH TO THE REPORT THAT
THE LINDBERGH BABY'S BODY HAS BEEN FOUND

But hundreds, perhaps thousands of people, tuning in as the announcer was taking a quick breath after the first two lines, heard only the last seven words and excitedly passed the rumor around, thus starting a brand new rumor, based on each listener's absolute knowledge that he had heard with his own ears a reputable newscaster on Station XYZ say:

THE LINDBERGH BABY'S BODY HAS BEEN FOUND

Here are some other examples of bad radio-writing. Read these six items first *without* a pause. Then read each one again, pausing for breath where it says (pause). Imagine the shock some listeners would receive if they tuned in at the pause and heard only the last part of the sentence, but assumed they had heard

the entire news item. As in the Lindbergh example, it is not enough to have a disclaimer or qualifying phrase at the start of an item.

The chauffeur of (pause) the well-known banker, John Jones, was arrested today, charged with drunkenness, disorderly conduct and rape.

A bulldog owned by (pause) Mayor John early today bit several small children and was shot by police.

The submarine christened last month by (pause) Miss Mary Robinson with a full complement of sailors aboard disappeared in the waters of the Gulf of Mexico today.

A client in the motel owned by (pause) Richard Herman disappeared this morning after dropping a cigarette which set the motel on fire. Police are searching for him.

Private Detective John Smith, who once guarded the home of (pause) the British Ambassador, Sir William Cholmondeley shot and killed himself today in a fit of despondency over charges his wife had made against him.

Paris. Andre Citroen, the French (pause) Henry Ford died today in a hospital.

In writing radio news it is necessary to word each item so it cannot possibly be misunderstood, no matter when a listener may tune in. The Lindbergh item could have been written:

The rumor that the Lindbergh baby's body has been found is untrue.

The suicide item should have been written:

Private Detective John Smith shot and killed himself today in a fit of despondency over charges his wife had made against him. The detective had once guarded the home of the British Ambassador, Sir William Cholmondeley.

No Clichés, Please

Avoid bromides, clichés, stereotypes, trite expressions, hackneyed English. A few examples. Don't say someone was *as pretty as a picture*, or *as fat as a pig*, or *as fresh as a daisy*, or *as brave as a lion*, or *as stubborn as a mule*, or *as smart as a whip*, or *as cool as cucumber*, or *as high as a kite*. Such expressions may have been considered scintillating the first time they were used. But that was a long time ago. The main complaint against a cliché is not that it is a bad figure of speech, but just the opposite. It was so apt and so good and was therefore used so much that it became worn out through overuse. Either invent your own figures of speech, or just say that she was pretty, fat, fresh, brave, stubborn, smart, cool, or high.

It is common when typing to underline words for emphasis. But it takes time to move the carriage of the machine, in order to underline. It saves time, which may be precious to the broadcaster, if you capitalize words or phrases you want to emphasize, instead of underlining them.

Don't Call a Spade a Spade

Most books on how to be a good newspaperman list pages of trite phrases to avoid. They should be avoided equally by those writing for radio and tele-

vision. A few samples: *conspicuous by his absence; skeleton in the closet; needs no introduction; sweet sixteen; telling effect; thunderous applause; caught like rats in a trap; call a spade a spade; time immemorial.*

There are two theories about how a radio news item should commence. Some broadcasting specialists say: "Hit the story on the head in the first sentence:" ie. *Five hundred people were drowned in a flood today in. . .* Others advise news writers to throw away a few words — a phrase — even a short sentence — before giving the listener the hard fact, on the ground that it takes a listener a few seconds to get oriented from the last item to this one. CBS, for example, in its handbook, *Television News Reporting*, gives three examples of how to communicate the meaning or significance of a story to the listener in the first sentence, and then in the second sentence give the news itself:

Hopes for three new city schools suffered a jolt today. The city budget manager said . . .

In Washington, still another hat is in the political ring. Senator Blurt announced today that he is available.

The French are at it again. For the twenty-second time since World War II, the French Government has fallen.

Skip the Five W's

The maximum length of a sentence in a radio news script should be twenty words. There are, of course, exceptions. But it is a good general rule that the longer the sentence the more simple the grammatical construction should be.

Most newspapers want their reporters to answer the five-W questions in the first one or two sentences of the news story. This rule does not apply to radio and television news.

There is one danger in the advice that a radio-television newscaster should try to sound as if he were telling the news to a group of friends in his own living room. It is a good idea to try to write conversational English, but most people's conversation consists of dull, colorless sentences, well larded with clichés and trite figures of speech. (*After all is said and done . . . As luck would have it . . .*) The solution, however, is not to call a cat a *feline animal* or a fire a *conflagration*. There are some words for which there are no synonyms and any attempt to create them makes the writing sound juvenile.

Because all broadcasters are merchants-of-words, they should study how language is constantly being enriched by other merchants-of-words. Walter Winchell for decades coined expressions that were sparkling and incisive when he first used them, although when others over-used them they quickly became clichés. One of Winchell's best was his description of two friends who were, he said, *closer than twenty minutes to eight*. A radio movie critic once gave this six-word review of Cecil B. De Mille's *Samson and Delilah*:

SAW THE MOVIE. LOVED THE BOOK.

Another critic, commenting on the work of the lead actress in a new play, said:

SHE RAN THE GAMUT OF EMOTIONS — FROM A TO B

While originality and colorful language are to be encouraged, *cuteness* for its own sake is out of place in almost any radio-television script.

Keep It Clean

Some veteran broadcasters take pride that their scripts, after they have finished editing them, look as if a chicken with dirty feet had wandered back and forth across the paper. A good broadcaster may be able to read such a script, but, like a dog standing on its hind legs, while possible it is not very pleasant. The young broadcaster should try to keep his script clean, to save himself from fluffing. When pencilled corrections are necessary, they should be written legibly enough for a stranger to read them, then there will be no difficulties. Instructions for marking up a script have already been given in Chapter 17. Here is one additional suggestion. When timing a script, use colored pencils and draw a red line across the full width of the page at the end of each minute, and a green or blue line at the end of each half minute.

Script Arithmetic

The ability to type without looking at the keyboard is a decided advantage, but touch-typing is not an essential skill. With two or four fingers, a man can type forty to sixty words per minute, which is about as fast as the average newsman is able to think what he wants to make his fingers say.

A newspaper reporter writes about 1,000 words a day. The average newspaper rewrite man may go as high as 3,000 words a day. A radio newsman often reaches 4,000.

The chart below will save a lot of figuring. The first column shows reading speeds in number of words per minute. The second and third columns show the number of words needed, at those speeds, for five-minute and fifteen-minute news shows (minus a fifteen-second opening and a fifteen-second closing in each case):

	4.30 min.	14.30 min.
140 wpm	630	2,030
145	653	2,103
150	675	2,175
155	698	2,248
160	720	2,320
165	743	2,393
170	765	2,465
175	788	2,538
180	810	2,610

Television Writing

There is one fundamental difference between writing news shows for television and radio. If the TV news item is to be introduced merely by a background still picture, the writer can do the script almost as if there were no visual. But if the text describes what the viewer is actually seeing, care must be taken not to insult the intelligence of the viewer by telling him what he can see that he is seeing. (If the Prime Minister is entering an automobile it is unnecessary to say "He is entering an automobile.") The CBS handbook has this to say of television news:

The television news writer does not have an easy task. Working against time, he has to produce scripts which are exactly clocked. In spite of limited show time, he must somehow manage to cram in all the pertinent facts, often dealing in twenty seconds with events which a newspaper covers in twelve column inches.

When Is It a Bulletin?

The staff member handling a station's news operation must decide when a local story breaks whether to use a *bulletin*, which would mean interrupting whatever program is on the air. Two people have been killed in a local automobile accident. In a large city like New York, a tragedy of this extent would not be considered of such importance that it would be treated as a bulletin, but would simply be used on the next program of local news, if the dead were people of importance. However, in a small city the seriousness of the accident would warrant bulletin treatment. All bulletins should be brief — not more than two sentences — and should always end: "Further details will be carried in our next regular local news program at such and such an hour."

The order in which news is presented is a matter of local custom or style. The general rule is to give international or world news first, then national, state, and local news, in that order, concluding with a short human interest story.

Standards of Practice

All broadcasters and aspiring broadcasters should be aware of the provisions of the code drawn up by the *Radio and Television News Directors Association*, which states:

1. The news director, as a key figure in the broadcasting industry, has the public interest as his foremost responsibility. His principal purpose is to keep the public well-informed.
2. Complete coverage of the news is the news director's prime objective and the emphasis should be on scope and understanding, particularly as it concerns the news within his own listening area.
3. Material selected for newscasts must be judged on its news merit alone.
4. News presentation must be accurate, factual, in good taste, and without bias. Writer and newscaster should cooperate to avoid sensationalism in reporting, writing, editing and broadcasting.
5. The use of the word *bulletin* should be limited to labeling only those reports

of such transcendental interest that they warrant interrupting the regular broadcasting schedule. The word *flash* must not be used contrary to its historic meaning in news coverage.

6. Commentary and analysis must be clearly identified in all news broadcasts.
7. Editorial material must not be mixed with factual news reporting, and when it is used, it must be clearly labeled.
8. The race, creed, color or previous status of an individual in the news should not be mentioned unless it is necessary to the understanding of the story.
9. No story, either wire copy, or locally written, should be used until the newscaster has read it understandingly. The only acceptable exception would be a late-breaking story of such importance that the news director or the newsmen on duty considers it is *must* for a news program already on the air.

Voicing the News

After compiling and writing a news show, the broadcaster should use the dictionary to look up words about which he is unsure. Mark all break points and underline important words that require special attention. Some newscasters spend as much as fifteen minutes marking up a five-minute newscast. The script should be rehearsed as many times as possible to minimize fluffs and hesitations.

When presenting the newscast on the air, keep your voice active and colorful. No one enjoys listening to a passive voice. The newscaster's voice should also ring with authority.

Speed of Delivery

Two factors put a limit on the speed at which a radio announcer can and should speak: (a) the maximum number of words per minute he can make his voice mechanism utter distinctly, and (b) the maximum number of words per minute the listener can comprehend. An announcer can train himself to rattle off as many as 400 wpm, but the average listener can only comprehend about 150 wpm. Faster than that and the newscaster loses him; the listener gets only a vague impression that something has happened somewhere to somebody, for there is more to comprehending than merely hearing.

In his heyday Walter Winchell gave the impression of firing at his listeners about twice as many words per minute as any of his colleagues. Actually his word-count was less than that of many others doing news on the same network. His trick was to shoot words out in machinegun style, in staccato accents, but to take long pauses between phrases, sentences and paragraphs.

Newscasters and even news analysts are supposed to broadcast in a completely neutral tone. They are to disclose no bias in the wording of their scripts and they are also supposed to read their scripts in a neutral voice. (Even the most innocent-looking script can be turned into partisan propaganda by voice tricks. *Senator Goldwater said that if elected he would not let the Pentagon Building run the country*, is a simple statement, but if a pause is placed before and after the word *said* and if *said* is read with a sarcastic, rising inflection,

political bias is injected into an innocent item. Commentators often do disclose their attitude toward news by voice intonations.

If a newsman is writing a script to be read by someone else, he should indicate by underlining or capitalization the words that are to be emphasized. A classic example of what improper emphasis can do is the story of the man who put this sign in his window:

**MY NAME IS FINK
WHAT DO YOU THINK
I PRESS SUITS AND PANTS
FOR NOTHING**

The sign attracted attention and brought in many clients, but when they asked about the free pressing service, Mr. Fink would read the sign to them, putting in the punctuation and emphasis:

**MY NAME IS FINK.
WHAT DO YOU THINK,
I PRESS SUITS AND PANTS
FOR NOTHING?**

Voicing TV News

The TV newscaster's main problem is to maintain eye-contact with his viewers. This necessitates skill in the eye getting enough ahead of the voice to permit looking at the camera every x number of seconds. Some TV newsmen manage to ad lib remarks now and then that add to the informality of the program and help establish a better rapport between broadcaster and viewer, but it can be disastrous for anyone who is not an experienced professional. The good TV newscaster must be able to give the impression that he is the master of the slides, maps, film clips and all the other visuals being used; not the reverse.

Gadgets, Gimmicks & Competition

If rivalry between broadcasting stations is intense (in Atlanta, Georgia, population less than half a million, there are, as the *Encyclopedia* goes to press, 28 competing radio and television stations) the news departments may offer each other considerable competition. Many stations use sound effects, filter microphones for datelines, echo chambers, the sound of a telegraph key or a teletype machine at the opening and close of the news program, and/or between each item, or other more original gadgets and gimmicks, in an effort to attract an audience.

Beeper phones are used by many stations for spot coverage. There is no longer any listener-antipathy to news on tape, and so more and more tape recorders are being used. By judicious editing of tape, the *guts* of a long interview can be excerpted and used in a news show.

The Huntley-Brinkley format has been copied in many cities around the coun-

try, with two, three and even four newsmen throwing the ball back and forth to each other. This often makes for pleasing variety.

News shows can be sparked in many ways: by short man-in-the-street interviews, round-table discussions of news developments, direct reports from the scene of news developments, in-depth reporting by experts on matters in the news.

It should be remembered, however, that radio and TV news reports will lose their believability if they are turned into three-ring circuses.

News broadcasts are and should remain informational, not "entertainmental."

Tips from the Pros

1. Don't use stories of local accidents in which the victims are as yet unidentified. Wait until all identifications are made and you can announce names of victims. (See warning in Chapter 20 about using names of deceased.)
2. Don't bother about ages of persons involved in the news, unless the age is a factor in the story. (An exception: listeners like to know the age of the deceased.)
3. Morbid detail, especially in crime and sex stories, should be avoided.
4. Keep it fair and factual.

22.

International Reporting.

Zanzibar, a spice island in the Indian Ocean, was no more, no less than a word out of exotic novels to most Americans — until 1964. One day in January of that year revolution broke out, the Sultan was overthrown and driven into exile, and the predominantly Arab government was replaced by Russian, Communist Chinese and East German experts. For a split second in history the eyes of the world were focused on this dot of land just off the southeast coast of Africa.

America was interested because on Zanzibar we had an important satellite-tracking station. What would happen next? In the three-way struggle to establish or maintain a foothold in this strategic spot, who would win out: the Communist Chinese, the Russians or the Americans? The story was Page One in the newspapers, a colorful spot for television, and was worth at least a hundred words in every five-minute news roundup for days.

And so men with tape recorders, cameras, transformers, portable lights and other equipment set off by plane from the nearest broadcasting centers (Johannesburg, Cairo or Rome) and within hours the color of the story — told by words and pictures — was being served up to America over thousands of television and radio stations.

Broadcasting the Wars

The most glamorous and the most dangerous part of international reporting is covering violence in its many forms: war, revolution, insurrection, uprisings, rioting, and other major and minor blood-letting. Radio has covered four important wars: the Spanish Civil War, World War II, Korea and Vietnam. Television's first war, which from the start she covered brilliantly, was the fighting in Vietnam.



Howard Tuckner, NBC, covers funeral at Buddhist pagoda in Vietnam



Ron Headford, ABC cameraman, in Vietnam.



ABC's Peter Jemmings in Vietnam

INTERNATIONAL REPORTING



Garrick Utley, NBC-TV, interviews American troops following a Vietnam battle



ABC War Correspondent Lou Gioffi in Vietnam



NBC News Correspondent Ron Nessen interviews Premier Cao Ky of South Vietnam



CBS War Correspondent Dan Rather



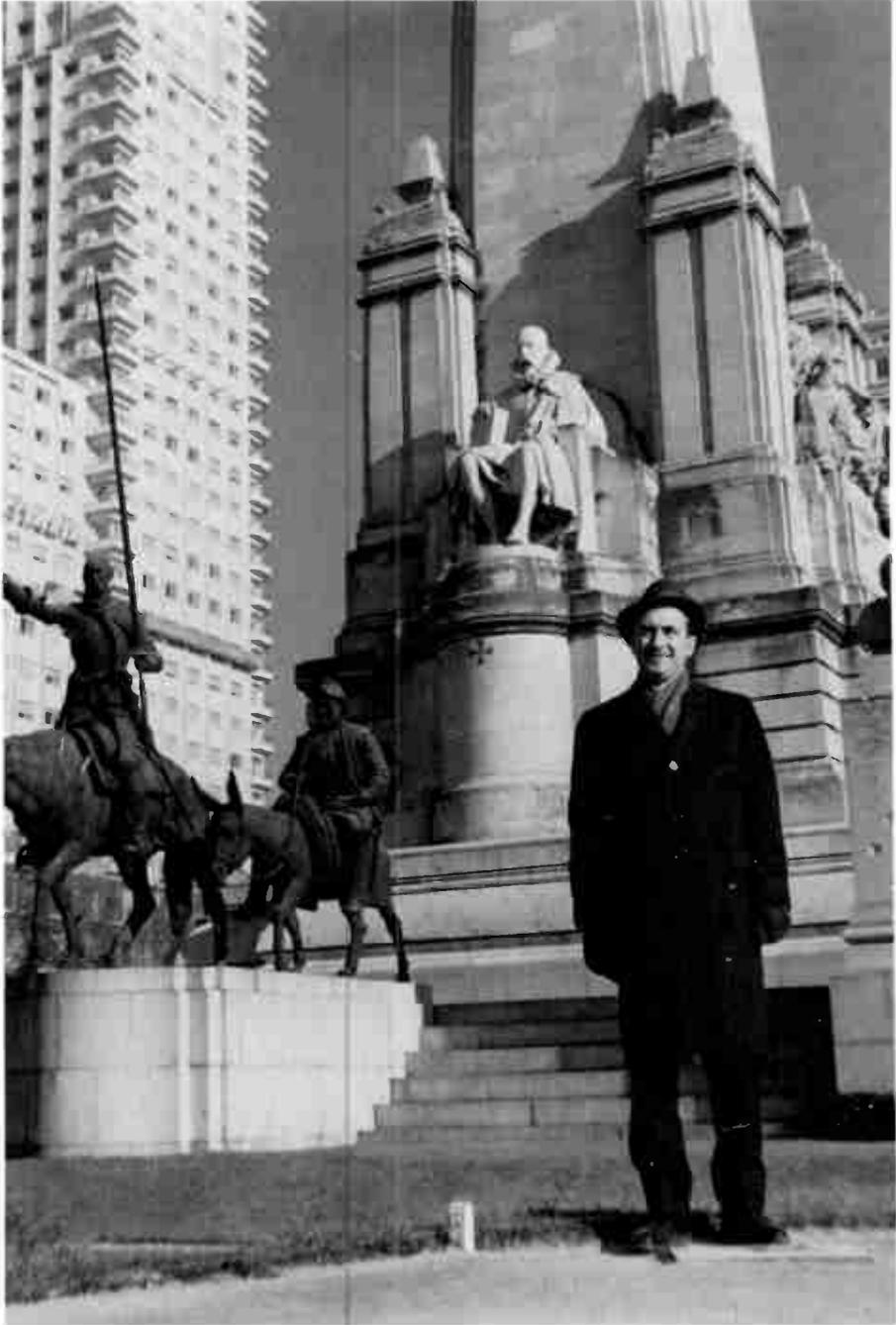
War Correspondent John Laurence, CBS



Foreign Correspondent Charles Collingwood, CBS, in the Far East.



Foreign Correspondent Hughes Rudd, CBS, in Moscow.



Foreign Correspondent Irving R. Levine, NBC, in Spain.

It was exactly 25 years from the day H. V. Kaltenborn hid in a haystack and broadcast the noises of battle between Spanish Fascists and Spanish Republicans to television's first real documentaries and news shots, which came out of Vietnam in 1963. Between 1938 and 1963 a great many American radio and television war correspondents were shot up, captured by the enemy, blown off ships, killed in plane accidents, or met death in other ways as they struggled with censors, communications problems, weather and unsympathetic military commanders, to keep America informed about what was really going on. Those who survived were decorated with medals, wrote best-selling books, became lecture-platform favorites, and achieved top success in still other ways.

Wars Made Some Men Famous

The late Edward R. Murrow, who rounded out his career as head of the United States Information Agency, might never have won renown had it not been for World War II and his memorable broadcasts from blacked-out London.

William L. Shirer, who achieved both fame and fortune as the author of *Berlin Diary* and *The Rise and Fall of the Third Reich*, is another veteran of the CBS staff of war correspondents.

Walter Cronkite, now one of the most respected and best paid men in television news, first made a name for himself in World War II. He landed with allied troops in North Africa, took part in the D-Day invasion of France as an accredited war correspondent, dropped with the 101st Airborne Division in Holland, and was with the U.S. Third Army in the Battle of the Bulge.

ABC's Howard K. Smith covered the allied sweep through Europe and was in Marshal Zhukov's headquarters in Berlin on the day in 1945 when the Germans surrendered to the Russians.

NBC's Merrill Mueller was the voice of the world radio pool on two historic occasions: the D-Day landing in Normandy and the Japanese surrender on the USS Missouri. In addition to World War II, he reported the Vietnam fighting, the Korean war and the Spanish Civil War.

Go down the list of the top men of radio and television news today. Nearly all of them have been at sometime in the past foreign correspondents or war correspondents.

How Radio-TV Covers the World

In addition to being served by the worldwide facilities of AP and UPI, most American radio and television stations belong to one of the networks, and all networks (as well as some individual stations) have bureaus abroad in such key cities as London, Tokyo, Paris, Rome, Johannesburg, Cairo. In each office there may be from one to five Americans, plus some local staff. Their lives are seldom dull. Their home offices keep them constantly on the jump. If there is no big story breaking in England, for example, a broadcast crew may be sent from the London bureau to cover a crisis somewhere in the Mid-

dle East. Thanks to the jet age, nowhere in the world is more than a few hours by plane from the nearest American network office. Once out on a story — no matter whether it is a war, a disaster, an election or a revolution — the broadcast reporters and photographers may have to go with little sleep for days — sometimes weeks.

When operating from their home base, they do their actual broadcasting from the studios of the state-owned radio network of the country. In London, for example, BBC studios are often used. Or sometimes a commercial hookup is arranged. Headquarters in New York will order up a circuit and inform the bureau abroad by cable, which may read like this:

CIRCUIT 20.30 ONE MINUTE 30

The minute and a half broadcast is often used live in America, although tape recordings are always made in New York of all foreign broadcasts, because if the bulletin is hot enough it may be used over and over again on newscasts, until it is superceded by a report of the next development.

Foreign Correspondent Tips

Here are some miscellaneous tips for broadcasters who aspire to a foreign assignment:

1. You must learn to keep abreast of developments in every corner of the world, so that if you are interviewing a man, for example, about the international water shortage situation and he mentions Hong Kong, you have at least a vague idea about the water situation in Hong Kong.
2. You must have some knowledge of the events of the immediate past, so that if, for example, you are interviewing King Hussein of the Hashemite Kingdom of Jordan and he says he is afraid he may meet the same fate his grandfather did, you know he is referring to the fact that King Abdullah, his grandfather, was assassinated by one of his own countrymen years ago.
3. You must become a genius with a stopwatch. When we were broadcasting from London during the war, we would wear earphones over which we could hear New York. It worked this way: Our voice would go from London by land line to a BBC transmitter — maybe in Liverpool, Birmingham or Manchester — they kept changing transmitters, to keep German bombing planes from riding in to London on the radio beam. From the transmitter the voice would go almost 3,000 miles across the Atlantic to the tip of Long Island, then by land line into the RCA Building in New York City, and then it would be fed back, over that same route in reverse until it got to London again. The time it took for the 6,000-mile trip was a fraction of a second. If we were saying "Kalamazoo," about the time we reached zoo, in the earphones we would hear our own voice saying *Kal*. The purpose of the feed-back line was so that New York could give us a go-ahead signal to commence

talking, and, also, so New York could talk to us, while we were actually broadcasting. Often a voice from the NBC control room in New York would come on, saying, "Tokyo's coming up early, so cut 30 seconds. Switch to Tokyo at 20.30.15 instead of 20.30.45." It takes quick thinking to keep right on talking, while trying to figure out just what to cut, in order to sign off at precisely the right second.

4. In your spare time, try to learn one foreign language well. If you have already studied a foreign language in high school or college, converse with someone in that language as often as possible. It will double your chance of success abroad if you know even one foreign language.
5. Become a past master at the technique of interviewing.

First, *Whom to Interview?* The prime consideration in picking some foreign dignitary to interview is that he must be able to speak English. Several years ago I took a tape recorder to Africa and tried to get an interview with the head of state in each country I visited. I succeeded quite well until I came to little Mali. Because Mali had been a French colony, those who spoke any foreign language at all spoke French. I tried the President, then the Prime Minister, all the cabinet members, the mayor of Bamako, the capital city, the chief of police, and the owner of the only hotel. Finally I got down to taxi drivers and hotel clerks. But no one in the entire country, as far as I could discover, spoke English. French, maybe. English, sorry. So I left, without anything on tape but my own voice. Another rule about whom to interview: the man must be so important a personage that anything he says is worth recording, or what he says must be so important that it doesn't make any difference whether he is a personage or not. If you could have obtained a tape interview with Winston Churchill a few weeks before his death it would have been carried on every radio station in America, even if he had talked about nothing more vital than British weather, whereas, if some French official were to give you an interview in which he announced that starting tomorrow American commercial planes would no longer be permitted to land on any French airfield, that broadcast would also be a sensation, even if no one had ever heard the name of the official making the announcement.

Next, *What to Ask?* The day has passed when smart-aleck reporters would ask a Nobel Prize winner in physics, on his first visit to America from Europe, what he thought of American women's hats or legs. We are more mature, more serious, nowadays. A reporter — especially a foreign correspondent — must ask questions in depth about matters on which the interviewee is an expert. A good interview will always make news. For example, in interviewing the leader of an African country at war with another African country, an astute reporter might ask a leading question about whether the leader would be willing to sit down for a peace talk with the head of the rival country. If

he were to say "Yes," it would be big news. Even if he were to say "No," it would still be a story. Many a top-of-the-news broadcast has been produced by a reporter asking the Provocative Question.

Next, *How to Ask It?* In interviewing foreigners, it is essential that the professional broadcaster ask his questions slowly and in simple English. If there is any danger that the listening audience will have difficulty in understanding the reply, it is well for the interviewer to repeat the reply. For example:

Q. Mr. President, do you think war between your country and Bolivia is likely?

A. I think it is very, very porutznsigi. . . .

Q. Mr. President, did we understand you correctly? Did you say that you *do* think that war is probable?

Now, *Where to Do the Interviewing?* Nothing gives such an air of authenticity as sound effects. If you are interviewing the winner of a famous European automobile race just after his victory, it helps to hear the sound of automobile engines in the background. An interview during a revolution is spiced-up if there are sounds of shooting in the background. But watch out that the sound effects do not ruin the entire broadcast by drowning out the words of the person being interviewed.

Here are a few more tips on interviewing: Many foreigners are not as microphone-conscious as American officials and may not realize what happens when they rattle papers in front of a microphone.

Never let anyone else handle the microphone. You know better than the man you are interviewing — even if he is the president of a country — how far from his mouth to hold the microphone to get a proper voice balance.

Foreign Protocol in Broadcasting

It is important for an American abroad — especially if he is working in broadcasting — to respect protocol or rules-of-behavior in the host-country. Let's take just one specific example. In the State of Israel, the Sabbath, which falls on our Saturday, is not only a legal holiday, but those who are extremely religious refrain from all work of any sort, which includes driving or riding in an automobile, using a fountain pen, answering the telephone, or even turning on a light. It also includes giving an interview on a tape recorder. It would be a violation of protocol and disrespect for other people's religious practices for a broadcasting reporter to try to interview, for example, an Israeli cabinet member on his Sabbath.

In France, General de Gaulle's idea of a press-radio conference is to have two or three reporters ask two or three planted questions, when he gives them the signal, and then the General orates for maybe an hour or two. American radio and television men may record the whole thing on tape and then use only the most sensational or most news-worthy two or three sentences.

How to Become an F.C.

It is not simple to become a good and well-established foreign correspondent. It can't be done simply by reading a biography of Lowell Thomas, Ernie Pyle or Edward R. Murrow. It takes study, training and experience. You have to learn such seemingly minor matters as the perfect pronunciation of the language of the country. You have to know whether to say the bomb was dropped on Hi-ro-SHE-ma or Hi-RO-shi-ma. You have to know the difference between a Slovak, a Slovenian and a Slavonian. You have to know why the Hungarians and the Rumanians once despised each other so intensely. You have to know the real cause of the trouble on the island of Cyprus.

Many young broadcasters want to know not only how to obtain and hold a broadcasting post abroad, but also . . .

“Please tell me, how do I become a *famous* foreign correspondent?”

It is, of course, very simple. First, you have to become an able foreign correspondent. Then you have to *want* to become famous — want to *enough*. You have to want to enough to take great gambles. War Correspondent Ernie Pyle gambled — and got killed. War Correspondent Bill Shirer also took many chances. He lived and became famous. War Correspondent Joe Smith, who took no chances, is today back pushing buttons on a 500-watt station somewhere, unknown outside his own bailiwick. The difference is in wanting to, enough. Plus, of course, a few breaks now and then, which are sometimes called *luck*. But the breaks do no good, even if they do come, unless one is well prepared to take advantage of them.

23.

*The Disc Jockey:
Modern Music Master*

It was a cold, miserable morning in Chicago. Elsewhere in the country there were signs that spring might soon arrive, but not in Chicago. The weather forecast was for more cold, more storms. Chicago had had one of its worst winters in years and most Chicagoans felt they had had just about enough of it.

Howard Miller, disc jockey on WIND, liked to start people off to work with a song in their hearts and a smile on their faces, but it had been no easy task lately, with the weather so beastly. As he spun his first record, he tried to think of some remark that would cheer up the hundreds of thousands of people who, he knew, were listening.

The music stopped and Miller suddenly found himself saying:

“The weather isn’t too pleasant this morning, but believe me, we’ll have no more snow this year, believe me we won’t! As a matter of fact, if we have one more snowflake, I’ll buy you a new hat.”

The engineer in the glass booth raised his eyebrows and shot Miller a look that seemed to say:

“Brother, you really stuck your neck out on that one!”

But Miller went right on with his early-morning chatter, sprinkling his talk with bits of miscellaneous information, not-to-serious comments on the events of the past 24 hours, and then another record.

After the Blizzard the Avalanche

That afternoon a blizzard swept in from the lake and the entire Chicago area was blanketed with snow and sleet. As Miller left the studio, the girl at the telephone switchboard quipped:

“How about that hat you promised me?”

The elevator man said the same thing in somewhat different words. So did

the taxi driver. As Miller, along with several million other people, fought his way through the storm he wondered how many of his listeners would remember his off-hand remark.

The next morning he began to find out. His fan mail was generally heavy, because WIND's signal covered a considerable area and because Miller himself was extremely popular, but never had there been a deluge like this. There were telephone messages, telegrams, postal cards and letters. Communications by the thousands! At the end of 24 hours, by actual count, there were fifty thousand demands for hats.

Miller and station officials went into conference. Miller's reputation was at stake, and so was the station's. And yet . . . at five dollars apiece, fifty thousand hats would cost someone a quarter of a million dollars! Even at \$1 each the bill would come to a lot of money. Just addressing and paying the postage on fifty thousand packages was not something to brush off lightly.

The compromise that Miller and the station reached was to send an inexpensive rain bonnet to each person who had written in claiming a hat. It was a gesture that satisfied most of the listeners. The cost was more than offset by the value of that avalanche of mail, for the station's salesmen now had some tangible figures to show prospective buyers of station time.

Such proof of Miller's popularity led *Time Magazine* to describe him as "the highest riding disc jockey of them all . . . the star of a radio program with the nation's biggest local audience . . . the nation's biggest single influence on record sales."



Deejay Howard Miller

5,000 Individualists

There is no trade union or private club exclusively for disc jockeys, and so there is no accurate count of how many there are. On some large stations there are as many as half a dozen. On "all-news" stations they do not exist. On some stations they are given another title. Yet there must be more than five thousand disc jockeys scattered across the country — some men, some women; some young, some old; lovers of many different kinds of music. They have little in common, except their understanding of the mechanics of a turntable, their interest in people, and their ability to communicate.

Martin Block, who was one of the nation's leading disc jockeys, was the son of a concert pianist. His first radio job as a young man was with XEFD in Tijuana, Mexico. Then KMPC, Beverly Hills. Then WNEW, New York, where he was a favorite for thirty years. After a brief retirement, he joined WOR in 1961. One of his many firsts: in 1949 he was the Voice of America's "first international disc jockey," beamed to Latin America, Europe and the Far East.

Most successful disc jockeys have been distinct individuals. One of the most unusual and most successful is Bill Randle, who in the course of twenty years spinning records in Cleveland, Detroit and New York has had a gross income of approximately two million dollars. For long periods he had the highest ratings of any radio program in America. He often combined five hours a day on the air with either going to college himself or doubling as a college instructor. While working daytimes as a disc jockey on WERE, Cleveland, he commuted each night to Detroit and took courses at Wayne State University to get an A.B. Later he won his M.A. in somewhat the same way. Then he spun records at WCBS in New York while teaching at Columbia University and working on a Ph.D., which was awarded him in 1966. He immediately began working on a second Ph.D. Randle had much to do with the success of Johnnie Ray, Tony Bennett, the Four Lads, Bill Haley, the Comets and many others. Mantovani credited him with starting the trend toward lush string music. He introduced Elvis Presley on network TV in 1955 and later got him his first job in Las Vegas. He also was responsible for many hit songs, such as *The Yellow Rose of Texas* (Mitch Miller), which Randle found in an old Civil War album.

The Worst of Rolfe

One of many strange dee-jay stories is that of Rolfe Peterson, instructor in English at Brigham Young University in Utah. To supplement his salary he began to moonlight, with KOVO, Provo, Utah, as a disc jockey. Instead of using idle chatter, he filled the time between records with such brilliant wit that he soon had an attractive offer from KSL, Salt Lake City, and abandoned the academic life forever. His reputation spread across the country and he published a book containing some of his radio wit, entitled *The Worst of Rolfe Peterson*. It never became a nationwide best-seller, but it did help Rolfe



Martin Block



Bill Cook



Rolfe Peterson



Bill Randle

Peterson to make the big-time, with several programs of his own on KCBS, the key Columbia station in San Francisco.

Disc jockeys — or those who aspire to success in that field — should study *The Worst of Rolfe Peterson* (it is available in some libraries) for it contains a type of humor that is almost universal in its appeal — to intellectuals as well as to the average person.

The publisher's introduction says:

Being a disc jockey is a somewhat unexpected fate for an academic type like Peterson, but he continues to hold his head high (he is approximately 6½ feet tall) and points out to anyone who will listen that disc-jockeying is certainly nothing to be ashamed of, when you think of all the murderers, dope addicts, Congressmen, traffic policemen and sex fiends running around loose.

Here are some samples of Peterson's own humor, taken from his book:

If you want to get a reputation for modesty, just tell the truth about yourself.

It's important to remember the Alamo, and the Maine, and Pearl Harbor, but it can mean a lot more to the success of your marriage to remember to stop and pick up a loaf of bread.

People who live in glass houses shouldn't do much of anything.

The reason most people resist temptation is that they can't afford it.

When you think you're going down for the third time, just remember — you may have counted wrong.

Just as the American economy was approaching the goal of two cars in every garage, it started turning out a car that fills a two-car garage all by itself.

Nobody's quite so hard to buy a gift for as a man with no bad habits.

One thing you've got to say for modern medicine, it gives us a wonderful variety of diseases to choose from.

The trouble with the younger generation is that when they do the things we used to do, they're not as ashamed of themselves as we were.

Everybody talks about the weather, and it deserves it.

Man is on this earth for such a short time, it's remarkable how much he can mess it up.

Pioneer Negro Disc Jockey

When William S. (Bill) Cook went with WAAT, Newark, N.J., in 1945, there were only three other Negro disc jockeys in the entire country. (Today there are several thousand.) More than that, Bill Cook became the first Negro D.J. in the New York metropolitan area and built up a rating of 5.2, equal to Martin Block's evening rating at that time. He was the first Negro to produce and emcee a TV variety show, *Club Caravan*. He was the first to present a charity show for the benefit of cerebral palsy. The format of his show consisted of rhythm and blues, pop and folk records, with three five-minute segments of

poetic narration at the conclusion of each hour — the show running for three solid hours nightly. His average mail pull was 5,000 letters a week. Among other pioneer Negro deejays were Hal Jackson, Joe Adams, the late Willie Bryant, WHOM, N.Y.; Jack Walker, WOV (now WLIB), N.Y.; the late Ramon Bruce, WHAT, Philadelphia; Al Benson, WGES, Chicago, and Randy Wood, WIBG, WHAT, WDAS.

Do's and Don't's for Dee-Jays

Howard Miller, who at one time in his free-lance days was doing 115 shows a week on six different Chicago stations, in the following question-answer format gives some basic information about dee-jay-ing:

- Q. Mr. Miller, what exactly is a disc jockey?
- A. Actually a disc jockey is the master of ceremonies of a record program. He not only introduces all the music, but he selects the music the listener will hear, and in almost all instances he also does the commercials.
- Q. What qualifications should a dee-jay have?
- A. First off, he must have a thorough knowledge of the type of music with which he's going to be concerned. He must be willing to spend much extra time keeping up with the new recordings. He must read the biographical sketches of the artists and pre-listen to the music, auditioning it in his own home and in his own listening chamber.
- Q. Should a disc jockey's personality coincide with the type of music being played?
- A. Well, yes, as nearly as possible match your display of personality with the tempo of the musical format. I can give you a couple of examples. Let's suppose you're going to do a *Top Forty* program. Now obviously that has an upbeat tempo. These are the popular records of the day. Therefore, you've got to keep your own tempo up, bright, cheerful, witty, and have a pace that's slightly more rapid than normal. Now, for a middle of the road format, which many stations are employing these days, your personality should still be warm and cheerful. Sincerity must still creep into the picture. But you'll have more time for detail in this type of program; it won't be race-horse. As a result you'll have a more moderately-paced delivery. Everything can go just a little bit slower. Introductions of classical music must be, obviously, of a slower pace and very conversational.
- Q. What can future dee-jays do to develop their personalities?
- A. Approach each day with the idea in mind that you'd like to make your listeners' day just a little brighter. I think you've got to keep up with current events. You've got to do a lot of extra reading on the outside. Walking into a studio and doing a show is not the whole job of being a disc jockey. You must be the alter ego for all of your listeners. You must be, in some

instances, as bright as the historians of the day, in the sense of knowing what's happening in the various trouble-spots of the world, because these things are obviously going to be part of your show. You're going to reflect some of these things that are happening around the world. It is most important that you remain happy. People tune you in to listen to the brighter side of life, because the war news might be disconcerting, or perhaps the financial news has not been to the listener's delight. Therefore, you've got to bring a bit of happiness into life and you do it by smiling when you speak — by injecting color into your words, and by being pictorial.

Q. Should a dee-jay be natural?

A. Definitely! You've got to be yourself all the time. You've got to be sincere. And remember, the biggest asset that you possess is your own personality, and don't fake it, because someday your faking will betray you. What you really are is what you must be on the air, if you are going to succeed as a disc jockey.

Q. One of the reasons for your success is the interesting conversation you have with your listeners between records. Is this something that came natural for you?

A. I suppose so. I do a lot of this extra reading. I try to maintain a rapport with people from different walks of life. I try to go on the air every day with a fresh approach to what may be the problems of some of my listeners. And of course, I do enjoy the lively art of conversation.

Q. How do you choose your topics for conversation?

A. There are some areas that are dangerous to touch on. Even if you are an oldtimer in the business, you should stay away from religion. Politics is also dangerous ground. You've got to be very careful. You may use any subject of current interest that's in good taste. For example, a *Top Forty* dee-jay would talk about the artist and where he may be appearing. He could say, "I saw Jane Morgan at the Chez Paris and she was fantastic last night. Her repertoire includes . . ." And so forth. Now the middle-of-the-road disc jockey would probably choose topics of more general interest, such as news that's on the front page, human interest stories, weather, things like that — general around-the-home conversation. He's talking perhaps to the breakfast table or to the entire family unit, not just to teenagers. The classical dee-jay music is somewhat restricted. His conversation must be about the composers and their compositions. Of course, everyone is interested in current weather conditions, and the latest forecasts, and the time of day. You're safe to use such material.

Q. Should a dee-jay ever criticize a recording artist?

A. After you've been in the business for a few years, I suppose you have become enough of an authority to say, "I believe that this is the wrong type of material for this artist." But certainly a newcomer should not do this.

Q. On what level should a disc jockey talk to his listeners?

A. He should never under any circumstances talk down to the audience. He must know his market, know to whom he is talking, and then gear his pace, his style, his vocabulary to that particular age level.

Q. Should a dee-jay announce in the style of the music?

A. To the extent that he should match his personality to that type of music, yes.

Q. How often should the time and temperature be given?

A. This varies throughout the broadcast day. I've been associated with morning broadcasts for many years, so I make it a policy to give weather after almost every record. But I paraphrase it. Where the weather bureau might say, "Cloudy today, clearing tonight" I say, "Girls, this afternoon you had better take your umbrella if you go outside." That says the same thing — that it may rain. Later the weather is less important, because people have already dressed for the day, and they've been outdoors themselves and know what the weather is, so every ten or fifteen minutes is certainly enough. You can't do much weather during the day. It gets to be a little bit of a drag. But then again, in the evening, when Dad's driving home from the office or factory, he's curious, now, because tomorrow he may have a golf date or plan to go horseback riding, or to a race track. You ought to tell him what the weather is going to be tomorrow, and you can do it more frequently again. Weather conditions can change the importance of the weather news. If all of a sudden you got advice from the weather bureau of an impending blizzard, or an ice storm, or a tornado, this, of course, would warrant your special attention and would change all the rules.

Q. Should the dee-jay always sound cheerful?

A. Yes, but be careful, because if you're coming out of a newscast that has a serious impact to it, then you had better not be too cheerful. You had better play an even pace.

Q. What good sources of information could you suggest for the disc jockey who is just beginning?

A. The beginning dee-jay ought to start acquainting himself with as many records as possible. He should study the biographies of the artists. He should read trade papers, such as *Billboard* and *Variety*, and of course for current news the daily newspaper. Also, he should read the news that comes into the radio station over the UPI or AP wire.

Q. Do the best ad-lib disc jockeys ever talk from notes?

A. Some do and some don't. It is my belief that the best memory often needs a written reminder, and it might be that you will scribble down a note or two, but generally it's off the cuff.

Q. How does a dee-jay become popular?

A. If there were an answer, everyone would be a popular dee-jay. But I recommend this: Be sincere. Know your market.

Q. What additional tips and suggestions can you offer?

A. Young men and women about to become dee-jays are starting unquestionably the most fabulous career, I think, available to young men and women today when they leave school. If they play it right, if they play it with honesty, if they play it with the thought that they *can* be successful, they're bound to be. And the rewards are great. Not just financial rewards. At the end of a broadcast day, if you entertained thousands upon thousands of people (and when you graduate to a major market you will be entertaining millions of people), there's a delightful satisfaction in knowing that perhaps you've left a little whimsy in the hearts of people — you've brought them some knowledge, some information — you've served to a degree some segment of humanity. You get rewarded for it with a swell night's sleep. It's a wonderful profession.

The Record Request Program

The record request program is much like any other record show, the difference being that the dee-jay solicits and receives requests from fans asking him to play their favorite records. Most of them will ask for current popular tunes. The dee-jay must keep abreast of current trends by subscribing to such trade publications as *Billboard*, *Downbeat* and *Variety*. Also, he should pay attention to the weekly record ratings put over their wires by both AP and UPI.

People like to hear their names read on the air. The dee-jay should limit his listeners to one name per card or letter. High school students have been known to request ridiculous tunes in the names of their teachers, so some station managers insist that only first names be used on request programs.

Once the mail starts coming in, you must set aside some time during the day when you can sort it out according to the selections requested. Then you should play the records for which you have received the most requests. Arrange the records so your show will have good balance. Don't play too many vocals without an occasional instrumental. Keep your program as varied as possible so it will have the widest appeal. If the show is one-sided many listeners will turn to another station.

You can prevent fluffing on the air if you go over your mail carefully. You will find many of the cards and letters difficult to read. Some dee-jays print or type the names and requests on a sheet of paper before the show begins. This makes it a lot easier than reading from the cards and letters themselves.

Occasionally requests will be received for selections not in the station's record library. It is wise to acknowledge the request and substitute another tune by the same artist, if possible. However, if you receive many requests for a particular record that is not in the library, get a copy from a record store, or send to the recording company for it. You stand a chance of losing your listeners if you do not answer their requests.

You should acknowledge all the requests you receive, even though you may not be able to play the selections asked for. Give preference to requests from the sick. It will give cheer to a person lying in bed at home or in a hospital to be thus recognized.

The more popular you become, the more mail you will receive. If you are unable to handle all the requests on a daily basis, talk to the station manager or program director about extending your program. You will always impress your station manager if your show draws a lot of mail. It is good evidence of your popularity on the air, and it could bring you a raise in salary. Also, let the sales manager know about your mail, as it will help him sell radio time on your show to local businessmen.

One great advantage of a record request show is that your listeners are actually helping you program your show, which makes it easy for you to select records. But popular tunes die. Several times a week you should feature new records that have just been released, and ask for listener reaction.

The most important ingredient of a request program — or for any other dee-jay show — is enthusiasm. One reasonably sure way to interest the listener is for you to be interested in the show yourself — and to make the listener feel it.

Footnote for Working Dee-Jays

Every working dee-jay is aware that all radio and television stations pay a fee for the right to play musical selections that have been copyrighted by the composer of the music, the author of the words, or the publisher, but how many know that the simple little tune *Happy Birthday to You* is copyrighted? The melody was written by Mildred Hill of Louisville, Kentucky, a concert pianist at the age of 14, and the words were composed by her sister, Patty, who later became a professor-emeritus at Columbia University. The song was originally called *Good Morning to All*. It was first published in 1893 in a children's book. It was republished in 1935, by an Evanston (Illinois) publisher, who still holds the copyright.

24.

Concert Music

When Walter Damrosch in 1925 conducted the New York Symphony Orchestra in the first symphonic program ever broadcast on radio, it was estimated that one million listeners were tuned in.

When Arturo Toscanini in 1954 conducted the NBC Symphony Orchestra in his final appearance, it was estimated that 22 million people heard the program.

In 29 years between those two events, radio was primarily responsible for making millions of Americans conscious of what is often called — for lack of a better name — *good music, fine music, serious music, classical music, or concert music.*

It really began with a single experimental broadcast over WEAJ, New York. Damrosch, seated at a piano, chatted informally about a composer, his life, his works in general and the composition in particular that the men of his New York Symphony were about to play. Often during the unrehearsed, ad lib monologue the white-haired conductor-composer would illustrate a point he was trying to make by playing a few bars on the piano. He explained difficult passages, told his radio audience what to listen for, how to understand, how to interpret. He did it all without being pedantic, professorial or pontifical. While he assumed that his listeners knew little at all about good music, he never made them feel embarrassed of their ignorance. After he finished his orientation talk, the orchestra played the entire work.

The Friendly Music Master

The experiment was a success beyond all anticipation. WEAJ was swamped with mail. And so, out of that single broadcast, grew the NBC *Music Appreciation Hour*, which eventually became required listening for eight million school children, with NBC supplying the manuals they used.



Walter Damrosch, beside piano on which he continued to practice until his death, and in front of portrait painted in 1885, when he was 23 and already world-famous

Every week Damrosch, in the casual, friendly manner that was typical of him, would introduce good music not only to school children, but to millions of adults who listened in, too, many of whom — until Damrosch came along — had considered the music of such composers as Beethoven and Bach “much too highbrow” for their appreciation.

The fan mail that Damrosch and NBC received was proof that the program was well-named — that it was not only teaching appreciation but was well appreciated. They wrote from Nebraska farms, from isolated New England villages, from skyscraper apartments and slum shanties. They wrote of how much they appreciated it that Damrosch had taught them appreciation. One letter from Iowa was typical:

Dear Mr. Damrosch:

I'm miles from the nearest village. During the winter days it gets mighty cold and lonesome out here. Months go by without my leaving this place and the only contact I have with the outside world is the little radio my nephew put together.

One day, by accident, I heard your program. What you said about Beethoven being deaf interested me because I'm kinna hard of hearing, too. At first I didn't understand some of the music you and your orchestra played, but I listened just the same. Now, I always tune in, because I like it. All those famous composers like Beethoven, Mozart, Brahms and Chalkolsky (sic!) were names I hardly knew before. I mean I heard them but didn't know anything about them. But now I do know, and I also love the pieces they wrote. You see, Mr. Damrosch, they're really beautiful and when you explain it they're not so hard to understand, after all.

Both Damrosch and Toscanini lived to see their musical labors bear fruit. Having learned from radio to appreciate fine music, Americans in 1953 spent more for tickets to concerts than they spent for tickets to baseball games. Besides, that same year the sale of classical records went to the unprecedented peak of \$75,000,000. Even more important, radio's popularization of good music led to the creation of more than a thousand large and small symphony orchestras around the country.

The foregoing historical notes are important for the young broadcaster of today, because millions who listened to the Damrosch hour when they were in school twenty or thirty years ago are today adults who look to radio for at least an occasional concert of the sort of music the maestro taught them to appreciate.

Alike Yet Unalike

There is no reason that a disc jockey should not also sometimes serve as the emcee for a concert of classical or semi-classical music, but he should be aware of the similarities and the differences between the two jobs. Both *do* involve: (1) cueing-up and spinning records, (2) reading the commercials, (3) operating the console, (4) ad libbing introductions to the records, and (5) keeping the program log. But there the similarity of the jobs ends.

Here are some of the ways in which the two jobs are unalike: (1) the selec-

tions of good music will nearly always run much longer than selections of popular music (some will run over half an hour) and so the good-music emcee will have fewer commercials to read, fewer introductions to make, and more time just to watch the record turning around, (2) he is not concerned with hit tunes, for most selections will be popular just because they were written years ago and have stood the test of time, (3) he will not be trying to develop a personal following.

Qualifications

In addition to all that a disc jockey needs to know, the announcer handling a good music program must also have these qualifications: (a) be able to pronounce musical terms (which are often in a foreign language) and know what they mean; (b) be able to pronounce perfectly the names of musicians and the titles of compositions, which may be in Italian, French, German, Russian or Spanish; (c) have an understanding and appreciation of classical and semi-classical music; (d) have a general idea of the history of music, the names of ancient as well as modern musical instruments and a familiarity with the biographies of the great musical figures of the past as well as the present.

A Few Suggestions

Here are some tips for a young broadcaster ambitious to emcee good music shows:

1. Before all else, read a comprehensive history of music from the start of time to the present. One could spend years doing nothing else, for there are thousands of volumes of musical history. The *Reading Guide* in Section III suggests a few easy-to-read histories. For the young-man-in-a-hurry, however, the 17-page entry under *Music* in the *World Book Encyclopedia* (available in most public libraries) is recommended. Here, concisely and interestingly, is given the story of music from the 4000's BC, when the Egyptians clapped discs and sticks together, jingled rods and sang songs, up to the days when worshippers in Solomon's Temple sang to the accompaniment of stringed instruments, and then to the days when the Chinese invented zithers and percussion instruments. Here, also, is a panoramic view of the great composers, from Bach to Shostakovich. Here, also, are photographs and descriptions of every variety of modern musical instruments, as well as panpipes, the shawm, the cromorne, the psaltry, the dulcimer, the zink, the serpent, and many other instruments now extinct.
2. Go to live concerts whenever possible. Between times, listen to broadcasts of good music.
3. Begin collecting records of classical music.
4. Buy at least one of the good-music books listed in Section III.
5. Practise the pronunciation of musical terms, names and titles of compositions in Section III.

Announcing Good Music

Announcers on most good music stations write their own introductions, often as many as twenty a day. It is not safe — especially for a beginner — to try to ad lib these introductions.

The breezy conversational style of a disc jockey is out of place. The voice must be dignified and the tone serious. Cute language, clichés, mispronunciations of foreign names, hesitations and stumbling are unforgiveable. Those listening to good music programs are for the most part discriminating, intelligent, well-educated people, who are accustomed to voices like that of Milton J. Cross, dean of music announcers. They will be impatient with imperfections. Because the music is not new to them, they are not interested in being told the announcer's opinion of it. While a dee-jay can and should make comments on the selections he is playing, the announcer of classical and semi-classical music should confine his remarks to strictly factual material, such as: title, composer, date of composition, age of composer at the time, any unusual circumstances attending the composition, premiere, public reaction to the composition at the time, any odd or interesting facts about the composer.



Deems Taylor, composer and one of radio's greatest music commentators



Milton J. Cross

Thumbnail Biography

Sportscasters may disagree about who the No. 1 man in their special field is. Likewise war correspondents, disc jockeys, commercial announcers and newscasters. But there is no argument when Milton J. Cross is called the best announcer of serious music who ever went on the air. He was born in New York in 1900, sang with the Paulist Choristers, and applied to WJZ for a job at the suggestion of a friend, shortly after the station went on the air. He was hired at first as a tenor soloist, but Thomas Cowan, station announcer, was so impressed with his speaking voice that he suggested that Cross join him on the announcing staff.

"But I am a student of serious music!" Cross retorted. "If I became an announcer I'd lose all my musical contacts."

Nevertheless he did become an announcer, although during the early years he divided his time between talking and singing. He was the first winner (in 1929) of the gold medal given by the American Academy of Arts and Letters for good diction. As he approached his 70's Cross' voice was still as rich, full-bodied and pleasing to the ear as when he did his first radio program as a young man in his early 20's.

25.

Emceeing

Even the networks have no single word to describe the job of such men as Johnny Carson, Ed Sullivan, Mike Douglas, Merv Griffin, Irving Kupcinet, Joey Bishop and the other stars of such programs as the *Today Show*, the *Tonight Show*, *Kup's Show* and the *Breakfast Club*. Their press releases use the terms *host*, or *emcee*, or *host-emcee*, or merely *star of the show*, which is no title at all.

M.C. is an abbreviation of *master of ceremonies* and *emcee* is the way it has always been written in trade papers and now is rather generally transcribed. One definition of an emcee is: a broadcaster who works without a script, introducing to his listener-viewers a collection of guests who may sing, dance, answer questions, or engage in a discussion of a variety of subjects.

At first glance there seems to be little in common between Bert Parks emceeing Miss America contests at Atlantic City, and Kupcinet sitting at an oval table in his Chicago studio, trying to find common-ground for a discussion by a doctor, a lawyer, a world traveler, a labor union leader, a movie actor and a French female writer — a discussion which, if he is successful, may get so heated that Kup's job will then be to keep them from knocking over the coffee cups and all talking at the same time.

They're All Personalities

There *is* a common denominator. Each of these network stars has: (a) an attractive camera-microphone personality, (b) the ability to ad lib with ease, wit and erudition, (c) a good sense of timing, (d) the talent to keep the show rolling, with no ugly pauses or awkward segments of dead air, (e) a knowledge of just what to do when tempers flare and insults begin to fly.

It may take as much diplomacy to handle half a dozen Miss America contestants who want to pull each other's hair out by the roots as it does to sit



Merv Griffin



Dave Garroway



Don McNeill



Irving Kupcinet



Johnny Carson



Jack Paar



Ed Sullivan

between a Communist party official and a leader of the American Nazi Party and keep them discussing politics calmly.

The big-name emcees started in various ways in various parts of the country. Their careers follow no pattern. A study of their lives reveals no rigid set of how-to-succeed rules. Luck played a large part in the success of many. Some began strangely. Johnny Carson, for example, spent thousands of hours mastering the art of sleight of hand and then, billed as "The Great Carsoni," played before banquets and civic clubs. This does not mean that sleight of hand is a prerequisite to becoming a successful NBC emcee.

Jack Paar began on a Canton (Ohio) radio station doing man-in-the-street interviews. Don McNeill started on a small Wisconsin radio station at \$15 a week sweeping the floor and filling in for an announcer now and then. Kup did his interviewing for a newspaper for years before he went on TV. David Garroway was an announcer for KDKA, Pittsburgh. While in the navy in the Pacific, he broadcast a disc jockey show from Honolulu. Merv Griffin began as a singer, dancer, musician and natural-born wit. before becoming an emcee.

Running a Panel Show

While no instructions are available, here or anywhere else, on how to prepare to become a thousand-dollar-a-night network emcee, it is possible to give some tips on what to do and what not to do while emceeing a panel show, such as many stations around the country put on periodically — shows on which a great variety of local, state, national and international subjects are discussed.

1. Make certain in advance of air time that you have written out plainly on three by five cards the names, titles, occupations and addresses of all your guests, one name to a card.
2. In advance of the program, read up on the subject or subjects to be discussed so that you know at least enough to ask intelligent leading questions.
3. Check the pronunciation of all proper names with your guests before air time.
4. When addressing questions or remarks to a guest, be sure to use his name. All guests will have been introduced on the air at the start of the show, but especially on radio, the listener will not always be able to connect the voice speaking with the right name.
5. Do not permit any one panelist to hog the show.
6. The more guests on the show, the shorter should be the comment of any one person, in answering any one question. Lively conversation always consists of short, sharp, snappy dialogue.
7. Watch that your guests keep the proper distance from the microphone.
8. Guests who have never been on the air before will need coaching about coughing, rattling papers, and striking the table.
9. Watch the clock. Pace the show so that there will be plenty of time to

identify all your guests as you thank them for having taken part in the discussion.

10. Always give the subject of the next discussion in the series.

Off-Air Emceeing

There are many special events on radio and television, besides panel discussions, that call for the services of a broadcaster who is adept at ad libbing, has good stage presence, and knows when to be deadly serious and when to relieve a tense moment with a touch of humor — in short, a man who can be the master of any situation. In addition, there is a constant demand on the part of outside organizations for someone to emcee important off-the-air functions. They turn instinctively to the professional broadcaster, knowing that he has good mike techniques and a pleasant voice, and also because he has such a well-known name that his presence will help increase attendance at the event.

Here are just a few of the events or functions which a broadcaster might be invited to emcee: a talent contest at a local theater, a barn dance, a political rally or political debate, a record hop, the dedication of a new library or school, the opening of a new factory, ground-breaking for some new civic structure, the opening of a new marina, events at a county fair, the opening of a new store by a chain-store advertiser.

Lions, Dances and Politics

One young broadcaster I know was invited during his first month in radio to emcee both a barn dance and a Lions Club talent contest. Another did such an excellent job emceeing a political rally that he was offered an important political post — an offer he turned down because he wanted to remain in broadcasting.

Because a radio or TV personality has perfect delivery and is able to project his personality into the homes of his listeners, and never sounds the least bit flustered or embarrassed on the air, many people with little knowledge of broadcasting assume that he will be able to function just as well before a live audience as in a studio. The truth is that there is a world of difference between sitting in a broadcast booth, alone, with the necktie off, shirt open at the neck, relaxed, talking to an unseen audience that may number in the hundreds of thousands (or even millions) and appearing *live* on a platform or stage in front of even a few hundred people.

To Avoid Stage Fright

Many broadcasters concede that they had stage fright the first few times they did outside emcee jobs. There is no easy, guaranteed way of avoiding it, yet there are certain tips that have been passed on by men who have gone

through the mill which will be of assistance and will lessen the breaking-in time.

First, whatever the event is, it is helpful and self-reassuring to do as much research as possible before the event. For example, if it is a talent show, try to find out as much as possible about each contestant. Whatever the event, get as much background material as you can.

Second, write out this material in the form of notes. Such *protection copy* will give you self-confidence. It will be helpful in getting you over the first few moments of uneasiness. It will come in handy if there are any long periods of inactivity in the proceedings. Even if you never have to use any of it, the fact that you have such protection copy in your hand, readily available, will do much to get rid of the feeling of insecurity that you might have, if you went onto the stage or before the mike empty-handed.

Humor Always Helps

Third, dig out a few anecdotes that are appropriate to the occasion and add these to your protection copy. Try to select stories that are somehow related to the occasion. Even when appearing before a live audience, do not tell stories or use language that you would not use on the air. Never tell jokes that could possibly offend religious or nationality groups, no matter how small.

Fourth, work at mastering the technique of ad libbing. Steve Allen, one of the best emcees in the business, tells how he taught himself to get over his shyness and to learn ad libbing by doing a running commentary every time he drove anywhere in an automobile, or even while walking alone down a street. People who overheard him thought him a little mad, because not only were his lips always moving, but often he would *talk* his running commentary outloud. He would comment on everything he saw, heard, and smelled. "There comes a woman in a very peculiar blue dress. It has pleats down the front. Her hat is rather small for so large a woman. It's blue, trimmed with red. The dog that she has on a leash is so well clipped you'd think it just came from some canine beauty parlor . . ." On and on, endlessly. Thus, Steve Allen trained himself to become so adept at descriptive talking that he is now considered one of the very best men in the world at ad libbing.

Don't Panic

Fifth, some broadcasters who, finally, after much training, master their nervousness and learn to ad lib intelligently and smoothly, find that when they actually get before a crowd, they lose their train of thought or their minds get deviated by a smile from someone in the audience . . . by some untoward event . . . by what is happening before them that is not *part of the show*. And then there are those whose minds suddenly seem to go blank for no apparent reason at all. This happens to those of us who are a little older, more often than it does to younger people. But it *can* happen to anyone. The main thing

is . . . DON'T PANIC! (in fact, DON'T PANIC ought to be the primary rule in the book of anyone who ever does any emceeing.) If you get mentally deviated . . . if you suddenly "forget" . . . if your mind wanders . . . remember your Protection Copy. Look quickly at the notes you are holding in your hand and . . . get back on the track.

Sixth, there are many other possibilities of a crisis or an emergency. Someone in your audience may faint. Fire sirens out in the street may drown out your voice. There may be a sudden hail storm, with such a noise on the roof that no one can hear what you are saying. If you are emceeing a political debate, it is even possible that an attempt will be made to break up the meeting. Remember that you are the *master* of ceremonies. Everyone will be looking upon *you* not only to have stage presence, but also *presence of mind*. Eventually you will learn to welcome any emergency, for it will give variety to your life and will test your true ability.

Master the Small Detail

Seventh: What makes a good M. C. is no different than what makes a good writer. Both are . . . (or should be) . . . *masters of the small detail*. This requires, first, an observing eye. You must learn to see! Maybe you think you *can* see. Here's a way to test yourself. If you live in a house, do you know how many steps there are from the street into your living room or front hall? If you live in an apartment building, do you know how many mail boxes there are, where your mail box is? Most people — even those who *think* they are observant — are not, really. Most people notice the obvious. But few except the *trained* are good at observing small details. It helps immeasurably to have a knack for observing the small details, if you are ever going to do any emceeing. Next time you go into a strange room, observe the color of the curtains, what the rug is like and other minor matters. After meeting a new acquaintance, try to remember the color of the eyes, something about the hair, the clothing, the fingernail polish, the color of shoes. And practice *talking* aloud about such small details.

Personality Is Everything

Finally, in emceeing remember that your personality is all-important. Never let a situation get the better of you. Never lose your temper. Never insult people. Never hold anyone up to ridicule, even though it might get you a laugh. Remember that even if you are not on the air, every person in your audience is a listener or potential listener to your radio station — to your own radio

program. You can greatly harm your station's image. You can increase or lessen your own popularity, by *what* you say, *how* you say it, and the general impression you make.

Clothes Don't Make a Man, But . . .

Clarence Darrow became one of America's most celebrated trial lawyers, despite the fact that he was one of the world's worst dressed men. Heywood Broun (there has never been another newspaper columnist quite like him!) was notorious for the food spots down the front of his clothes. In Philadelphia there is an eminently successful broadcaster (male) who wears striking purples, shocking pinks, bright yellows, and other colors that announce his coming a city block away.

However — —

It is a decided gamble for a young man (or woman) just starting a broadcasting career to be either sloppy, flamboyant or eccentric in dress or general appearance. On Page 206 the matter of how to dress for television has been discussed. If one is on radio, or on television but not on camera, one should dress in good taste, with shoes always polished, hair well groomed, hands decently manicured, shirts clean, suits spotless. Although a man's voice may be his fortune, and his command of the language one of his greatest assets, and his intelligence his chief stock-in-trade, it will only add to his reputation to be so well dressed that people turn around in the street and say to each other, admiringly:

"Who do you suppose *he* is?"

This is all especially important if one is running a program with studio guests, or doing a job of outside emceeing.

26.

*Women in
Broadcasting*

One day in 1930, the New York *Daily News* radio editor wrote a brief but demolishing paragraph about a new voice on the air. Martha Deane, who had begun a program aimed exclusively at women, was, in the opinion of Editor Ben Gross, the worst thing that had ever been foisted on the listening public. She was not a smooth talker. She had a high-pitched, rural, Missouri twang. Every now and then she would stumble over her own words. Occasionally she giggled. She often began a sentence without ever finishing it. Besides all these faults of voice and style, Gross wrote that her material was inadequate. He ended his criticism with these words: "Oh what idiosyncracies!"

A week later Gross happened to tune Martha Deane in again. As he listened, her words began to fascinate him. Everything he had previously written about her was still true, and yet . . . he decided she was no ordinary female gabber. She obviously had a wealth of experience to draw on. She had a store of amusing and entertaining anecdotes about the great, the near-great and the humble. Above all, it was evident that she had a tremendous love of people. She commented on art, politics, literature, human relations, instead of giving recipes and household hints, as other women on the air were doing.

So Editor Gross wrote another column. He called Martha Deane "a great reporter." He said she obviously at one time had been a first-rate newspaper woman. He advised the *Daily News's* millions of readers to tune her in and hear for themselves.

Turning Point in a Career

What the New York columnist did not know was that the day his second column appeared the executives of WOR were on the verge of firing Martha

Deane because they had decided she was not a colorful enough personality to be on radio. When they read the *Daily News* comment they reconsidered, so Martha Deane was given another chance. However, if at the end of a specified trial-period she had not made good, she was out.

That incident was the turning point in the life of Mary Margaret McBride. (Martha Deane was the name under which she broadcast while she was on WOR. The name belonged to the station. After MM left WOR there were many other Martha Deanes — women who have been required to exude personality, but to do it while pretending that Martha Deane was their real name.)

Within a few days after the appearance of that second newspaper article advertisers began *asking* for time on her program. And that is the way it was for the next twenty years for Mary Margaret McBride.

The biography of this paragon is a female Horatio Alger story. It really begins when she was 16, and a wealthy aunt who had founded William Woods College in Fulton, Missouri, offered to send her there if she would study to be a teacher. But the girl had her mind set on a career in journalism, so she worked her way through the University of Missouri, completing the four years in two and a half, while at the same time earning money and gaining experience as a newspaper reporter. (Her first job was on her hometown paper, the *Paris Mercury*. Paris, Missouri, is slightly smaller than the other Paris. Its population today is 1,393. It was even smaller in MM's day.)

\$25 a Week to Start

Before she was ten years out of college, she became the highest paid magazine writer in the United States, traveling the world on assignments. When the Great Depression cut the maximum prices she received for an article from \$3,000 to \$500, she began looking for a job with a fixed salary and a better future than free-lancing. WOR, she heard, was looking for a woman to work on the air, so she applied. She was one of forty auditioned. Later she said:

"I think I was the one who got the job because I didn't ask about salary. At the start I got \$25 a week for doing six half-hour broadcasts. The typist in the office got \$20 . . . the station manager \$75."

Martha Deane was supposed to be a loveable, grandmother-type, who looked at the world through the eyes of her children and grandchildren. At first MM tried to conform to the pattern set by the station, but one day, able to bear it no longer, she dropped her script, hesitated for a moment, then said into the microphone emotionally:

"I find it necessary to kill off all my family. I am not a grandmother. I don't have any children. I'm not even married. I'm not a bit interested in telling you how to take the spots out of Johnny's clothes or what to do with the leftovers in the icebox. I'm a reporter. I've just been to the flea circus. If you'd like to hear about it, I'll tell you."

The Advertisers Stood in Line

The station manager trembled with rage, but he finally decided to give her a chance of being herself on the air. It was shortly thereafter that the voice of Mary Margaret McBride (but still known as Martha Deane) reached the Gross ears.

Although broadcasting only over a local station (she later switched from WOR to the CBS station in New York, then to the NBC station, then to the ABC station) she was heard daily by many millions of women in the vast Atlantic Seaboard area, and her reputation became national. At times as many as fifty advertisers stood in line, waiting for some of her sponsors to drop dead or give up their time on her show so they could get on.

MM made a great contribution to the performer-end of radio by demanding the same freedom on the air that she had had as a writer. She chose the products that would be advertised on her program and if she thought any of the commercial copy was exaggerated, false, misleading or objectionable, she threw it out.

The Secret of Her Success

Each day's program was as different from the last as the guests she brought to her microphone were different — generals, admirals, ambassadors, political leaders, foreign celebrities, artists, writers, playwrights, actors, scientists, war leaders, peace leaders. But no matter how celebrated they were, the interviewer was always Mary Margaret McBride (she stopped being Martha Deane and became legitimate after leaving WOR) — Mary Margaret, simple, sweet, naive in some ways, at heart always a country girl from Missouri who could be thrilled, amazed, excited and awed by the stories she persuaded her guests to tell. She had a way with guests that put them at their ease and encouraged them to "tell all." (The writer of this book knows, having been a guest on her program on seven different occasions.)

Her style, her technique, her methods could well be studied today by any young woman in broadcasting or studying to go into broadcasting. She began her program each day by chatting informally with her listeners, as if they were all old friends — which most of them felt themselves to be — such good friends that few of them ever used her last name when talking about her or writing letters to her, which they did by the bushel-basket-full every day. She was "Mary Margaret" to one and all.

A Genius at Interviewing

As she talked with her guest-star, her own personality came out, as much as did that of the interviewee. She always seemed deeply interested in what the person across the microphone had to say. She bubbled with spontaneity, exuded good will, and seemed to find life a constant adventure, bringing to it a great

capacity for enjoyment and enthusiasm. She asked the questions that her listeners would have wanted to ask, had they been present. ("Was your wife with you on the adventure when it happened?" "What is your wife like?" "Why did you marry her?" "Weren't you afraid, alone in that open boat in the middle of the ocean?" "Why was the little Greek girl in the hospital whimpering all night?" "How did her arm get blown off?" "Why didn't they bandage it?") Her listeners pictured her as part of a sophisticated, glamorous world that they could only dream about, but she made them see, hear and smell all that she saw, heard and smelled, by her skill as a broadcaster.

At night, back home in her apartment overlooking Central Park, she would often stay up until 2 or 3 a.m. reading the latest book by or about the man she was to interview the next day. Yet when she went on the air she never had in front of her any more of a script than a few notes, scribbled on a small piece of paper or the back of an envelope.

She Could Even Sell Carrots

Her listeners were so much under her spell that if she said, at 11:28 a.m.: "Ladies, the minute — the very instant I sign-off, I want every one of you to put on your hats and go right out to the store and buy a large-size package of XYZ!" tens of thousands of women at exactly 11:30½ a.m. would put on their hats and obey her orders exactly, even if, having missed the earlier part of the commercial while answering the phone, some of them had no idea what XYZ was or whether they needed any.

Printers Ink, advertising trade paper, called it "perhaps the most outstanding reliance upon the word of a human being in the commercial field."

Once when there was a great surplus of carrots in the Eastern markets, MM told her listeners to go out and buy some that very day — "Now!" The total sale of carrots that day leaped from two tons to ten tons, meaning that 16,000 of MM's listeners must have gone right out and bought a pound apiece, or 8,000 bought two pounds each.

Honors, Awards, Acclaim

In the 1940's honors began coming her way in abundance — medals, awards, plaques, topped by a decoration bestowed upon her by the King of Norway for her broadcasts in behalf of occupied Norway during the war. The Governor of Missouri proclaimed an MM Day. After VE Day the U.S. Army flew her to England, France and Germany in a Flying Fortress so she could "look around."

On one of her anniversaries, 20,000 people packed Madison Square Garden to sing "Happy Birthday" to her. Mrs. Franklin D. Roosevelt headed the list of dozens of celebrities who paid tribute to her.

MM had many imitators, and then there were others who used quite different techniques. There were women whose stock-in-trade was barbed wit. (One

female broadcaster, interviewing an artist, asked him to explain one of his paintings. When he replied, "Painting is a very hard thing to talk about . . ." she interrupted him with, "Then we won't talk about it!" and that was the end of that interview.) Others dropped names whenever they opened their mouths. ("Last night in the *Golden Nugget* I bumped into . . .") Others capitalized on insulting their guests. ("Who are you? Oh, did I invite *you* on the program?")

Ex-chorus girls, ex-opera singers, ex-beauty queens, ex-beauties tried radio, and later television. The air-life of many such broadcasters was short. They flashed brightly for a moment, then spluttered out.

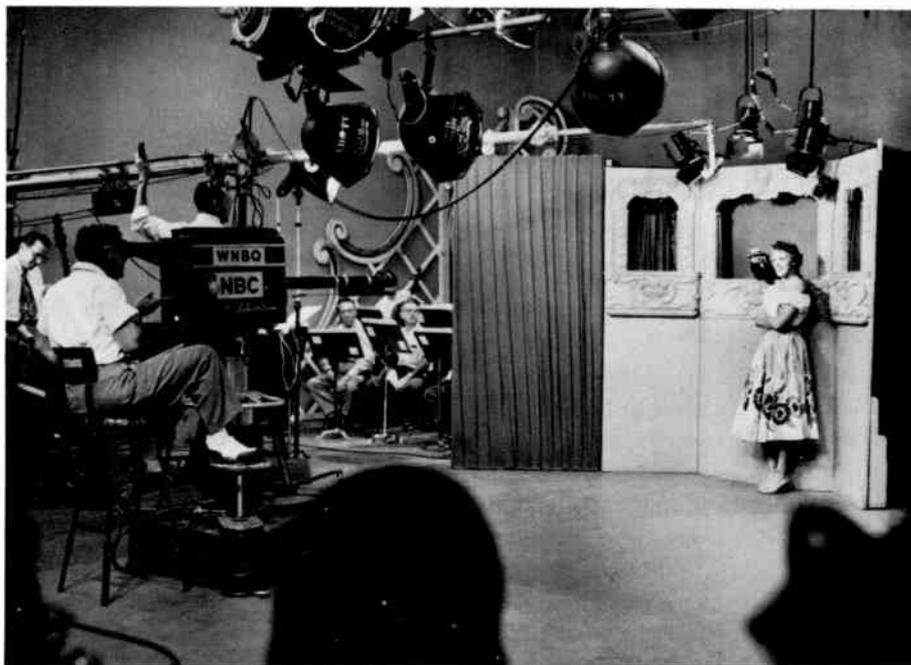
Aunt Fanny Is Born

The transition from radio to television was too great a leap for many women — even successful ones — to make. One notable exception was Fran Allison. Her roots are in soil similar to MM's — only it's Iowa soil instead of Missouri soil. Her first job was as a singer on a Waterloo, Iowa, station. They gave her thirty minutes to sing and do commercials. She had to sell them, write them, and then deliver them. This was a challenge which most young women singers would have failed. But the *Fran Allison Show* stayed on the air in Waterloo for a full three years.

The program director had a noon program of his own, beamed to a farm audience, with news, market reports and entertainment. The show so intrigued Fran that she spent most of her lunch hour listening and watching. There were many characters on the show, all played by the program director, a near-genius at impersonation. One day, as Fran watched from outside the studio, he announced over the air the unexpected arrival of Aunt Fanny. Fran Allison waited with anticipation to see what sort of character she would be, only to have the door of the studio flung open and — suddenly she was on the air. That was how Fran Allison became Aunt Fanny. From then on Aunt Fanny was the *alter ego* of Fran Allison. They have been together ever since. Aunt Fanny's first accomplishment was in bringing a large farm implement company onto the station as a sponsor. In three years, as a result of this radio advertising, the company had to build two additional factory-stores.

Then the Breakfast Club

Fran's next achievement came as the result of giving in to pressure when she went back to La Porte, Indiana, to attend a high school alumnae affair and was asked to sing. The speaker of the evening, an official of the American Rolling Mills, was so impressed by her voice that the next day he called around at the studio and asked if she would permit him to submit an air check of her work to a network acquaintance of his. The next week she received a call to come and do an NBC audition in Chicago. The following week she was appointed staff vocalist at NBC. Her first assignment was on Don McNeil's *Breakfast Club*. McNeil glanced over her biographical sketch, spotted a re-



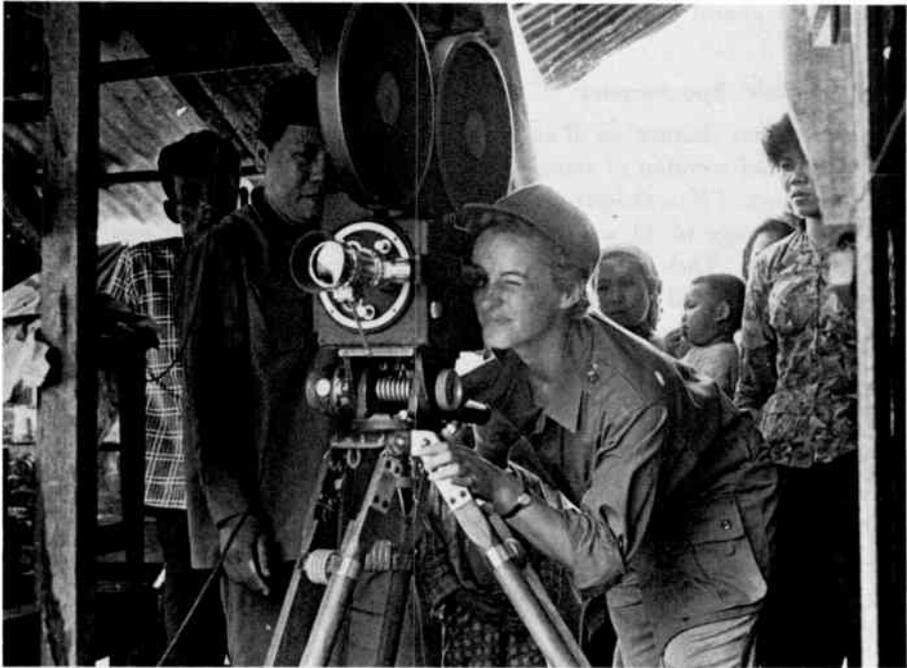
Fran Allison, the middle member of the Kukla, Fran and Ollie team, at work in an NBC studio

ference to Aunt Fanny and invited her to bring Aunt Fanny with her to his studio some time. She did. Aunt Fanny stayed. In fact, she outstayed Fran. Twenty years later Aunt Fanny is still on the *Breakfast Club*.

One night while doing a hospital benefit in Chicago, Fran met a young puppeteer, Burr Tillstrom, whose two characters, Kukla and Ollie, Fran found "intriguing, enchanting and completely winsome." When RCA, looking for a television program that would sell television sets, offered Tillstrom a one-hour program, five days a week, he suggested that if someone could work in front of the stage it would help him a lot. That is how Kukla and Ollie became a television show called *Kukla, Fran and Ollie*, which had high success for a full decade.

Women in Radio

In the early days of radio it was feared that women, who do the bulk of the buying in America, would either turn the dials or would be offended if a woman announcer tried to sell them anything. Then there was the danger that a woman on the air would talk down to her listeners, as if she were a teacher and they were her pupils. Those women who have been the most successful in radio have been those who cultivated the pleasant tones of conversation, free from affectation and mechanical inflections.



Canadian Broadcasting Corporation's Beryl Fox in action close to the fighting front in Vietnam.

When Mrs. Eleanor Roosevelt was offered \$3,500 a broadcast (she contributed all the money to charity) some said cynically that it was just because of her name. This was partly true, yet she spoke on the air as she did on the lecture platform, which was as she did in her own living room with friends — earnestly, naturally, and with warm friendship in her voice — all qualities any good broadcaster, male or female, needs to have.

Even Female War Correspondents

There is virtually no place in the broadcasting galaxy that women are not filling today. Even as war correspondents. A female Canadian Broadcasting Company producer, Beryl Fox, won the George Polk Memorial Award for the war documentary she filmed in Vietnam, called *The Mill of the Gods*. Dressed in army khaki, Miss Fox trudged jungle patrols with U.S. Marines, rode gunboats as they traded fire with shoreline snipers, and flew with bomber crews over guerilla strongholds.

It would be unfair, however, to start naming even the top women in television and radio, because there are dozens who are brilliant and earn salaries that sometimes run into six figures; there are hundreds who do an excellent job, win a degree of fame and have immense followings; and there are literally thousands (yes, thousands!) who have a happy and creative life in broad-

casting, for almost every station in the country has at least one female staff member.

First Female Sportscaster

However, no chapter on *Women in Broadcasting* can go to press without at least a brief mention of some of the pioneers.

Jill Jackson of New Orleans, one of the first (perhaps *the* first) female sportscaster, at the age of 13 was junior golf champion and in 1940 was women's golf champion. Then she suffered a spinal injury that forced her to give up sports, so she turned to sportscasting, for WSMB, New Orleans.

Among other pioneer women on radio were Besse Howard, WCAU, Philadelphia; Anne Holden, KGO, San Francisco, and Eleanor Sanger, WQXR, New York, one of the first women program directors.

Gertrude Berg, who died just a few months before this volume went to press, deserves a special place in the *Women's Hall of Fame*. For many decades she wrote, directed, and took a leading role in *The Goldbergs*, a radio program with such universality of appeal that she once received a letter from two Catholic nuns explaining that the previous day their religious duties had forced them to miss *The Goldbergs*, and so please would she send them the full script because they had a premonition that they had missed an important episode. During most of its life the program had an audience of at least eight million.

Women in Television

One of the most cruel commentaries on women in television appeared under Critic John Crosby's name in the New York *Herald-Tribune* some years ago. Reviewing a program by Wendy Barrie, he wrote:

It's a matter of gossip, back-biting and impudence, delivered at breathless speed and accompanied by the most superb display of hand-wringing, hair-waving, body-wiggles and facial contortions . . . a spectacle I found vastly more entertaining than some of the dog acts on Ed Sullivan's show. There are guests, too — singers, painters, actresses and the like, all a-thirst for publicity and all possessed of some talent, which Miss Barrie succeeds skillfully in suppressing.

Despite such barbed criticism, women have done and are doing even better on television than they ever did in radio. There are all-girl stations on which *everything* is done by what once used to be called the weaker sex — even the technical jobs of operating cameras and lights. Stations with entirely female staffs are to be found in Palm Beach, Florida; Memphis, Tennessee; Terra Haute, Indiana, and in several other cities.

The first metropolitan station to go all-girl was WNEW-FM, New York, which celebrated the Fourth of July, 1966, by announcing that four beautiful and intelligent-sounding young women would divide the station's broadcast hours — 10 a.m. until midnight. All four had had experience doing radio or television commercials, or had been on Broadway, or in Hollywood, or had appeared in



Mary Margaret McBride



Pauline Frederick



Nancy Dickerson



Bess Myerson

minor or major roles in television dramas.

Practical Advice

Fran Allison, from her wealth of experience in both radio and television, has addressed these words to young women broadcasters, or those who aspire to be:

Most radio and television stations have a woman on the staff who is known as the *Women's Editor* of the station. She will usually have a segment of time in the morning or afternoon on the station on which she can inform her listeners about the latest trends in fashion, recipes, current food values, travel, and other news of interest for women. And she will usually have an interesting guest or guests to share the program.

Now, let us talk about you and *your* part in this picture, and let's make a personality check. Do you enjoy other people? Do you find it easy to communicate with others? Radio and television *means* communication. Are you observant? Are you a good listener? When interviewing, it's a very important thing to listen; and interviewing plays a large part in most women's shows. Be as familiar as possible with the background of the person you are to interview. Know his interests, his accomplishments, and if (for example) you are to interview an author who will be talking about his latest book, try to read the book first. This will aid you greatly in choosing your questions.

Your program may include a food section. It used to be said everyone imagined he could write a song. Well, now the field has widened to include cookbooks. Direct some of your food suggestions to the backyard weekend chef — Dad. Invite women to send in their husband's favorite barbecue triumph recipe. You'll be surprised at the response. Encourage your listeners or viewers to participate in your program. Ask them to send the household hint they have found most helpful. Ask them for suggestions as to what they want to hear or learn about it.

People enjoy hearing their names. Your mail can be of immeasurable help in planning your program. You might include a local professional person on a weekly appearance basis; a pediatrician, an orthodontist, an obstetrician, a tax expert, a golf pro, a beauty consultant, a travel agent. Offer your assistance in local drives and campaigns. Much local information will be sent to the women's editor of a station. Encourage it. You'll receive information on PTA meetings, local bake sales, club meetings, and church affairs. In addition, the UPI and AP wire services have daily segments of news devoted to women. Another source of material is to keep abreast of the latest women's magazines. Some stations will subscribe to the publications requested by the women's editor.

If you are doing a television show, your technical staff will appreciate your cooperation in rehearsals. Make it easy for them to televise what you want shown. Work things out with them. They will advise you on what materials in your wardrobe will or will not photograph well. Take their advice. Make-up should be carefully, but simply, applied. Eye definition may be strengthened, but never exaggerate, and never let what you are wearing detract from what you are saying. Never let variety in your program make it impossible to cover any one subject well. Choose your identifying theme carefully. Make it a bright and a happy one, and if you include music in the body of your program, make it conform to the general mood of the material you will be using in the program itself.



"Next time say 'Let's check over our recipe and see where we went astray'; not, 'What the hell's wrong now?'"

(From the April 4, 1966, issue of *Broadcasting*, the Businessweekly of Television and Radio. Reprinted with permission.)

27.

*Children on the Air:
Danger or Delight*

Children's programs are about as old as radio itself. Advertisers, aware of how much influence the young can have on the buying habits of their parents, have always been interested in a program that has proven juvenile appeal.

Thomas H. Cowan, who has the undisputed honor of being the first radio announcer in the New York metropolitan area, likes to tell the story of the first children's program. It happened in October of 1921, just a month after Cowan had put WJZ on the air. The station's program director asked a woman who was running a series of children's stories in the Newark (N.J.) *Sunday Call* to try reading one of them over the air. If the audience reaction was favorable, WJZ might put her on regularly.

The WJZ studio was located on the roof of the Westinghouse factory in what was sometimes referred to, euphemistically, as a "penthouse." Actually it was little more than a shack, reached by climbing a fifteen-foot iron ladder that led through a hole in the roof. The female writer was something between portly and plump. Also, she was exceedingly timid. She had, she said, no nervousness about talking into a microphone to a large and unseen audience, but she balked at climbing that fifteen-foot ladder. Fortunately she had been accompanied to the studio by Bill McNeery, a *Sunday Call* reporter. He and Cowan volunteered to assist her up the ladder. They had her about six feet off the ground when she fainted.

"Now what do we do?" McNeery asked.

As she lost consciousness, the lady story-teller had dropped several sheets of copy paper on which were pasted the clippings of the newspaper stories from which she intended to read. Cowan picked them up and handed them to McNeery,

saying:

"It's your newspaper. You read them!"

McNeery agreed, but just before going on the air he asked:

"What do we call it?"

Cowan glanced around the room for inspiration. Through the window he saw a full moon.

"Let's call it *The Man in the Moon*. That's a name the kids'll like."

The program was an instant hit and *The Man in the Moon* became one of the best-loved characters of radio in the early 1920's.

The Perfect Formula

Then there is the story of the woman broadcaster in Charleston, West Virginia, who billed herself as *Auntie B.* and who devised the perfect formula for building a listening audience. Every morning, just before air-time, she went to one of the public schools and "borrowed" a small child for the duration of her program. In between spot announcements, she would ask the child simple questions that generally brought forth simple, often monosyllabic answers. But the genius of the idea was that no one knew in advance — not even Auntie B — what child was going to be on the air, and so every mother of a grade school pupil in Charleston simply *had* to listen to Auntie B's program every morning of the week, just in case her little Willie or Susie might happen to be the one interviewed.

In Auntie B's case children were a delight, because they assured her an immense listening audience, which in turn assured her all the sponsors and spot announcements she could handle, which in turn assured her a good income. But the story of Auntie B also illustrates how children on the air can also be a danger. One morning she was interviewing a lovely, six-year-old with masses of curly blond hair and a twinkle in her bright blue eyes. The dialogue went like this:

AUNTIE B: Mary-Lou, if I were your fairy godmother and could make any wish come true, what would you like? Think hard, now. Would you like a trip to the top of the tallest building in New York? Or a ride in a real airplane? Or the biggest box of chocolates in the world? Or a new dolly? Think hard! Do you know what you would like best?

MARY-LOU: Yes, I know, Auntie B.

AUNTIE B: Then you get right up close to the microphone and you tell our large and attentive radio audience what you would like better than anything else in the world.

MARY-LOU: I'd like to go to bed with my boy-friend Johnny and spend all night in bed with Johnny.

Also at the microphone in Charleston that morning was a visiting lecturer, waiting to be interviewed about his latest book. (He happens, also, to be the author of this book.) There was a long bit of dead air. As Auntie B's other guest leaned forward to try to save the situation for her, she waved him away and turned to the child again. The following dialogue then took place:

AUNTIE B: Mary-Lou, I am afraid you misunderstood. What I said was that if I were your fairy godmother and could give you anything you wanted, wouldn't you like to cross the ocean in a big ship, or have a wonderful birthday party, or get a big, new doll?

MARY-LOU: No! I want to go to bed with my boy-friend Johnny and spend all night in bed with Johnny.

There is a moral to the story for all broadcasters — on radio or television — male or female. Art Linkletter has made a small fortune collecting and publishing the words of wisdom and the bloopers that come from the mouths of sweet, innocent children when they get before a mike. The habit in recent years of putting children's shows on tape instead of using them live has avoided much embarrassment. But if a show *is* live, the broadcaster must be on the alert for the unexpected. When it happens, the best thing to do is to pass it off as lightly as possible and then hurry on, as if nothing had happened.

Some Practical Suggestions

All the networks and many local stations produce children's programs and most of them have no trouble finding sponsors. They all fall into two classifications: (a) programs put on by adults for a children's audience, or, (b) programs on which children themselves appear.

Here are some tips from professional broadcasters who have had years of experience working with children. They apply to both categories of programs, no matter whether on radio or television:

1. What children want most is to be entertained.
2. Most children are highly imaginative, even though they may also be very practical. They will accept the idea that trees, toads and thing-a-ma-jigs can talk. They like whimsy and fantasy. They love fairy tales. Much of their own play is make-believe.
3. Remember that children today are far more sophisticated than their parents were. They are aware of rockets, space ships and supersonic planes, and many of them know something about the floor of the sea, how and why an atom is split, and how it is that a frog can jump so far.
4. The more informal and intimate you are with children the better they will like it.
5. Don't be too complicated or elaborate. The fewer the props the better.
6. Don't try to be subtle. Children won't understand it.
7. Never do any faking. The children are likely to see through it.
8. Remember that children like to feel they are part of the show.
9. Be sure that all facts mentioned are correct and be sure of the correct pronunciation of all names and places. Otherwise you will get a flock of reproving letters.
10. What will interest a child of 11 may completely bore a child of 5, and vice versa. Decide in advance what age group you are aiming at.

11. In re-telling a classic, never depart from the basic facts. Children remember and they resent anyone distorting stories they know and love.
12. Constant effort should be made to maintain interest throughout the program.
13. The more conversational in style, the better the children's program.
14. Stories written for the eye — to be read — generally must be drastically revised before they are presented to a *listening* audience.
15. Children's librarians are experts in what children like. Most of them will feel flattered if they are asked to give advice or make suggestions about a children's program.
16. Never preach to children.
17. Children are more sensitive to insincerity than adults. They can spot it and they resent it.
18. It takes intelligence and perspicacity on the part of the broadcaster to steer a careful course between the twin dangers of talking over children's heads and giving them the impression you are talking down to them. Try, instead, to talk their language.
19. When talking to children, or reading for them, it is necessary to take many more pauses than normal. Also, it is necessary to underscore more words. The rate of delivery should be slower, to enable the child to visualize what the words are saying, or (if television) to react to what is being seen on the screen.
20. Request parents to send in the dates of their children's birthdays. If you have a television show, ask them also for photographs, so the camera can pick up the photo, while you announce the name of the birthday-child. This will make a good, regular local feature.
21. Mail from children should never be ignored. A child may send in a drawing or a scribbled question, or a painfully-printed letter of appreciation. Whatever it is, it is a friendly gesture and should be cheerfully acknowledged.
22. Women doing a television show for children should take care that their wardrobe is simple and their hair style soft and never exaggerated. The voice should be gentle and the language easy to understand.
23. When you invite children to visit your show, require that at least one parent accompanies them. Ask parents to write to the station for tickets. In this way it is possible to schedule them so that the studio facilities will never be over-taxed. Provide each child-guest with a small, inexpensive remembrance.
24. Some time should be devoted to children who are ill or in hospitals. A simple mention of the child's name on the air may speed recovery. It is also advantageous to pay an occasional visit to the children's ward of a hospital, with television equipment or at least a tape recorder.
25. From her experience with puppets, Fran Allison advises: If you are using puppets on your show, don't discount the possibility of making up your

own stories. You can make stories to fit your characters. But never preach to children. If you have character puppets, let the constructive suggestions be offered by them, or by a staff member who is made up like a clown and is a regular member of the show.

What to Avoid

All networks and many stations have set rules about children's shows. Here are a few that are general:

1. Don't make heroes out of gangsters and criminals.
2. Don't confuse recklessness with adventure.
3. Don't portray unfair exploitation of others as commendable.
4. Don't arouse disrespect for constituted authority: ie, parents, teachers, the police, government officials.
5. Crime should never be portrayed as attractive, or as a solution to human problems.
6. No reference should ever be made to kidnapping, or threat of kidnapping.



Ben Grauer does a sidewalk interview.



Art Linkletter

What to Strive for

Here are some positive goals for children's programs, excerpted from the NAB Codes for Radio and Television: (See Section III for the full codes.)

1. Programs specifically designed for listening by children shall be based upon sound social concepts and shall reflect respect for parents, law and order, clean living, high morals, fair play, and honorable behavior.
2. They shall convey the commonly accepted moral, social and ethical ideals characteristic of American life.
3. They should contribute to the healthy development of personality and character.
4. They should afford opportunities for cultural growth as well as for wholesome entertainment.
5. They should be consistent with integrity of realistic production, but they should avoid material of an extreme nature which might create undesirable emotional reactions in children.

Television for Children

Radio's greatest appeal for children is the challenge to use their imaginations. Television leaves nothing to the imagination, but it does have the power — with its puppets, actors, actresses, scenery, camera tricks and visual gadgetry — to hold attention.

There are a dozen different forms a children's television show can take, among them straight narration illustrated by still pictures; narration with the storyteller surrounded on camera by a group of children whose reactions the camera will pick up; narration over sketching by the narrator or an assistant; off-camera dialogue over stills or film; narration illustrated by pantomime by children or staff members; puppet shows; nursery school programs, with small children constantly on camera as they sing, march, play games, identify familiar objects and do anything else that will sustain interest while giving the cameraman a chance to make good, characterful closeup shots, which will appeal to adult viewers, even if they do not happen to be the parents of the child being televised.

Power Over the Young

One of the best examples of the influence that broadcasters can have over children is the story of Jon Arthur, known to his young followers as Big Jon and whose show, *No School Today*, for years originated from Cincinnati. One day he invited those listening to raise their hands above their heads. Across the country, thousands — perhaps hundreds of thousands — obeyed. But fifteen minutes later ABC stations were flooded with calls from parents asking Big Jon, please, please to tell the children to drop their hands. Apparently he had forgotten that he had not said, "Hands down now." and according to the sad tale told by distressed parents, many of the children, heedless of parental urging, refused to lower their hands until Big Jon told them to.

28.

Sportscasting

Time: a crisp autumn day (October 5) in 1921. Place: the Polo Grounds, New York City. Occasion: the opening of the World Series, New York Giants vs. New York Yankees.

In the press stand a sports writer for a New York newspaper, who had been hired especially for the occasion, had a telephone line open to the studios of WJZ, then in Newark, New Jersey. Over this line he was giving a running account of the game, play by play. But reception at the other end of the telephone line was not nearly of broadcast quality — not even broadcast quality in those pioneer days of radio — and so an announcer in Newark, after listening to a description of a play over his earphones, would turn to a microphone and describe the play all over again for WJZ listeners. He even supplied simulated sound effects. As he announced: “It’s a good pitch!” he would break an ordinary kitchen match close to the microphone in such a way that it sounded just like the crack of a bat against a ball. He did the whole broadcast with his microphone near an open window. On an adjoining rooftop, just below the level of the window, a group of men and boys, hired for the purpose, would cheer and shout everytime they were given a signal from WJZ. As they did, the announcer would hold his microphone out the window and describe the excitement of the crowd.

A \$100,000,000 Industry

By 1966 — just 45 years later — sportscasting had become such Big Business that networks and stations agreed to pay \$44,105,205 for the rights to broadcast the games of 24 professional football teams and 118 college teams during just one season. From the corporations sponsoring the broadcasts and telecasts of these games, networks and stations would collect more than double that outlay — a gross of approximately \$100,000,000. By 1966 the going price for a professional linebacker had soared to \$600,000. By that time the marriage of broad-



NBC Announcer Bob Ebans interviews Seabiscuit.



Graham McNamee interviews Babe Ruth

casters and professional sport had taken so well that one of the networks (CBS) had purchased a major baseball team (the New York Yankees).

Sportscasting's Hall of Fame

The best-known names in the early days of sports broadcasting were Graham McNamee, Ted Husing, Joe Boland and Bill Munday. After them came a distinguished galaxy: Grantland Rice, Bill Stern, Clem McCarthy, Red Barber, Mel Allen, Tom Harmon, Red Grange, Chris Schenkel, Earl Gillespie, Lindsay Nelson, Don Dunphy, Harry Wismer, Curt Gowdy, Joe Garagiola, Dizzy Dean, Bob Prince, Burt Wilson, Ray Scott, Vin Scully, Russ Hodges, Jack Brickhouse, Jack Drees, Harry Caray, Merle Harmon, Chuck Thompson, and Ernie Harwell.

Some were one-sport specialists, others were amazingly versatile. Dunphy, twice president of the New York Sports Broadcasters Association, in his first quarter century of radio and TV work broadcast boxing, football, baseball, basketball, golf, track and field events, horse racing, harness racing and even bowling.

Stern, who for decades was top sports man for NBC, was also as much at home calling shots on a golf course as he was looking down onto a baseball diamond, a football gridiron, a race track or a tennis court.

Teams All Have "Voices"

Some are (or have been) the *voice* of a particular team, such as Nelson, play-by-play commentator for the New York Mets; Gillespie, Voice of the Milwaukee Braves and Green Bay Packers; Caray, Voice of the St. Louis Cardinals; Barber, for 13 years voice of the New York Yankees; Prince, Voice of the Pittsburgh Pirates; Hodges, Voice of the Giants; Scully, Voice of the Dodgers; Brickhouse, Voice of the Chicago Cubs and Sox; Thompson of the Baltimore Orioles; Harwell of the Detroit Tigers; and Merle Harmon, now Voice of the New York Jets and the Minnesota Twins.

These top men in the field of sports reporting achieved success in a variety of different ways. Some began in humble jobs, on small stations. Brickhouse, who in 1963 became the nation's first television reporter to describe two thousand official major league baseball games from one city (Chicago), started as a combination switchboard operator and part-time announcer for WMBD, Peoria, Illinois.

Gillespie, who in his first twenty years of broadcasting handled major sporting events for all the networks, was one of the few who began in the field he has been in ever since — sports. But he began at the bottom, on a tiny, new FM station in Green Bay, Wisconsin, and the sports events he covered at the start were high school games in the area.

Many Began Their Careers Humbly

Schenkel, one of the most articulate sports voices for more than two decades,

covered high school games in his hometown of Bippus, Indiana, population 275, before he went to Purdue University, where he paid his own way with what he earned summers sportscasting on small stations around the Middle West.

Wismer, who for 16 years was the Voice of Notre Dame, and the National Football League's Washington Redskins, started as a sports broadcaster for WKAR, the Michigan State University station, after he had been so badly injured playing football that the coach recommended him for the broadcasting job.

Scully, who several years ago was named the Outstanding Sportscaster in the United States by the National Sportscasters and Sportswriters Association, began as a staff announcer at WTOP, Washington, D.C.

Prince, who became in the Pittsburgh sports world what the Empire State Building is among New York's skyscrapers, began by answering a newspaper ad for an announcer to do a daily, 15-minute sports program. He got the job. Starting salary, \$7.50 a week.

Grantland Rice was one of many sports men who came to radio from the newspapers. Another, Clem McCarthy, who could make the dullest horse race sound like the event of the century, also started out as a sports writer, but when NBC discovered what he could do with the *spoken* word, his radio career began.

619 Applied; One Was Chosen

Ted Husing, who was born over a saloon in the Bronx, New York, was one of the first men in the world employed solely and exclusively as an announcer. In the autumn of 1924 WJZ, Newark, advertised for an announcer. Soon after the newspaper appeared on the street there were 619 young men standing in line. One of them was Husing. He got the job, partly because of his ability to rattle off 400 words of good English per minute.

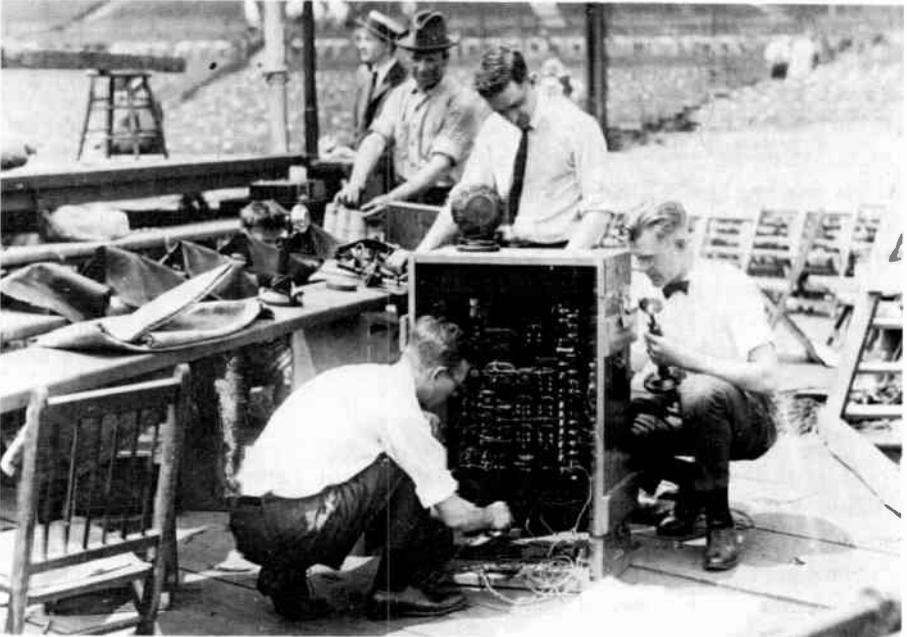
McNamee, the dean of all announcers and sportscasters in the early days, got into radio as a singer. Then he did a little announcing on the side — and that was the end of his musical career. He became a national figure with his announcing of the 1927 Rose Bowl tie (7 to 7) between Alabama and Stanford.

10,000 Sports Shows on TV

Some sportscasters are connected with one or another of the networks. Tom Harmon, who in 1966 figured out that he had done 10,000 sports shows on television — an average of ten shows per week for almost 20 years — is with ABC.

Some sportscasters have single-station affiliations. Scott, who was named Minnesota Sportscaster of the Year for 1962, 1963, 1964, 1965, and holds many other awards and honors, is affiliated with WCCO, Minneapolis.

Most of the men under discussion are masters of vivid language. Some have used stock phrases of their own so often that they have become their trademarks. Example: Whenever the Giants hit a home run, Hodges sings out: "Bye, bye, baby!" And every Giants fan within hearing knows what he means.



Preparing for what came to be called "the world's first real sportscast" — the Dempsey-Carpentier fight, broadcast over equipment borrowed from the U.S. Navy.



Earl Gillespie (left) with Henry Aaron (center) and Tom Collins.

Sportscasters sometimes lead hectic lives. Merle Harmon, former voice of the Kansas City Athletics and Milwaukee Braves and more recently voice of the New York Jets, on one occasion was scheduled to broadcast a Jets game in New Brunswick, N.J., in the afternoon and a Braves game in Houston, Texas, that night. If he had made his plane schedule he would have arrived in Houston thirty minutes before air time, but he missed a connection because of heavy traffic and was delayed an hour. Once in the air he asked the pilot to monitor the Houston broadcast to find out how far along the game was. The pilot reported back that the game was being held up by rain. As it turned out it was delayed two hours and Harmon was in the park in time to broadcast the first pitch. (Had the Houston Astrodome been completed that year Harmon would have missed the game.)

Some Write Books

At least two men in the Sportscasters' Hall of Fame have written books: Nelson is co-author with Al Hirschberg of *Backstage at the Mets*, and Wismer wrote *The Public Calls It Sport*.

Some are experienced commercial announcers. Jack Drees often does the commercials for the sponsors of the event he is announcing.

Several were star athletes themselves, before becoming sports voices.

What Does It Take?

What qualities, talents and virtues should a man have who wants to become a good sports announcer? Or, being a sports announcer, on what aspects of the job should he concentrate to improve his performance?

Top sports announcers — those already named, and others — are in violent disagreement on many subjects, but not on this one. And what they say is echoed by broadcasting executives who do the hiring, and by broadcasting critics who sometimes have something to do with the firing. Taken from magazines and books they have written, from broadcasts and talks they have delivered, and from interviews they have given, here is a consensus of this group of men that is well worth listening to:

This Is What It Takes

1. A real love of sports in general and of the sport in particular that is being reported. (This applies equally to a disc jockey playing pop music or to an announcer emceeing a concert.)
2. A thorough knowledge of all aspects of the game.
3. Familiarity with the players — the vital statistics, life history and peculiarities of each — as well as the record of the two teams facing each other.
4. A broadcast-voice that has power, depth, range and tonal qualities able to communicate to the listener the excitement of the event being reported — even if the listener were a foreigner unable to understand English.

5. A vocabulary of action verbs, descriptive adjectives and vivid figures of speech that are neither hackneyed nor trite, and are always on tap, ready to be used as an artist uses his paints — to give color, meaning, depth and body to the broadcast.
6. An eye for details, which are as important (if the broadcaster is going to paint for his listeners a word-picture of what he sees) as they are for the artist seeking to put onto canvas what registers on his eye and mind.
7. Enthusiasm and a feeling of excitement so contagious that the listeners will become infected.
8. The ability to hide so well whatever partiality may be felt in favor of one team or one player that no one suspects it.
9. The good taste to be funny without ever actually making fun of an individual, not only because of how unfair it would be, but because such a slip could boomerang and do great harm to the sports announcer.
10. The gift of being able to take a few notes about important people present at the game, humorous sidelights, the reaction of those in the stands, and then ad lib a bright, colorful commentary that will bridge any dead spots in the game.
11. The skill to summarize at frequent intervals in the game what has happened thus far, for the benefit of those who may have tuned in late.
12. The ability to use voice and language to build, BUILD, BUILD to a climax, so that the listener at home is kept in just as much a state of suspense as those in the stands. (As someone once said of Clem McCarthy's broadcast of a horse race: "Clem is so excited, so breathless and at times so much involved that soon he has *you* involved, too." By contrast there is the story of an English sports announcer, who, after 30 or 40 seconds of dead air, said to his BBC audience: "I am sorry but nothing very exciting is happening here right now.")

Television Vs. Radio

In the days before television, if a station wanted to cover a sports event, it might send an announcer and an engineer — two men. Today, in order to broadcast that same event by television, the station would have to send a crew of at least 18 men.

As for the announcer doing the TV play by play, to a layman he may seem to be doing exactly what his colleague on radio is doing, but television reporting calls for quite a different technique.

Viewers get quickly annoyed if the voice they are hearing talks so much that it detracts their attention from what they are trying to watch. Contrariwise, if the voice does not explain something that the viewers can see only vaguely, they are likely to say: "Why doesn't he tell us? What does he think he's there for?"

Ben Gross, dean of radio-television critics, once wrote this about a top announcer:

Mel Allen has frequently been castigated for talking too much during baseball telecasts. Like so many others, he often seems unwilling to permit the camera to tell the story and at times attempts to gild the picture on the tube with excess verbiage. This annoys some viewers. Yet in recent polls he was voted No. 1 favorite among sportscasters.

How to Read Sports News

Most stations have several shows every day devoted exclusively to sports — sports of national, state and local interest.

All staff announcers should keep posted on what is going on in the world of sports, just in case they are called in to do one of these programs. Listeners can tell if a sports announcer knows sports or if he is just reading copy because it is part of his job.

The length of a sportscast is usually five or ten minutes. As with any news program, the announcer must gather his sports news from the wire and write stories of local events to include in the program. An interview will always add color to a sports show, providing it is interesting and well done. It could be with the local high school football or basketball coach, the manager of a baseball club, a prominent player, a well known sports celebrity passing through town. Good interviews lend prestige to a show.



Clem McCarthy (center) with Max Baer (left) and Jack Johnson.

When delivering a sportscast, the reading pace should be a little faster than when reading a newscast. This alone will add color. The announcer's personality will determine how much enthusiasm he will instill in his listeners. Give the voice a sporty flavor. Above all, keep the voice full of enthusiasm.

A sincere effort should be made to pronounce names correctly. Sports fans dislike hearing their favorite stars' names mispronounced.

Baseball Play-by-Play

A play-by-play announcer — no matter which sport he is covering — must know the game, appreciate the effort that goes into it, and have a natural love of everything competitive. He must have the ability to think calmly in exciting circumstances. Those who give play-by-play accounts of games must be able to speak with animation — and almost continuously for two hours. They must articulate clearly in order to be understood. They must modulate their voices to avoid monotony. Many hours of preparation should go into each event. Learn as much as you can about the players. Attend practice sessions and get to know the players personally.

(Bill Stern built his early reputation by making himself a walking compendium of information about every man on the field and every man who was likely to take the field before the afternoon was over. This knowledge was the result of amazing preparedness. One of his secrets was that he always carried with him a camera without any film. Before the game he would single out certain players whose features he wanted to fix in his mind so he would be able to recognize them instantly through his field glasses from the broadcasting booth. He would approach these players, one by one, and ask them to pose for a picture. While they posed for him he would concentrate on studying their features through the finder of his filmless camera. By the time he finished one of these make-believe picture-takings he had memorized the face and had learned much about the personality of the player.)

The sportscaster should have a thorough knowledge of the rules and regulations of the game, as well as the hand signals used by the officials.

They Want to Know. . . .

As the announcer begins his baseball sportscast, he should answer for his listeners these questions:

1. Where the game is being played.
2. Who is playing.
3. Weather conditions
 - a. Temperature.
 - b. Wind velocity. (The wind velocity is important information that should be considered in any outdoor event. Since weather conditions are subject to change, any changes should be broadcast to your listeners.



Jack Brickhouse



Lindsey Nelson



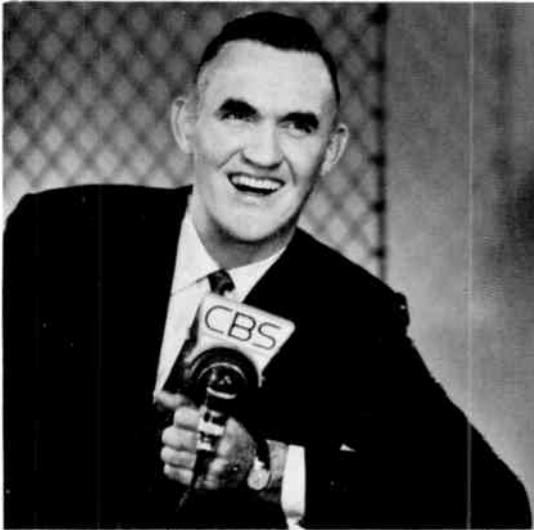
Curt Gowdy



Chris Schenkel



Ray Scott



Jack Drees



Merle Harmon



Russ Hodges



Danny Gullivan



Vincent Edward Scully



Harry Caray



Tom Harmon



Don Dunphy

4. Crowd. (This is always good fill information. It can change, as many people do not arrive until just before the game and, some, of course, arrive late.)
5. Condition of the playing field. (This is very vital and could affect the game.)
6. Ground Rules. (Since specific ground rules vary from park to park, you should learn what these rules are. Inquire before the game.)
7. The names of the umpires.
8. The starting line-ups.
9. Each team's wins and losses and where they stand in the league.
10. Complete information on the starting pitchers.
 - a. Wins and losses.
 - b. Earned run average.
 - c. Past record with the team. (During the game, you should pass along other information about the pitcher — what pitch he uses most, how he makes his *stretch* on the mound, and any other interesting mannerisms.)

During the actual broadcast, there are other bits of information that should be passed along. The batter makes for interesting conversation. For example: His batting average going into the game. Does he bat from the left or right side of the plate? What sort of stance does he use? Is he loose or does he hug the plate? How does he hold his bat? You may even mention the size and weight of the bat he uses. How do the infield and outfield play him? Do they use a shift? How many home runs, triples, doubles, and singles has he hit? When a batter is at the plate, keep an eye on the fielders and see how they play him. Straight away? Shift? Shallow? Deep? This is all information you can sandwich in between pitches in a baseball game.

Since you will always have new listeners tuning in, you should mention the score several times each inning. Also inform the listeners what inning it is at least twice every half inning.

When you are calling the balls and strikes, never try to outguess the umpire. What may look like an obvious strike to you could very well be a ball. Remember, the umpire is calling the game, not you. When you are calling the balls and strikes, always give the balls before the strikes. Example: "The count is two balls and two strikes." Or vary with "2 and 2."

When there is an argument on the field, never criticize the umpire, player, coach, or manager. Describe the activity and what's causing the disturbance, but never judge or criticize a decision. A candid opinion is fine if you qualify it by saying that the official is right on top of the play and calls it as he sees it.

Your play-by-play voice should be well-modulated and colorful. The excitement of the game should be reflected in your voice.

The following excerpt is from an actual broadcast of the San Francisco Giants—Milwaukee Braves game at Milwaukee County Stadium, by Sportscaster Earl Gillespie. The great left-hander Warren Spahn was pitching against Sad-

Sam Jones. It was April 23, 1961. Warren whipped through the first eight innings in breath-taking fashion and had a no hitter going as the tense struggle moved into the top of the ninth. He had had to be razor sharp, as his teammates had given him only one run — and that in the first inning.

Ball two, strike two count. The pitch is on the way. A swing and a miss and he struck him out. That's one away in the ninth inning. Listen to that crowd — 8,518 fans really being treated to a great pitching performance. That strike-out is number five for Warren Spahn. Five strike-outs in the ball game. The batter is a pinch batter — Mateo Alou. Mateo Alou, brother of Felipe Alou — the Giant's right fielder. Mateo's been at bat three times this season. He has two hits. He's batting at 667. And here's the first pitch. He bunts one . . . a drag bunt down the first base side. Spahn goes over . . . throws . . . he's out on a great play — Warren Spahn to Joe Adcock! And it's two away in the ninth. Alou trying to bunt for that base hit off Warren Spahn here in the ninth. And that was a good drag bunt but Warren Spahn hustling over there (bad knee and all) flipped that ball to Joe Adcock, and Spahn really had to hurry, as this kid can fly. Two men are out. Here's a pinch batter — Joe Amalfitano. Spahn has faced only 26 hitters, and there are two outs in the ninth. Two Giants have been on base. Chuck Hiller, the second baseman, walked in the fourth inning. Willy McCovey, the first baseman, walked in the fifth inning; and that's all for the Giants. Those two runners were killed on double plays. Now here's Amalfitano, who has two hits in seven times at bat this season, hitting 286. Joe Amalfitano — two outs and nobody on base. Can Warren Spahn do it again? He did it last year against the Philadelphia Phillies, for the first time in his long career. And now he is down to the last man here in the ninth in a one to nothing ball game. He's been great tonight, and he's had to be great. The Braves have given him just one run. They gave him that run back in the first inning — right-handed batter Joe Amalfitano. Here's the first pitch. It's low and outside; and that's a ball. Ball one and no strikes. Boy, these fans that came out here tonight are very lucky to watch this kind of a ball game. Ball one and no strike count. Outfield playing around to the left. Here's the windup . . . the pitch on the way, and it's too low. It's ball two. Second baseman Chuck Hiller is the on-deck hitter. This is Amalfitano batting for Sam Jones, and he's out in front of Warren Spahn. Ball two, no strikes. Spahny starts his motion. Two and 0 pitch, and there's a swing and a hard-hit ball to Roy McMillan. He bobbles the ball, comes up, throws to first base . . . he's out! And Warren Spahn has pitched another no hitter! Warren Spahn has just pitched his second no hitter in his second consecutive year. And he's being mobbed out here behind the mound. Roy McMillan took that hard shot. It bounced off his chest. He picked it up and threw the guy out at first base, and Warren Spahn has done it again. Tonight he faced only twenty-seven men. This is not a perfect ball game as he walked Hiller in the fourth and walked McCovey in the fifth, but both those runners were erased on double plays and both going the same way — Spahn to McMillan to Adcock. And here in the ninth inning he struck out Ed Bailey, got pinch batter Alou on a drag bunt down the first base line on a very close play at first. And on this last play Amalfitano hit a shot at Roy McMillan, which bounced up, hit him in the stomach or chest. He recovered and threw him out at first base by about a step. So in the ninth — no runs, no hits, no errors, nobody left on base. Warren Spahn has just pitched another no hit — no run ball game. Boy, what an exhibition out here tonight. The final score: Milwaukee 1, San Francisco nothing.

Notice how Gillespie followed all the rules of a good sportscaster so that anyone tuning in even as late as the last half of the ninth inning could obtain a clear understanding of what had transpired. They would immediately be swept

up in the excitement of the dramatic situation as the last two batters tried to ruin Spahn's bid for a no hit game and drive the winning runs across the plate.

Notice how the game was recapped for the benefit of those who may have just tuned in:

Two Giants have been on base. Chuck Hiller, the second baseman, walked in the fourth inning. Willy McCovey, the first baseman, walked in the fifth inning; and that's all for the Giants. Those two runners were killed on double plays.

In those three sentences the listeners learned the names and positions of the men to get on base, how they got on base, the innings involved, and how they were eliminated as base runners. Gillespie also added to the excitement by keeping his fans constantly reminded of the tenseness of the moment.

Can Warren Spahn do it again? He did it last year against the Philadelphia Phillies for the first time in his long career. And now he is down to the last man here in the ninth in a one to nothing ball game.

These are the elements you must learn to master if you are to become a great sportscaster.

Football Play by Play

Many of the baseball tips apply to football broadcasts. In football, you'll also want to mention the offensive formation each team uses — straight T, split T, or single wing. Pass along as much information about the quarterbacks as possible. Are they passing or running backs? What is each team's bread-and-butter play? Watch how the ends are split and if they use a balanced or unbalanced line. A balanced line is when three linemen (tackle, guard, and end) line up on each side of the center. An unbalanced line is when they line up four men to the right or left side of the center with two men on the other side.

A card or tab should be made out for each player which should contain the following information: the player's name; the number on his jersey; plus his age, height and weight. For college games the card should show whether the player is a freshman, sophomore, junior, or senior and where he played high school football. If a pro game the card should show where he played collegiate ball and his number of years in pro football. The listeners are interested in knowing such vital statistics on each player, so this information should be at the sportscaster's fingertips during the broadcast.

When broadcasting a game, never overdramatize the importance of a play. For instance, don't give the same enthusiasm to a 10-yard run that you would for a long touchdown play. Gauge your enthusiasm to each play; and, on the spectacular plays, let it come alive. Be enthusiastic, but don't get carried away.

The following is an excerpt of a broadcast by Gillespie. Wisconsin was playing the Golden Gophers at Minneapolis and Gillespie was covering the game for Wisconsin. Minnesota had to win this one for the Big Ten Championship. At the start of the fourth quarter the score was Wisconsin, 20; Minnesota, 15.

The battle goes into the fourth quarter. Minnesota is desperately trying to regain the lead. A touchdown will do it. Wisconsin's ball. Third down. Boy, if Wisconsin can score. Calling signals . . . Ron Miller sends a man in motion. Merrit Norvell rolls out of the pocket . . . he's being chased — throws to the end zone to Napoleon Hern. Incomplete! Intended for Hern . . . it's incomplete in the end zone. He was guarded by two men.

Alright. Here comes co-captain Jimmy Baaken in for a field goal attempt. He has missed on six. Two have hit the uprights of the goal posts and bounced back into play. Two . . . that would have meant six points for a 26 to 15 lead. Those are just the breaks of the game. And now Baaken will try to give Wisconsin a 23 to 15 lead, or eight points. He'll be kicking from the 20-yard line at an angle. Waiting for the snap. Here it is. The ball placed . . . the boot is up in the air. It's end over end. What is it? What is it? It's good! It's good, and Wisconsin now has a 23 to 15 lead over the Golden Gophers of Minnesota.

The Gophers (their dreams of another Big Ten Championship slipping away) came through with some brilliant clutch running and finally . . .

It's first down, goal to go . . . first down, goal to go on the four-yard line of Wisconsin. The Badgers on the defense. They have to be real stubborn now as Sandy Stevens brings the Gophers up to the line of scrimmage. First down on the 4-yard line. They trail by eight points. Here is Stephens on a roll out. He comes around to the right side. He's hit back here on the 4-yard line . . . rolling out of the pocket to his right. He whirled out from under the center. He was hit out there by Dick Grim and by Ron Carlson. It's gonna take a good performance by Wisconsin to stop this Minnesota team here inside the five. Second down goal on the four, with Wisconsin—23, Minnesota—15. Clock running . . . 2 minutes and 20 seconds left to play in the ball game. What a ball game! Up comes Minnesota . . . up to the line of scrimmage. Sandy Stephens calling the signals. Stephens' taking kind of a long count here with time running. Sandy Stephens out of the pocket . . . back to pass . . . throws into the end zone, and it's caught. A touchdown! Al Fisher caught that ball for a touchdown in the end zone, and the score now is Wisconsin—23, Minnesota—21. They have to go for the two points . . . they have to go.

Alright. Here they come up to the line of scrimmage . . . needing the two points to tie this ball game, with about two minutes left to play. Sandy Stephens rolls out of the pocket to the right. He's gonna throw. He does throw, and it's batted down. It's batted down. Who batted that ball down? I believe it was Jimmy Bakken. It was Jimmy Bakken who batted that ball from Danny Campbell. And Wisconsin has the lead . . . 23 to 21, with 2 minutes and 7 seconds to play in the ball game. How was that defensive play, Red?

Earl, that was a dandy, and, of course, Jim Bakken closing out his career here, certainly since the Northwestern game, became a very important part of this ball club . . . not only with his toe, but in the last couple of weeks has played a lot of defense, and that was a big key play. Wisconsin now will receive this kick off. Minnesota undoubtedly will try an on-side kick to get their hands on that football, and the Badgers will have to guard against that possibility. With two minutes on the clock, they can use up a lot of time and maybe hang on to that football. They lead, 23 to 21. Minnesota has to get that football. So let's watch out now for an on side kick, Earl, because that is the only alternative the Gophers have at this point to get their hands on that football.

Ron Miller over on the far side line is yelling out to the Wisconsin Badgers the same thing, Red . . . to watch that kick now. We're waiting. Judge Dickson will kick off for Minnesota. 23 to 21. The Wisconsin Badgers lead by two points. Two-point lead here with 2 minutes and 7 seconds to play in the ball game. Man alive, what a game out here at Memorial Stadium up in Minneapolis, Minnesota.

Here's the advance by Dickson. Here is the boot. He tries the on-side. It's picked up by a Badger line man. At the 45, he gets up here to the 49-yard line, and that was Underwood. Wisconsin has the ball on the forty-nine. The on-side try failed. But, of course, it was worth the gamble. They had to do that. They can see with that clock running . . . they can see a Big Ten Championship slipping out of their grasp, unless something happens here in the last one minute and 44 seconds. Time is still running. The Badgers taking their time . . . just taking their time. They have to hold on to the ball. A minute and 37 seconds left to play. Wisconsin with a two-point lead. Ron Miller has his ends split . . . Ron Miller taking a long count. He quarterback sneaks. He's got two yards. He comes across to the Minnesota 49-yard line . . . a gain of, well, almost three yards. Let's call it two. Second down . . . eight yards to go . . . a minute and seven seconds. The clock is still running. Look at those Badgers take their time. If you're on the other side of the fence, you'd say, "Come on, you guys . . . get that ball in play." Up over the football goes Dick Bear . . . 23 to 21. Wisconsin leading. Fifty-four seconds left to play in the ball game. Miller taking his time on second down, and here's a delay of game called against Wisconsin. A delay of game. The ball is handed off to Garry Koener. Delay of game. Delay of game . . . 50 seconds. It will be a second down and 13 — that was a 5-yard penalty. Delay of game moves it back to the 46-yard line . . . only 50 seconds left to play. We'll count them down with the fans back home in Milwaukee. It's Wisconsin—23, Minnesota—21. The ball on the Wisconsin 46-yard line now with a second down and 13. Alright. Here come the Badgers up over the football. What a great team they have been out here at Memorial Stadium this afternoon. Man in motion . . . the hand off goes to Merrit Norvell. Norvell cuts inside his left end up to about the 49-yard line. Forty-three seconds — forty-two seconds. Not much time left. They're unpiling the players. The clock is still running . . . 37 seconds, that's all. That's all that's left in this ball game. Thirty-five seconds. Wisconsin has that 2-point lead at 23 to 21. The ball is on the 48-yard line of the Badgers, and it's third down 11. A third down 11. Jack Park goes into the line for Minnesota. Here comes Wisconsin up. Twenty seconds, nineteen seconds, eighteen seconds, seventeen seconds. Miller gives to Louie Holland. He's pulled down by an arm back to the 41-yard line. But look at that clock. Nine seconds . . . eight seconds . . . seven seconds. Wisconsin's gonna hold on. Wisconsin's gonna swing the big upset of the year out here at Memorial Stadium . . . 23 to 21. There it is! The end of the ball game and Wisconsin has done it! Wisconsin has dethroned Minnesota . . . as the Big Ten Champions here this afternoon. And the final score . . . the Badgers —23; and the Gophers—21.

The above play-by-play radio broadcast of a crucial Big Ten football game is an excellent example of the professional sportscaster at work. Quick and accurate identification of players involved in each play was included. A thorough knowledge of the game and the individual teams enabled the announcer to keep his eye on the ball carrier even during intricate, deceptive plays. He maintained a constant flow of information so as to paint continuous word pictures for his listeners. And he created a growing sense of excitement as the Gophers raced against the clock to move the ball across the goal line.

The Spotter and Color Man

Broadcasting a football game and providing the listeners with prompt, accurate identification of the players involved is difficult because there are twenty-two players on the field. Although each team has different colored jerseys, and each player has an identifying number on his jersey, one announcer cannot

possibly watch twenty-two players at the same time. Therefore football play-by-play announcers use spotters to assist them. The spotter helps spot the players involved in each play as the announcer describes the action. Some announcers use two spotters — one for each team.

In addition to a spotter, many play-by-play announcers have a color man. He should have a better-than-average knowledge of the game. He should be able to analyze an important play after it has happened. But, he must also know how to speak colorfully and be easily understood by the listening audience. Many bigtime sportscasters started out as color men and gradually worked into play-by-play.

Those of you who do not feel qualified to do play-by-play (but know and like sports) should not pass up the opportunity to do color. You'll find it is both interesting and exciting.

A good color man should always be prepared to come in with interesting comments whenever there's a lull in the game. He should also cover the half-time activities while the play-by-play announcer gets a well-deserved rest. He should fill the half-time segment with some of the vital statistics, recap highlights of the first half, and (if time permits) do one or two interviews.

During the game, the color man can also assist in keeping some of the important statistics, such as number of yards gained by running, yards gained by passing, number of completed passes, number of attempted passes, number of fumbles, number of first downs, and number of field goals attempted.

When the game ends, the color man should recap the highlights of the entire game in an interesting manner.

Basketball

Basketball is big in any market. It's an exciting game with plenty of action, and its rapid pace is a challenge to the sportscaster's style of delivery. Basically, you must learn the rules governing this great game, as in any other sport you may be assigned to cover. Once you have the rules down pat, player identification should be easy, as there are only ten men on the floor at one time. If you broadcast the games of one specific team throughout a season, the job will be even easier, as you will get to know all your own team's players.

Some veteran broadcasters use a simple spotting board or card placed right in front of them just in case (and it does happen) they have a sudden lapse of memory on a player's name. Player identification cards can be made similar to those used on the football spotting boards: the player's name; number; height (which is important in basketball); his weight; year in school; and for your own convenience, the player's average point production per game. Statistically, your listeners like to know a basketball player's point production, percentage of free throw accuracy, and the number of fouls on each player as the game progresses.

Remember to set the scene for your play-by-play broadcast as colorfully as you can, to get your listeners interested right from the start of your broadcast — rivalry of the two teams, standings in the league or conference, importance of the particular game you are covering. Tell them if there's a red-hot scorer in the lineup, and try to learn each player's favorite shot. Try to set up interviews for the half-time period, and keep them as interesting as possible.

In broadcasting basketball games, it is important to remember that you must pace yourself and your voice, because of the type of action you will be describing. If you try to keep up with the action, some of your words could be lost along the way, cutting down on the word pictures you are painting for your audience. Basketball games see-saw back and forth, and the lead can change hands hundreds of times. This is where your pacing will be important. If it is a tight game, the last five minutes will turn out to be the most important . . . so you must be ready for them. Don't run out of gas before you get to this crucial period.

Golf

Golf has become one of the most popular sports in the country during the last decade or so. You may be called on to describe the action of a local or regional or statewide tournament. If you play golf, it will be much easier for you to turn in a good job. If you don't, it will be wise to sit down with one of your area golf pros. Ask questions. Never be afraid to ask questions, as this is the only way you will learn about a specific sport. Talk to the players involved in the tournament you are assigned to cover. See if you can get any human interest stories from them. You will find that these will come in handy during the lull in play. Set up interviews that might be useful to you during the tournament. In covering golf you don't have the rapid fire action of games like basketball or football, so it will be easy to pace yourself.

You may never have to cover a golf match, but if you do, learn as much about the game as you can. Learn the different golf clubs, length of the holes, wind velocity and direction, as these play an important role in the way a golfer will play a specific hole. Get to know which golfers are the longest hitters, the better iron shots, the best putters. Once you have learned all this, you will be surprised how everything will fall in place: and you will sound like an expert.

Track, Boxing, Tennis

As a sports announcer, other assignments could well come your way: covering track meets, boxing matches, perhaps tennis tournaments, and even wrestling. Accept the challenge of any and all of these with one thought in mind — to do the best job possible. Never turn down an assignment simply because you may not know a thing about the sport. You will have time for preparation. You will have time to seek out an expert of the sport — a coach, manager, or a man who has participated.

Soccer

One of the fastest growing sports in North America is soccer, which originated in Derby, England, in A.D. 217, during the Roman occupation of Britain. The ball was advanced by kicking it or butting it with the body. Then in 1823 a Rugby (England) School soccer player picked up the ball and *carried* it toward the goal, and so a new game was invented — rugby — which in the 1870's became the basis of American football. Because soccer is still new to some parts of the country, many listeners are not as well acquainted with the game as they are with football or baseball, and so the conscientious broadcaster must weave into his reportage subtle references to rules, dimensions of the playing field, regulations and scoring procedures. Because soccer is one of the fastest games ever devised, it takes an expert to follow the action and deliver a good play-by-play.

Hockey

Hockey has been an official Olympic Games sport only since 1920, yet its origin has been traced back to a game that British troops played on frozen lakes and ponds at Kingston, Ontario, and Halifax, Nova Scotia, in the 1860's. Today hundreds of thousands of men, women and even children play or watch hockey games each winter in Canada, and the game is of ever-increasing popularity in the United States. The major league is the National Hockey League, formed in 1917. It includes the Montreal Canadians, the Toronto Maple Leafs, the Chicago Black Hawks, the Detroit Red Wings, the Boston Bruins and the New York Rangers. As evidence of the growth of hockey in the United States, during the 1967-68 season teams were added to the league from Los Angeles, Pittsburgh, Philadelphia, Minneapolis-St. Paul, St. Louis, and San Francisco-Oakland. Each team plays a 70-game schedule each winter. The four teams finishing the highest then play an elimination tournament in the Stanley Cup play-offs. This trophy was presented by Lord Stanley of Preston, when he was Governor-General of Canada, as a perpetual challenge cup.

The famous Canadian sportscaster Danny Gullivan, who specializes in hockey and has been broadcasting the National League games for 16 years, gives these tidbits of advice to aspiring sportscasters:

Know the game. Make sure you have the rules at your fingertips. Always keep up-to-date on team and player statistics. Hockey is so fast that the television camera often is not on some player involved in scoring a goal and so it's up to the sportscaster to fill-in his listeners on what the camera misses. Keep your eye, always, on the puck!

29.

Weathercasting

Everyman wants to know whether . . .

Whether it will rain and spoil a golf tournament scheduled for tomorrow. Whether it will be too hot, too cold, too windy, too damp for all the things Everyman, and his wife and children are planning.

Interest in the weather is not new. Primitive man had just as much curiosity as modern man about it, plus superstitious fear. Since the discovery that seeds poked into the ground would sprout and provide food for human nourishment, man's fate has been ruled by weather. Before the days of radio, Americans got their weather forecasts from newspapers, but that method of communicating forecasts was so slow that often the thing predicted happened before the victims of the thing predicted could read the prediction. Then came radio, with instantaneous communication of storm warnings and tornado forecasts. No one has ever attempted to estimate how many thousands — or millions — of lives have been saved in the last forty years by radio storm warnings.

Then Came Television

Weather reports really came of age with the popularity of television. It was not that this new medium delivered the forecasts and warnings any faster than radio. In fact, for technical reasons, they were and are slower in getting to the public. It is principally because television enabled viewers to look at weather maps and to *see* the direction in which cold fronts and warm fronts were moving, and where the high and low pressure centers were located. Terms heretofore used only by specialists became part of the common language. Weather, even more conversational than stock market quotations, now had a new dimension.

In the competition for viewer-attention many stations spiced up an otherwise factual and unglamorous subject by adding the element of sex. For a time weathercasting on some stations was the prerogative of young women who looked like Miss America contestants.

By now almost every local news and sports block on almost every TV station includes a five-minute report on current weather conditions and a forecast, done by a television announcer, generally chosen for his warm, friendly manner, his ease of delivery, and his pleasant personality. In addition, weathercasters must have a thorough knowledge of the geography of the United States and the location of all important cities.

Each TV weathercaster has developed his own style. However, there are two basic methods used in preparing the national weather map for *on camera*. The first is to fill in completely all of the symbols and figures to be used on the map before the weather show begins. Using this method, the TV weathercaster may concentrate his attention on pointing to and announcing the figures and symbols. In the other method, the TV weathercaster very lightly marks the figures and symbols on the weather map before the weather show begins. Once he is on camera, he marks in heavily the figures and symbols, and at the same time announces them to the audience. Either method is satisfactory.

After completing the national weather, the announcer presents the weather for his particular state and city. This part of the report warrants greater attention to detail than did the National Report. Most TV weathercasters will not fill in the local map before going on the air, although they may *lightly* fill in the symbols and figures to be used.

If the weather show is sponsored, the commercial message is usually placed after the state and local weather conditions and before the forecast.

In addition to weather conditions and forecasts, a TV weathercaster should make note of such special items as road conditions, aviation weather conditions, farmer's and stockmen's weather reports, long-range weather forecasts and any unusual weather developments or record-setting figures.

The weather conditions and forecasts may be obtained from the AP or UPI wire service, or directly from the nearest U. S. Weather Bureau reporting station or airport. Some TV stations have volunteer observers in the viewing area who supply specific information for their localities, such as the amount of rain or snow that has fallen, wind direction, wind velocity, etc.

Weathercasting Definitions

There are certain standard terms used in weathercasts, with which all radio and television announcers should be thoroughly familiar. The following list contains definitions of the most commonly used terms:

1. **COLD FRONT.** A cold air mass that may advance along a line extending for several hundred miles. As the leading edge of the cold front moves, it forces the warmer air in front of it to rise. We may compare this to the use of a wedge. As the warm air is pushed upward, moisture usually appears in the form of rain or snow for a brief period, and then clearing skies will occur.

Basic Symbols Pertaining to the National Weather Map

Cold Front



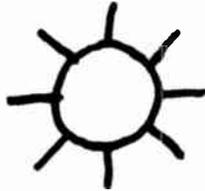
Warm Front



Stationary or Occluded Front



Clear Skies



Partly Sunny or Partly Cloudy Skies



Rain



Thunderstorm



Snow



High Pressure Center



Low Pressure Center



Tornado







2. **WARM FRONT.** A warm air mass usually overrides the colder air in front of it. This will cause an extended cloud coverage condition, sometimes for many hundreds of miles. The cloud cover first noticeable will be high and thin cirrus clouds, usually at an altitude of 25,000 feet or above. As the center of the warm front moves closer, the clouds tend to thicken and drop closer to the earth. The passing of the center of the warm front may take from one or two to several days.
3. **STATIONARY OR OCCLUDED FRONT.** This occurs when a warm front and a cold front collide, and neither front is strong enough to replace the other.
4. **CLEAR SKIES.** Less than 1/10th of the sky is covered with clouds.
5. **PARTLY SUNNY OR PARTLY CLOUDY SKIES.** Between 1/10th and 6/10ths of the sky is covered with clouds.
6. **RAIN.** Visible precipitation in a liquid form which is heavy enough to fall from a cloud.
7. **THUNDERSTORMS.** When the winds inside cumulonimbus clouds, or thunderheads, reach a high velocity in a vertical direction, the up and down drafts create the friction necessary to produce lightning. As the electrical charge of the lightning leaves the cloud and heads for the ground, the air is "split" and thunder occurs.
8. **SNOW.** Visible precipitation in a "frozen" form which is heavy enough to fall from a cloud.
9. **HIGH PRESSURE CENTER.** These areas may develop anyplace where air cools, compresses and sinks. The winds move outward from the center in a clockwise direction. The weather conditions usually associated with a high pressure center are generally clearing and favorable.
10. **LOW PRESSURE CENTER.** These areas are formed by a horizontal wavelike action between two highs of different temperatures. The winds move inward toward the center of the low pressure area, and in a counter-clockwise direction. Weather conditions usually associated are cloudy and unsettled.
11. **TORNADO.** A tornado may result from an almost explosive instability in the air, and it will usually accompany heavy thunderstorms or rains — conditions typical of strong cold fronts and squall lines. The funnel cloud representing the tornado will touch ground at random locations, but the general movement of a tornado is from southwest to northeast.

As mentioned previously complete weather forecasts for use on radio and TV stations can be obtained from the various wire services to which the stations subscribe. An example of a teletype weather forecast follows.

U R G E N T

(TORNADO FORECAST)

U.S. WEATHER BUREAU TORNADO FORECAST FOR . . .

PORTIONS OF SOUTHERN AND CENTRAL MINNESOTA

AND NORTHWEST AND WEST CENTRAL WISCONSIN

THE THREAT OF TORNADOES EXISTS IN THESE AREAS FROM THE

CURRENT TIME UNTIL 9 P-M C-D-T TODAY.

THUNDERSTORMS HAVE BEEN INTENSIFYING RAPIDLY OVER SOUTHWESTERN AND CENTRAL MINNESOTA. THE PREVIOUS SEVERE WEATHER FORECAST FOR THIS AREA IS NOW AMENDED TO INCLUDE THE POSSIBILITY OF TORNADOES WITH SCATTERED SEVERE THUNDERSTORMS PRODUCING LARGE HAIL AND LOCALLY DAMAGING WIND STORMS IN THE AREA ALONG AND 60 MILES EITHER SIDE OF A LINE FROM 40 MILES NORTH OF REDWOOD FALLS, MINNESOTA, TO 10 MILES NORTHEAST OF WAUSAU, WISCONSIN, FROM THE CURRENT TIME UNTIL 9 P-M C-D-T TODAY.

IN WISCONSIN THIS INCLUDES AN AREA SOUTH OF A LINE FROM 30 MILES SOUTH OF SUPERIOR ON THE WISCONSIN BORDER TO LAND 'O LAKES, WEST OF A LINE FROM LAND 'O LAKES TO WAUTOMA, AND NORTH OF A LINE FROM WAUTOMA TO LA CROSSE.

A WIDE VARIETY OF WEATHER CONDITIONS EXISTS OVER THE NATION.

IT WILL BE SUNNY AND MILD OR COOL IN THE NORTHEASTERN QUARTER EXCEPT FOR A FEW SHOWERS IN NORTHERN NEW ENGLAND.

WARM OR HOT WEATHER IS EXPECTED IN MOST OF THE SOUTHERN HALF. IT ALSO WILL BE WARMER IN THE UPPER MISSISSIPPI VALLEY AND WESTERN GREAT LAKES REGION.

SCATTERED SHOWERS OR THUNDERSHOWERS WILL EXTEND FROM THE NORTHERN PLAINS TO LOUISIANA AND FLORIDA, MOSTLY IN THE AFTERNOON OR EVENING IN THE SOUTHERN PART OF THE AREA.

SHOWERS AND COOLER TEMPERATURES ARE FORECAST FOR THE WESTERN SECTIONS OF WASHINGTON AND OREGON . . . AND WIDELY SCATTERED AFTERNOON OR EVENING THUNDERSHOWERS ARE EXPECTED ELSEWHERE IN THE MOUNTAIN AREAS OF THE WEST.

AN INVASION OF COOL AND DRY AIR FROM THE NORTH DELIVERED PLEASANT WEATHER TODAY TO THE UPPER MISSISSIPPI VALLEY, THE GREAT LAKES REGION, THE OHIO VALLEY AND THE NORTHEASTERN STATES.

MUCH OF THE SOUTHERN HALF SWELTERS AGAIN WITH THE USUAL SUMMERTIME WARM OR HOT WEATHER. SOME RELIEF CAME FROM A FEW LOCAL THUNDERSHOWERS ALONG THE CAROLINA COAST AND IN SOUTHERN FLORIDA. HOWEVER, THE LOWER TEMPERATURES ALSO SPAWNED BY THE THUNDERSHOWERS ALSO RAISED THE RELATIVE HUMIDITY VALUES. WEST PALM BEACH HAD ONE AND 23-HUNDREDTHS INCHES OF RAIN DURING A ONE-HOUR PERIOD.

IN THE NORTHWEST, TEMPERATURES WERE AT OR BELOW SEASONABLE LEVELS. SHOWERS IN OTHER AREAS WERE CONFINED MOSTLY TO NEVADA, THE LOWER MISSOURI VALLEY AND EXTREME EASTERN MAINE.

THE WEATHER MAP SHOWS A LOW IN NORTHERN NEW ENGLAND AND A HIGH JUST NORTHEAST OF LAKE SUPERIOR. A COLD FRONT EXTENDED FROM THE ATLANTIC ACROSS NORTH CAROLINA INTO WESTERN TENNESSEE. A COLD FRONT STRETCHED FROM WESTERN TENNESSEE TO SOUTHERN MONTANA AND INTO NORTHWESTERN NEVADA. A COLD FRONT FROM EASTERN MONTANA EXTENDED INTO NORTHWESTERN MANITOBA. A LOW STOOD OVER SOUTHERN IDAHO AND A COLD FRONT WAS OFF THE WASHINGTON COAST.

FOR TOMORROW, THE LOW WILL MOVE TO THE NORTHEAST OF NEW ENGLAND AND THE HIGH WILL MOVE TO NORTHERN LAKE HURON. A STATIONARY FRONT WILL EXTEND FROM GEORGIA TO SOUTH DAKOTA, AND A COLD FRONT FROM HUDSON BAY TO NORTH-

WESTERN SOUTH DAKOTA AND NORTHERN NEVADA. THERE WILL BE A LOW IN NORTHERN IDAHO WITH A COLD FRONT TO THE NORTH-WESTERN TIP OF CALIFORNIA.

Tornado Forecast

The tornado forecast received from the weather bureau in Chicago is the first item that would be used on a TV Weather Show. It should be announced exactly as written. At the same time the affected areas on the map should be marked. As you will notice on the weather map, we began in Southern and Central Minnesota and moved northeastward to northwest and west-central Wisconsin. Across this area we printed the words TORNADO FORECAST. The actual line of the tornado forecast runs from 40 miles north of Redwood Falls, Minnesota, to 10 miles northeast of Wausau, Wisconsin. In Wisconsin, this includes an area south of a line from 30 miles south of Superior on the Wisconsin-Minnesota border and to Land 'O Lakes, west of a line from Land 'O Lakes to Wautoma, and north of a line from Wautoma to La Crosse. Assuming we are the TV Weathercaster for a Milwaukee area TV station, the only cities we have to show on the map would be Wausau and La Crosse. The actual tornado line would extend from the southern and central Minnesota area to the northeast and west-central Wisconsin area. We must be sure to note the time the tornado warning will expire, 9:00 PM Central Daylight time.

Regular Weather Forecast

The regular Weather Bureau report begins with a notation of a variety of weather conditions existing over the nation. In the New England area, we have placed a CLEAR SKY symbol over Connecticut and Rhode Island. We placed a RAIN symbol across the northern tip of Vermont, New Hampshire and Central and Northern Maine. Also, RAIN and THUNDERSTORM symbols from the northern plains to Louisiana and Florida are indicated. This is the line running from the mid-Dakotas through Nebraska, Kansas, across Northeastern Oklahoma, into Louisiana and then curving into Florida. As noted, these will be afternoon or evening showers in the Southern part of this area. The weather forecast indicates rain and cooler weather for Washington and Oregon, and we have accordingly placed RAIN symbols and printed the word COOLER across western Washington and Oregon. Also, THUNDERSTORM symbols in eastern Idaho, at the Colorado-Wyoming border and New Mexico-Colorado border are shown. We will also note in our weather presentation that these are afternoon or evening THUNDERSTORMS. To indicate clear weather, we have placed CLEAR SKY symbols over Illinois, Iowa and Missouri, over central Indiana, and over central Pennsylvania. We have printed the word COOL, placing the c in Lake Michigan, the two o's in Michigan and the L in Lake Huron. We have printed the words HOT & HUMID starting at the Texas-Oklahoma border and running eastward into Georgia, and placed a THUNDERSTORM symbol near

West Palm Beach, Florida, and marked 1.23 inches of rain, and note that it fell in a one-hour period. We have placed a **LOW PRESSURE CENTER** symbol between the New Hampshire and Maine border, and a **HIGH PRESSURE CENTER** symbol just at the eastern edge of Lake Superior. Notice, we started a **COLD FRONT** symbol in the Atlantic Ocean just opposite of North Carolina and extended it through North Carolina and into western Tennessee. Another **COLD FRONT** symbol is indicated from western Tennessee to southern Montana and into northwestern Nevada. This line, as you will note on the map, runs from western Tennessee through southwest Missouri, central Kansas, the northeastern corner of Colorado, through central Wyoming and into southern Montana. Then the line runs from southern Montana, down through Idaho, and into northwestern Nevada. The **COLD FRONT** symbol is drawn from eastern Montana, northwestward into Canada, and a **LOW PRESSURE CENTER** symbol is shown over southern Idaho, and a **COLD FRONT** off of the Washington coast. That completes the marking of the National Weather Map.

Weather Forecast for Tomorrow

Now, if you had used moveable symbols on your weather map, you would be able to slide the **HIGH AND LOW PRESSURE CENTERS** to the predicted positions for tomorrow. In any event, you may point to the **LOW PRESSURE CENTER** symbol in New England and announce that it will move to the northeast for tomorrow, and be out over the Atlantic Ocean. The **HIGH PRESSURE** area will move from northeast of Lake Superior to northern Lake Huron. The **COLD FRONT** that runs through the Carolinas and Tennessee into the Dakotas will change to a **STATIONARY FRONT**, dropping into Georgia at the eastern end of the **FRONT**. A **COLD FRONT** will extend on a line between north-central Canada and northern Nevada. This line will enter the Continental United States midway at the North Dakota border and curve southwestward through South Dakota, Wyoming, the northwestern corner of Utah, and into Nevada. A **LOW PRESSURE** area will extend from northern Idaho, into Oregon and northwestern California.

Local Weather Forecast

The same symbols used for the National Weather Report may be used for the Local Weather Report. Your local weather map would list the principal cities in your area along with the high and low temperatures expected. Because everyone is especially interested in local weather, the Local Report should bring out details not necessary on the national weather map. These details could include even small amounts of precipitation and wind velocities that will be slight.

One of the best ways for prospective broadcasters to prepare themselves for weather reporting is by studying the techniques used by several network TV weathercasters. Watch a variety of such shows paying special attention to the

individual styles and delivery of the different personalities. Then strive to develop an individual style of your own, combining the best qualities of those observed.

One final note on weathercasting. Strive to project a friendly, good natured approach to your weather forecasts, even when you know that the news of bad weather is going to upset a lot of listeners. While your voice should carry a note of urgency when forecasting serious storms, such as tornadoes, it should not be overdramatized so as to cause undue alarm.

30.

Commercials Pay the Rent

Herbert Hoover, as Secretary of Commerce in the early 1920's, had strong ideas about how broadcasting should be financed in the United States. At first he declared, unequivocally:

"The American public will never stand for advertising on the radio."

Later he made a slight concession. At the start of a program a brief announcement should be made on behalf of the sponsor, giving the name of the company, the nature of its business, the type of merchandise it sold and the fact that the following program was being paid for as a public service. There must be no breaks during the program, no matter whether it lasted five minutes or fifty minutes. At the conclusion, the sponsor's announcement would be repeated. Then on to the next program. When Mr. Hoover was asked how the sponsor would benefit, he suggested that a grateful public would probably buy the sponsor's products out of its deep gratitude for the entertainment he had financed.

In the early days of radio, sponsors paid for station time in cash, but they often compensated talent with gifts of merchandise. A small candy manufacturer hired a singer and pianist to perform on a Chicago radio station and to mention his candy bar now and then during the program. They were paid — in candy bars. Thus *O'Henry Candy Bar*, eventually a million-dollar product, was launched. Some broadcasters in those days were so successful that they collected enough merchandise to open a general store.

\$160,881,000 to Sell Soap

By contrast with the broadcasting economics of those early days —

Proctor & Gamble, manufacturers of soap, in 1965 spent \$160,881,000 on television. The Philip Morris cigaret company in one year allocated \$7,000,000

for a television campaign just to introduce a new cigaret. *Bonanza*, top television program, in 1966 was costing just a hair under half a million dollars a week for time and production costs. As an indication of costs — the networks spent a million dollars for the pooled production of the Pope's 14-hour visit to America in 1965, besides losing nearly six million dollars in revenue from pre-empted programs. To make their appeals on television, advertisers were spending \$14.56 per set-owning family, for a total of about two billion dollars a year. Radio income was also at a record-high — approaching one billion dollars a year.

The reason broadcasting has become such a major industry is that it is principally responsible for the success and prosperity of so many other industries. And its power keeps growing. Back in the early days, Amos and Andy once offered a free bottle of mouthwash to any listener who would send in two empty toothpaste tubes. One million listeners promptly did so. Ed Wynn told his listeners that if they would go to their nearest Texaco station and say he sent them, they would be given a red fireman's hat similar to the one he wore. Three hundred thousand people within a very short time did so.

Ben Gross, radio-television critic of the New York *Daily News*, made a survey of his own after the 1952 election of Eisenhower over Stevenson. He asked: "What incident comes to your mind first when you think of the 1952 political conventions?"

Gross reported in his column that a majority replied: "Betty Furness opening and closing refrigerator doors during her television commercials."

Such is the power of broadcasting in America.

Selling the Commercial

There are half a dozen stages through which a commercial must go before it can achieve any success for the product, the service, or the institution it is publicizing. First it must be sold. The sale may be made *by* an employee of an individual station, by a representative of a group of stations, or by a network salesman. The sale may be made *to* the sponsor directly, or to his advertising agency. What is sold — the commercial — may take any one of many forms.

THE STATION BREAK. When the network announcer says: "We now pause for station identification" the local stations have a chance to make some money putting on short commercials. These may take the form of simple service announcements, such as:

IT IS NOW 8 P.M. EASTERN DAYLIGHT TIME . . . COURTESY OF THE XYZ WATCH COMPANY. REMEMBER YOUR BEST FRIEND WITH AN XYZ WATCH.

On TV networks the station break may last for 40, 50, 60 or 70 seconds.

Advertisers at this time have the possibility of reaching viewers who were watching the program that has just ended, and others who may be tuning in to the program that is to follow. The time may be sold to local or national advertisers for 10-second, 20-second or 30-second spot commercials. Because these commercials run only two or three words per second, every word counts.

PARTICIPATING ANNOUNCEMENTS. Many station programs are arranged so that commercials similar to one-minute station breaks may be used, scattered through the show. Such commercials are used on both radio and TV. All television networks have participating programs, such as the *Today* show on NBC.

PIGGYBACKS. A single company with more than one product may use half the one-minute commercial for one product and half for another. These are technically called Multiple Product Announcements, but are more commonly known as Piggybacks.

CO-OP ANNOUNCEMENTS. These are local commercials, sold to two or three different sponsors, one for use at the start of a program, one at the close, and one, perhaps, in the middle.

PROGRAM ANNOUNCEMENTS. When a sponsor purchases a program on a weekly or one-shot basis he has the chance to choose whichever program is likely to appeal to the sex, age-group and interest-group he is trying to sell.

The NAB Codes (see Section III) give complete tables of the maximum total time that can be given over to commercials. On radio it is 1.30 on a 5-minute program; three minutes on a 15-minute program. On television during Prime Time it is 10.20 minutes of each hour and the rest of the time, 16:20 minutes of each hour.

Processing the Commercial

After a salesman has made a sale to a sponsor, he determines (with the sponsor) how many spots are to be run, the number of times each spot will run, how many days the spots will run, how long each spot is to be and what time of day each spot will run. Some advertisers want all their spots in the morning, or all at the noon hour, or all at night. Maybe a sponsor will want all his advertising scheduled only over the week-end, or only on Thursday morning. When the salesman leaves the sponsor, he has a signed contract. All the information mentioned above is included in that contract.

When the salesman takes the contract back to the station, one copy goes to the accounting department, one to the sales manager or general manager, and one to the traffic department.

The billing to the client is not done until the spots have actually been broadcast. The accounting department may have the billing ready to be mailed, but it is not sent out until a check has been made of each day's official station log to be sure the client's spots ran at the time they were scheduled and were of the length scheduled. It is important for announcers to keep the log

accurately, because it is from the log that the accounting department makes up the billing.

The function of the traffic department is to schedule all commercials and programs on the log each week. This department must also keep the salesmanager and salesmen up to date on the availabilities of commercials that can be scheduled at various times during the day. For example, the salesman must know what time-periods are available before he calls on prospective advertisers. He must know that if the prospective client wants a commercial scheduled between 7:15 a.m. and 7:30 a.m. every Monday, Wednesday and Friday that the time is available. It is also the duty of the traffic department to inform salesmen and the sales manager when contracts with clients are due to expire. Then the salesman will either try to renew the contract or expand it.

Writing the Commercial

The next department concerned with the spot is the continuity department. This is where the commercial is actually written. The salesman has a good idea what the advertiser would like to say, so he passes this information on to a continuity writer who begins to compose the commercial.

The purpose of a commercial is to *sell* — whether a product, a service, an institution or a name. How this message is put down on paper will determine whether or not it will be successful.

There are many types of commercials. The one most common among local advertisers is called the **STRAIGHT SELL**. A shop dealing in women's clothing has just received a shipment of new fall dresses and buys time on a radio station to advertise them. Or an automobile agency wants to get people to come in and look over next year's models. Then there are **INSTITUTIONALS**. This category includes the sponsorship of a symphony orchestra by a steel corporation that wishes to brighten its public image. Or the sponsorship of a news commentary by a labor union. It also includes advertising by a local bank that wants people to "think of the First National when you think of banking." A third category is **TESTIMONIALS**. Many national advertisers pay actors, actresses, broadcasting personalities or others in the public eye to endorse a product and relate its virtues. Testimonials are not often used locally. **EDUCATIONAL COMMERCIALS** are designed to provide the listener with facts and figures that will help him make up his mind in purchasing a relatively expensive item — an automobile, motor boat, house or home appliance. **SINGING COMMERCIALS** were first used by national advertisers, but have now spread even to small local stations. **DIALOGUE COMMERCIALS** may be elaborately produced, with music and sound effects, or may simply be a conversation between two announcers about the product. **HUMOROUS COMMERCIALS** may take many forms, ranging from the way Arthur Godfrey sometimes talks about a sponsor's product, to out-right fun-poking, which is based on the theory that it does not matter what is

said about a product as long as the *name* of the product is deeply enough implanted in the listener's mind. The extreme came to be known as ANNOYANCE ADVERTISING, which is no longer as popular as in the days when Lucky Strike had announcers shout LSMFT almost insanely and with a repetition that was like hammer blows on the brain.

Questions That Must Be Answered

Here are a few basic rules for writing good copy. Plan a story-line that will make the message as interesting, informative and entertaining as possible. Don't try to tell too much in too short a time. Remember: it is better to drive home one or two sales points and leave a favorable impression than to try to include too much copy and leave the listener bewildered and annoyed. Use music and sound effects whenever possible to augment your message.

Before he starts to compose a commercial, there are several things a good copywriter must know about the sponsor whose commercial he is writing. He must know what sort of people frequent the store. Is credit extended? Does the store appeal to a minority group or to the general public? How does the store rank in size and volume with other stores in the same business? How long has the store been in business? When was it established? Is it still growing? (Although the prestige of having been in business for a long time will not sell merchandise by itself, it is an asset for some businesses, such as banks and breweries.) What are the sponsor's competitors like? What are their strong points and weak points? What are some of the services offered by the sponsor, such as charge accounts, time payments, personal shoppers, mail order, delivery, and (very important these days) parking. You should also note the strengths and weaknesses of your sponsor, such as his location, the brand names of nationally advertised merchandise that he carries, and the service given by his sales people.

Know the Sponsor

If possible be familiar with the principal executives of the store. You should know the advertising director and the advertising agency officials; also the sponsor's approximate annual advertising budget and how his budget is divided among broadcasting, newspapers and other media. Also, his previous advertising policies. Is his a price store? Does he rely on the hard-sell or the soft-sell? Is it a prestige-type store or a discount-type store? It is vital to know these facts in order to prepare good copy — copy that will sell the store.

This may seem like a lot of work, but a good commercial writer knows at least this much about each one of his clients; otherwise, he could not begin to prepare a good commercial. Next, analyze the sponsor's customers. Does his store appeal primarily to the masses or to a select group of people? What is the age group? Do they live in the city, the suburbs, or on farms? What is the approximate income-range of the customers? (The sponsor knows this and so

should a good commercial writer.) What are their shopping habits? Do they shop on week-ends? Or in the morning? Or evening? When is the store's heaviest traffic?

Ask the sponsor if he has any special objectives for his radio advertising, such as expanding his trading area, promoting a special service, advertising a special line of merchandise, creating more traffic in the store, publicizing his prestige, or promoting his bargain basement.

Once these questions are answered, the writer is prepared to turn out a good radio commercial. Larger stores have a promotional department which can supply most of this information. In the case of smaller stores, the owner or manager will be happy to tell you all you need to know. After all, he is more concerned with a better commercial than you are. He is paying for it.

Creating Want

As you begin to formulate a radio commercial, you must be aware of the great power of the spoken word. Remember that a person will be led to buy something only if he can actually visualize himself buying it in his mind's eye and only if it offers some benefit to him. So you must make him see himself with the product — whether it be a new car or a new set of golf clubs — and you must show him how it will benefit him to have this product. So, early in the commercial you must make the listener *want* the product — see himself with it — by telling him how he will benefit by having it. Do not get too technical when selling by radio. Be simple, direct and to the point.

A Practical Exercise

As an example of all these points, take a commercial for a department store that wants to advertise carpets. From research you know your store and you know the store's customers, so you know whom you are trying to sell. You know that the housewife is the one who decides which carpets the family will buy, so you must make your copy appeal to her. You must show her how it will benefit her to own this particular carpet. Are you going to tell her how it's made, what material it's made of, how many stitches there are to the square inch, and the amount of money and hours of research time spent in producing this fabric for her floor? These are excellent points, but they won't make her buy, because you haven't shown her how it will benefit her to have that carpet on her floor.

So, instead, tell her how easy it is to clean. Tell her that if someone spills coffee on the carpet she can clean it up with a damp cloth. You can be sure someone has at some time or other spilled coffee on the carpet she now has, and she knows that the stain is still there. So, she is picturing in her mind's eye the new carpet on her floor, and she is picturing herself wiping up a coffee stain just with a damp cloth. She is seeing how she will benefit from owning the carpet. Now that you have her in the proper condition to buy, because she likes

the idea, you can tell her about the research that has gone into making the carpet so easy to clean and she will listen.

Next in your copy, you want to get her to act, and so include next that if she will call the store, a carpet expert will come to her home and demonstrate to her that nothing will stain this carpet and that she can wipe up any spill with a damp cloth.

Now, let's see how that commercial would sound if written for a 60-second radio spot:

(Sound effect of ladies talking . . . then broken cup on floor). Announcer: HOW MANY TIMES HAS THIS HAPPENED TO YOU? YOU'RE HAVING COFFEE WITH SOME FRIENDS, AND SOMEONE ACCIDENTALLY SPILLS SOME COFFEE ON YOUR GOOD CARPET; AND YOU KNOW YOU WILL NEVER BE ABLE TO GET THAT STAIN OUT. ARE YOU INTERESTED IN A CARPET THAT CANNOT BE STAINED . . . EVER? ONE THAT EVEN *COFFEE* CANNOT STAIN? ANYTHING SPILLED ON THIS CARPET CAN BE CLEANED QUICKLY, EASILY, AND COMPLETELY WITH ONLY A DAMP CLOTH. YOU WILL NEVER HAVE A STAIN ON THIS CARPET, BECAUSE YOU CAN CLEAN IT JUST AS QUICKLY AS THAT COFFEE WAS SPILLED WITH JUST A DAMP CLOTH. THIS FABULOUS OZITE CARPET IS THE RESULT OF 15 YEARS OF RESEARCH IN OUR LABORATORY, AND NOW YOU CAN HAVE IT ON YOUR FLOOR. CALL OUR STORE, AND LET US SEND OUR OZITE EXPERT INTO YOUR HOME TO DEMONSTRATE THAT THIS CARPET WILL NOT STAIN. HE WILL LET YOU POUR COFFEE, TEA, OR TOMATO JUICE OR ANYTHING YOU LIKE ON THIS CARPET, AND HE WILL CLEAN IT WITH JUST A DAMP CLOTH. (Slight pause) CALL US TODAY, AT 462-2334 AND LET US RELIEVE YOU OF EVER HAVING TO HAVE A CARPET CLEANED AGAIN OR LOOK AT A MESSY STAIN. WE CAN HAVE THE CARPET IN YOUR LIVING ROOM FOR THE WEEKEND . . . AND YOU WILL *NEVER* BE TROUBLED WITH STAINS AGAIN.

Remember three things: Know your sponsor. Know his customers. Make your listeners see themselves buying the product by telling them how they will benefit from owning it.

The Announcer's Book

If the sponsor has more than one commercial scheduled on the station, the commercials must be numbered and coded so the proper commercial will be broadcast at the proper time. This number is then passed on to the traffic department, which in turn will put it on the log at the proper time. The traffic department and the continuity department must work closely together on such matters.

The final step before the commercial is voiced is putting the Announcer's Book together. This procedure will vary from station to station. Generally, the traffic department will take the log that it has made up and give it to the continuity department, which will then begin putting the copy into the book, beginning with the *sign-on* and finishing with the *sign-off*. Each commercial or program format is placed in the book in the exact order that it is listed on the

station log. When the book is completed, the copy in the book should correspond exactly to what is called for on the log. Then someone will check over the book, to be sure that nothing has been left out.

Most stations work at least one day in advance on their books. On Monday the traffic director may be putting together Thursday's log. When the book is complete and properly checked, it goes to the announcer. It is a good idea for each announcer to check over the book again at the start of his shift to be sure that all the copy called for on the log is in the book.

Commercial Timing

Split-second timing is as vital as the manner in which the commercial is read. Assume that you are working for a network station that carries the World News Roundup, a ten-minute network news program which is heard daily at 8:00 a.m. and is sponsored by Dodge. The agency that handles the Dodge account hasn't purchased your station's market. Consequently, your station is not obligated to carry the Dodge commercials. Your station will cut away from the network and insert its own commercials. These commercials must be timed to the second, and it is the responsibility of the announcer to see that they are.

You will be provided with a *cue sheet* showing what is to be done and when. A cue sheet is much like a program format. If the cut-away is exactly sixty seconds, you should rehearse reading the commercial until you read it in exactly one minute.

The only hand on the clock with which you should concern yourself is the second hand. It will confuse you if you try to watch all three hands at once — so follow the second hand while you read. It is wise to memorize the first sentence of the commercial so you can keep your eyes on the second hand as you wait for your cue to cut away from the network. The cue could be the following:

At 8 o'clock you joined the network for the program. The news announcer came on and gave the headlines. Approximately thirty seconds later he gave the following oral cue:

"These are the headlines of today's important news stories. The details of these and other stories will follow after this message."

On the word *message*, you would cut away from the network and begin immediately to read your local commercial. You would have checked the second hand on the word "message," too. If the second hand was at the 35-second mark (35 seconds after 8 o'clock), you would rejoin the network exactly 60 seconds later at 8:01:35.

At exactly 8:01:35, the network newscaster would start reading the news. The second commercial in the ten-minute World News Roundup would come at approximately 8:05. It could be slightly before 8:05 or just after. If it came at 8:05:10, you would cut away from the network and rejoin it sixty seconds later, or at 8:06:10.

Commercial Cut-Ins

In today's fast-paced radio, many sponsors prefer to have a commercial composed of recorded voice or music and live copy read by a studio announcer. Many commercials feature a musical tune that is not changed from year to year, but the copy read by the announcer is changed from time to time.

In a musical jingle-type commercial, the usual format is for the live copy that is read by the studio announcer to be inserted in the middle of the musical jingle. Sometimes a live voice-tag is used. In other words, all but the last ten or fifteen seconds of the commercial will be recorded, and then the studio announcer will mention the address of one or two dealers handling the product or service advertised.

Timing is the most important part of a part-recorded and part-live commercial. In a musical-type commercial, the volume or gain level of the music must be lowered so that the studio announcer's voice can be heard as he reads the copy. Sometimes this is done before the commercial arrives at the station; and other times the control console operator will have to decrease the gain or volume so that the live announcement can be heard over the music.

After being hired by the station manager, a young announcer should request permission to work with all the part-recorded and part-live commercials that his station uses. Usually, these are available when they are not scheduled for use.

Delivering the Commercial

How a commercial is to be read will have been determined, in general, by the sponsor, the advertising agency and the continuity writer long before the piece of copy gets into the Announcer's Book. A first quick glance at the commercial will tell in what category it is supposed to fall.

PUNCH COPY is a term used about a commercial that is to be driven home the way a carpenter drives nails — with force and power. By the manner in which he uses his voice the announcer will make it clear to the listener that . . . This is important! This is worth listening to. This is sensational. This is the chance of a lifetime. This is superlative. The words to be punched will either be underlined, or will be in capital letters, or will be separated from the rest of the sentence by a series of dots. As explained in previous chapters of this section, there are various ways of emphasizing a word, a phrase or a thought. In Punch Copy all the tricks and techniques will have to be used to put across the message with the emphasis desired by the sponsor.

CONVERSATIONAL COPY is quite the opposite of Punch Copy. It is to be read as if the announcer were sitting across the table from a friend telling him something interesting. The danger into which the young broadcaster may fall is that he will relax too much. Be sure there is both warmth and vitality in the voice, even when trying to be relaxed and conversational.

HOMELY COPY. Many sponsors wish the announcer to give the impression that he is on intimate terms with the listener and as a friend is giving him some advice about products that ought to be used. Copy of this sort is not as easy to read as a layman might think. It takes considerable rehearsal.

Tips from the Pros

A piece of practical advice comes from Westbrook Van Voorhis, the original voice of *The March of Time*, and for more than thirty years an important name in commercial broadcasting:

“Your commercial copy may sometimes be badly written. If it is, be brave and ask the agency or the continuity department for permission to change a word or two here and there to make it more readable. Chances are they will be delighted at your interest in doing a good job for the sponsor.”

Probably the best advice ever given to young broadcasters in the commercial field came from John Cameron Swayze, top TV commercial personality, when he said:

“To be a good salesman on the air you must project a pleasing personality and give the impression of honesty and great sincerity. Then listeners will be convinced you are telling the truth and they will believe you.”

31.

*Fluffs, Goofs, Boners,
Slips, Butchs, Bloopers*

Sang froid are two French words meaning *cold blood*, but they have been admitted to the English language by Mr. Webster and his dictionary-makers. They connote: *Freedom from agitation, and coolness in trying circumstances*. Such circumstances may come quite unexpectedly on radio or television. A child-guest may say the naughty word. Someone may knock over a floor lamp. An announcer may make a blooper that will go resounding down the corridors of time.

Early in his career Lowell Thomas one night said a word on an NBC network news show that had probably never been uttered on the air before. After fluffing around with it, he finally went on. But during the rest of the quarter-hour newscast he frequently giggled and snickered. The next morning thousands — perhaps hundreds of thousands — of people across America asked fellow commuters on their way to work: “Did you hear Lowell Thomas last night?” Since then Thomas has often repeated this performance — not always fluffing the same word, of course. He has done it so frequently — including the snickering — that some of his radio colleagues have suspected he has done it on purpose.

Not everyone can get away with what a network star can, but the moral for everyone is: in case of a fluff, keep going. Ignore the error. Remember the two French words: *sang froid!*

\$100 Network Commercial

Sometimes the boners are on the part of engineers. A classic happened in 1933 when Detroit station WWJ was feeding the NBC network an exciting speed boat race on the Detroit River. For \$100 WWJ had sold a local spot announcement just preceding the race to a Detroit jeweler, Harry Glick, who made a

specialty of cleaning watches at the bargain price of 89¢, instead of the normal price of \$3 or \$4. He was so successful that he employed 25 men regularly to do nothing but clean watches. Due to a slight error made by WWJ engineers, AT&T engineers or NBC engineers, the Glick watch commercial got fed to New York and went out over the entire network. For weeks the watches kept coming in — watches from every state in the Union. It was the cheapest commercial that ever went out over a network.

Add a Million

There are hundreds of radio-television stories about weird coincidences, odd juxtapositions, freak cross-blending of programs. Here are just a few.

When the NBC news room one day in 1935 received a bulletin that a giant U.S. dirigible had crashed off the coast of California, it cut in on the Ben Bernie program to put this bulletin on the air:

WASHINGTON — THE NAVY DEPARTMENT CONFIRMS THE CRASH OF THE DIRIGIBLE MACON. IT IS NOT KNOWN HOW MANY ABOARD ARE DEAD.

Then a switch was made back to the studio where Ben Bernie began singing the words of a then-popular song:

Take a number from one to ten, double it, and add a million.

Conflict of Interests

Lowell Thomas was sponsored for years by the Sun Oil Company and his commercial wound up:

. . . and as you start out on that trip, be sure to fill your car with a tankful of Blue Sunoco.

For several nights — until someone stopped it — this was followed immediately on one NBC station by a spot announcement that began:

Why drive your car in this heavy traffic? Use a Greyhound bus.

Just Give the News, Please

It was midnight of election night, 1936. From the NBC news room came a bulletin that wound up:

THE DEMOCRATS SEEM TO BE SWEEPING THE NATION.

Then a switch was made to a hotel orchestra, with a male chorus that by unhappy coincidence, as they went on the air, were singing a song called *Ain't It a Shame!*

Milton Cross Slightly Scuttled

In 1939, after a battle with three small British ships, the Nazi pocket battleship *Graf Spee* was cornered in the neutral port of Montevideo, Uruguay, and was scuttled on Hitler's order, to prevent the British from learning the secrets of its weapons. Interrupting a Sherwin-Williams operatic program presided over by Milton J. Cross, the NBC news room put this bulletin on the air:

THIS IS NBC AT MONTEVIDEO. THE GRAF SPEE HAS BEEN SCUTTLED AND SUNK. WE RETURN YOU TO THE NATIONAL BROADCASTING COMPANY.

Then in came the suave voice of Mr. Cross, who had gone right on talking, unaware that he had been interrupted:

. . . and that is all you need to know about paint.

Intoxicating Music

Mrs. Ella Boole, president of the Women's Christian Temperance Union, was given fifteen minutes on the network to defend prohibition and denounce strong drink. Being an amateur at broadcasting, she had not timed her script accurately, with the result that she finished and signed-off several minutes early, so NBC had to call on a pianist stand-by to fill the remaining time. He did — playing *The Champagne Waltz*.

Our Father . . . One, Two, Three, Testing

KDKA, Pittsburgh, was broadcasting a service from Point Breeze Presbyterian Church when engineers got two wires crossed, so that the listeners heard the Lord's Prayer and at the same time the loud voice of an engineer repeating again and again:

One, two, three, testing. One, two, three, testing.

Who's the Hog?

Those who heard the broadcast of the Dempsey-Firpo fight in 1923 remember what happened when a wire broke at a tense moment in the first round of the world championship fight. The sportscaster had just said:

Firpo lands a terrific blow, knocking the champion . . .

There was a long pause. Then the studio standby announcer, told to start talking quickly, picked up the first piece of AP copy at hand and began reading:

With hogs up two cents a pound . . .

It was difficult to explain that he had picked up a market report instead of a piece of regular news copy.

A Smelly Cheese Story

There are other bloopers from which some moral can be drawn. For example, NBC's pioneer news director, Abe Schechter, needing a bright little story to put at the end of Lowell Thomas' newscast, rewrote an item he had spotted in a London paper about a tariff war between France and Germany over the duty on cheese. In the Schechter version, France says to Germany:

If you won't buy my Camembert, I won't buy your Liederkrantz.

When Schechter did not know was that Liederkrantz is not a type of German cheese at all, but an American cheese with a copyrighted name. He found out, however, the next day when a coterie of lawyers called on him, threatening libel. It took an apology over the entire network to quiet the trouble.

MORAL: Know your cheeses.

The Tragedy of the Unguarded Turntable

In the late 1930's on a small station in Missouri, the combination announcer-engineer each morning, after signing-on the station and then starting the needle on a fifteen-minute recording of a religious program, was in the habit of dashing down the street for a quick cup of coffee. (This was before the days of coffee machines.) There was no danger, because he always timed it so that he would be back well before the needle reached the end of the segment. One morning upon his return he found both telephones ringing madly. There was no need to answer them, because he suddenly realized what the calls were about. The needle was stuck in a groove and what was going out over the air were these words, repeated again and again and again:

O Jesus Christ, now and forever. Oh Jesus Christ, now and forever . . .

Instead of answering either of the phones, he shut off the turntable, pulled a few switches, picked up his hat, and left town the quickest way possible.

MORAL: Never leave a turntable unguarded.

Keep It Clean

One story that is told in various parts of the country as having happened on various stations — and maybe it did — is the breast-bed mixup. The spot announcement was supposed to wind up:

. . . and for the best in bread, try Rainbo.

What the announcer actually did say was:

. . . and for the breast in bed, try Rainbo.

One of the best versions of that story has it that the announcer, while realizing his fluff, went right on talking, that no complaints were ever received, that apparently no one but the announcer himself noticed it, even though a recording of the spot later showed that he actually had mixed up his nouns and his adverbs.

MORAL: Don't ever try to go back and correct a blooper.

If You Can't Hear Us, Write

A small station in the South left the air due to a power failure. The young announcer, remembering instructions about always apologizing to listeners when something goes wrong, grabbed a dead mike, and said into it:

Ladies and gentlemen, due to difficulties beyond our control, we are off the air.

And for a long time he couldn't understand what he had done that was wrong.

MORAL: Think! Think! Think!

The Scarlet Something or Other

Fortunately for him, the announcer responsible for this one is anonymous, but this is exactly what he said in introducing a film on TV:

Our Late Show presentation for this evening is a revival featuring the late

Leslie Howard as the Scarlet Pumpernickel . . . er . . . er . . . the Scarlet Pimple . . . I mean, the Scarlet Pimpernel.

MORAL: Don't try to correct a fluff.

Not a Carload in a Cough

Once while substituting for Arthur Godfrey, Robert Lewis did one of the commercials like this:

Chesterfields are much milder (violent coughing fit) as compared with other brands. (More violent coughing.)

The studio audience roared with laughter. As soon as his coughing spell ended Lewis wiggled out of his predicament by saying, on mike:

The mere mention of any other brand makes me cough.

MORAL: Quick wit saves many a situation.

And Watch Out for Blondes

During World War II, a newscaster at WOR was responsible for this delightful blooper:

In last night's air raids, the RAF dropped two-ton and four-ton blondes on Berlin.

MORAL: Watch your articulation.

A Very Castigated Man

On an unnamed network an unnamed actor had this line to say:

I found I had to castigate my father.

The way he read the line on the air:

I found I had to castrate my father.

MORAL: Chalk that one up against the script writer.

Painful Spain

An NBC announcer, introducing a short-wave pickup from Madrid, Spain, said with great pride in his voice:

She is NBC's only woman commentator in pain.

MORAL: Don't drop your consonants.

What's a Female Adult?

The man with the tape recorder was doing a sidewalk interview. The dialogue went like this:

ANNOUNCER: *And what do you do for a living?*

WOMAN: *I'm a maid. I do housework. I take care of a large family.*

ANNOUNCER: *How large a family?*

WOMAN: *Well, let's see. There are four boys, three girls, one adult and one adultress.*

MORAL: That announcer was glad it was only on tape.

Vanishing Schools

A newscaster on KMBY made this one:

The federal government has ordered the schools of Mississippi to disintegrate.

MORAL: When in doubt use a dictionary!

Anything's Possible in Hollywood

Louella Parsons, Hollywood observer, made this network report:

It is rumored here in Hollywood that a film company has bought the rights to a new navel for Audrey Hepburn.

MORAL: Watch your vowels!

How to Stay Young Forever

A Wisconsin newscaster was responsible for this one:

The 67-year-old candidate for the Senate, now of Peoria, was born on a farm in Columbia county 58 years ago . . . that doesn't sound right, but that's what his campaign manager sent over for me to read!

MORAL: Always read it at least once before going on the air!

An Icebox Full of Nudes

A local commercial announcer:

This king-size refrigerator is large enough to seat all the nudes of your family. Eh . . . I mean, suit all the needs of your family.

MORAL: Keep your mind on your business!

Good North, Mr. Night

Sterling North, well known author, one night signed off his program:

This is Sterling Night, saying good north!

MORAL: At least try to remember your own name!

I Don't Need One Myself

A (fortunately) anonymous commercial announcer:

Try this wonderful new bra. You'll love the softly lined cups. You gals who need a little something extra should try Model 718. It's lightly padded and I'm sure you'll love it. I do . . . I mean I like the looks of it . . . What I'm trying to say is that I don't need one myself, naturally, being a man . . . How do I know about it? I really don't. I'm just reading the commercial for Mary Patterson, who's home ill with a cold.

NO COMMENT.

32.

Knowledge: How to Acquire It

The dictionaries define *knowledge* in many ways. They say it is *acquaintance with facts, or understanding, or the clear perception of truth, or enlightenment, or learning, or the sum total of the information preserved by civilization.*

Philosophers have praised it. Socrates in one of his dialogues said:

There is but one evil, ignorance; but one virtue, knowledge.

Francis Bacon put it even more succinctly:

Knowledge is power.

The Bible is full of references to it. The Book of Proverbs, XXIV, 5, says: *A wise man is strong, yea, a man of knowledge increaseth strength.*

Novelists have often had a good word for it. Laurence Sterne said:

The desire of knowledge, like the thirst of riches, increases with the acquisition of it.

Daniel Webster once declared:

Knowledge, in truth, is the great sun in the firmament. Life and power are scattered with its beams.

Poets have sung of it. Wordsworth wrote:

*Many are our joys
In youth, but oh! what happiness to live
When every hour brings palpable access
Of knowledge, when all knowledge is delight.*

Dante said it bluntly:

*Consider your origin: ye were not formed to live like brutes, but to follow
Virtue and knowledge.*

John Addington Symonds, Nineteenth Century poet, put it this way:

*These things shall be: a loftier race
Than e'er the world hath known shall rise,
With flame of freedom in their souls,
And light of knowledge in their eyes.*

The broadcaster especially has the need to know, to be well-informed, to develop a well-rounded personality, to be intellectually alert, to have a broad cultural and intellectual background. The broadcaster needs to know a little about a great many things, because in his work he encounters such a wide diversity of people and subjects. The news he reads on the air today may be about a new development in nuclear science, another chapter of space exploration, a frontier incident in the Middle East, a crisis in some African country, an experiment in desalination, an air pollution development, a Security Council debate on the Kashmir situation. It would be — it is — entirely possible for someone who knows nothing about any of those subjects to read the AP or UPI bulletins without stumbling or fluffing, but some knowledge of what each story is about would be a great advantage in making the news understandable to the listener. It is not enough to be able to pronounce the words. Voder (see Chapter 15) can do that. Don't be just a Voder!

You Need It to Ask Intelligent Questions

The broadcaster frequently is called upon to conduct interviews with people who may be experts in various fields. Today it may be an astronaut, tomorrow a clinical psychologist. It is not necessary for the interviewer to have traveled in a space capsule himself or to have obtained a college degree in clinical psychology to do the two interviews. But he should certainly know something about outer space and what a clinical psychologist is and what he does, and what the two men might have to say that would be of general interest to a radio or television audience. If not, the interviewer would have no idea what questions to ask. It takes intelligence just to ask questions. Remember that Socrates, one of the world's most brilliant minds, spent most of his life just asking questions.

Then there are panel shows, which most broadcasters at some time in their careers have the opportunity to emcee. The discussion may be about the state of religion in the world. If someone mentions Zen Buddhism and someone else says something about Existentialism, the emcee will be in an embarrassing position if he has never even heard of either.

But How to Acquire it?

So the poets and philosophers agree that it is a virtue and desirable, and *we* agree that broadcasters are especially in need of it. But precisely *how* is knowledge acquired?

A. Edward Newton wrote:

From contemplation one may become wise, but knowledge comes only from study.

Does that mean that knowledge comes only wrapped up in a college degree? Not at all. Many students succeed in obtaining A.B.'s and even M.A.'s at good colleges and universities, and soon forget all they have learned and go out into the world very unknowledgeable men. By contrast, some of the most keenly

knowledgeable people never saw the inside of an institution of higher learning. It depends on the individual and the will. Exposure to knowledge is not enough. It must be absorbed. There must be a keen and lively interest in the acquisition of knowledge. Improving the mind is not for the lazy. Cutting down trees in a forest with an axe is easier work. A British wit once wrote:

Thinking for a human being is like standing on his hind legs is for a dog: it is possible but very difficult.

There is much to be learned. There is so little time. Samuel Johnson, who wrote the first real dictionary of the English language, once said:

A young man should read five hours a day and so may acquire a great deal of knowledge.

Many young men these days do not have five hours a day to devote to this pursuit. And yet there is much more to read and much more to know today than when Johnson lived, back in the 18th Century.

Papers, Magazines, Books

Let's be practical. Assume you are an announcer on a local station in a Mid-West city with a population of 50,000. You must first read the local newspaper, of course. Sandwiched in between all the super-market and department store ads there will be some news, probably most of it concerned with local affairs. Such news must not be ignored, because therein may be ideas for local interviews, material that the disc jockey can work into his patter, and information you need to have, now that you are a member of the community.

Next, read *Time* magazine or *Newsweek*, not because these are the best and most reliable weekly publications from which to find out what is happening, but because they are so widely read and so widely quoted that, as a communicator, you need to know what other people are saying and thinking.

Once a month you should at least skim one novel and one non-fiction book that are at or near the top of the best-seller list. Do this not because they are necessarily the best of the new books, but because, being so widely read, they will be widely quoted and you need to know what people are talking about.

But Don't Stop There

Most people go just that far and then stop. They are much too busy for more reading than that. If you wish just to hold the job you have — if you wish to be just Anybody instead of eventually becoming Somebody, you can stop there, too. But if you have read this far in the Encyclopedia and this far in Chapter 32, it is to be presumed that you are interested in really acquiring knowledge and really making progress in your chosen field. And so . . .

Each day buy or read in your local public library the *New York Times*. (If it is unavailable in your town, it will be well worth your while to subscribe to it and have it come by mail.) There is no other newspaper in America that gives such complete coverage of both domestic and foreign news. The *Times*

has its own correspondents all over the world, who cable in thousands of words a day of what is truly reporting "in depth."

Subscribe to at least one weekly publication with an editorial policy quite the opposite of the publications you are already reading. This will give you a much more rounded, balanced picture of national and international affairs. If your reading is already on the conservative side, here are a few suggestions for balancing it:

SATURDAY REVIEW: This weekly, once devoted exclusively to literary matters, now contains one department called "Ideas" in which a bold stand is taken on national and international matters, and also at least one of two articles per issue combining reportage and opinion.

Address: 308 Madison avenue, New York, 10017. Price: \$8 per year.

MANCHESTER GUARDIAN WEEKLY: This is a 16-page, tabloid-size weekly edition of a distinguished British daily paper. The weekly, on airmail paper, is a compilation of the best articles that appeared during the previous six days in the daily. The Guardian is a brilliantly-edited, middle-of-the-road paper with excellent world coverage.

Address: 20 East 53rd. street, New York, 10022. Price: \$9 a year.

NEW STATESMAN & NATION: This very old British weekly, similar in format to the *New Republic*, is extremely liberal, always provocative. It is often bitingly critical of American policies. Only a small percentage of its contents will be unintelligible to non-British readers.

Address: 30 E. 60th. st., NY, 22, or 10 Great Turnstile rd., London, WC1. Price: \$9 a year.

NEW REPUBLIC: This is an old liberal weekly. It averages about 40 pages per issue devoted to articles on national and international matters. It is mildly liberal, but not as bold and fearless as it once was. It has a good Washington correspondent and contains some news not found elsewhere.

Address: 381 W. Center st., Marion, Ohio. Price: \$8 per year; \$6.50, students or armed forces.

THE NATION: This liberal weekly recently celebrated its 100th. anniversary. Its regular issues run to about 40 pages. Occasionally it puts out special issues, each devoted to a single subject. These exposés are brilliantly researched and often have wide repercussions.

Address: 333 Sixth avenue, New York, 10014, NY. Price: \$10 a year.

And here are several monthlies worth looking into:

CURRENT: This provocative monthly contains what its editors call "significant new material from all sources on the frontier problems of today." It covers both national and international affairs.

Address: 905 Madison avenue, New York, 10021. Price: \$8 a year. (\$5 for students and teachers.)

CHANGE: This new monthly of about eight pages is put out by the Center of the Study of Democratic Institutions (Fund for the Republic) headed by Robert Hutchins, former president of the University of Chicago. It provides "a channel for discussion of the forces of change; an experimental project of the Center." Neither *Change* nor the Center propagates any ism except true American democracy.

Address: Box 4427, Santa Barbara, California. Price: \$3 a yr. contribution to publication costs.

THE IDLER: This is a small, very off-beat monthly magazine of 32 pages with the sub-title: "Public Occurrences, Comment, Excursions & Rational Entertainment." It contains articles by such men as Edward P. Morgan, ABC radio commentator, and Senator Fulbright. Pungent. Entertaining.

Address: 125 Fifth street, Washington, 2, D.C. Price: \$3 a year.

THE PROGRESSIVE: This 46-year-old progressive monthly was founded by the late Robert LaFollette. It makes no attempt to exact complete conformity from its contributors, but rather welcomes a variety of opinions consistent with its general policies, which are to stimulate intelligent discussion of national and international problems.

Address: 408 W. Gorham street, Madison, Wisconsin. Price: \$5 a year.

Although neither weeklies nor monthlies, these two publications are also worth noting:

TRUTH & THE DRAGON: This is one of the many publications of the American Friends Service Committee which are highly recommended. The price of this one paper-bound book is 75¢. It tells in illustrated form what to guard against in the search for truth. When ordering this book, ask for a list of other publications and periodicals available. This committee is outstanding in its leadership of the fight for truth, freedom and justice.

Address: Friends Service Committee, 160 N. 15th. st., Philadelphia, 2, Pa. Price: 75¢.

THE CHRISTIAN SCIENCE MONITOR: This full-sized daily newspaper is published in a number of regional editions. Each issue contains one article on Christian Science. Otherwise the paper's religious sponsorship in no way colors the contents, which consist of reports from its own staff of able foreign correspondents, and many articles about people and places *not* involved in any current sensational crisis. This is the only American daily keeping alive old-fashioned constructive journalism and giving space to essay-type writing.

Address: 1 Norway street, Boston, Mass. Price: \$6 for three months.

Read at least one non-fiction book a month that is not on the best-seller list and never will be. It may be about a man, a country, a situation, a branch of science, or something as topical as flying saucers.

An Aspiring Thinker's Handbook

If for some reason you are unable to take all this advice and can read in the course of the next year only a single book, that book *must* be S. I. Hayakawa's *Language in Thought and Action*. Its sub-title calls it: *An up-to-date edition of one of the most popular books on language; a stimulating guide to accurate thinking, reading, listening and writing*. The only thing wrong with the sub-title is that it should also say *speaking*. The book is important for broadcasters, because they should always be thinking, should sometimes be reading, occasionally must listen, and often must write.

The first edition was published in 1939. In the past quarter-century the book has revolutionized the thinking-habits and even the lives of hundreds of thousands of people. Listen to some of the chapter titles: *The Word Is Not the Thing, What Animals Shall We Imitate? Snarl-Words and Purr-Words, Discovering One's Bias, Chasing Oneself in Verbal Circles, Oververbalization, Reading Toward Sanity, The Open and the Closed Mind, The Symbols We Live By*. That's enough to give a tantalizing (we hope) idea of what a stimulator the book is.

How to Read

Going back to Sam Johnson's advice to young men — to read five hours a day — although qualifying as a young man, you may say you cannot find five hours

out of each 24 to devote to reading. How many hours *do* you have for it? Whatever the number is, use them to full advantage. Learn to skim over words, sentences, paragraphs, even whole pages that strike you as non-essential, but dig deep when you come to the meaty passages. Professor Odell Shepard, a brilliant teacher of English, used to advise his students to spend as many minutes in silent contemplation of what they had just read, or in heated discussion of it, as they had spent in the actual mechanical process of reading. The thinking-pauses may come after a sentence, a paragraph, a page, or chapter. If what you are reading does not seem to be worth that much thought, then you must be reading the wrong things. It is necessary to weigh what we read, to decide on its validity or falseness, and then to integrate it — to tuck it away in the proper compartment of our intellectual storehouse.

Better a Detective Story

Many people read newspapers, magazines and serious books (without admitting it) for the same reason that other people read detective stories in bed at night — as a soporific. Ask a man who has just stepped from a bus with a copy of *Time* in his hand to write on a piece of paper everything — EVERYTHING — he can remember that he read during the quarter hour or so he was sitting on the bus with *Time* for a companion. He may have scanned the magazine from cover to cover — tens of thousands of words — but if his life depended on it, it is probable that he could not cover one side of a piece of note paper with an accurate report on what he had read. Just as reverie often passes for thinking, so does soporific *Time*-reading often pass for acquisition of knowledge. There is more to acquisition of knowledge than that.

Some people read with their lips. A broadcaster always should read scripts with his lips moving, for in this way he will “hear” what his script is going to sound like. Lip-reading is pardonable at other times and in other people as long as one reads also with the mind.

Every time you strike a word that is strange, look it up in the dictionary. It is not proof of stupidity always to have a dictionary near at hand. Quite the contrary. Use an encyclopedia for checking on places and people. There is something the matter with any broadcaster or writer who does not refer on an average of at least once a day to his copy of the *World Almanac* or the *Information Please Almanac*, two compendia of facts and figures that should never be far out of reach.

Valuable Reading

Besides the publications suggested above, the broadcaster should read at least one trade paper to keep abreast of what is going on in the exciting world of broadcasting (See Pages 445 & 446). Program directors and station managers will be impressed with such interest, and it could lead to a promotion. Also see the chapter, *Suggested Reading*, Page 447.

Disc jockeys and even those who spin records only occasionally should glance through *Billboard*, *Variety*, *Downbeat* or one of the other trade papers dealing with popular music. (They are as important to the dee-jay as market reports are to a farmer.) The dee-jay should keep an informational file on those whose records he plays. Some day one of them may come to town and the file will be invaluable in doing an interview on him.

A final word of caution about reading. Sam Johnson, the dictionary-man, also wrote these words:

Knowledge is of two kinds: we know a subject ourselves, or we know where we can find information on it.

The brain is a forgetting instrument as well as a machine for remembering. Now and then a man comes along without the ability to forget. Such men often die of strange brain disorders. It is not necessary to make the mind into an encyclopedia, unless you intend to make a career out of competing on television quiz shows. Every town large enough to have a radio station has a public library, and every public library is large enough to have at least one encyclopedia of twenty or thirty volumes, which will contain more facts and figures than any one brain, however large, could possibly hold. As Mr. Johnson said, the important thing is to have the knowledge to be able to find the information you need. Researching is both a science and an art. To try to find any specific fact in a library the size of the Library of Congress in Washington is like looking for some one particular pebble on a vast seashore, unless you know the techniques. Any librarian will be glad to give you tips on how to start looking for some specific fact. The more looking you do, the easier researching will become. But don't try to cram your head full of information that you can just as well let an encyclopedia store up for you.

Don't Be Afraid to Be Different

In addition to the reading, take a keen interest in the world in which you live. Despite periodic outbursts of ugliness, it is a progressive, dynamic, exciting place. Our society has been created by men with ideas — men not afraid to think — men not afraid to be different — pioneers in intellectual fields, as well as pioneers who felled trees in forests and cleared land. Don't be afraid to be called an intellectual. Strive to be one and you will find yourself in good company, for Socrates, Plato, Christ, Gandhi, Mohammed, Schweitzer, Einstein, Marconi and Edison were intellectuals, too, each in his own unique way.

People, Events, Ideas

Develop a healthy curiosity about things, people, places, ideas. (Someone once said: *A small mind discusses only people, an average mind discusses events, a great mind is interested in ideas.*) Soon you will discover that thinking is one of the most intense pleasures that a man can have.

The broadcaster must take an interest in domestic politics. He must know which party controls each branch of the State Legislature and Congress. He must know what each party stands for in the state, and in the nation. He must know something of American political history. He must know all there is to know about the Mayor, the Congressman representing the district, and his two U.S. Senators.

The broadcaster will often encounter foreign names in the news. He should have a basic understanding of how to pronounce them, even before they come up on the AP and UPI wires. If you live in a large city, explore the possibilities of attending classes in a foreign language. If it is not possible, any library or bookshop has paperbound books on foreign languages. They are inexpensive and should be included in any broadcaster's personal library.

Words Are Your Business

Besides his voice, one of the most important assets of the broadcaster is his command of English. Strive to build a rich and colorful vocabulary. A word is not part of your vocabulary unless you can and do use it on the proper occasion. If you are called on to do an interview program or a news remote, your own vocabulary will be put to the test, because you will have no script from which to read. To develop a proper vocabulary, take a keen and sincere interest in words. Every new word you encounter in your reading should become a challenge. Look it up in the dictionary. Write it down. Make it part of your ever-expanding vocabulary. Remember, you are dealing in words and the communication of ideas, so it is imperative that you begin at once to increase your vocabulary. Build yourself a new word list each week. Then put them to use in sentences. No announcer can become really successful without a good basic vocabulary.

The listener depends on radio and television announcers for authoritative pronunciations. He believes that the announcer is a person of culture, education and refinement. If he hears words mispronounced, the prestige of the station and the announcer suffers. Also, if the listener is unaware the announcer is mispronouncing a word, the listener may copy the mispronunciation himself. Also, mispronounced words often change the entire meaning of a news story or commercial message.

This chapter is entitled *Knowledge: How to Acquire It*. If knowledge is some of the things the dictionaries say it is (see the first paragraph of this chapter) then it can never really be acquired. The best thing we can do is to engage in a constant search for it — a reaching-out, a struggle. No mortal man may ever acquire what Webster calls "the clear perception of truth." What is important is the trying.

33.

Management

Who owns all the radio and television stations scattered across the country? The answer is surprising. Some are owned by individuals, or partnerships, or corporations with few or many stockholders. But others are owned by labor unions, newspapers, magazines, colleges, universities, bible institutes, department stores and even cities. (The largest city-owned station is WNYC, New York.) For many years high school students in Buffalo kept a radio station there alive. In a majority of cases, however, both radio and television stations are commercial enterprises, founded and operated for the primary purpose of making a good return on invested capital. And in an overwhelming percentage of cases, they do. Regardless of what individuals or what group may own the station, and regardless of how small or large it is, it must have a general manager.

The Station Manager

Here is the key figure of every radio or television station. Here is the man behind the man behind the microphone. The star announcer may have a golden voice, a talent for making news and sports come alive, a beautiful command of the English language, and a vocabulary second to none, but it is the Station Manager who is responsible for the success or failure of the operation.

Others may be temperamental and get away with it. A young announcer who deserts his turntable to snatch a cup of coffee down the street may put on his hat and take the next bus out of town if the needle gets stuck in a groove while he is gone, but the Station Manager is the one who has to stay and do battle, constantly, day and night, against a variety of forces, in order to keep his station on the air and making money.

What is the background of this key man in broadcasting? There is no pat-

tern, no fixed formula. Station Managers have come from all walks of life. Several who have become prominent in the industry were once airplane pilots or stunt fliers. Many were formerly lawyers. Others were engineers, salesmen, newspaper reporters, schoolteachers, editors. One, who made such a success as a station manager that he ultimately became a network vice president, began as a salesman of popcorn machines. More and more, however, as broadcasting becomes mature, station managers are coming up from the ranks of the industry itself, rather than from the outside. This means that any young announcer who has all the qualifications and predilections listed below may, someday, be able to put those letters SM after his name.

The manager of even the smallest radio or television station is no ordinary businessman. He must have a wealth of creative ability, for each station needs to have a personality of its own, and it is up to the SM to decide what that personality shall be, and then to take steps to create it.

He must be an able promoter, a clever showman and a good public relations expert, with original ideas for making the community conscious of the existence of his station. He must have the ability of every good executive to surround himself with able subordinates, who can execute his ideas, and sometimes develop ideas of their own. He must inspire confidence and loyalty, just as a well-loved football coach or an esteemed schoolmaster does. He must know enough about the technicalities of broadcasting to talk intelligently with engineers. He must know enough about news, sports and entertainment to supervise his station's coverage of events in these fields. He must know something about law, so that when listeners threaten libel suits or when contracts are up for re-negotiation, he will not be in the dark. He must know advertising from *a* to *z* and back again, for the life-blood of his station is advertising revenue. He must be adept in the field of labor relations, for many if not all his employees will be members of unions.

He must have the ability to inspire loyalty and enthusiasm for the station, not only on the part of the staff, but also on the part of the community, especially the advertisers.

The SM must have an intense interest in his environment, for he will probably often be asked to help raise money for the local hospital, serve on the Chamber of Commerce, be a director of the Community Chest, support the Symphony Orchestra Society, advise the Mental Health Association, be chairman of the YMCA building fund, and assist the Public Library in getting an increased appropriation for the purchase of books. He may even wind up being induced to run for mayor, member of the State Legislature, or Congress.

If he succeeds in cutting such a figure in the community, his station is more than ever likely to prosper, but he will need two secretaries to protect him from all the telephone calls. Friends — and everyone will be his friend — will ask him to use his influence to get them tickets to the Army-Navy game, a

place on a plane to New York when the airline office says there's a wait list for all flights that day, two seats on the aisle for the season's hit play on Broadway that is sold out for the next six months, passes to get into the Johnny Carson Show, an introduction to General Sarnoff or the Mayor of New York, some tips on what to see in Washington. He will be invited to sit at speakers' tables so many nights of every week that members of his own family will become almost strangers to him.

If his station is not affiliated with one of the networks, buying film will be one of his major tasks. Eighty per cent of the time on the average independent station is given over to film, which adds up to thousands of hours of film a year. And so his role as purchasing agent is very time consuming.

Inasmuch as FCC licenses expire every three years, the station and its general manager must be constantly on their good behavior, concerned always about the possibility of complaints for even unintentional violations of the hundreds of written and thousands of unwritten rules and regulations.

Competition from other stations and other informational-entertainment media also calls for leadership, planning and a clever outwitting of the rivals. In a city like Atlanta, Georgia, where there are 23 radio and television stations, the rivalry is intense and every SM who is not on his toes is likely to find himself some day without a frequency or at least without his name on a door. Even if there are no other radio or television stations in the community — an unlikely situation — there are at least competitors for the sponsor's dollars in the form of daily or weekly newspapers, and other advertising enterprises.

Perhaps the reader of these paragraphs has no idea of becoming a Station Manager. Even so, he should now have a greater respect for the Station Manager. His role is not an easy role.

And so — hats off to the SM!

Sales Department

The most important department of any station — except those endowed for life — is the department concerned with providing the money to keep the staff paid, the station on the air, and the stockholders happy. Here is an inside look at what is sometimes called the Commercial Department:

Every radio and TV station, large or small, has a Station Representative, referred to in the business as "the Rep." He handles all national sales for the station, which are made through advertising agencies in the large cities, such as New York, Chicago, Los Angeles, Philadelphia and Detroit. It would be impossible for a station in Paducah, Kentucky, to have salesmen in each of these cities trying to seek national business, so the manager of the Paducah station employs a Station Rep to handle the task.

The Rep employed by the Paducah station will probably represent a number of other stations. If he hears that the D'Arcy Advertising Agency in Chicago,

for example, is considering buying spot announcements around the country for one of its clients, Standard Oil, he visits the agency on behalf of all the stations he represents. If he is successful in selling a schedule of spots, he makes out a contract and sends a copy to each Station Manager. The stations pay the Rep 15 per cent of the gross amount of money received from the D'Arcy Agency, which in turn collects from Standard Oil.

Network Sales

The next source of income for the local station comes from Network Sales. The local station does not have much control over the revenue it gets from the network. In both radio and television, the network sets a specific rate that a station will receive for a given number of hours of network time each week. The Station Manager can, of course, bargain with the network for a higher rate, but the rate is usually set by the size of the market which the local station covers. This can be increased by population growth or by boosting the wattage of the station.

The station signs a contract with the network and agrees to carry a certain amount of the network's programs. Then the station is paid each month the amount agreed upon. Sometimes a station will determine that it is in the public interest to pre-empt a network program on either radio or television in order to carry a locally-originated program or a special film. To do this, the station must notify the network in advance, so the network can notify the sponsor through his advertising agency that a certain city will not be carrying his program on a certain night. The network then has the prerogative of contacting another station in the area in order to find an alternative outlet.

Local Sales

The third sales leg is Local Sales. A good local salesman is worth his weight in gold; a bad salesman can almost run a station out of business. Most stations pay their salesmen on a commission basis. The salesman who works under that arrangement is close to being in business for himself. His earnings are in direct proportion to the amount of work he puts in and how good a salesman he is. Most good salesmen prefer to work this way.

A good salesman must be a self-starter. He must be continually working on ideas to present to his clients. He will usually put in long hours and sometimes work with his clients in the evening. He carefully plans his working day, and he does not call on a client until he is ready with a well-worked-out proposition. He understands the problems which may be facing the client and presents solutions that involve radio or television advertising.

Each station has an established rate card, listing the cost of time segments, from 10-second spots up to 15- and 30-minute programs. The number of people a station reaches has much to do with determining the cost of time on the station. Another factor is competition — what other stations are charging. Time

charges vary according to the time of day or night. As with most other things that men buy and sell, there is a discount for quantity purchasing. This is called a *frequency discount*. While a single, one-minute spot may cost \$10, if a single advertiser bought a hundred one-minute spots, the frequency discount might bring the cost per spot down to \$8.

Naturally the advertiser is interested in ratings. If he buys a station with a good rating at a bargain price, his cost per delivered message goes down. If a station's rating remains consistently high, it can then raise its time charges. This means more profit for the entire operation and can reflect itself in fringe benefits, as well as direct salary increases. Good ratings or bad, it is still the job of the sales department to sell the station to advertisers.

Having sold the advertiser on a schedule of spots, the salesman must then service the account in many and various ways. Above all, it is his job to get the sponsor to renew his contract as it nears expiration.

Engineering

The Station Manager and the Sales Department are important to the man behind the microphone because they keep the station on the air, financially. The Chief Engineer and his department are important to the man behind the microphone because they keep the station on the air, technically. They are important to the sales department because no matter how effective a commercial may be, if it is delivered to the listener in bad condition, it will not make a sale. The Chief Engineer has the task of delivering perfect sounds to the air waves. Besides just keeping music and voices going from microphone to antenna, he has the responsibility of making certain that the operation of the equipment conforms to FCC regulations. He is in charge of both the studio equipment and the transmitter. He must be thoroughly familiar with FCC rules and regulations. Each station is required to supply the FCC with an annual proof of performance, from microphone input to antenna.

Engineering also has supervision of tapes, transcriptions and recordings. A weekly check must be made of the turntables. Portable battery-operated tape recorders must be checked daily. Automatic programming and automatic logging equipment (if any) are also the province of engineering.

Promotion and Publicity

This department is as busy as the ringmaster of a three-ring circus. Its first task is to get publicity for the station — to keep the call letters constantly before the public — to be sure the image of the station remains shining and bright. If there are other stations in the community, *our* station must be made better known than all the others. If the star announcer is arrested for a minor but embarrassing offense or is sued for breach of promise by a female listener to whom he was polite on the phone, Promotion and Publicity must go into action.

Program listings must get into as many papers as possible. Pictures and

stories about the station's outstanding broadcasters must be conceived, written and distributed to newspapers and magazines. If a celebrity is interviewed and makes news-worthy remarks, a transcript of what he said must be fed to the papers. (A good example of enterprise was the idea conceived by a CBS publicity department official in New York to send Ho Chi Minh a cable asking him some pertinent-at-the-moment questions about his stand on peace negotiations in the Vietnam war. His reply not only furnished material for a broadcast, but the story, which credited CBS, made Page One in almost every paper in the United States.)

Audience promotion — another of the department's tasks — includes preparing newspaper ads, cards to be placed in buses, signs for the back of taxicabs, slides for use in movie houses, ads and stories for trade papers and direct-by-mail material. Also, arranging contests, stunts and demonstrations, and producing promotional recordings and promotional spot announcements.

This department also helps the sales department work out presentations for salesmen. It makes up sales brochures of national products that will be advertised heavily on the station and sends them to local retail stores. This is helpful to both the advertiser and the store owner, for if the store owner sees that Campbell's Soup will be running a heavy schedule of commercials the coming week, he will stock up on Campbell's Soup.

Miscellaneous duties of Publicity and Promotion might include such diverse chores as writing speeches to be delivered by station officials, editing a station house organ, taking a columnist to dinner, or writing a history of the station.

Other Departments

The activities of the News Department have been well covered in several previous chapters. The duties of the Program Director will be explained in Chapter 34. Continuity and Traffic are two extremely important departments. Their duties have already been described in Chapter 30. Many stations also have a Business Manager, a Sales Development Manager, a Music Department, which, among other duties maintains a music library and a Public Affairs Department.

A television station would also have an Art Director, a Film Department, a Staging Services Manager, and a Transcription Library.

No matter how large or small a station may be, it is essential that the various departments mesh and perform their duties with the coordination of a well-run professional football team. That brings us back, full-circle, to the Station Manager, who is to the members of his staff what a coach and a captain are to a football team. If he runs a good station, there will be much cooperation, little friction among the people employed in all these departments and as a result the product that is put onto the air will be excellent, and the financial success of the station will be assured.

34.

Programming

Broadcasting stations have personalities, just as people do. The man who determines exactly what that personality will be is the Program Director, who acts on orders or suggestions from the Station Manager. In most cases the Program Director (or P.D., as he is called in the business) is a highly paid specialist. He is responsible for all programming. He is the quarterback who must call the plays and keep the players on their toes.

Some of the determining factors in deciding what a station's format should be are: the amount of competition from other radio and television stations, the format of the rival stations, the type of audience the station's advertisers wish to reach. Most stations fall into one of these nine basic categories:

Prestige Stations

These stations are generally found in metropolitan areas. Their major objective is a well-balanced program structure. They attempt to program for all types of audiences and for all age groups. They are extremely careful in choosing talent and in program balance. They appeal to the more mature teen-agers by playing carefully selected popular music, rather than rock and roll. Such stations use some talk and some interview programs, and have good news departments, staffed by able, experienced news men. WGN, Chicago, is an outstanding example of this type.

Popular Music Stations

These stations appeal to teen-agers and young adults, although they say that older adults listen to and enjoy their programs, which consist entirely of music, except for periodic news segments. The type of music varies from station to station. It can be hot or cool. It can be all Top Forty, or Swing, or Sweet, or Twist, or Ballad, or Standard, or MOR (Middle-of-the-Road). Some stations require their disc jockeys to follow a format: during each half hour they must

play a certain number of currently popular songs, a certain number of instrumentals, a certain number of memory tunes, and a certain number of standards.

It takes a special type of announcer to handle a disc jockey show on these stations. He must have a young-sounding voice, must broadcast in a light, bright style, and must be able to communicate with teen-agers and young adults. If he sounds patronizing or not in the groove, the young people may desert him for a dee-jay on a rival station. On some popular music stations the dee-jays have complete freedom in the selection of their music. On others they must work from a tightly-controlled music list, which is posted each week by the Program Director.

All-Telephone-Request Stations

These are music stations which permit the audience to decide exactly what goes on the air — that is, to do the programming themselves. Years ago big-time broadcasters looked down on this device as *small-town*. By the end of 1966, however, it had become a major-market staple, with half a dozen stations in metropolitan areas switching from some other format to All-Request. In smaller markets there were many more. KDAY, Santa Monica, received a great deal of national publicity when it changed from programming for an almost exclusively Negro audience to All-Request. Eighteen telephone lines were opened to take calls from the nine million inhabitants of Los Angeles and Orange counties. Five lines handle calls from the Los Angeles metropolitan area, which are answered by a live voice that says:

“Good morning, this is KDAY, million dollar radio. What is your request?”

The operator makes a note of the tune desired on a printed form and then says:

“Thank you. You can listen to that on KDAY, 1580 on your radio dial.”

She and other operators get an average of 3,000 calls a day, seven days a week — nearly 100,000 calls a month. The other thirteen lines are for the rest of Los Angeles county and Orange county. These calls, which come in over special toll-free phones leased from Pacific T & T, are answered mechanically and the requests are recorded on tape recorders set up in a Wilshire boulevard showroom, where advertisers and other interested people can watch and hear the requests coming in and being taken down. Each night the tapes are collected and delivered to KDAY headquarters in Santa Monica, where two decoder girls make a bar chart showing the most requested records. The station attempts to play the requested tunes within 48 hours. By playing 18 records an hour, it theoretically would be possible to handle 900 requests a week, but about 350 are usually repeats, so 550 different records are played per week.

Among other highly successful All-Request stations are WORC, Worcester, Massachusetts, which has been using this format since 1956, and KWIZ, Santa Anna, California, which began it in 1965 and has been doing a flourishing business since then. KDAY emphasizes standards, rather than rock.

All-News Stations

This is one of the newest innovations in programming. It has been especially successful in metropolitan areas. WINS, New York, uses as its motto: *News the minute you want it!* and its promotionals ask the listener why he should wait for "news on the hour" or "news on the half hour." KABC-FM, Los Angeles, was the first all-news station in that city to broadcast around the clock, 24 hours a day, using as its motto: *All-news all the way round the clock.*

All-Talk Stations

Some network-owned stations have switched to this format. It involves a staff of announcers who are able to talk almost unceasingly and always interestingly on any subject that may be brought up by listeners who telephone in their questions or their opinions. The questions may range from "How do I get my garbage collected because it's beginning to smell terrible?" to "Please tell me the difference between Existentialism and Zen Buddhism." The voices of listeners are generally recorded and played on the air with a several second delay, enabling the station to cut off a person who intentionally or unintentionally tries to utter vulgar, profane, libelous or blasphemous words on the air. These stations have a great appeal in some metropolitan areas, but they require a special type of announcer who can talk for hours without uttering an *ah* or an *eh*, who has a mind like an almanac, who can rattle off dates, facts and figures about minor as well as major sports, and who can discuss Oriental philosophy as glibly as he can the technicalities of atomic science.

Farm Stations

There are fewer and fewer stations that program exclusively for a farm audience. Some are still in operation in the Mid-West and the plains states. Announcers must have a folksy, down-to-earth style. Less attention is given to national and international news; more to reports on what is happening within the state. Millions of farmers depend on radio for farm-market reports, agricultural-weather forecasts and general news.

C & W Stations

During the mid-1960's stations by the hundreds changed to a *partial* Country and Western format, and stations by the scores to *exclusive* C & W. By mid-1966 there were 2,066 radio stations programming two to 24 hours of C & W. Of these 298 were exclusively C & W. The oldest C & W program, *Grand Ole Opry*, on WSM, Nashville, Tennessee, dates back to 1925. (Nashville, incidentally, is the world capital for C & W. It has ten recording studios that are used by 26 record companies in turning out C & W records. *Broadcasting*, in explaining the popularity of C & W, said:

The sound of country music is modern. It has an infectious beat, somewhat more subdued than pop music, and listenable lyrics that tell some of the most plaintive stories man has yet heard.

The followers of this type of music are the most loyal listeners in radio. They love the music, they love the performers, and they love the disc jockeys. They are also much more likely to write fan letters and join fan clubs. This type of station used to be confined to the South. Now it has spread to every corner of the nation. The C & W disc jockey must know C & W music and like it himself, because the C & W music fan is quick to spot a phony. Since these fans are warm and sincere themselves, they will be quick to reject an announcer who is not.

Negro-Oriented Stations

WWJ, Detroit, claims to have been the first major radio station to hire a Negro announcer. That was shortly after World War II. (There were then a quarter of a million Negroes in Detroit.) Today the National Association of Radio Announcers, whose membership is 90 per cent Negro, includes some 500 Negro announcers and disc jockeys. It was not until the late 1940's that the first station beamed to an all-Negro audience took the air. Today there are more than 400 that describe themselves as Negro-appeal or Negro-oriented. Only a few are Negro-owned, but all have partial or all-Negro staffs.

WDAO-FM, a full-time Negro-programmed station in Dayton, Ohio, grossed nearly a quarter of a million dollars in its first year of operation.



Del Shields, NARA Executive Vice President interviewing MGM's recording artist, Irene Reid.

Sponsor, the magazine of broadcast advertising, reported that the caliber of most Negro-appeal stations has been going up; higher standards are being set for Negro announcers, and "some station groups now insist that station personnel keep the image up by wearing suits and ties, joining local clubs and taking part in community affairs and government activities."

Whereas most Negro stations once specialized in gospel songs and spirituals and Top Forty music, Del Shields, executive vice president of NARA, reports that the trend is away from such music and toward what he called "modified Top Forty" and more news, talk, and public service programs, covering everything from politics to summer camping, education and job-hunting.

One of the giants in Negro-programmed stations is WCHB, Detroit, that city's only 24-hour Negro-programmed station, which calls itself *The Voice of Progress*.

One of the things Negro-operated radio stations do best is on-the-spot reporting of news of interest to Negroes, using mobile units, tape recorders, beeper reports, in-depth commentaries, documentaries and interviews. KDIA, San Francisco, feeds a network of western stations with live football sportscasts of a pro team which has a number of Negro stars.

A survey made by *Sponsor* showed that Negroes are finding jobs on Negro-appeal stations not only as announcers and dee-jays, but in the newsroom, the control room, at the transmitter, as program planners, and in managerial and executive positions.

Hour-by-Hour Programming

Many facts must be known and taken into consideration when doing the programming for either a radio or television station, among them: Is any of the audience rural? What percentage? What percentage of the audience falls into each of the various income brackets? What percentage is Negro? When do most listeners arise in the morning? What time do they leave home? Do they return home for lunch? What time do they come home in the evening?

If one were programming for a station with a sign-on at 6 a.m. and a sign-off at midnight, in a town of 30,000, of whom 5,000 were farmers, the first hour, from 6:00 to 7:00 a.m., should be programmed for the rural audience, and should include farm news and market reports, complete weather reports, and music with an appeal for rural listeners.

Between 7:00 and 9:00 a.m. the city audience is up and off to work and school. This is the busiest time of the day for listeners, and the choice of programming should reflect it. During this period they frequently want to know the time, the temperature, the weather and the latest news. At least one and preferably two newscasts should be scheduled every hour. The mother will want to know how to dress the children for school. The father will want to know whether he should take an umbrella or raincoat to work. The music should

be light, bright and up-tempo, reflecting the mood of the audience. The announcer should sound happy as he supplies his listeners with what he knows they want at this time of the day.

The next time period is from 9:00 a.m. until noon, during which hours housewives form the primary audience. Husbands are at work and the children are in school, so programs during these four hours should be directed to the wives. The music can be slowed down, but still should be pleasant. Shopping tips, interview programs, and general news from the woman's point of view are in order. But it should be remembered that the housewife is busy washing dishes, making beds and doing general housework, so the programs should not demand her complete attention.

The audience changes again from noon to 1:00 p.m. Here again is a good time to plan programs for the rural audience. The noon news, market reports and extended weather reports are of great interest to the farmer. Music and news should also be selected in order to appeal to the town audience.

From 1:00 to 4:00 p.m. the primary audience is again made up of housewives. The programming should be similar to that in the morning, except that most housework is now done and listeners will be more receptive to programs requiring a little more attention.

From 4:00 through 6 p.m. the audience changes again. The children are home from school and the husband is driving home from work. Music should pick up in tempo, with the same bright touch as during the early morning hours. The husband has been at work all day and will want to know what has been happening in the outside world, so frequent newscasts should be scheduled. During the summer he will probably want the latest baseball scores. Teenagers will also be listening and will want to hear music — their kind of music. Through clever selection of popular and standard music, the station may be able to appeal to both the younger and the more mature music-lovers.

From 6:30 p.m. to 7:30 p.m. is a good time to schedule complete news reports and complete market reports. The man of the family is at home at this time and is eager to hear a full news report. This period should be primarily informational.

From 7:30 to midnight is music time. A large teen-age audience is available, eager for popular music. For the adult audience, standard music and plenty of instrumental music should be included. Some stations have been successful in putting on audience-participation shows during these hours, using the beeper phone, with listeners going on the air.

It is clear by now that a Program Director must know his audience. He must know what his listeners are doing every hour of the day, their needs, their tastes. If he does and if he programs accordingly, the station's salesmen will find selling time much easier. And when sales are good, the station thrives, and then announcers as well as stockholders benefit.

35.

Truth:

How to Delve for It

Paul Joseph Goebbels, who committed suicide as World War II ended, rather than be captured and tried as a war criminal, was the official propagandist for Nazi Germany. As Minister of Popular Enlightenment, his job was to try to persuade the people of Germany — and later of the outside world — that Adolf Hitler had all the answers. Before the start of the war he told H. V. Kaltenborn that he considered radio “our most precious and most potent weapon.” Then he admitted to the American radio commentator that he tailored truth on the air to suit his purposes. He was the inventor of the Big Lie technique — based on the theory that if you repeat an untruth often enough and with enough conviction it eventually will be believed by almost everyone: that the bigger the lie the better the chance of getting it believed.

This chapter is neither a guide in how to spread propaganda effectively, nor is it a lesson in how to avoid being a victim of propaganda. It is written for men and women in broadcasting who presumably are trying to use words on the air as truthfully and honestly as is humanly possible. But truth can be distorted accidentally as well as intentionally. Therefore this chapter.

What Is Truth?

One of the functions of a radio or television station is to transmit truth in various forms. Commercials must be based on truth, or the station may lose its license. News must not be falsified, for the circulation of false news would soon get any station put off the air. Even the broadcasting of an untrue weather report could result in a disaster. And so everyone connected with broadcasting has — or should have — a constant, never-ceasing concern with truth.

Of course no one in his right mind is going to put anything but the truth on the air. But what *is* truth? Mr. Webster says: . . . *that which conforms to fact or reality*. If you *hear* it, is it fact or reality? One might think so, and yet . . .

Chapter 21 contains almost a page of quotations from news stories, such as this one:

The chauffeur of (pause) the well-known banker, John Jones, was arrested today, charged with drunkenness, disorderly conduct and rape.

The listener who tuned in at the point indicated (*pause*) heard with his own ears an announcement of the arrest of Banker Jones. So it is not necessarily true if you hear it.

If you *see* it, is it true? Not necessarily. Many years ago, on the edge of Chicago, a street battle occurred between striking steel workers and police, resulting in many deaths. The big question was: "Which side started the violence?" Investigators for a Congressional Committee found out that a newsreel cameraman had been at the scene, so they subpoenaed the film he had shot. Then they darkened the committee room, and the film was shown. The cameraman had been on top of a truck, using a wide-angle lens. His film showed the strikers approaching from one direction, the police from the opposite direction. It had been a tense moment. Now it was a tense moment again, as the members of Congress sat there, watching for the first sign of violence. Then suddenly they saw it. A striker leaned down, grabbed a rock, and threw it, hitting a policeman in the head. Then the police began firing their revolvers. So they shut off the projector, and turned on the lights. Thanks to a newsreel film, they had discovered the truth: the strikers had begun the violence. They knew it for certain. They had seen it with their own eyes.

But some time later, the conscience of the newsreel man bothered him, so he asked the committee members to hear him, and they did. What he wanted to tell them was that at the critical moment, as strikers and police approached each other, he had had to change a reel of film in his camera. While he was changing it, one or more of the policemen fired shots and it was only then, after he started his camera again, that the striker had thrown the first rock.

And so it is not necessarily true if you *see* it.

Such an Evasive Creature!

Truth is not as easy to come by as one might think. Truth is a woman — a very evasive woman — a nymph-of-the-forest — who flees when you chase her. She takes on strange disguises. She laughs at your attempt to embrace her. She keeps slipping away again, defying you to catch her.

Truth's enemies are Gossip, Innuendo, Conjecture, Prophecy, Exhortation, Guesswork, Crusading, Coloring, Slanting, Inferring. Any one of them can put her to flight.

A Frightening Responsibility

People often say: "Oh, that's just a newspaper story!" The implication is that the facts have been greatly exaggerated. Yet one rarely if ever hears anyone say: "Oh that's just a radio (or television) story!"

There is something about the conveyance of news or information by the human voice that inspires much more confidence in its truth than if the same facts were conveyed by the printed word. This gives broadcasters a frightening responsibility. It is a fact that some radio voices are so confidence-inspiring that if the voice said: "This morning at 10 a.m. all the buildings of New York City vanished below the surface of the water of New York Harbor!" some people would believe it. (See Chapter 8 on how the Orson Welles broadcast caused near panic in some cities years ago, because people believed that men actually had landed on this planet from Outer Space.)

Deception on Television

Consider television. If people see it with their own eyes (even though second-hand, on a television screen) they are inclined to believe that it must be the truth. However, here is an example of what a deceiver the human eye can be.

If a stranger from some distant land were to be blindfolded and taken to any American city — say Chicago — and then the blindfold were removed, it would be possible to convince him that he was in one of the most beautiful cities in the world, or in a place of terrible poverty, squalor and filth — the ugliest spot of human habitation — all depending on which part of Chicago he was shown.

In like manner, a one-hour television documentary could be photographed in one of those areas or the other, depending on what one wanted to prove. You can take a TV camera to the Congo and convince viewers that the Congo is a place running with blood and covered with dead bodies, or that life goes on there just as normally as in Milwaukee, Wisconsin, or Houston, Texas, or Atlanta, Georgia. The television camera is a very powerful and dangerous weapon in the hands of anyone out to make propaganda — to distort the truth intentionally. It is also powerful in the hands of someone trying to present the whole truth — trying to make his reporting as honest and truthful as humanly possible.

Emotive Words

Prejudice can be aroused — without even trying — by the use of emotive words, in print or on the air. In some areas of the Southwest the word *Mexican* has been used with contempt for so long that it has become a pejorative word. People not wishing to be depreciatory use *Spanish-speaking person* instead. In South Africa, *native* — a harmless word in itself — has been used so contemptuously about members of the Bantu races that it is now considered insult-

ing and has been replaced by *African* in the vocabulary of those not wishing to offend. In like manner, *Hansen's disease* has replaced *leprosy*. Years ago FBI Chief J. Edgar Hoover made a plea for abolishing the word *cop* from American conversation and writing, on the ground that its use led to juvenile disrespect for policemen. The Arizona Lathe and Plaster Institute asked that speakers and writers desist from using the word *plastered* to mean inebriated, because "it detracts from the dignity of a respectable industry." From time to time delegations of hot-rodders complain to newspaper editors that their good name and reputation have been impugned because the press has caused the public to associate hot-rodders with juvenile delinquency. And in Congress a Representative from a coastal state pleaded for elimination of the Navy expression *petty officer*, because the dictionary defines *petty* as something small, trifling or inferior.

I Am, You Are, He Is

Years ago Bertrand Russell, on a NBC broadcast, gave the following conjugation of an irregular verb:

I am firm.
You are obstinate.
He is pig-headed.

That led the *New Statesman and Nation*, a British weekly, to conduct a contest for the best such irregular verbs. The entries included:

I am sparkling. You are unusually talkative. He is drunk.
I day dream. You are an escapist. He ought to see a psychiatrist.
I am a creative writer. You have a journalistic flair. He is a prosperous hack.
I am beautiful. You have quite good features. She isn't bad looking if you like the type.

Conscious and Unconscious Slanting

The above are just a few samples of how words have built-in judgements. The use of emotive words is not the only way in which language can be slanted. There are a hundred other devices.

Then there is the voice. A sentence that on paper looks factual and harmless can be turned into a deadly weapon by coloring the words with a tinge of sarcasm, or by punching certain words that were never meant to be emphasized, or by putting a questioning tone into the voice.

Beware the Amateur Observer

Thanks to relatively inexpensive travel, the 20th Century has produced a small army of amateur observers, who may go to Paris for a day, spend a few hours in Florence, remain in Rome for a week-end and then return home with colored slides and perhaps a movie film of a few main streets and historical monuments, and claim: "Oh, I know Europe! I've *been* there!" If such people go so far as to form rigid opinions about the internal political situation and the economy of the countries they go through on such a whirlwind tour, then

it is even worse than if they come home with prejudices just about the food, the service, the hotels and the plumbing facilities.

A professional observer is a trained person. No layman would think of pretending to be able to compete with a trained airplane pilot if he had never had any training himself in flying a plane. But almost everyone thinks he is a qualified observer. He thinks he can see just as well as anyone else.

Here is how a trained foreign observer operates:

1. He spends as much time as possible, in advance, reading about the place he is going to visit.
2. When he arrives in the capital city of the foreign country, he goes directly to the American Embassy, hands in his card, and asks if it would be possible to have a briefing by the Ambassador. If he is a VIP (head of the London bureau of CBS, or chief foreign correspondent of the *New York Times*) he may get a full hour's briefing, plus luncheon at the Ambassador's home. A man of lesser importance might get a 15-minute briefing by a third secretary of the embassy.
3. He then seeks a similar interview with the British or French Ambassador, or the diplomatic representative of some smaller country, who often will be better informed than the Big Power Ambassadors.
4. With three such briefings, during which the reporter may have been given three quite different versions of what the situation is, he now begins to check to see which version (if any) seems correct. He talks with local journalists and broadcasters. From them he may get a fourth set of opinions, or confirmation of some of the ambassadorial briefings.
5. Now he begins to do some first-hand observing of his own. It is not enough to question porters, waitresses and taxi drivers. Such people (these are the source of most tourists' information) are the most unreliable, for they tell foreigners just what they think they want to hear, in the hope of large tips. A good foreign correspondent works hard at developing contacts with local people not dependent on tips for their livelihood. He is often entertained in local homes, where he listens to people talking honestly, in their natural environment.
6. Finally he begins to weigh one set of opinions against another, to balance and evaluate, until some semblance of what looks like truth begins to emerge. But even then, he will hedge what he reports, by qualifying phrases and *escape hatches*, never making a sweeping generalization; always saying *some* instead *all*. (There is an old adage: *All generalizations are false — including this one.*)

What does all this have to do with an announcer about to go to work on a small radio station in Kansas? A great deal. These tips on how to seek the truth in some foreign city apply just as well if one is doing a study of Chicago's slums, or the integration situation in some Southern city, or juvenile delinquency close to home. To boil it down to a set of specific suggestions:

1. Remember that truth nearly always is evasive and can be tracked down only if one is determined and persistent.
2. Don't ever make broad generalizations.
3. Avoid like poison such words as: *all, every, 100%, entirely.*
4. Make frequent use of words like *almost, nearly, in general, about.*
5. Statements of opinion should always be ascribed to the person making them.
6. Remember that almost everyone has some axe to grind, which will inhibit him from telling *the truth, the whole truth and nothing but the truth* about the matter that concerns him.

7. Be aware always that truth can be twisted just as easily by omission of certain pertinent facts as by the circulation of actual falsehoods.
8. Be careful that your own prejudice does not show in your voice.
9. Be suspicious if everyone you speak to, while doing an investigation, gives you an identical opinion. There's an old adage . . . WHEN EVERYONE IS THINKING ALIKE, NO ONE IS THINKING AT ALL.

36.

Editorializing

Four years before the start of World War II, one of the most popular radio programs of that era — Alexander Woollcott's *Town Crier* — was thrown off the air because a sponsor complained that Woollcott had criticized Hitler and Mussolini and thereby had offended some listeners. In short, Woollcott was purged because he had been found guilty of editorializing about two of the arch-villains of the 20th Century. (Today almost any broadcaster in the country would be proud to have such "guilt" on his record.)

About the time World War II began, Radio Station WAAB, Boston, owned by the Mayflower Broadcasting Corporation, began using its facilities to support various causes and to advocate the election of certain political candidates. Complaints were made to the FCC, which conducted an investigation and then, in 1941, issued the famous *Mayflower Decision*. It said, in effect, that the licensee of a radio station was not justified in using it as though it were his private property; that controversy on the air must be "balanced;" that a licensee "shall not advocate."

Although there were few other stations at that time doing editorializing, the decision created wide resentment, both in the industry and on the floor of Congress, with NAB leading the fight for abolition of the decision. The FCC held fifteen months' of hearings and finally in June, 1949, issued a revised ruling, which empowered radio stations to editorialize as long as the other side of questions thus treated was also given. The ruling stressed "fairness" and "balance," saying in part:

The particular format best suited for the presentation of such editorial programs in a manner consistent with the public interest must be determined by the licensee in the light of the facts of each individual situation. Such presentation may include the identified expression of the licensee's personal viewpoint as part of

the more general presentation of views or comments on the various issues, but the opportunity of licensees to present such views as they may have on matters of controversy may not be utilized to achieve a partisan or one-sided presentation of issues . . . it is evident that broadcast licensees have an affirmative duty generally to encourage and implement the broadcast of all sides of controversial public issues over their facilities, over and beyond their obligation to make available on demand opportunities for the expression of opposing views. It is clear that any approximation of fairness in the presentation of any controversy will be difficult if not impossible of achievement unless the licensee plays a conscious and positive role in bringing about balanced presentation of the opposing viewpoints.

This was all very unclear and left radio stations in the difficult position of deciding for themselves just what constituted *fairness*.

Years later the FCC chairman told broadcasters:

“Broadcasters can editorialize without having any trouble with the FCC if they employ reasonable and intelligent effort in making a fair presentation.”

Later he was asked just how advocates of opposing viewpoints could and should be given an opportunity of expressing themselves and he replied:

“Use common sense. Be fundamentally fair.”

Hesitancy Gradually Vanishes

One reason radio and television stations were hesitant about putting editorials on the air, even after the FCC revised its ruling, was the knowledge that an editorial enunciated by the human voice can have a much greater impact and can stir people much more than when the same words are put into print. Yet, one by one stations across the country did, gingerly, begin to plan, study and prepare to editorialize.

By 1963, according to an NAB survey, 60 per cent of all stations were doing some editorializing, although not all on a regular basis. In the next few years more and more stations began using the power of radio and television to influence the thinking and the actions of listeners and viewers, until finally, by the late 1960's, editorializing had become an established part of the programming of most major stations and a majority of smaller stations.

The FCC chairman told a conference on editorializing:

Now, as never before, we need more news, not less; more voices, not fewer; more sources of information, more viewpoints, more opinions. . . . It is up to the American broadcaster to fulfill the country's need for many voices, many sources of information and many viewpoints . . .

The plain and unhappy fact is that our traditional avenues of communication are contracting, not expanding. We are witnessing an odd and distressing phenomenon. The population is increasing at an explosive rate; the big cities are now metropolitan areas; the suburbs are spreading like ink spilled on a blotter. But in the eye of this hurricane, the number of metropolitan newspapers which traditionally have served our people is decreasing. The population and newspaper birth rates are moving in opposite directions — more people, fewer printed sources of information. Some of the most startling social statistics I know are that since 1945 newspaper circulation has increased from forty million to sixty million, while in the same time the number of cities with dailies under competing ownership has decreased from 117 to 60. (A few years later the total had dropped far

below 60.) Today there are in America slightly more than 1,440 cities with daily newspapers, but there are only 60 cities with competing papers. . . .

If broadcasting is to take its rightful place in the communications firmament — if it is to become a force as well as a service, if it is to accept the responsibilities as well as the protections of the First Amendment — then broadcasting should be willing to express a point of view about the news it provides. . . .

The Commission decided that while a broadcasting station cannot simply be the broadcaster's private mouthpiece, the broadcaster has as much right to express his views as any other member of the public and is often much better prepared to do so than others.

Television Wins a Fight

The first television station to offer editorials on a regular basis was WTVJ, Miami. It began on July 19, 1961, when three of the five City Commissioners suddenly and unexpectedly voted to fire the City Manager. Even before the meeting adjourned, WTVJ's vice president in charge of news was on the air with an editorial denouncing the action. When the station heard that because of a technical hitch the firing had to be repeated at a City Commission meeting a few days later, the station put editorial after editorial on the air. In one, listeners were told:

Rarely in the history of this city has the public decency and respect for orderly processes of good government been so outraged.

When the next Commission meeting was held WTVJ covered it live with television cameras and microphones. Result: the City Commission reversed the dismissal. Summarizing this example of the power of editorializing on the air, F.C.C. Chairman Newton Minow said:

"There is a moral in this story. You can fight City Hall — and most effectively, too — with television cameras."

Radio Makes History

In October, 1960, WMCA, New York, became the first station to endorse a candidate for President. In 1961 it endorsed candidates of different parties for Mayor of New York and Governor of New Jersey. On reapportionment, it followed up its own editorials by filing a taxpayer's suit to force the issue into court, which led to the U.S. Supreme Court decision that stands today as a constitutional landmark.

WDSU-TV, New Orleans, won this commendation from the Louisiana State Advisory Committee to the U.S. Commission on Civil Rights:

The editorial leadership that did exist in New Orleans during the school crisis was provided by television station WDSU-TV and its companion radio station, WDSU. In about a year and a half these two media have presented more than 50 editorials relating to the complex problems of desegregation. Their editorial position has seemed to be a full acceptance of the concept of editorial responsibility to interpret the facts and to advocate constructive lines of action.

Why It Is Necessary

The news director of a Florida television station declared:

The huge morass of complicated public affairs in village, town or city makes it necessary in every case for a voice as strong as television's to pitch in and explain these affairs and dig out misuses and malpractices.

WTOP, Washington, D.C., one of that city's leaders in editorializing, made a count and found that 60 per cent of its daily editorials had been on national and foreign affairs, while 40 per cent had been comments on events in the Washington metropolitan area.

A station in the Pacific Northwest selected for its first editorial the controversial subject of air pollution, but before that editorial was even written, the station's special events manager was assigned to spend six months investigating, interviewing and fact-gathering. Thousands of feet of film were shot. Finally a half-hour documentary was made which was billed as "an honest, unbiased editorial report."

The decision to editorialize raises many questions and creates many problems.

Length & Frequency

Some stations keep all editorials to a maximum of one-minute in length. Others let them run to two minutes.

Some stations use each editorial only once. Others repeat the editorial many times during the day and evening. A Washington (D.C.) station repeats each of its editorials as many as twelve times.

A few stations allot regular segments of their program schedule to editorials. Others do the editorializing during their regular news periods. For example, an upper New York State station has a period from 6 to 7 p.m. during which it presents news, sports, special events, and editorials. A Connecticut station allots six regular time-slots a day to editorials. The same editorial may be used all six times.

Some stations do all their editorializing through 30-minute or full hour documentaries.

Many program directors use editorials only when they think some local situation calls for the station to take a strong position. The theory of these PD's is that the impact of an editorial is lost if editorials are broadcast on a routine basis.

Who Should Read It?

To emphasize that the editorial is an expression of management's opinion, many stations have it read on the air by a management representative, one of the vice presidents or even the president himself. Other stations use their local commentators. Still others prefer to have the editorial voiced anonymously by a staff announcer. Even on television, the viewer may be shown the text of the editorial, rolling, rather than the face of the man reading it.

In all cases the editorial should be clearly identified at the start and at the conclusion as an expression of management opinion. If it is voiced by a

management representative he should say that it was prepared for him by the station's editorial staff or board. Many television stations make clear that it is an editorial by flashing the word *editorial* on the screen several times during the reading.

Editorials should always be written out; never ad libbed.

Some stations send copies of each editorial to anyone named therein or who is closely involved in the case.

Content

Should editorials be confined to local issues? Some stations say *yes*, some say *no*. Many — such as WTOP, Washington — even editorialize about international matters. But whatever the subject, it is generally agreed that editorials must be based on long, diligent and professional research. All facts and figures must be accurate beyond dispute. Most broadcasting stations are handicapped in not having a *morgue*, such as newspapers have. Reliance must be placed on the files of the local public library.

The Cardinal Rules

There is a wide difference of opinion about all the matters discussed above, but there are three rules that are not debatable.

1. The editorial must be clearly separated from news, commercials and other program content, and the listener must be told at least twice that this is an opinion and *whose* opinion it is.

2. Equal opportunity must be given for the expression of views and opinions contrary to the station's editorial policy.

3. All sides of a controversy must be fairly presented.

Accomplishments

An entire book could be filled with what radio and television editorializing has accomplished in the relatively few years it has been a permitted practice. These results range from the settlement of a nine-month supermarket strike in Providence, R.I., to the reduction of gasoline prices in New Haven, Conn., to air pollution progress in Portland, Oregon.

In other scattered parts of the country, editorial campaigns put on by broadcasting stations have brought about improved transportation service, political reforms, the closing of gambling houses and prostitution establishments, slum cleanups, the election of better-qualified local officials, and the building of sorely-needed schools and libraries.

Broadcasting Critic John Crosby once wrote:

"A TV station that has a mind to harbor an opinion and the courage to utter it just seems more important than a station that won't dare open its mouth."

Former FCC Chairman Minow told an NAB conference:

"The day is coming when the broadcaster who aspires to stature and influence

in his community will have to see, hear and speak about evil. He will not be able to plead that he does not have the staff to find out what's going on in front of his microphone and his lens."

Perhaps that day has now come.

37.

*From Automation
To Vice*

This chapter is a potpourri of important subjects briefly treated. The broadcaster who finds the Farm section of value may never have occasion to refer to the Religion section. The suggestions for covering a trial may be of use to a relative few, and some may have no interest whatsoever in Automatic Programming, but this is an encyclopedia.

Farm News

So many radio and television stations number farmers among their listeners and so many stations carry special farm programs that AP and UPI put on their wires each day thousands of words of news and features designed to appeal to farmers.

From his radio station the farmer expects the earliest possible weather report, for it will determine how he plans his day's work. In the event of severe weather, he will have to protect his livestock as well as his family. He is also interested in current market conditions, for he is a businessman operating in a very speculative manner. A drop in prices when he is ready to sell crops or livestock will mean the loss of many dollars.

Here is an example of a grain report sent by the wire services:

(Final Grain)

(MINNEAPOLIS) — MINNEAPOLIS GRAIN FUTURES PRICES CLOSED DOWN.

WHEAT

JUNE 1 65

SEPT 1 58

DEC 1 58¾

This report means that wheat to be harvested and delivered in June is selling at \$1.65 a bushel. September wheat is at least \$1.58 and wheat for December is

\$1.58 $\frac{3}{4}$. The comment that the prices closed down indicates that these prices have dropped since the last report.

Livestock prices represent the amount of money paid per hundred-weight for a particular animal. There are many livestock markets around the country, but most are in the Middle West. They are generally classed as terminal or interior. A terminal market is usually located in a city with vast rail and truck shipping facilities. Farmers utilize interior markets, in more rural areas, to avoid the shipping cost to a terminal market and the possible drop in price at the terminal market between the time of the last report and the arrival of his livestock at the terminal market.

To determine when to sell his livestock, the farmer watches two items on the market report — the prices paid and the estimated livestock arrivals or receipts. The prices paid for livestock change from day to day. A prime factor is the presence at the market of more or less livestock than the day's demand. Naturally, if a farmer can sell on the day when arrivals are down, he will probably get a better price.

The livestock market reports generally list animals in five major categories: cattle, calves, hogs, sheep and lambs, and live poultry. Cattle listings range in grades from prime, choice, good, standard, common, utility, canner to cutter. The general names given to cattle are steers, heifers, cows and bulls. Calves are listed separately and are usually graded the same as cattle, except for the term *culls*, used for the bottom price range. Hogs are graded according to sex and weight — medium, light and heavy. Sheep and lambs are graded like cattle. A sample listing of livestock from a wire service might look like this:

MILWAUKEE CLOSING LIVESTOCK

CATTLE: 1,000. STEADY TO STRONG. GOOD CHOICE STEERS 23.00 TO 27.00.

This report would be read on the air like this:

HERE IS THE CLOSING LIVESTOCK REPORT FROM MILWAUKEE. CATTLE, 1,000 RECEIVED. MARKET STEADY TO STRONG. GOOD TO CHOICE STEERS, TWENTY-THREE TO TWENTY-SEVEN.

In addition to market and weather reports, most radio stations provide other programs of special interest to farmers. Large stations have a farm director responsible for all farm programs. On smaller stations the early morning announcer generally handles the bulk of farm news. In some areas, the County Agent Advisor will supply much farm news.

Market reports and prices can be read at a rapid rate. The farmer is accustomed to listening to these reports and can pick them up faster than someone not interested. When doing commercials aimed at the farmer, the announcer should speak in a warm, friendly style. He should soft pedal the *sell* to some extent, for the farmer is primarily interested in learning about the product and not in the sales pitch.

One thing to keep always in mind: the farmer today is, more often than not, a sophisticated, worldly-wise, well-educated person. He may have attended an

agricultural college. He probably reads at least one daily newspaper and a weekly agricultural paper. He will be critical of any farm program if he senses any condescension in either the wording of the script or the voice of the announcer. The announcer should always sound as if he knows something about farming in general and the subject of the broadcast in particular.

Religion

In the early days of radio, religion caused program directors a great deal of trouble. The networks sold time to any religious group that had the money. Preachers stampeded to get on the air. Sermons were often wedged in between red-hot jazz numbers. Religious rivalry on the air was intense. More time was often spent attacking rival religious groups than propagating the tenets of the religion under discussion. Many preachers made blatantly libelous statements. Some were even sued. Fanaticism rode the air waves. One of the most popular radio crusaders was Father Charles E. Coughlin, who broadcast from the Shrine of the Little Flower at Royal Oak, Michigan, about political as well as religious matters. One of his favorite themes, in the late 1930's was isolationism from the threatening war (World War II.) After one broadcast he received 600,000 letters. When, because of the controversy he generated, his network contract was not renewed, he continued for some years broadcasting over 27 independent stations.

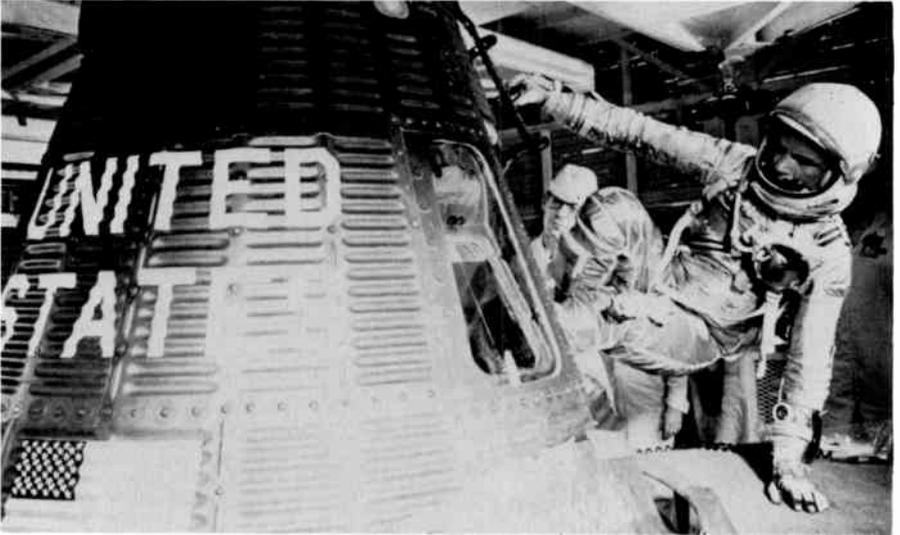
NBC took the lead in creating some order out of the religious chaos on the air. It adopted a policy of offering a limited amount of air time, free of charge, to Catholics, Protestants and Jews. Responsibility for selecting preachers and arranging programs was delegated to the National Council of Catholic Men, the Federation of Churches of Christ in America, and the United Synagogues of America. Some years later the other networks adopted somewhat similar policies.

The religious policy of individual stations varies, but the NAB has attempted to set a standard for the industry by including several articles in its Radio Code which state that religious programs must be presented by "responsible individuals, groups or organizations;" that attacks on and ridicule of any religious body are to be avoided, and that religious programs shall "place emphasis on religious doctrines of faith and worship."

Special Events

The term "special events" is an umbrella. Under it can be grouped anything from the telecast of an egg being fried on the sidewalk in front of the Court-house on a hot summer day to the coverage of the wedding in Washington of a President's daughter.

NBC in its early days had a Director of News and Special Events who was noted for his ingenuity in conceiving odd, unusual and spectacular special events. As radio became more mature, fewer and fewer stunts were broadcast. Yet special events still play a large role in the programming of many important



ABC News Science Reporter Jules Bergman familiarizes himself with space ship and extra-vehicular activity in outer space.





WFAA, Dallas, covers a fire



Airplane disaster is covered by television cameraman for WFAA-TV, Dallas.

stations. One example: WTVJ-TV, Miami, Florida, combined news, editorializing and special events when its vice president in charge of news, Ralph Renick, did a series of interviews with Roy O'Nan, who described himself on the air as "the most famous bagman in southern Florida" and said he was the go-between for a number of state law enforcement officers and gamblers, hook-makers and owners of girl joints from 1952 to 1963, paying off a total of \$10,000 a week to the officials. Each interview in the series was followed by a broadcast-editorial and the series was concluded with half-hour special entitled *The Price of Corruption*.

In smaller communities, special events programs may deal with such prosaic but locally important events as the opening of a factory, the laying of the cornerstone for a new City Hall, a convention, a county fair.

Politics

Each election year broadcasters face serious problems in handling politicians eager for air time.

The NAB Television Code contains two sentences of guidance:

Political telecasts should clearly be identified as such. They should not be presented by a television broadcaster in a manner which would mislead listeners or viewers to believe that the program is of any other character.

The NAB Radio Code in addition has this provision:

Because of the unique character of political broadcasts and the necessity to retain broad freedoms of policy void of restrictive interference, it is incumbent upon all political candidates and all political parties to observe the canons of good taste and political ethics, keeping in mind the intimacy of broadcasting in the American home.

The FCC has issued many rules and regulations about political broadcasts, which are well summed up in a 30-page booklet, *Political Catechism and the Fairness Doctrine*, prepared by the legal department of the NAB — a booklet that should be in the hands of every broadcaster as a guide book, for it also contains, in question and answer form, a discussion of such subjects as: What Rates Can Be Charged Candidates for Programs Under Section 315? What Limitations Can Be Put on the Use of Facilities by a Candidate? What Constitutes Equal Opportunities? What Constitutes an Appearance Exempt from the Equal Opportunities Provisions of Section 315? A final chapter of the same booklet deals with the fairness doctrine and answers such pertinent questions as: "What must a broadcaster do if a personal attack is made on his station?" and "What must a broadcaster do if there is no transcript of the program containing a personal attack?" The NAB also puts out two smaller booklets of value: *Is Your Hat in the Ring?* and *Campaigning on TV*.

Trials

Under American law and according to American tradition most court trials are open to the public. But whereas in former days only a few dozen or few

hundred people could crowd into a courtroom or a legislative hall, today radio and television can communicate the scene to millions. However, broadcasters often run up against Canon 35 of the American Bar Association's *Canons of Judicial Ethics*, which holds that the broadcasting of trials "is calculated to detract from the essential dignity of the proceedings, distract witnesses in giving testimony and degrade the court." It is important for broadcasters to know that while the canon carries great weight with some judges and attorneys, it is not legally binding on anyone.

In opposing this canon as a violation of freedom of speech and communication, broadcasters have argued that modern methods of communication can permit the public to hear and see what is actually going on in a courtroom, how justice is meted out, and how laws are made and upheld.

Because of Canon 35 it is incumbent upon broadcasters when covering trials to use the tools of their trade (microphone, cameras and lights) in as unobtrusive a way as possible.

One of the pioneers in broadcasting trials was Station WKY-TV in Oklahoma City, which in 1953 telecast a murder trial. A specially-constructed booth, finished in the decor of the courtroom, was built at the rear of the room. A small slit was cut in the front of the booth, just wide enough for a camera to shoot through. The sound equipment and the camera, and the men to operate them, were inside the booth and were not visible to anyone in the courtroom. The judge had this to say at the end of the trial:

"The coverage . . . was handled in such a manner as not to hamper the trial in any way. The attention of the attorneys, the jurors, the witnesses, and the court was not distracted in any appreciable manner."

In Cleveland, Ohio, Judge George P. Allen sanctioned the broadcast by Radio Station KYW of actual court traffic cases, which were recorded on tape and later broadcast. The judge's hope was that motorists listening "while they are driving will become more alert to traffic conditions and traffic laws."

The entire matter of trials is considered so serious a problem by the NAB that it has issued a special 16-page booklet, *Broadcasting Public Proceedings*, which should be part of any good broadcaster's private library. It deals not only with the freedom to know, to see and to hear, but it gives tips on how to broadcast from a courtroom with the least possible annoyance to all concerned. It even discusses such technical matters as the use of zoom lenses and high-speed film.

Public Hearings

While many Senators and U.S. Representatives were still opposing the broadcasting of sessions of Congress, great headway was being made around the country in the campaign to cover the meetings of city councils and other local bodies. Some large cities permit such coverage; others do not. In Minot, North

Dakota, KLPM has been broadcasting City Council meetings since 1960, carrying each session from start to finish. A station official reported that "even to us it's surprising how many people tune in and stay with it right to the end."

Station KEEN in San Jose, California, records the entire council session and then edits it down to fifteen minutes, with brief bridging announcements to maintain continuity.

Here are five NAB rules for broadcasters covering public meetings:

1. They will conform to the established procedures, customs, and decorum of the legislative halls, hearing rooms, and other public places where they provide broadcast coverage of public business.
2. At all public hearings they will respect the authority of the presiding officer to make appropriate rules of order and conduct.
3. Coverage arrangements will make maximum use of modern techniques for unobtrusive installation and operation of broadcasting equipment. Coverage will be pooled where necessary. Call letters should not be displayed in cases of multiple coverage.
4. In those many instances where commercial sponsorship of news coverage of public proceedings is desirable on economic grounds, commercials will be in good taste and will be clearly separated from the news content of the program. Broadcasters, of course, will honor to the letter any agreements with the presiding official regarding sponsorship.
5. Newsmen will present summaries of the proceedings, and will conduct interviews, or broadcast commentaries only during recesses, or outside the hearing room, or during appropriate portions of other proceedings in a manner that will assure that the broadcast does not distract from the public business.

Public Service

Under the Communications Act of 1934, radio and television stations are licensed to broadcast "in the public interest, need and necessity." To meet this requirement, broadcasters are required to devote a certain amount of their broadcast time to public service programming. This may be in the form of public service spot announcements or public service programs. The spot announcements come from such organizations as the Boy Scouts, Red Cross, United Fund, U.S. Savings Bonds and the YMCA. The stations donate the time. Across the country in the course of a year, radio and TV stations give away \$14,000,000 worth of air time to public service spots and programs.

The Program Director and the Station Manager are besieged many times a week — often many times a day — by national and local organizations seeking free public service time. Obviously they cannot put on the air all the public service spots and programs that are dumped into their laps. It is their responsibility to try to be fair in what they use and what they reject. It is also their duty to see that the public service programs are written and broadcast as professionally as possible.

Some of the reasons for poor public service programs are lack of funds, lack of experience, lack of proper planning, lack of organization and inadequate rehearsal and promotion.

Here are some suggestions to be passed on to groups and organizations that

want free time on the air: They should have a chairman to handle promotion of their activities by radio and television. The chairman should have a good knowledge of broadcasting, be familiar with the stations in the community, should understand programming and production techniques, should have a personal acquaintance with all the Station Managers and Program Directors, should be familiar with each station's policies, codes and standards, should know which stations prefer live programs and which want them taped, and should know as much as possible about each station's operations, facilities and coverage.

Many public service announcements and programs come to the station through the Advertising Council and are usually of high quality. CARE, Crusade for Freedom, the Red Cross, Register and Vote, Religious Overseas Aid, United Community Campaigns and U.S. Savings Bonds generally work through the Advertising Council. Stations can rely on such campaigns to be worthy of free public service time.

Remember that a station gains prestige by broadcasting good public service programs, and prestige usually means more business and a greater financial return for all concerned.

Lotteries

Federal law clearly and definitely prohibits the broadcasting of lotteries or anything about lotteries. The statute reads:

Whoever broadcasts by means of any radio station for which a license is required by any law of the United States, or whoever, operating such a station, knowingly permits the broadcasting of any advertisement of or information concerning any lottery, gift enterprise, or similar scheme, offering prizes dependent in whole or in part upon lot or chance, or any list of the prizes drawn or awarded by means of any such lottery, gift enterprise or scheme, whether said list contains any part or all of such prizes, shall be fined no more than \$1,000 or imprisoned not more than one year, or both. Each day's broadcasting shall constitute a separate offense.

The first question a broadcaster needs to be able to answer is: What is a lottery? The legal definition is that first, a prize must be given; second, the element of chance must be involved. There is *chance* if one is required to guess the number of beans in a pot, or if to win one must be among the first thirty customers entering a store in the morning, or if one's letter must bear the earliest postmark, or if the pump meter must read a certain total number of gallons when you buy a tank full of gasoline. A horse race or dog race is not considered a lottery because the winner is determined by skill or ability. The third element necessary to make it a lottery is *consideration*. This is the most obtuse. Consideration is the price one must pay to participate in the lottery. But the price need not be money. If a substantial expenditure of time or effort is required, then consideration has been paid. The FCC says: "If the participants have to (1) furnish any money or something of value, or, (2) are required to have in their possession any product sold, manufactured, furnished or distributed by a sponsor of a program broadcast by a station, the necessary element of consideration is present."

The NAB has a valuable booklet, *Broadcasting and the Federal Lottery Laws*, which throws light on the subject by giving thirty examples of station promotions, advertiser promotions and guessing contests and discussing why each one is or is not a lottery.

However, if a broadcaster is in doubt about whether a proposed broadcast or commercial violates the lottery law and FCC rulings, he should consult the station's lawyer.

How to Make a Good Tape Recording

The above heading is the title of an extremely valuable, 154-page book published by Audio Devices Inc., 444 Madison Avenue, New York, NY, 10022 (\$1.50) which should be in the personal library of any broadcaster who works with a tape recorder. It is amply illustrated, clearly written, and contains a chapter on *Stereo Microphone Techniques*, as well as short sections on such diversified matters as *Recording in the Church*, *Recording Children*, *The Master of Ceremonies Technique*, *Use of Sound Effects*, *Candid Recording Approach*, *the Interview Approach*, and *Recording Ad Lib*.

Here are a few random tips on the use of any tape recorder:

1. Low quality tape, too high a recording level or tubes in poor condition will result in distortion, fuzziness, or a muffled sound.
2. If the recording level is too high you will get magnetic print-through, which is a slight echo of the loud sounds, just before or just after the sound. This results from the magnetism on one layer of tape being transferred slightly to adjacent layers.
3. If there is a waver in pitch (sometimes called a *wow*) it may be because there is a deposit of some sort (perhaps a bit of spliced tape) on the capstan. Clean the capstan and the capstan pinch roller with alcohol.
4. The strongest tape splice is a diagonal one. If the splice is made improperly, there will be a momentary muffled sound. If the two ends of the tape do not touch, there will be a click. It is an art to be able to cut and splice correctly. Be sure to use a splicing tape especially designed for the purpose. Excess splicing tape should be trimmed off neatly.
5. For maximum life of tapes, store them at 60 to 70 degrees, humidity 40 to 60 per cent.
6. Clean the surface of the recording, erasing and playback heads after every eight hours of operation.

Automatic Broadcasting

All broadcasters should be aware that automation has come to broadcasting in the form of machines designed to take the place, to a certain extent, of humans. The concept is called Automatic Tape Control Automation, or Program Automation. One manufacturer (ATC, Inc.) describing the philosophy of it, says its purposes include:

- More efficient and effective utilization of existing manpower.
- Relieving program personnel from confining mechanical responsibilities, thereby providing more time for creative assignments.
- Improved production with tighter control over program policy and execution.

Manufacturers concede that every form of program automation "has a de-

gree of inflexibility and station management is inclined to have an instinctive reaction against any device or technique that inhibits a free and extensive variety of programming."

By the use of Automatic Tape Control it is literally possible to leave a radio station unattended from Friday afternoon until Monday morning, with a machine master-minding the playing of music, fading, making spot announcements, giving station identification, giving the correct time, signing off the station Friday night, signing it on Saturday morning, etc. Some machines even keep a written program log.

What the machine cannot do, of course, is to give the current weather, read news bulletins, or announce that a hurricane warning has just been issued.

Automatic equipment is already in use in almost every state. Here are some samples of the installations made by just one manufacturer:

KLWN-FM, Lawrence, Kansas: An installation that provides stereo music in conjunction with announcements and station identifications carried on cartridge tape.

WTOT-FM, Marianna, Florida: A slightly more complex system, providing voice insertions into music, consisting of promotionals, commercials and station identifications, interjected by cartridge units when called for by a timing mechanism.

WPBS-FM, Philadelphia, Pennsylvania: A system that operates automatically without attendance for a majority of the program hours, but with the capability of manual control for inserting news and other specific program material.

WTAD-AM-FM, Quincy, Illinois: A system that automatically keeps a program log and joins the station automatically to the network on time, and also airs time signals, and automatically tapes for re-broadcast.

KXRX, San Jose, California: Because this station prefers partly live and partly automated programming during periods when freeway traffic is heavy, its automation machinery permits an operator to start, fade or stop any of the audio sources in the automation system at any time, in order to air special program material. Broadcasting is automated on this station 18 out of every 24 hours.

WCWC-AM-FM-SCA, Ripon, Wisconsin: This station has the ultimate in automatic equipment "in order to relieve the personnel of a substantial portion of on-shift duties so the time can be spent to better advantage." This system permits automatic operating of all three broadcast operations simultaneously.

The man behind the microphone should look upon automation without fear or panic, always remembering that the voice going out over the air is a human voice. Whether it is broadcast live or from tape, it is still a human voice. No matter how many machines are invented and no matter how much Program Automation is perfected, men and women still must be employed to put their voices onto the tapes that are fed into the machines. Despite the spread of automation, more and more columns of *Help Wanted* ads appear each week in such trade publications as *Broadcasting*, offering good salaries for ambitious young announcers — proof that the supply of talent is still far behind demand, automation notwithstanding.

So what is left that alert young broadcasters should know? Answer: a

thousand things! Each day there are new ideas, new inventions, new concepts about broadcasting that must be taken into consideration. Every week's trade papers tell of developments in the science of communications. For the man behind the microphone broadcasting is not only a science. It is also an art. This is the challenge. For a scientist as well as for an artist, basic education and training are vital. But the graduate who stops his intellectual growth when he gets his diploma is soon left behind by those for whom education is an ever-continuing process — a life-development — a road rather than a goal.

Pity the man so conceited as to say :

“Now I am educated!”

Wise is the man who says, instead:

“I am in the process of trying to acquire more education.”

38.

A Job in Broadcasting: How to Get It

There are 102,125 men and women directly employed in broadcasting. (Unfortunately, that figure is already out of date. It was the accurate total at the moment this book went to press. But even before the ink was dry and before the *Encyclopedia* could get into the hands of its first reader, the total had jumped to some higher figure.)

The yearly turnover in radio is about 33 per cent; in television, 28 per cent. This means that every year approximately 30,000 broadcasting jobs become vacant and are somehow refilled. Then there are all the jobs on all the new radio and television stations which start up each year and must recruit staff. If you are interested in statistics, it adds up to the fact that while you are reading from the top to the bottom of this page (unless you are a speed-demon reader) at least one Station Manager or Program Director or network executive somewhere in the country will have said to the man or woman across the desk from him: "Okay. You're hired!"

Up And Up And Up They Go

Vacancies in broadcasting positions are caused by the same factors that cause vacancies in other industries: deaths, serious accidents, promotions and men leaving the industry. But in broadcasting there are some extra factors. This is an ever-growing, ever-expanding business. Each month additional radio and television stations begin operation. Also, in few if any other industries, trades or professions is there the almost continuous flow upwards. One of the networks offers a place to a man who has made a name for himself on some important metropolitan station. He accepts. Now *his* job must be filled. It may go to a broadcaster on some 50,000-watt station. That creates another vacancy —

another opportunity for someone. And so it goes, right down the line, until finally someone just out of a broadcasting school gets his first job, filling the vacancy on a 100-watt station that was created because of the chain-reaction that began when the network picked a man from the ranks of the independent stations. As a result of that chain-reaction, ten jobs may have been made vacant, nine of them being filled by what amounted to promotions. But the tenth job, at the bottom of the ladder, went to a newcomer. That explains why there are always opportunities for men and women who, having obtained sufficient professional training, decide to seek work in broadcasting.

Precisely What Do You Want?

How does one go about applying for a job in broadcasting? First, be brutally honest with yourself as you answer the following questions:

Do you have any fixed ideas about *where* you want to work? If you desire to be within 100, 200 or 500 miles of your hometown, for some personal reasons, take a compass and on an automobile road map draw a circle which is that many miles from your hometown in all directions.

Next, do you have any strong feelings about the size of the community in which you wish to work? If so, write the maximum and minimum population figures on a piece of paper.

Next, do you have a minimum salary in mind, below which you will not go, even at the start? If so, write down that figure.

If there are any other qualifications that the job must have, write them on the same piece of paper. This is all in the interest of self-honesty and to encourage clear-thinking.

Now, with the marked map and a list of broadcasting stations (see Section III for the names of radio and TV directories) pick out ten stations for which you would like to work and write letters to the ten Station Managers.

Tips on Letter-Writing

There is the story of a brash young man who sent a Station Manager this telegram: I'M THE BEST ANNOUNCER YOU HAVE EVER HEARD AND I WANT THE TOP ANNOUNCING JOB ON YOUR STATION! The Station Manager was so impressed by the unconventionality of the applicant that he sent for him and after listening to an audition gave him a job. While this may be a true story, the use of such a shock-method is a rather reckless gamble. All Station Managers do not admire unconventionality.

There is no such thing as the perfect job-application letter. A letter that will appeal to one SM might annoy another. Some will like originality of approach and brightness of style. Others will be annoyed and toss an application into the wastebasket if it is not concise and factual. However, here are some suggestions:

Borrow a good typewriter, or have a friend type the letters for you. Letters written on an electric typewriter are the most legible and the most impressive.

If a job-application is made in longhand, be sure the penmanship is not only neat but easy to read. Never send out carbon or mimeographed copies of your qualifications.

If there is any reason that you have picked this particular station as a likely employer, say so. It might flatter the SM.

In giving your biography, be sure to cover these points:

Date of birth.

Place of birth.

Schooling (grammar school, high school, college.)

Professional education. (Give full details of your training: where and how it was taken, who were the members of your directing faculty, how long the course took, some of the subjects covered, what type of equipment was used.)

Experience in all phases of show business. (Mention even such experience as school plays, drama groups, emceeding social functions, and any and all public speaking.)

Tell what your marital status is, and the number of dependents you have. Male applicants should tell what their draft status is.

Tell why you think you have the makings of a good broadcaster.

Indicate that you are honest, trustworthy, reliable and not a drifter. Indicate that you are looking for a permanent position. (Employers dislike spending time and money breaking in a new man and then have him pack up and leave just because he suddenly dislikes the hours or how his immediate superior says "Good morning!" to him.)

State when you will be available.

Send a photo of yourself, preferably a head-and-shoulders shot.

Do not neglect to give your telephone number, even if you are writing to a station a thousand miles away.

Offer to send an audition tape, or to come for a personal interview.

Try to get the letter on one side of an 8½ x 11 sheet of paper.

If your letters are well written and if the situation in your area is normal, you should receive an average of three replies to every ten letters you send out.

Tips on Making An Audition Tape

Select enough news material from the AP or UPI wire to fill three minutes and forty seconds, and a one-minute commercial. Write an opening, using your own name and the call letters of the station to which you are going to send the tape. Edit your copy carefully, checking the pronunciation of all words about which you have the slightest doubt. Mark the copy to indicate breathing pauses, change of pace, words or phrases to be emphasized, and passages you wish to give special treatment.

Before turning on your tape recorder, take two or three deep breaths, filling your lungs to capacity.

Put life and verve into your delivery. Imagine as you talk that you have already been given the job and that this is your first broadcast for the station. Imagine that your listeners include your mother, your sweetheart, and a talent scout for your favorite network.

Read the news for two minutes, then do the commercial, putting into it all the tricks of voice you have been taught during your training. After the commercial do one minute and forty seconds of news, winding up with a bright item that will leave your listeners in a good mood — a *kicker*.

Tips on Live Auditioning

If you have a chance to meet your prospective employer face to face, remember that first impressions are extremely important and that many employers consider themselves amateur psychologists, and will be super-critical in looking you over.

A man's suit should be neatly pressed and conservative in color and style. His shirt should be plain and clean, preferably a pale blue, in case a camera test is made. The necktie should be modest rather than flamboyant. The hair should be neatly combed, the hands well manicured, and the shoes shined. Women should wear a suit rather than a dress, and all makeup, jewelry and accessories should be conservative.

Move with dignity. Hold yourself erect, whether standing or sitting. Try to give the impression that you are genuinely interested in the prospect of becoming an employee of this particular station, but do not appear over-eager. If the opportunity presents itself, ask several questions about the station, its history, its coverage. The SM may take this as a sign of your genuine interest.

The Pluses and the Minuses

Every job in every field of human endeavor has its drawbacks. Broadcasting is no exception. In every organization — whether it is one of the great networks with thousands of employees or a 250-watt station with just you and one or two others — there are conflicts of personalities. Rivalries and jealousies are the rule rather than the exception, especially in the talent end of broadcasting, because *talent* means *personality* and that in turn means there are many more angles of possible conflict than with more introverted types of people. The wise and mature person, however, tries to remain as far as possible above the petty jealousies and the intrigues of office politics.

Job Decisions

If, as a result of your campaign for a job, you wind up with two or three offers, you will have to make your first great decision. It will help you to be logical about it if you will take a sheet of paper and make a column for each prospective employer, like this:

STATION KYZA

+

List here
all the
advantages
that this
particular
station
offers.

—

List here
all the
disadvantages
that this
particular
station offers.

STATION WCAB

+

List here
all the
advantages
that this
particular
station
offers.

—

List here
all the
disadvantages
that this
particular
station offers.

STATION KARK

+

List here
all the
advantages
that this
particular
station
offers.

—

List here
all the
disadvantages
that this
particular
station offers.

In this way you will force yourself to make a decision that will be based on such practical considerations as salary, working conditions, location of station, type of job offered, size of station, etc. It will also help you to face the fact that there are plus and minus qualities about all the jobs that have been offered to you. (As you will later find out, this will be true of all the jobs that *ever* will be offered to you. There are even disadvantages, as well as advantages, to being Chet Huntley or president of NBC.)

Now That You Have a Job

As soon as your voice begins to go out on the air, you will start experiencing the joys and the sorrows, the pleasures and the pain, the excitements and the embarrassments of broadcasting. And there are many!

The first time the sweet voice of an obviously intelligent person says over the phone to you, "I have never heard a broadcast I enjoyed so much!" you will begin to understand what it means to have broadcasting fans — what it does to the human ego.

The first time some angry city official, or some indignant friend of the Station Manager telephones to complain about something you said in a broadcast, you may wish you had become a filling station attendant instead of an announcer.

The first time you fluff and say some unprintable word on the air by mistake, you may become overwhelmed with self-hate. But the first time the PD or the SM says, "I listened to that broadcast of yours this morning and I liked it very much!" you may find that you need a much larger hat than you have been wearing.

For the first job, the smaller the station the better. Unfortunate is the man or woman who lands immediately in an important position on a large station, for he (or she) will have missed the opportunity of learning about all phases of radio and television broadcasting from practical experience. There is no substitute for experience, and once job-experience is gained it can never be taken from you. Such experience will be the greatest asset you can possibly possess when taking the *next* step up — when looking for the *second* job.

On the first job learn as much as possible about every phase of the station's operation. Do not hesitate to ask questions. Work every shift; do any job that is assigned to you. Try to avoid making even minor errors, but when you do err, take consolation in the fact that it is far better to get mistakes out of your system while in a small town, than to move to a big city too fast and be snowed under by lack of seasoning and experience.

Make your moves slowly and deliberately, always being sure of yourself. Try in every way to improve yourself and the stature of your station in the public eye.

In these directions lies success for those who want it enough.

Good luck!

Section

III.

The Reference

Book of

Broadcasting



39.

The NAB Radio Code

Although broadcasting in America is regulated by the FCC, most of the rules by which it lives are set by the industry itself. They are contained in two codes, which are reproduced in full in this and the next chapter because they should be close at hand, for quick and easy reference, whenever the man behind the microphone is in any doubt about what is or is not ethical.

I. PROGRAM STANDARDS**A. News**

Radio is unique in its capacity to reach the largest number of people first with reports on current events. This competitive advantage bespeaks caution—being first is not as important as being right. The following Standards are predicated upon that viewpoint.

1. **NEWS SOURCES.** Those responsible for news on radio should exercise constant professional care in the selection of sources—for the integrity of the news and the consequent good reputation of radio as a dominant news medium depend largely upon the reliability of such sources.
2. **NEWS REPORTING.** News reporting shall be factual and objective. Good taste shall prevail in the selection and handling of news. Morbid, sensational, or alarming details not essential to factual reporting should be avoided. News should be broadcast in such a manner as to avoid creation of panic and unnecessary alarm. Broadcasters shall be diligent in their supervision of content, format, and presentation of news broadcasts. Equal diligence should be exercised in selection of editors and reporters who direct news gathering and dissemination, since the station's performance in this vital informational field depends largely upon them.
3. **COMMENTARIES AND ANALYSES.** Special obligations devolve upon those who analyze and/or comment upon news developments, and management should be satisfied completely that the task is to be performed in the best interest of the listening public. Programs of news analysis and commentary shall be clearly identified as such, distinguishing them from straight news reporting.

4. **EDITORIALIZING.** Broadcasts in which stations express their own opinions about issues of general public interest should be clearly identified as editorials and should be clearly distinguished from news and other program material.
5. **COVERAGE OF NEWS AND PUBLIC EVENTS.** In the coverage of news and public events the broadcaster has the right to exercise his judgment consonant with the accepted standards of ethical journalism and especially the requirements for decency and decorum in the broadcast of public and court proceedings.
6. **PLACEMENT OF ADVERTISING.** A broadcaster should exercise particular discrimination in the acceptance, placement and presentation of advertising in news programs so that such advertising should be clearly distinguishable from the news content.

B. *Controversial Public Issues*

1. Radio provides a valuable forum for the expression of responsible views on public issues of a controversial nature. The broadcaster should develop programs relating to controversial public issues of importance to his fellow citizens; and give fair representation to opposing sides of issues which materially affect the life or welfare of a substantial segment of the public.
2. Requests by individuals, groups or organizations for time to discuss their views on controversial public issues should be considered on the basis of their individual merits, and in the light of the contributions which the use requested would make to the public interest.
3. Programs devoted to the discussion of controversial public issues should be identified as such. They should not be presented in a manner which would create the impression that the program is other than one dealing with a public issue.

C. *Community Responsibility*

1. A broadcaster and his staff occupy a position of responsibility in the community and should conscientiously endeavor to be acquainted with its needs and characteristics in order to serve the welfare of its citizens.
2. Requests for time for the placement of public service announcements or programs should be carefully reviewed with respect to the character and reputation of the group, campaign or organization involved, the public interest content of the message, and the manner of its presentation.

D. *Political Broadcasts*

1. Political broadcasts, or the dramatization of political issues designed to influence an election, shall be properly identified as such.
2. They should be presented in a manner which would properly identify the nature and character of the broadcast.
3. Because of the unique character of political broadcasts and the necessity to retain broad freedoms of policy void of restrictive interference, it is incumbent upon all political candidates and all political parties to observe the canons of good taste and political ethics, keeping in mind the intimacy of broadcasting in the American home.

E. *Advancement of Education and Culture*

1. Because radio is an integral part of American life, there is inherent in radio broadcasting a continuing opportunity to enrich the experience of living through the advancement of education and culture.
2. The radio broadcaster, in augmenting the educational and cultural influences of the home, the church, schools, institutions of higher learning, and other entities devoted to education and culture:

- (a) Should be thoroughly conversant with the educational and cultural needs and aspirations of the community served;
- (b) Should cooperate with the responsible and accountable educational and cultural entities of the community to provide enlightenment of listeners;
- (c) Should engage in experimental efforts designed to advance the community's cultural and educational interests.

F. Religion and Religious Programs

1. Religious programs shall be presented by responsible individuals, groups or organizations.
2. Radio broadcasting, which reaches men of all creeds simultaneously, shall avoid attacks upon religious faiths.
3. Religious programs shall be presented respectfully and without prejudice or ridicule.
4. Religious programs shall place emphasis on religious doctrines of faith and worship.

G. Dramatic Programs

1. In determining the acceptability of any dramatic program containing any element of crime, mystery, or horror, proper consideration should be given to the possible effect on all members of the family.
2. Radio should reflect realistically the experience of living, in both its pleasant and tragic aspects, if it is to serve the listener honestly. Nevertheless, it holds a concurrent obligation to provide programs which will encourage better adjustments to life.
3. This obligation is apparent in the area of dramatic programs particularly. Without sacrificing integrity of presentation, dramatic programs on radio shall avoid:
 - (a) Techniques and methods of crime presented in such manner as to encourage imitation, or to make the commission of crime attractive, or to suggest that criminals can escape punishment;
 - (b) Detailed presentation of brutal killings, torture, or physical agony, horror, the use of supernatural or climatic incidents likely to terrify or excite unduly;
 - (c) Sound effects calculated to mislead, shock, or unduly alarm the listener;
 - (d) Disrespectful portrayal of law enforcement;
 - (e) The portrayal of suicide as a satisfactory solution to any problem.

H. Responsibility Toward Children

The education of children involves giving them a sense of the world at large. It is not enough that programs broadcast for children shall be suitable for the young and immature. In addition, programs which might reasonably be expected to hold the attention of children and which are broadcast during times when children may be normally expected to constitute a substantial part of the audience should be presented with due regard for their effect on children.

1. Programs specifically designed for listening by children shall be based upon sound social concepts and shall reflect respect for parents, law and order, clean living, high morals, fair play, and honorable behavior.
2. They shall convey the commonly accepted moral, social and ethical ideals characteristic of American life.
3. They should contribute to the healthy development of personality and character.
4. They should afford opportunities for cultural growth as well as for wholesome entertainment.
5. They should be consistent with integrity of realistic production, but they should avoid material of extreme nature which might create undesirable emotional reaction in children.

6. They shall avoid appeals urging children to purchase the product specifically for the purpose of keeping the program on the air or which, for any reason, encourage children to enter inappropriate places.
7. They should present such subjects as violence and sex without undue emphasis and only as required by plot development or character delineation. Crime should not be presented as attractive or as a solution to human problems, and the inevitable retribution should be made clear.
8. They should avoid reference to kidnapping or threats of kidnapping of children.

1. General

1. The intimacy and confidence placed in radio demand of the broadcaster, the networks and other program sources that they be vigilant in protecting the audience from deceptive program practices.
2. Sound effects and expressions characteristically associated with news broadcasts (such as "bulletin," "flash," "we interrupt this program to bring you," etc.) shall be reserved for announcement of news, and the use of any deceptive techniques in connection with fictional events and non-news programs shall not be employed.
3. The acceptance of cash payments or other considerations for including identification of commercial products or services, trade names or advertising slogans, including the identification of prizes, etc., must be disclosed in accordance with provisions of the Communications Act.
4. When plot development requires the use of material which depends upon physical or mental handicaps, care should be taken to spare the sensibilities of sufferers from similar defects.
5. Stations should avoid broadcasting program material which would tend to encourage illegal gambling or other violations of Federal, State and local laws, ordinances, and regulations.
6. Simulation of court atmosphere or use of the term "Court" in a program title should be done only in such manner as to eliminate the possibility of creating the false impression that the proceedings broadcast are vested with judicial or official authority.
7. Quiz and similar programs that are presented as contests of knowledge, information, skill or luck must in fact, be genuine contests and the results must not be controlled by collusion with or between contestants, or any other action which will favor one contestant against any other.
8. No program shall be presented in a manner which through artifice or simulation would mislead the audience as to any material fact. Each broadcaster must exercise reasonable judgment to determine whether a particular method of presentation would constitute a material deception, or would be accepted by the audience as normal theatrical illusion.
9. Legal, medical and other professional advice will be permitted only in conformity with law and recognized ethical and professional standards.
10. Program material pertaining to fortune-telling, occultism, astrology, phrenology, palm-reading, numerology, mind-reading, character-reading, or subjects of a like nature, is unacceptable when presented for the purpose of fostering belief in these subjects.
11. The use of cigarettes shall not be presented in a manner to impress the youth of our country that it is a desirable habit worthy of imitation in that it contributes to health, individual achievement or social acceptance.
12. Profanity, obscenity, smut and vulgarity are forbidden. From time to time, words which have been acceptable, acquire undesirable meanings, and broadcasters should be alert to eliminate such words.
13. Words (especially slang) derisive of any race, color, creed, nationality or national derivation, except wherein such usage would be for the specific purpose of effective dramatization, such as combating prejudice, are forbidden.
14. Respect is maintained for the sanctity of marriage and the value of the home. Divorce

is not treated casually as a solution for marital problems.

15. Broadcasts of actual sporting events at which on-the-scene betting is permitted should concentrate on the subject as a public sporting event and not on the aspects of gambling.

II. ADVERTISING STANDARDS

Advertising is the principal source of revenue of the free, competitive American system of radio broadcasting. It makes possible the presentation to all American people of the finest programs of entertainment, education, and information.

Since the great strength of American radio broadcasting derives from the public respect for and the public approval of its programs, it must be the purpose of each broadcaster to establish and maintain high standards of performance, not only in the selection and production of all programs, but also in the presentation of advertising.

This Code establishes basic standards for all radio broadcasting. The principles of acceptability and good taste within the Program Standards section govern the presentation of advertising where applicable. In addition, the Code establishes in this section special standards which apply to radio advertising.

A. General Advertising Standards

1. A commercial radio broadcaster makes his facilities available for the advertising of products and services and accepts commercial presentations for such advertising. However, he shall, in recognition of his responsibility to the public, refuse the facilities of his station to an advertiser where he has good reason to doubt the integrity of the advertiser, the truth of the advertising representations, or the compliance of the advertiser with the spirit and purpose of all applicable legal requirements.
2. In consideration of the customs and attitudes of the communities served, each radio broadcaster should refuse his facilities to the advertisement of products and services, or the use of advertising scripts, which the station has good reason to believe would be objectionable to a substantial and responsible segment of the community. These standards should be applied with judgment and flexibility, taking into consideration the characteristics of the medium, its home and family audience, and the form and content of the particular presentation.

B. Presentation of Advertising

1. The advancing techniques of the broadcast art have shown that the quality and proper integration of advertising copy are just as important as measurement in time. The measure of a station's service to its audience is determined by its overall performance.
2. The final measurement of any commercial broadcast service is quality. To this, every broadcaster shall dedicate his best effort.
3. Great care shall be exercised by the broadcaster to prevent the presentation of false, misleading or deceptive advertising. While it is entirely appropriate to present a product in a favorable light and atmosphere, the presentation must not, by copy or demonstration, involve a material deception as to the characteristics or performance of a product.
4. The broadcaster and the advertiser should exercise special caution with the content and presentation of commercials placed in or near programs designed for children. Exploitation of children should be avoided. Commercials directed to children should in no way mislead as to the product's performance and usefulness.

5. Appeals involving matters of health which should be determined by physicians should be avoided.
6. Reference to the results of research, surveys or tests relating to the product to be advertised shall not be presented in a manner so as to create an impression of fact beyond that established by the study. Surveys, tests or other research results upon which claims are based must be conducted under recognized research techniques and standards.

C. Acceptability of Advertisers and Products

In general, because radio broadcasting is designed for the home and the entire family, the following principles shall govern the business classifications listed below:

1. The advertising of hard liquor shall not be accepted.
2. The advertising of beer and wines is acceptable when presented in the best of good taste and discretion.
3. The advertising of fortune-telling, occultism, astrology, phrenology, palm-reading, numerology, mind-reading, character-reading, or subjects of a like nature, is not acceptable.
4. Because the advertising of all products of a personal nature raises special problems, such advertising, when accepted, should be treated with emphasis on ethics and the canons of good taste, and presented in a restrained and inoffensive manner.
5. The advertising of tip sheets, publications, or organizations seeking to advertise for the purpose of giving odds or promoting betting or lotteries is unacceptable.
6. The advertising of cigarettes shall not state or imply claims regarding health and shall not be presented in such a manner as to indicate to the youth of our country that the use of cigarettes contributes to individual achievement, personal acceptance, or is a habit worthy of imitation.
7. An advertiser who markets more than one product shall not be permitted to use advertising copy devoted to an acceptable product for purposes of publicizing the brand name or other identification of a product which is not acceptable.
8. Care should be taken to avoid presentation of "bait-switch" advertising whereby goods or services which the advertiser has no intention of selling are offered merely to lure the customer into purchasing higher-priced substitutes.
9. Advertising copy should contain no claims dealing unfairly with competitors, competing products, or other industries, professions or institutions.
10. Advertising testimonials should be genuine and reflect an honest appraisal of personal experience.
11. Advertising by institutions or enterprises offering instruction with exaggerated claims for opportunities awaiting those who enroll, is unacceptable.

D. Advertising of Medical Products

Because advertising for over-the-counter products involving health considerations are of intimate and far-reaching importance to the consumer, the following principles should apply to such advertising:

1. When dramatized advertising material involves statements by doctors, dentists, nurses or other professional people, the material should be presented by members of such professions reciting actual experience, or it should be made apparent from the presentation itself that the portrayal is dramatized.
2. Because of the personal nature of the advertising of medical products, the indiscriminate use of such words as "Safe," "Without Risk," "Harmless," or other terms of similar meaning, either direct or implied, should not be expressed in the advertising of medical products.
3. Advertising material which offensively describes or dramatizes distress or morbid situations involving ailments is not acceptable.

E. Time Standards for Advertising Copy

1. The maximum time to be used for advertising shall not exceed an average of fourteen minutes an hour, computed on a weekly basis; provided, however, that in no event shall the maximum exceed eighteen minutes in any single hour or ten minutes in any thirty-minute segment.
2. The maximum time to be used for advertising allowable to any single sponsor regardless of type program shall be:

5 minute programs				1:30
10	“	“		2:10
15	“	“		3:00
25	“	“		4:00
30	“	“		4:15
45	“	“		5:45
60	“	“		7:00

3. Any reference to another's products or services under any trade name, or language sufficiently descriptive to identify it, shall, except for normal guest identifications, be considered as advertising copy.
4. For the purpose of determining advertising limitations, such program types as “classified,” “swap shop,” “shopping guides,” and “farm auction” programs, etc., shall be regarded as containing one and one-half minutes of advertising for each five-minute segment.

F. Contests

1. Contests shall be conducted with fairness to all entrants, and shall comply with all pertinent laws and regulations.
2. All contest details, including rules, eligibility requirements, opening and termination dates, should be clearly and completely announced or easily accessible to the listening public; and the winners' names should be released as soon as possible after the close of the contest.
3. When advertising is accepted which requests contestants to submit items of product identification or other evidence of purchase of products, reasonable facsimiles thereof should be made acceptable. However, when the award is based upon skill and not upon chance, evidence of purchase may be required.
4. All copy pertaining to any contest (except that which is required by law) associated with the exploitation or sale of the sponsor's product or service, and all references to prizes or gifts offered in such connection should be considered a part of and included in the total time limitations heretofore provided. (See Time Standards For Advertising Copy.)

G. Premiums and Offers

1. The broadcaster should require that full details of proposed offers be submitted for investigation and approval before the first announcement of the offer is made to the public.
2. A final date for the termination of an offer should be announced as far in advance as possible.
3. If a consideration is required, the advertiser should agree to honor complaints indicating dissatisfaction with the premium by returning the consideration.
4. There should be no misleading descriptions or comparisons of any premiums or gifts which will distort or enlarge their value in the minds of the listeners.

40.

*The NAB Television Code***PREAMBLE**

TELEVISION is seen and heard in every type of American home. These homes include children and adults of all ages, embrace all races and all varieties of religious faith, and reach those of every educational background. It is the responsibility of television to bear constantly in mind that the audience is primarily a home audience, and consequently that television's relationship to the viewers is that between guest and host.

The revenues from advertising support the free competitive American system of telecasting, and make available to the eyes and ears of the American people the finest programs of information, education, culture and entertainment. By law the television broadcaster is responsible for the programming of his station. He, however, is obligated to bring his positive responsibility for excellence and good taste in programming to bear upon all who have a hand in the production of programs, including networks, sponsors, producers of film and of live programs, advertising agencies, and talent agencies.

The American businesses which utilize television for conveying their advertising messages to the home by pictures with sound, seen free-of-charge on the home screen, are reminded that their responsibilities are not limited to the sale of goods and the creation of a favorable attitude toward the sponsor by the presentation of entertainment. They include, as well, responsibility for utilizing television to bring the best programs, regardless of kind, into American homes.

Television and all who participate in it are jointly accountable to the American public for respect for the special needs of children, for community responsibility, for the advancement of education and culture, for the acceptability of the program materials chosen, for decency and decorum in production, and for propriety in advertising. This responsibility cannot be discharged by any given group of programs, but can be discharged only through the highest standards of respect for the American home, applied to every moment of every program presented by television.

In order that television programming may best serve the public interest, viewers should be encouraged to make their criticisms and positive suggestions known to the television broadcasters. Parents in particular should be urged to see to it that out of the richness of television fare, the best programs are brought to the attention of their children.

I. *Advancement of Education and Culture*

1. Commercial television provides a valuable means of augmenting the educational and cultural influence of schools, institutions of higher learning, the home, the church, museums, foundations, and other institutions devoted to education and culture.

2. It is the responsibility of a television broadcaster to call upon institutions for counsel and cooperation and to work with them on the best methods of presenting educational and cultural materials by television. It is further the responsibility of stations, networks, advertising agencies and sponsors consciously to seek opportunities for introducing into telecasts factual materials which will aid in the enlightenment of the American public.
3. Education via television may be taken to mean that process by which the individual is brought toward informed adjustment to his society. Television is also responsible for the presentation of overtly instructional and cultural programs, scheduled so as to reach the viewers who are naturally drawn to such programs, and produced so as to attract the largest possible audience.
4. The television broadcaster should be thoroughly conversant with the educational and cultural needs and desires of the community served.
5. He should affirmatively seek out responsible and accountable educational and cultural institutions of the community with a view toward providing opportunities for the instruction and enlightenment of the viewers.
6. He should provide for reasonable experimentation in the development of programs specifically directed to the advancement of the community's culture and education.
7. It is in the interest of television as a vital medium to encourage and promote the broadcast of programs presenting genuine artistic or literary material, valid moral and social issues, significant controversial and challenging concepts and other subject matter involving adult themes. Accordingly, none of the provisions of this code, including those relating to the responsibility toward children, should be construed to prevent or impede their broadcast. All such programs, however, should be broadcast with due regard to the composition of the audience. The highest degree of care should be exercised to preserve the integrity of such programs and to ensure that the selection of themes, their treatment and presentation are made in good faith upon the basis of true instructional and entertainment values, and not for the purposes of sensationalism, to shock or exploit the audience or to appeal to prurient interests or morbid curiosity.

II. Responsibility Toward Children

1. The education of children involves giving them a sense of the world at large. It is not enough that only those programs which are intended for viewing by children shall be suitable to the young and immature. In addition, those programs which might be reasonably expected to hold the attention of children and which are broadcast during times of the day when children may be normally expected to constitute a substantial part of the audience should be presented with due regard for their effect on children.
2. Such subjects as violence and sex shall be presented without undue emphasis and only as required by plot development or character delineation. Crime should not be presented as attractive or as a solution to human problems, and the inevitable retribution should be made clear.
3. The broadcaster should afford opportunities for cultural growth as well as for wholesome entertainment.
4. He should develop programs to foster and promote the commonly accepted moral, social and ethical ideals characteristic of American life.
5. Programs should reflect respect for parents, for honorable behavior, and for the constituted authorities of the American community.
6. Exceptional care should be exercised with reference to kidnapping or threats of kidnapping of children in order to avoid terrorizing them.
7. Material which is excessively violent or would create morbid suspense, or other undesirable reactions in children, should be avoided.
8. Particular restraint and care in crime or mystery episodes involving children or minors, should be exercised.

III. Community Responsibility

1. A television broadcaster and his staff occupy a position of responsibility in the com-

munity and should conscientiously endeavor to be acquainted fully with its needs and characteristics in order better to serve the welfare of its citizens.

2. Requests for time for the placement of public service announcements or programs should be carefully reviewed with respect to the character and reputation of the group, campaign or organization involved, the public interest content of the message, and the manner of its presentation.

IV. General Program Standards

1. Program materials should enlarge the horizons of the viewer, provide him with wholesome entertainment, afford helpful stimulation, and remind him of the responsibilities which the citizen has towards his society. The intimacy and confidence placed in television demand of the broadcaster, the network and other program sources that they be vigilant in protecting the audience from deceptive program practices.
2. Profanity, obscenity, smut and vulgarity are forbidden, even when likely to be understood only by part of the audience. From time to time, words which have been acceptable, acquire undesirable meanings, and telecasters should be alert to eliminate such words.
3. Words (especially slang) derisive of any race, color, creed, nationality or national derivation, except wherein such usage would be for the specific purpose of effective dramatization such as combating prejudice, are forbidden.
4. Racial or nationality types shall not be shown on television in such a manner as to ridicule the race or nationality.
5. Attacks on religion and religious faiths are not allowed. Reverence is to mark any mention of the name of God, His attributes and powers. When religious rites are included in other than religious programs the rites shall be accurately presented. The office of minister, priest or rabbi shall not be presented in such a manner as to ridicule or impair its dignity.
6. Respect is maintained for the sanctity of marriage and the value of the home. Divorce is not treated casually as a solution for marital problems.
7. In reference to physical or mental afflictions and deformities, special precautions must be taken to avoid ridiculing sufferers from similar ailments and offending them or members of their families.
8. Excessive or unfair exploitation of others or of their physical or mental afflictions shall not be presented as praiseworthy.
The presentation of cruelty, greed and selfishness as worthy motivations is to be avoided.
9. Law enforcement shall be upheld and, except where essential to the program plot, officers of the law portrayed with respect and dignity.
10. Legal, medical and other professional advice, diagnosis and treatment will be permitted only in conformity with law and recognized ethical and professional standards.
11. The use of animals both in the production of television programs and as part of television program content, shall at all times, be in conformity with accepted standards of humane treatment.
12. Care should be exercised so that cigarette smoking will not be depicted in a manner to impress the youth of our country as a desirable habit worthy of imitation.
13. Criminality shall be presented as undesirable and unsympathetic. The condoning of crime and the treatment of the commission of crime in a frivolous, cynical or callous manner is unacceptable.
The presentation of techniques of crime in such detail as to invite imitation shall be avoided.
14. The presentation of murder or revenge as a motive for murder shall not be presented as justifiable.
15. Suicide as an acceptable solution for human problems is prohibited.
16. Illicit sex relations are not treated as commendable.
Sex crimes and abnormalities are generally unacceptable as program material.
The use of locations closely associated with sexual life or with sexual sin must be governed by good taste and delicacy.

17. Drunkenness should never be presented as desirable or prevalent. The use of liquor in program content shall be de-emphasized. The consumption of liquor in American life, when not required by the plot or for proper characterization, shall not be shown.
18. Narcotic addiction shall not be presented except as a vicious habit. The administration of illegal drugs will not be displayed.
19. The use of gambling devices or scenes necessary to the development of plot or as appropriate background is acceptable only when presented with discretion and in moderation, and in a manner which would not excite interest in, or foster, betting nor be instructional in nature.
20. Telecasts of actual sport programs at which on-the-scene betting is permitted by law should be presented in a manner in keeping with Federal, State and local laws, and should concentrate on the subject as a public sporting event.
21. Program material pertaining to fortune-telling, occultism, astrology, phrenology, palm-reading, numerology, mind-reading, or character-reading, is unacceptable when presented for the purpose of fostering belief in these subjects.
22. Quiz and similar programs that are presented as contests of knowledge, information, skill or luck must, in fact, be genuine contests and the results must not be controlled by collusion with or between contestants, or any other action which will favor one contestant against any other.
23. No program shall be presented in a manner which through artifice or simulation would mislead the audience as to any material fact. Each broadcaster must exercise reasonable judgment to determine whether a particular method of presentation would constitute a material deception, or would be accepted by the audience as normal theatrical illusion.
24. The appearances or dramatization of persons featured in actual crime news will be permitted only in such light as to aid law enforcement or to report the news event.
25. The use of horror for its own sake will be eliminated; the use of visual or aural effects which would shock or alarm the viewer, and the detailed presentation of brutality or physical agony by sight or by sound are not permissible.
26. Contests may not constitute a lottery.
27. Any telecasting designed to "buy" the television audience by requiring it to listen and/or view in hope of reward rather than for the quality of the program, should be avoided.
28. The costuming of all performers shall be within the bounds of propriety and shall avoid such exposure or such emphasis on anatomical detail as would embarrass or offend home viewers.
29. The movements of dancers, actors, or other performers shall be kept within the bounds of decency, and lewdness and impropriety shall not be suggested in the positions assumed by performers.
30. Camera angles shall avoid such views of performers as to emphasize anatomical details indecently.
31. The use of the television medium to transmit information of any kind by the use of the process called "subliminal perception," or by the use of any similar technique whereby an attempt is made to convey information to the viewer by transmitting messages below the threshold of normal awareness, is not permitted.
32. The broadcaster shall be constantly alert to prevent activities that may lead to such practices as the use of scenic properties, the choice and identification of prizes, the selection of music and other creative program elements and inclusion of any identification of commercial products or services, their trade names or advertising slogans, within a program dictated by factors other than the requirements of the program itself. The acceptance of cash payments or other considerations in return for including any of the above within the program is prohibited except in accordance with Sections 317 and 508 of the Communications Act.
33. A television broadcaster should not present fictional events or other non-news material as authentic news telecasts or announcements, nor should he permit dramatizations in

any program which would give the false impression that the dramatized material constitutes news. Expletives, (presented aurally or pictorially) such as "flash" or "bulletin" and statements such as "we interrupt this program to bring you . . ." should be reserved specifically for news room use. However, a television broadcaster may properly exercise discretion in the use in non-news programs of words or phrases which do not necessarily imply that the material following is a news release.

34. Program content should be confined to those elements which entertain or inform the viewer and to the extent that titles, teasers and credits do not meet these criteria, they should be restricted or eliminated.
35. Hypnosis, either as fiction or in fact, should be presented with proper precautions to avoid adverse effects on the viewing audience.

V. Treatment of News and Public Events

News

1. A television station's news schedule should be adequate and well-balanced.
2. News reporting should be factual, fair and without bias.
3. A television broadcaster should exercise particular discrimination in the acceptance, placement and presentation of advertising in news programs so that such advertising should be clearly distinguishable from the news content.
4. At all times, pictorial and verbal material for both news and comment should conform to other sections of these standards, wherever such sections are reasonably applicable.
5. Good taste should prevail in the selection and handling of news:
Morbid, sensational or alarming details not essential to the factual report, especially in connection with stories of crime or sex, should be avoided. News should be telecast in such a manner as to avoid panic and unnecessary alarm.
6. Commentary and analysis should be clearly identified as such.
7. Pictorial material should be chosen with care and not presented in a misleading manner.
8. All news interview programs should be governed by accepted standards of ethical journalism, under which the interviewer selects the questions to be asked. Where there is advance agreement materially restricting an important or newsworthy area of questioning, the interviewer will state on the program that such limitation has been agreed upon. Such disclosure should be made if the person being interviewed requires that questions be submitted in advance or if he participates in editing a recording of the interview prior to its use on the air.
9. A television broadcaster should exercise due care in his supervision of content, format, and presentation of newscasts originated by his station, and in his selection of newscasters, commentators, and analysts.

Public Events

1. A television broadcaster has an affirmative responsibility at all times to be informed of public events, and to provide coverage consonant with the ends of an informed and enlightened citizenry.
2. The treatment of such events by a television broadcaster should provide adequate and informed coverage.

VI. Controversial Public Issues

1. Television provides a valuable forum for the expression of responsible views on public issues of a controversial nature. The television broadcaster should seek out and develop with accountable individuals, groups and organizations, programs relating to controversial public issues of import to his fellow citizens; and to give fair representation to opposing sides of issues which materially affect the life or welfare of a substantial segment of the public.
2. Requests by individuals, groups or organizations for time to discuss their views on controversial public issues, should be considered on the basis of their individual merits,

and in the light of the contribution which the use requested would make to the public interest, and to a well-balanced program structure.

3. Programs devoted to the discussion of controversial public issues should be identified as such. They should not be presented in a manner which would mislead listeners or viewers to believe that the program is purely of an entertainment, news, or other character.
4. Broadcasts in which stations express their own opinions about issues of general public interest should be clearly identified as editorials. They should be unmistakably identified as statements of station opinion and should be appropriately distinguished from news and other program material.

VII. Political Telecasts

1. Political telecasts should be clearly identified as such. They should not be presented by a television broadcaster in a manner which would mislead listeners or viewers to believe that the program is of any other character.

VIII. Religious Programs

1. It is the responsibility of a television broadcaster to make available to the community appropriate opportunity for religious presentations.
2. Telecasting which reaches men of all creeds simultaneously should avoid attacks upon religion.
3. Religious programs should be presented respectfully and accurately and without prejudice or ridicule.
4. Religious programs should be presented by responsible individuals, groups and organizations.
5. Religious programs should place emphasis on broad religious truths, excluding the presentation of controversial or partisan views not directly or necessarily related to religion or morality.
6. In the allocation of time for telecasts of religious programs the television station should use its best efforts to apportion such time fairly among the representative faith groups of its community.

IX. General Advertising Standards

1. This Code establishes basic standards for all television broadcasting. The principles of acceptability and good taste within the Program Standards section govern the presentation of advertising where applicable. In addition, the Code establishes in this section special standards which apply to television advertising.
2. A commercial television broadcaster makes his facilities available for the advertising of products and services and accepts commercial presentations for such advertising. However, a television broadcaster should, in recognition of his responsibility to the public, refuse the facilities of his station to an advertiser where he has good reason to doubt the integrity of the advertiser, the truth of the advertising representations, or the compliance of the advertiser with the spirit and purpose of all applicable legal requirements.
3. Identification of sponsorship must be made in all sponsored programs in accordance with the requirements of the Communications Act of 1934, as amended, and the Rules and Regulations of the Federal Communications Commission.
4. In consideration of the customs and attitudes of the communities served, each television broadcaster should refuse his facilities to the advertisement of products and services, or the use of advertising scripts, which the station has good reason to believe would be objectionable to a substantial and responsible segment of the community. These standards should be applied with judgment and flexibility, taking into consideration the characteristics of the medium, its home and family audience, and the form and content of the particular presentation.
5. The advertising of hard liquor (distilled spirits) is not acceptable.
6. The advertising of beer and wines is acceptable only when presented in the best of

good taste and discretion, and is acceptable only subject to Federal and local laws. (See *Television Code Interpretation No. 6*)

7. The advertising of cigarettes should not be presented in a manner to convey the impression that cigarette smoking promotes health or is important to personal development of the youth of our country.
8. Advertising by institutions or enterprises which in their offers of instruction imply promises of employment or make exaggerated claims for the opportunities awaiting those who enroll for courses is generally unacceptable.
9. The advertising of firearms and fireworks is acceptable only subject to Federal and local laws.
10. The advertising of fortune-telling, occultism, astrology, phrenology, palm-reading, numerology, mind-reading, character reading or subjects of a like nature is not permitted.
11. Because all products of a personal nature create special problems, such products, when accepted, should be treated with especial emphasis on ethics and the canons of good taste. Such advertising of personal products as is accepted must be presented in a restrained and obviously inoffensive manner.
The advertising of particularly intimate products which ordinarily are not freely mentioned or discussed is not acceptable. (See *Television Code Interpretation No. 3*)
12. The advertising of tip sheets, race track publications, or organizations seeking to advertise for the purpose of giving odds or promoting betting or lotteries is unacceptable.
13. An advertiser who markets more than one product should not be permitted to use advertising copy devoted to an acceptable product for purposes of publicizing the brand name or other identification of a product which is not acceptable.
14. "Bait-switch" advertising, whereby goods or services which the advertiser has no intention of selling are offered merely to lure the customer into purchasing higher-priced substitutes, is not acceptable.
15. Personal endorsements (testimonials) shall be genuine and reflect personal experience. They shall contain no statement that cannot be supported if presented in the advertiser's own words.

X. *Presentation of Advertising*

1. Advertising messages should be presented with courtesy and good taste; disturbing or annoying material should be avoided; every effort should be made to keep the advertising message in harmony with the content and general tone of the program in which it appears.
2. The role and capability of television to market sponsors' products are well recognized. In turn, this fact dictates that great care be exercised by the broadcaster to prevent the presentation of false, misleading or deceptive advertising. While it is entirely appropriate to present a product in a favorable light and atmosphere, the presentation must not, by copy or demonstration, involve a material deception as to the characteristics, performance or appearance of the product.
3. The broadcaster and the advertiser should exercise special caution with the content and presentation of television commercials placed in or near programs designed for children. Exploitation of children should be avoided. Commercials directed to children should in no way mislead as to the product's performance and usefulness.
Appeals involving matters of health which should be determined by physicians should not be directed primarily to children.
4. Appeals to help fictitious characters in television programs by purchasing the advertiser's product or service or sending for a premium should not be permitted, and such fictitious characters should not be introduced into the advertising message for such purposes.
5. Commercials for services or over-the-counter products involving health considerations are of intimate and far-reaching importance to the consumer. The following principles should apply to such advertising:
 - a. Physicians, dentists or nurses, or actors representing physicians, dentists or nurses shall not be employed directly or by implication. These restrictions also apply to

- persons professionally engaged in medical services (e.g., physical therapists, pharmacists, dental assistants, nurses' aides).
- b. Visual representations of laboratory settings may be employed, provided they bear a direct relationship to bona fide research which has been conducted for the product or services. (See *Television Code, X, 10*) In such cases, laboratory technicians shall be identified as such and shall not be employed as spokesmen or in any other way speak on behalf of the product.
 - c. Institutional announcements not intended to sell a specific product or service to the consumer and public service announcements by non-profit organizations may be presented by accredited physicians, dentists or nurses, subject to approval by the broadcaster. An accredited professional is one who has met required qualifications and has been licensed in his resident state.
6. Advertising copy should contain no claims dealing unfairly with competitors, competing products, or other industries, professions or institutions.
 7. A sponsor's advertising messages should be confined within the framework of the sponsor's program structure. A television broadcaster should avoid the use of commercial announcements which are divorced from the program either by preceding the introduction of the program (as in the case of so-called "cow-catcher" announcements) or by following the apparent sign-off of the program (as in the case of so-called trailer or "hitch-hike" announcements). To this end, the program itself should be announced and clearly identified, both audio and video, before the sponsor's advertising material is first used, and should be signed off, both audio and video, after the sponsor's advertising material is last used.
 8. Since advertising by television is a dynamic technique, a television broadcaster should keep under surveillance new advertising devices so that the spirit and purpose of these standards are fulfilled.
 9. A charge for television time to churches and religious bodies is not recommended.
 10. Reference to the results of bona fide research, surveys or tests relating to the product to be advertised shall not be presented in a manner so as to create an impression of fact beyond that established by the work that has been conducted.

XI. Advertising of Medical Products

1. The advertising of medical products presents considerations of intimate and far-reaching importance to the consumer because of the direct bearing on his health.
2. Because of the personal nature of the advertising of medical products, claims that a product will effect a cure and the indiscriminate use of such words as "safe", "without risk", "harmless", or terms of similar meaning should not be accepted in the advertising of medical products on television stations.
3. A television broadcaster should not accept advertising material which in his opinion offensively describes or dramatizes distress or morbid situations involving ailments, by spoken word, sound or visual effects.

XII. Contests

1. Contests shall be conducted with fairness to all entrants, and shall comply with all pertinent laws and regulations. Care should be taken to avoid the concurrent use of the three elements which together constitute a lottery—prize, chance and consideration.
2. All contest details, including rules, eligibility requirements, opening and termination dates should be clearly and completely announced and/or shown, or easily accessible to the viewing public, and the winners' names should be released and prizes awarded as soon as possible after the close of the contest.
3. When advertising is accepted which requests contestants to submit items of product identification or other evidence of purchase of products, reasonable facsimiles thereof should be made acceptable unless the award is based upon skill and not upon chance.
4. All copy pertaining to any contest (except that which is required by law) associated with the exploitation or sale of the sponsor's product or service, and all references to

prizes or gifts offered in such connection should be considered a part of and included in the total time allowances as herein provided. (*See Television Code, XIV*)

XIII. *Premiums and Offers*

1. Full details of proposed offers should be required by the television broadcaster for investigation and approved before the first announcement of the offer is made to the public.
2. A final date for the termination of an offer should be announced as far in advance as possible.
3. Before accepting for telecast offers involving a monetary consideration, a television broadcaster should satisfy himself as to the integrity of the advertiser and the advertiser's willingness to honor complaints indicating dissatisfaction with the premium by returning the monetary consideration.
4. There should be no misleading descriptions or visual representations of any premiums or gifts which would distort or enlarge their value in the minds of the viewers.
5. Assurance should be obtained from the advertiser that premiums offered are not harmful to person or property.
6. Premiums should not be approved which appeal to superstition on the basis of "luck-bearing" powers or otherwise.

XIV. *Time Standards for Advertising*

In accordance with good telecast advertising practice, the time standards for commercial material are as follows:

1. Prime Time [Programs]

Definition: A continuous period of not less than three evening hours per broadcast day as designated by the station.

Commercial material, including total station break time, in prime time shall not exceed 17.2% (10 minutes and 20 seconds) in any 60-minute period.

Not more than three announcements shall be scheduled consecutively.

Commercial material in prime time includes billboards, public service announcements, promotional announcements (except those for the same program) and below-the-line credits as well as commercial copy. (*See Television Code Interpretation No. 5*)

2. All Other Time [Programs]

Definition: All time other than prime time.

Commercial material, including total station break time, within any 60-minute period may not exceed 27.2% (16 minutes and 20 seconds).

Individual programs of 5 minutes duration may include commercial material not in excess of 1 minute and 15 seconds and individual programs of 10 minutes duration may include commercial material not in excess of 2 minutes and 10 seconds.

Not more than three announcements shall be scheduled consecutively.

Commercial material in *all other times* does not include public service announcements, promotional announcements and opening and closing billboards which give sponsor identification.

3. Station Breaks

Definition: Station breaks are those periods of time between programs, or within a program as designated by the program originator, which are set aside for local station identification and spot announcements.

In prime time a station break shall consist of not more than two commercial announcements plus non-commercial copy such as station identification, public service or promotional announcements. Total station break time in any 30-minute period may not exceed 1 minute and 10 seconds.

In other than prime time individual station breaks shall consist of not more than two commercial announcements plus the conventional sponsored 10-second ID, and shall not exceed 2 minutes and 10 seconds.

Station break announcements shall not adversely affect a preceding or following program.

4. Multiple Product Announcements

A multiple product announcement is one in which two or more products or services are presented within the framework of a single announcement.

(1) Only those multiple product announcements which meet the following criteria shall be counted under the Code (Section XIV, 1, 2, 3) as a single announcement:

- (a) The products or services are related in character, purpose or use; and
- (b) The products or services are so treated in audio and video throughout the announcement as to appear to the viewer as a single announcement; and
- (c) The announcement is so constructed that it cannot be divided into two or more separate announcements.

(2) Multiple product announcements not meeting the criteria of 4(1) above (commonly referred to as "piggybacks") shall be counted as two or more announcements under this section of the Code.

(3) Multiple product announcements of retail or service establishments are exempted from the provisions of (1) (a) above.

5. Prize Identification

Reasonable and limited identification of prize and statement of the donor's name within formats wherein the presentation of contest awards or prizes is a necessary and integral part of program content shall not be included as commercial time within the meaning of paragraphs 1 and 2, above; however, any aural or visual presentation concerning the product or its donor, over and beyond such identification and statement, shall be included as commercial time within the meaning of paragraph 1, above. (*See Television Code Interpretation No. 4*)

6. Care should be exercised in the selection, placement and integration of non-program material in order to avoid adversely affecting the program content or diminishing audience interest.

7. Programs presenting women's services, features, shopping guides, fashion shows, demonstrations and similar material with genuine audience interest provide a special service to the viewing public in which what ordinarily might be considered advertising material is an informative and necessary part of the program content. Because of this, the Time Standards may be waived to a reasonable extent and limited frequency. The Code Authority will evaluate each such program on its own merits.

8. Except for normal guest identifications, any casual reference by talent in a program to another's product or service under any trade name or language sufficient to identify it should be condemned and discouraged.

9. Stationary backdrops or properties in television presentations showing the sponsor's name or product, the name of his product, his trade-mark or slogan may be used only incidentally. They should not obtrude on program interest or entertainment. "On camera" shots of such materials should be fleeting, not too frequent, and mindful of the need of maintaining a proper program balance.

10. Each opening and closing billboard, regardless of the number of sponsors, shall not exceed 10 seconds in program periods of one half-hour or less, or in the ratio of 10 seconds of opening and closing billboard per 30 minutes of program time in periods exceeding 30 minutes, provided that a billboard for any one sponsor at no time shall exceed 20 seconds in programs exceeding 30 minutes.

11. Billboard language may not include a commercial message and should be confined to the sponsor's name, product and established claim or slogan. Billboards should not mention contests, premiums, offers or special sales.

41.

Mass Communications Chronology

B.C.

- c.3300 Picture language, called *hieroglyphics*, developed by Egyptians, and symbol language, cuneiform, by Sumerians.
- c.1000 Sheets of papyrus used as writing material by Egyptians.
- c. 800 Libraries established by Babylonians and Assyrians.
 - 640 Thales of Miletus observed magical property of *elektron* (amber).
 - 322 Aristotle attempted to compress all existing knowledge into one set of books.
 - 63 System of shorthand invented by a Roman slave.

A.D.

- c. 100 Chinese already using paper and ink.
- c. 800 Arabs adopted modern number system from India.
 - 1300 Movable type of porcelain being used in China; of metal in Korea.
- c.1440 Gutenberg invented casting of metal type.
- c.1445 Books began to be printed on hand presses, using oil-varnish ink.
- c.1456 42-line Gutenberg Bible published.
- c.1539 First printing press in Western Hemisphere in use in Mexico City.
 - 1600 William Gilbert, English physician, made important discoveries about static electricity and coined the word *electrica*.
 - 1640 Oldest book still in existence, the *Bay Psalm Book*, published in America.
 - 1665 Publication of first English newspaper, the *London Gazette*.
 - 1690 Publication of first American newspaper in English, the *Publick Occurrences*, Boston. (One issue only.)
 - 1704 Publication of first continuously published American newspaper, the *Boston News-Letter*.
 - 1725 In England Stephen Gray observed that a hemp thread could carry electrical forces as far as 1,000 feet. (Discovery of electrical conduction.)
 - 1731 Publication of first magazine in England, the *Gentlemen's Magazine*, London.
 - 1741 Publication of first magazine in America, the *American Magazine*, Philadelphia.
 - 1749 Benjamin Franklin by kite experiment proved lightning is electrical phenomenon.
 - 1783 Founding of first daily paper in America, the *Pennsylvania Evening Post and Daily Advertiser*.
 - 1817 Jakob Berzelius, Swedish chemist, discovered selenium.

- 1821 Andre Amphere in France established relationship between electricity and magnetism.
- 1827 An Englishman, Sir Charles Wheatstone, coined word *microphone* for an acoustical device he had developed to amplify sound.
- 1831 Joseph Henry made first electric bell, after discovering mutual-induction and self-induction.
- 1832 Morse conceived idea for telegraph on ship returning from Europe.
- 1833 First mass-circulated penny newspaper, the *New York Sun*.
- 1837 Morse described his code of dots and dashes in applying for patent.
- 1842 Alexander Bain became father of facsimile by his discovery of basic principles of transmitting pictures by electricity.
- 1843 Congress passed bill appropriating \$3,000 for Morse's experiment in telegraphy.
- 1844 Morse opened telegraphic circuit between Washington and Baltimore with words: "What hath God wrought."
- 1853 First paper made from pulp.
- 1858 First transatlantic cable opened on August 16.
- 1861 German inventor designed make-break platinum contact microphone over which musical sounds but not human voice could be transmitted.
- 1862 Caselli transmitted a picture by wire.
- 1868 American patent granted for a "letter-printing machine," ancestor of modern typewriter.
- 1872 Photo-engraving developed.
- 1873 First daily illustrated newspaper published.
- 1876 Bell invented the telephone.
- 1877 Edison applied for patent on "phonograph or speaking machine," after achieving first audible reproduction of sound.
- 1883 Edison demonstrated that electric current could travel between heated filament and a cold plate in a vacuum.
- 1884 German patent issued for television-scanning disk.
- 1885 Edison developed system of communication between railroad depots and moving trains.
- 1886 First Mergenthaler linotype machine went into operation.
- 1886 Hertz proved feasibility of sending electromagnetic waves through space.
- 1888 Emile Berliner received patent for flat, glass phonograph disk.
- 1892 First voice broadcast by Stubblefield near Murray, Ky.
- 1894 Marconi set new record in sending wireless message two miles.
- 1896 Marconi applied for wireless telegraphy patent. (The patent, No. 7777, remained for 17 years the basic radio patent.)
- 1897 Marconi sent wireless message across three and a half miles of water.
- 1898 Dublin *Daily Express* used wireless to report a regatta.
- 1899 Marconi sent first wireless signal across English Channel.
- 1899 The *Transatlantic Times*, printed on board SS *St. Paul*, claimed to be first newspaper produced at sea using news obtained by wireless.
- 1901 Marconi on December 12 received at St. John's, Newfoundland, letter *S* transmitted from Poldhu, Cornwall, England.
- 1904 DeForest became world's first radio war correspondent.
- 1904 Orestes Caldwell transmitted a voice one city block using a steel needle on aluminum supporting wires.
- 1904 John Ambrose Fleming discovered a vacuum tube could be used to detect radio signals.

- 1904 Wirephoto sent from Munich to Nuremberg.
- 1905 New York *Times* received eyewitness reports by radio of naval battle off Port Arthur in Russo-Japanese War.
- 1905 First FM (frequency modulation) patent issued.
- 1906 Fessenden's broadcast of phonograph music and human voice from Brant Park station picked up by ships at sea.
- 1906 International convention in Berlin suggested the word *radio* for wireless telegrams.
- 1907 DeForest patented triode tube.
- 1909 DeForest did voice broadcast from Eiffel Tower.
- 1909 Peary sent radio message: Stars and stripes nailed to pole.
- 1910 Caruso's singing picked up by ships at sea.
- 1912 First U.S. radio licensing law passed.
- 1912 KQW, San Jose, Cal., began broadcasting.
- 1912 April 12, *Titanic* sank. Radio helped save 705 persons.
- 1912 Poole made 25-mile voice broadcast, California.
- 1914 Italian ships received voice messages from Ireland.
- 1914 Radio carried news of start of World War I.
- 1915 First radio telephone communication between Arlington and Paris.
- 1916 Sarnoff made his "Music Box prediction."
- 1916 DeForest began voice broadcasting in New York City, giving presidential returns.
- 1917 U.S. declared war on Germany. Amateur wireless stations were closed down the next day.
- 1918 Station 8MK (later to become WWJ) broadcast Michigan primary election returns.
- 1918 Via radio world received news of end of World War I.
- 1918 President Wilson made broadcast from aboard ship returning from Paris Peace Conference.
- 1919 Atlantic coast residents heard voices of Navy pilots enroute to Azores.
- 1920 Radio station 8MK, Detroit, became WWJ, Aug. 9.
- 1920 KDKA on air Nov. 2 with elections returns.
- 1921 Crossley founded WLW.
- 1921 Jan. 2. First remote, which was also first church service, KDKA.
- 1921 March 10. First broadcast from a theater, KDKA.
- 1921 April 11. First prizefight broadcast: Ray vs. Dundee, KDKA.
- 1921 May 19. First U.S. Market Report, KDKA.
- 1921 July 2. First world championship prizefight broadcast, Jersey City, WKZ.
- 1921 Aug. 4. First tennis match broadcast, KDKA.
- 1921 Aug. 5. First play-by-play baseball broadcast, KDKA.
- 1921 Sept. 15. First regular broadcast license issued to WBZ, Springfield, Mass.
- 1921 Sept. 19. WBZ on the air.
- 1921 Sept. 30. WJZ, Newark, N.J., licensed.
- 1921 Oct. WJZ put on first children's program.
- 1921 Oct. 5. First World Series baseball game broadcast from Polo Grounds.
- 1921 Nov. 11. KYW on air in Chicago.
- 1922 NAB founded.
- 1922 Superheterodyne demonstrated by inventor, E. H. Armstrong.
- 1922 Milton Cross made debut as WJZ announcer.
- 1922 WGY, Schenectady, on air.

- 1922 Aug. 16. First commercial aired, WEAF.
1922 Nov. 11. First remote pickup of an opera (*Aida*), WEAF.
1923 Jan. 4. WNAC, Boston, and WEAF, NY, formed first "network."
1923 Feb. 4. First broadcast of a stage performance: Roxy & His Gang.
1923 Televised pictures sent from New York to Philadelphia.
1923 March 23. Picture of Harding & Coolidge transmitted by radiophoto.
1923 Two million radio sets in the U.S.
1923 Hazeltine announced invention of neutrodyne circuit.
1923 Aug. 1. WRC, Washington, began operation.
1923 Dec. 4. Opening of Congress broadcast for first time.
1924 Feb. 8. First trans-continental broadcast: Roll of the Cities.
1924 Feb. 22. Coolidge did first presidential talk from White House.
1924 July 6. First radio photo radioed across Atlantic and back.
1925 WGN, Chicago, broadcast Scopes evolution trial.
1925 March 14. London orchestra made first transatlantic musical broadcast.
1925 July 11. First sponsored network program — Lopez Orchestra sponsored by Gimbel's.
1925 Heater-type vacuum tubes made possible first all-electric receivers.
1925 First dynamic loudspeakers.
1925 Walter Damrosch conducted New York Symphony Orchestra in first symphony program ever broadcast.
1925 Baird and Jenkins transmitted pictures electronically.
1925 Network of 20 stations broadcast Coolidge speech.
1926 Dirigible *Norge* broadcast from North Pole.
1926 Philo Farnsworth, 19, sophomore at Brigham Young University, patented first electronic television device.
1926 NBC organized, with WEAF as key station.
1926 Blue Network organized, with WJZ as key station.
1927 Television transmission over wire circuit, New York to Washington, demonstrated by Bell Telephone laboratories.
1927 Crossley began rating radio programs.
1927 Passage of Radio Act, laying foundation for present system of broadcasting.
1927 First broadcast of grand opera over a nationwide network.
1927 Lindbergh's return broadcast over 50 stations, the largest hookup to date.
1927 Columbia Phonograph Broadcasting System (later CBS) formed.
1927 Oct. 6. Premiere of *The Jazz Singer*, first real talking film.
1927 Single dial radio tuning introduced.
1928 Jan. 4. National hookup of every state in Union.
1928 April 4. NBC received construction permit for first television station.
1928 July. Color television demonstrated by John L. Baird in England.
1928 Dec. 23. NBC established permanent coast-to-coast network.
1928 First nationwide broadcast of the Tabernacle Choir from Salt Lake City. (Now oldest continuous program on the air.)
1928 Mrs. Mia Howe in London was televised and the image of her face was seen in Hartsdale, N.Y.
1928 WGY, Schenectady, began telecasting experimentally.
1929 Zworykim of RCA demonstrated a non-mechanical receiver using a special cathode ray tube called a *kinescope*.
1929 Color television demonstrated by Bell Telephone laboratory.

- 1929 Screen grid tubes developed.
- 1930 First showing of TV in a theater when RCA experimental station, NYC, sent program to RKO Proctor's Theater.
- 1930 Clyde Wagoner became first person to send his voice around the world. It took one-eighth of a second for voice to go over W2XAD on 19.58 m. to Hurzien Hall, then relayed by PHI on 16.88 to Bandung, Java, and back to Schenectady on 28.5 over VK2ME.
- 1931 RCA installed experimental television facilities and studio in 102-story Empire State Building and commenced field tests.
- 1931 CBS began regularly scheduled telecasts over W2XAB.
- 1932 Electronic scanning device invented.
- 1932 Radio covered Lindbergh kidnapping.
- 1933 Armstrong constructed first FM station.
- 1934 Mutual Network inaugurated.
- 1934 FCC superceded FRC.
- 1934 NBC reversed its policy of live broadcasts only and offered its stations electronic transcriptions of programs originating in its studios.
- 1934 WLW increased its power to 50,000 watts.
- 1934 Hooper began rating radio programs.
- 1935 Coaxial cable capable of carrying TV signals announced by Bell laboratories.
- 1935 WNEW originated so-called personality-music and news station, with Martin Block as deejay.
- 1935 Microphones lowered into Vesuvius crater as a radio stunt.
- 1935 Armstrong demonstrated frequency modulation.
- 1935 First broadcast of U.S. Army maneuvers from tanks, planes, trucks and balloons.
- 1936 First American picture magazine launched.
- 1936 RCA began all-electronic television field tests with broadcast of 343-line pictures from Empire State tower.
- 1936 Audimeter developed for measuring broadcast audiences.
- 1936 Regular television broadcasts begun in London.
- 1937 May 6. Herbert Morrison, WLS, broadcast Hindenburg disaster.
- 1937 Germans began showing television on screens eight feet wide.
- 1937 NAB Radio Code promulgated.
- 1937 First all-night music program in the United States, *Milkman's Matinee*, begun by WEAJ.
- 1938 Regular TV broadcasts begun in New York City.
- 1938 NBC conducted first sidewalk interviews in Rockefeller Plaza, relayed from a RCA telemobile unit to the Empire State Building and then put on the air.
- 1938 Admiral Leahy of the U.S. Navy conducted the first world tour by radio, talking from New York to Navy officers stationed all around the world: London, Cairo, Rio de Janeiro, Samoa, Manila, Honolulu, Shanghai.
- 1938 Orson Welles broadcast drama about invasion from Mars.
- 1938 April 30. NBC broadcast first regularly scheduled television program from New York World's Fair, with President F. D. Roosevelt as speaker.
- 1940 FM broadcasting begun.
- 1940 June 24. First coaxial cable used, Philadelphia to New York.
- 1940 August. CBS made its first experimental color telecast.
- 1941 Nearly 800 broadcasting stations changed frequencies by order of FCC.
- 1941 FCC authorized commercial television.

- 1941 FCC allocated five channels for non-commercial FM broadcasting.
- 1941 FCC issued Mayflower Decision, banning editorials on the air.
- 1941 WNBT and WCBW became first licensed commercial television stations.
- 1941 President Roosevelt's comments on Pearl Harbor attack heard by 90,000,000 the largest radio audience in history.
- 1942 Radio production for civilian use stopped by order of War Production Board to divert vital material for military purposes. Huge radio training program begun.
- 1943 ABC founded, with purchase of Blue Network.
- 1943 Kate Smith sold \$39,000,000 in War Bonds during 18-hour broadcast.
- 1943 Radar and its use as a detection and range-finding device first announced to the public.
- 1945 Peak audiences heard VE Day and VJ Day broadcasts.
- 1947 Jan. 3. First telecast of Congress in session.
- 1948 Bell laboratories developed the transistor.
- 1948 In one year number of television sets jumped from 100,000 to 1,000,000.
- 1949 FCC ruled editorializing on the air is permissible.
- 1949 May 31. First broadcast of a surgical operation.
- 1951 TV covered Kefauver crime hearings.
- 1952 NAB Television Code promulgated.
- 1952 Republican and Democratic National Convention covered by television, for first time.
- 1952 FCC ended freeze on TV channels.
- 1952 U.S. Air Force and FCC established Conelrad.
- 1953 First hour-long color TV program.
- 1953 Murder trial broadcast by WKY-TV.
- 1953 KUHT, first educational television station, licensed in Houston, Texas.
- 1954 First color television on a regular commercial basis.
- 1954 Arturo Toscanini conducted NBC Symphony Orchestra in farewell broadcast heard by 22,000,000.
- 1954 Television covered the McCarthy hearings.
- 1955 Ford Foundation granted \$6,250,000 to ETV.
- 1957 First artificial earth satellite sent back information from Outer Space.
- 1957 FCC announced it would accept applications for pay-TV experiments.
- 1959 First major independent radio news operation established by WNEW.
- 1959 Radios in US and USSR space vehicles sent back information from beyond the moon.
- 1960 WMCA became first station to endorse a candidate for President.
- 1960 TV played a major role in Kennedy-Nixon campaigns.
- 1961 FCC authorized FM stations to engage in stereophonic broadcasting, and WEFM and WGFM began to do so.
- 1961 First radio conversations held with man in space — Russian cosmonaut Gagarin.
- 1961 FCC authorized WHCT to experiment with toll-TV.
- 1962 Congress passed law requiring that all new TV sets be equipped to receive UHF.
- 1962 TV programs relayed between America and Europe via satellite Telstar.
- 1964 Sept. 28. Parma (O) and Mineola (NY) school boards were first on the air with instructional television broadcasts.
- 1965 Comsat launched Early Bird, first commercial communications satellite.
- 1966 WNEW-FM became first metropolitan station to go all-girl.

42.

*Abbreviations Every Broadcaster
Should Know*

A	Ampere	AFL	American Federation of Labor.
AAA	Amateur Athletic Association.	AFL	American Football League
AAA	Automobile Association of America.	AFM	American Federation of Musicians.
AAAA	American Association of Advertising Agencies.	AFRS	Armed Forces Radio Service.
AAAA	Associated Actors & Artists of America.	AFTRA	American Federation of TV & Radio Artists.
AAAS	American Academy of Arts & Sciences.	AFTS	Armed Forces Television Service
AAAS	American Assoc. for the Advancement of Science.	AGC	Automatic gain control.
AAU	Amateur Athletic Union	AGMA	American Guild of Musical Artists.
AB	Bachelor of Arts.	AGVA	American Guild of Variety Artists.
ABC	American Broadcasting Company.	AIEE	American Institute of Electr. Engineers.
ABC	American Bowling Congress	ALA	American Library Association.
ABC	Automatic brightness control.	AM	Amplitude modulation.
AC	Alternating current.	AMP	Ampere.
AD	Anno Domini (In the year of Our Lord).	AMP	Associated Music Publishers.
AEA	American Education Association.	AMVETS	American Veterans (World War II).
AEC	Atomic Energy Commission.	ANA	Association of National Advertisers.
AEF	American Expeditionary Forces.	ANG	American Newspaper Guild
AER	Assoc. for Education by Radio.	AP	Associated Press
AES	Audio Engineering Society.	APBE	Assoc. for Professional Bdcstng Educa.
AF	Audio frequency.	APO	Army Post Office.
AFA	Advertising Federation of America.	ARNA	Assoc. of Radio News Analysts.
AFB	Air Force Base.	ARRL	American Radio Relay League.
AFC	Automatic frequency control.	ASCAP	Americ. Society of Composers, Authors & Publishers.

ATS	American Television Society.	CYC	Nickname for cyclorama; a canvas backdrop.
AVC	Automatic volume control.	CYO	Catholic Youth Organization.
AWRT	American Women in Radio & TV.	DAR	Daughters of the American Revolution.
BBC	British Broadcasting Corporation.	DAV	Disabled American Veterans.
BC	Before Christ.	DB	Decibel.
BCE	Bachelor of Civil Engineering.	DB	Delayed telecast of a live show.
BCI	Broadcast interference.	DC	Direct current.
BCL	Bachelor of Civil Law.	DDS	Doctor of Dental Surgery.
BCU	Big closeup	DEW	Distant early warning.
BD	Bachelor of Divinity.	DJ	Disc Jockey.
BG	Background (music or sound effects).	DJA	Disc Jockey Association.
BL	Bachelor of Laws. (LLB)	DOA	Dead on arrival.
BM	Bachelor of Medicine.	DST	Daylight savings time.
BMI	Broadcast Music Inc.	DVM	Doctor of Veterinary Medicine.
BPOE	Ben. & Protective Order of Elks.	ECU	Extreme close up shot of a subject.
BS	Bachelor of Science.	EDT	Eastern daylight time.
C	Symbol for centigrade, capacitance, or bias supply.	EST	Eastern standard time.
C & W	Country & western.	ET	Electrical transcription.
CAB	Canadian Association of Broadcasters.	ETV	Educational television.
CAB	Civilian Aeronautics Board.	FBI	Federal Bureau of Investigation.
CAP	Civil Air Patrol.	FCC	Federal Communications Commission.
CATV	Community Antenna TV.	FDA	Food and Drug Administration.
CBC	Canadian Broadcasting Corporation.	FDIC	Federal Deposit Insurance Corporation.
CBS	Columbia Broadcasting System.	FHA	Federal Housing Administration.
CCTV	Closed circuit television.	FM	Frequency modulation.
CDST	Central Daylight Savings Time.	FOB	Free on board.
CIA	Central Intelligence Agency.	FPO	Fleet Post Office.
CIO-AFL	Congress for Industr. Organ. Am. Fed. of Labor.	FS	Follow shot.
CO	Commanding Officer.	FTC	Federal Trade Commission.
COAX	Coaxial cable.	GMT	Greenwich Mean Time.
COC	Chamber of Commerce.	GND	Ground.
CORE	Congress of Racial Equality.	GPU	Gay Pay Oo (Russian Secret Police).
COMSAT	Communication Satellite Corp.	HF	High frequency.
CPA	Certified public accountant.	HIH	His (or her) Imperial Highness.
CST	Central standard time.	HMS	His (or her) Majesty's Ship (or service).
CTV	Canadian TV Network.	I	Symbol designating current.
CU	Close-up	IATSE	Intern. Alliance of Theatrical Stage Employees.
CVC	Chorus, verse & chorus of a musical selection.	IBEW	Intern. Brotherhood of Electric Workers.

ICBM	Intercontinental Ballistic Missile.	NAFMB	National Assoc. of FM Broadcasters.
ID	Station identification.	NASA	National Aeronautics and Space Administration.
IE	That is.	NATO	North Atlantic Treaty Organization.
IEEE	Institute of Electrical & Electronic Engineers.	NATVPE	National Assoc. of TV Program Executives.
IFR	Instrument flight rules.	NBA	National Basketball Association.
IHS	Latin for Jesus, Savior of Men.	NBA	National Boxing Association.
IKE	Iconoscope.	NBC	National Broadcasting Company.
IOOF	Ind. Order of Odd Fellows.	NC	Network commercial.
IRE	Institute of Radio Engineers.	NCAA	National Collegiate Athletic Association.
IRS	Internal Revenue Service.	NEA	National Education Association.
ITV	Industrial television.	NET	National Educational Television.
KC	Kilocycle.	NFL	National Football League.
KKK	Ku Klux Klan.	NG	National Guard.
LASER	Light Amplification by Stimulated Emission of Radiation.	NHL	National Hockey League.
LC	Live commercial.	NLRB	National Labor Relations Board.
LLB	Bachelor of Laws.	NP	Notary public.
LS	Long shot, or wide shot, or establishing shot.	NS	Network sustaining.
LS	Live sustaining.	NTI	Nielsen TV Index.
MA	Milliampere.	NYC	New York Central Railroad.
MBS	Mutual Broadcasting System.	NYC	New York City.
MC	Master of ceremonies (emcee).	OAS	Organization of American States.
MC	Megacycle.	OEIU	Office Employees International Union.
MCA	Music Corporation of America.	PA	Power amplifier or public address system.
MDT	Mountain Daylight time.	PDT	Pacific daylight time.
ME	Mechanical engineer.	PGA	Professional Golfers Association.
MIKE	Microphone.	PHD	Doctor of Philosophy.
MPAA	Motion Picture Assoc. of America.	PL	Private line.
MS	Medium shot of a subject.	PO	Postoffice.
MST	Assoc. of Maximum Service Telecasters.	PS	Postscript.
MST	Mountain Standard Time.	PSA	Public service spot announcement.
NAACP	National Assoc. for the Advancement of Colored People.	PST	Pacific Standard time.
NAB	National Association of Broadcasters.	PTA	Parent-Teachers Association.
NABB	National Association for Better Broadcasting.	PTT	Push-to-talk.
NABET	National Assoc. of Bdcst. Employees & Technicians.	QV	Which see.
NAEB	National Assoc. of Educational Broadcasters.	R	Symbol for resistor or resistance.
NAFBRAT	National Assoc. for Better Radio & TV (now NABB).	RAF	Royal Air Force.

RBI	Runs batted in.	TVA	Tennessee Valley Authority.
RC	Recorded or transcribed commercial.	TVI	Television interference.
RCA	Radio Corporation of America.	UAR	United Arab Republic.
RCVR	Abbreviation for receiver.	UAW	United Automobile Workers.
RDF	Radio direction finder.	UE	United Electric., Radio & Machine Workers of Am.
REA	Rural Electrification Administration.	UFO	Unidentified flying object.
REV	Reverse shot.	UHF	Ultra-high frequency.
RF	Radio frequency.	UMW	United Mine Workers.
RFD	Rural free delivery.	UN	United Nations.
RFE	Radio Free Europe.	UNESCO	UN Educational, Scientific & Cultural Organiz.
ROTC	Reserve Officers Training Corps.	UNICEF	UN Childrens Fund.
RS	Recorded or transcribed sustaining.	UPI	United Press International
RST	Readability, signal-strength, and tone.	USAF	United States Air Force.
RSVP	Reply if you please.	USCG	United States Coast Guard.
RTTY	A radio-communications system using teletypewriters.	USIA	United States Information Agency.
SA	Commercial spot announcement.	USIS	United States Information Service.
SAC	Strategic Air Command.	USMC	United States Marine Corps.
SAG	Screen Actors Guild.	USN	United States Navy.
SBA	Small Business Administration.	USO	United Services Organization.
SBIC	Small Business Investment Company.	USS	United States ship.
SEATO	Southeast Asia Treaty Organization.	USSR	Union of Soviet Socialist Republics.
SEC	Securities Exchange Commission.	V	Volt.
S/N	Signal-to-noise ratio.	VA	Veterans Administration.
SOF	Sound on film.	VFR	Visual flight rules.
SOS	Help.	VFW	Veterans of Foreign Wars.
SPCA	Society for the Prevention of Cruelty to Animals.	VHF	Very high frequency.
SPDT	Single pole double throw.	VOA	Voice of America.
SPST	Single pull single throw.	VOL	Volume.
SS	Steamship.	VS	Veterinary surgeon.
SSB	Social Securities Board.	VTR	Videotape recording.
STA	Special temporary authorization.	VU	Volume unit.
SW	Shortwave.	VV	Vice versa.
T	Temperature or time.	W	Watt or wattage.
TKO	Technical knockout.	WC	Wire commercial.
TNT	Trinitrotoluene (an explosive).	WCTU	Women's Christian Temperance Union.
TR	Transmit-receive.	WS	Wire sustaining.
TV	Television.	WWV	Call letters of the National Bureau of Standards.
		XMTR	Abbreviation for transmitter.
		XTAL	Abbreviation for crystal.

43.

Guilds, Unions and Associations

- ACTORS EQUITY ASSOCIATION**, 226 W. 47th st., New York, N.Y. (10036). Branches: Hollywood — 6636 Hollywood blvd. Chicago — 612 N. Michigan ave.
- THE ADVERTISING COUNCIL INC.**, 25 W. 45th st., New York, N.Y. (10036).
- ADVERTISING FEDERATION OF AMERICA (AFA)**, 655 Madison ave., New York, N.Y. (10021).
- ADVERTISING RESEARCH FOUNDATION (ARF)**, 3 E. 54th st., New York, N.Y. (10022).
- AMERICAN ASSOCIATION OF ADVERTISING AGENCIES (AAAA)**, 200 Park ave., New York, N.Y. (10017).
- AMERICAN COUNCIL FOR BETTER BROADCASTS**, 423 N. Pinckney st., Madison, Wis. (53703).
- AMERICAN FEDERATION OF MUSICIANS (AFM)**, 641 Lexington ave., New York, N.Y. (10022).
- AMERICAN FEDERATION OF TELEVISION & RADIO ARTISTS (AFTRA)**, 724 Fifth ave., New York, N.Y. (10019). A branch of Associated Actors & Artists of America. Branch: Hollywood — 151 N. LaBrea.
- AMERICAN GUILD OF MUSICAL ARTISTS (AGMA)**, 1841 Broadway, New York, N.Y. (10023). Branch of AAAA.
- AMERICAN GUILD OF VARIETY ARTISTS (AGVA)**, 551 Fifth ave., New York, N.Y. (10017). Branch of AAAA.
- AMERICAN INSTITUTE FOR BETTER TELEVISION RECEPTION**, 200 Park ave., New York, N.Y. (10017).
- AMERICAN NEWSPAPER GUILD (AGN)**, 1126 16th st., NW, Washington, D.C. (20036).
- AMERICAN SOCIETY OF COMPOSERS, AUTHORS & PUBLISHERS (ASCAP)**, 575 Madison ave., New York, N.Y. (10022).
- AMERICAN WOMEN IN RADIO AND TELEVISION INC.**, 75 East 55th st., New York, N.Y. (10022).
- ARMED FORCES COMMUNICATIONS & ELECTRONICS ASSN.**, 1725 Eye st., NW, Washington, D.C. (20006).
- ASSOCIATED ACTORS & ARTISTS OF AMERICA (AAAA)**, 226 W. 47th st., New York, N.Y. (10036).
- ASSOCIATION CANADIENNE DE LA RADIO ET DE LA TELEVISION DE LANGUE FRANCAISE**—(French Language Radio & Television Broadcasters Assn.) Conrad Lavigne, CFCL, Timmins, pres.
- ASSOCIATION FOR PROFESSIONAL BROADCASTING EDUCATION**, 1771 N st., NW, Washington, D.C. (20036).
- ASSOCIATION OF BROADCAST CONSULTANTS (Canadian)**, c/o C. Eastwood, secy-treas., 26 Lacewood Cres., Don Mills, Ont.
- ASSOCIATION OF CANADIAN ADVERTISERS INC.**, Federal Building, Toronto 1, Ont.
- ASSOCIATION OF MOTION PICTURE & TELEVISION PRODUCERS INC. (AMPTP)**, 8480 Beverly blvd., Hollywood, Cal. (90048).

- ASSOCIATION OF NATIONAL ADVERTISERS**, 155 E. 44th st., New York, N.Y. (10017).
- ASSOCIATION OF RADIO & TELEVISION NEWS ANALYSTS**, c/o The Williams Club, 24 E. 39th st., New York, N.Y. (10016).
- ASSOCIATION ON BROADCASTING STANDARDS INC.**, 1741 De Sales st., Washington, D. C. (20006).
- BMI CANADA LIMITED**, 16 Gould st., Toronto 2, Ont.
- BOARD OF BROADCAST GOVERNORS**, 48 Rideau st., Ottawa 4, Ont.
- BROADCASTERS FOUNDATION**, 589 Fifth ave., New York, N.Y. (10017).
- BROADCASTERS PROMOTION ASSOCIATION INC.**, 1812 Hempstead rd., Lancaster, Pa. (17601).
- BROADCASTING FOUNDATION OF AMERICA** (Distributor of International Radio programs), 52 Vanderbilt ave., New York, N.Y. (10017).
- BROADCASTING RATING COUNCIL INC.**, Room 2347, 420 Lexington ave., New York, N.Y. (10017).
- BROADCAST MUSIC INC. (BMI)**, 589 Fifth ave., New York, N.Y. (10017).
- BROADCAST-TELEVISION RECORDING ENGINEERS (IBEW)**, 7265 Santa Monica blvd., Hollywood, Cal. (90046).
- CANADIAN ASSOCIATION OF BROADCASTERS (CAB)**, Box 627, Station "B," Ottawa 4, Ont.
- CANADIAN ADVERTISING ADVISORY BOARD**, 159 Bay st., Toronto 1, Ont.
- CANADIAN RADIO TECHNICAL PLANNING BOARD**, 200 St. Clair ave., W. Toronto 7, Ont.
- COMMUNICATIONS WORKERS OF AMERICA (CWA) AFL-CIO**, Mercury Bldg., 1925 K st., NW, Washington, D.C. (20006).
- COMPOSERS, AUTHORS & PUBLISHERS ASSN. OF CANADA LTD.**, 1263 Bay st., Toronto, Ont.
- COUNCIL FOR TELEVISION DEVELOPMENT** — 1000 Ring Bldg., Washington, D.C. (20036).
- COUNTRY MUSIC ASSOCIATION INC.**, 801 16th ave., Nashville, Tenn. (37203).
- DAYTIME BROADCASTERS ASSOCIATION**, Box 322, Mattoon, Ill. (61938).
- DIRECTORS GUILD OF AMERICA INC.**, 7950 Sunset blvd., Hollywood, Cal. (90046). New York Office: 59 E. 54th st., New York, N.Y. (10022).
- EDUCATIONAL COMMUNICATION ASSOCIATION INC.**, 1319 F st. NW, Washington, D.C. (20004).
- EDUCATIONAL FACILITIES LABORATORIES**, 477 Madison ave., New York, N.Y. (10022).
- EDUCATIONAL TELEVISION & RADIO CENTER**, 2320 Washtenow ave., Ann Arbor, Mich.
- INTERNATIONAL ALLIANCE OF THEATRICAL STAGE EMPLOYES & MOVING PICTURE MACHINE OPERATORS (IATSE)**, 1270 avenue of the Americas, New York, N.Y. (10020).
- INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS (IBEW)**, 1200 Fifteenth st., NW, Washington, D.C. (20005).
- INTERNATIONAL RADIO & TELEVISION SOCIETY**, 444 Madison ave., New York, N.Y. (10022).
- INTERNATIONAL UNION OF ELECTRICAL, RADIO & MACHINE WORKERS (IUE)**, 1126 16th st. NW, Washington, D.C. (20036).
- INSTITUTE FOR EDUCATION BY RADIO-TELEVISION (IERT)**, Ohio State University, 2470 N. Star rd., Columbus, O. (43221).
- JOINT COUNCIL ON EDUCATIONAL BROADCASTING (JCEB)**, 1346 Connecticut ave., Washington, D.C. (20036).
- MASS COMMUNICATIONS HISTORY CENTER**, State Historical Society of Wisconsin, 816 State st., Madison, Wis. (53706).
- NATIONAL ACADEMY OF TELEVISION ARTS AND SCIENCES**, 7188 Sunset blvd., Los Angeles, Cal. (90046). Chicago Chapter — 203 N. Wabash ave. (60601). Columbus Chapter — Center of Science & Industry, 280 East Broad st. (43215). Hollywood Chapter — 7188 Sunset blvd. (90046). New York Chapter — 54 W. 40th st. (10018). Phoenix Chapter — 511 W. Adams St. (85003). St. Louis Chapter — 6996 Millbrook blvd. (63130). San Francisco Chapter — 311 California st. (94104). Seattle Chapter — 320 Aurora ave. N. (98109). Washington Chapter — 2120 Eye st. NW, Washington, D.C. (20006).

- NATIONAL ASSOCIATION FOR BETTER RADIO & TELEVISION (NAFBRAT)**, 373 N. Western ave., Los Angeles, Cal. (90004).
- NATIONAL ASSOCIATION FOR EDUCATIONAL TELEVISION**, 1640 Como ave., St. Paul, Minn. (55108).
- NATIONAL ASSOCIATION OF BROADCAST EMPLOYEES & TECHNICIANS (NABET)**, 80 E. Jackson blvd., Chicago, Ill. (60604).
- NATIONAL ASSOCIATION OF BROADCASTERS**, 1771 N. street, NW, Washington, D.C. (20036).
- NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS**, 1346 Conn. ave., NW, Washington, D.C. (20036).
- NATIONAL ASSOC. OF FM BROADCASTERS (NAFMB)**, 45 West 45th st., New York, N.Y. (10036).
- NATIONAL ASSOCIATION OF MUSIC MERCHANTS INC.**, 222 West Adams st., Chicago, Ill. (60606).
- NATIONAL ASSOCIATION OF TELEVISION & RADIO ANNOUNCERS (NARA)**, 850 7th ave., New York, N.Y. (10005).
- NATIONAL ASSOCIATION OF TELEVISION & RADIO FORM DIRECTORS (NATRFD)**, c/o WGY, Schenectady, N.Y.
- NATIONAL BROADCASTERS CLUB**, 1737 DeSales st., NW, Washington, D.C. (20036).
- THE NATIONAL CENTER FOR SCHOOL AND COLLEGE TELEVISION**, Indiana University, Bloomington, Indiana (47405).
- THE NATIONAL COMMISSION ON EDUCATIONAL TELEVISION**, 26 New street, Cambridge, Massachusetts (02138).
- THE NATIONAL COMMITTEE FOR THE FULL DEVELOPMENT OF THE INSTRUCTIONAL TELEVISION FIXED SERVICE**, Federal Communications Commission, Washington, D.C. (20554).
- NATIONAL COMMUNITY ANTENNA TELEVISION ASSOC. OF CANADA (NCATA)**, 1010 St. Catherine st., W, Suite 1004, Montreal, 2, P.Q.
- NATIONAL COMMUNITY TELEVISION ASSOCIATION INC.**, 535 Transportation Bldg., 17th & H sts. NW, Washington, D.C.
- NATIONAL COUNCIL ON EDUCATIONAL TELEVISION**, 1785 Mass. ave., N.W. Washington, D.C.
- NATIONAL EDUCATIONAL TELEVISION CENTER**, 10 Columbus Circle, New York, N.Y. (10019).
- OVERSEAS WRITERS**, National Press Bldg., Washington, D.C. (20004).
- RADIO ADVERTISING BUREAU**, 116 East 55th st., New York, N.Y. (10022).
- RADIO, NEWSREEL, TELEVISION WORKING PRESS ASSOCIATION**, Room 458, 527 Lexington ave., New York, N.Y. (10017).
- RADIO-TELEVISION NEWS DIRECTORS ASSOCIATION**, c/o Rob Downey, exec. secy., WKAR, Michigan State University, East Lansing, Mich.
- RADIO & TELEVISION CORRESPONDENTS ASSOCIATION** — Senate Radio-Television Gallery, U.S. Capitol, Washington 25, D.C.
- RADIO & TELEVISION DIRECTORS GUILD**, 114 E. 52nd st., New York, N.Y. (10022).
- SOCIETY OF BROADCAST ENGINEERS**, Box 1841, Annapolis, Md.
- SCREEN ACTORS GUILD (SAG)**, 7750 Sunset blvd., Hollywood, Cal. (90046).
Branch: 551 Fifth ave., New York, N.Y.
- SPORTS BROADCASTERS ASSOCIATION**, Box 223, Radio City Station, 322 W. 52nd st., New York 19, N.Y.
- TELEVISION BUREAU OF ADVERTISING**, 1 Rockefeller Plaza, New York, N.Y. (10020).
- TELEVISION EXECUTIVES SOCIETY INC.**, 7069 Hollywood blvd., Hollywood, Cal.
- TELEVISION INFORMATION OFFICE**, 666 5th ave., New York, N.Y. (10019).
- UNITED ELECTRICAL, RADIO & MACHINE WORKERS OF AMERICA (UE)**, 11 E. 51st st., New York, N.Y. (10022).
- U. S. OFFICE OF EDUCATION**, Media Dissemination Branch, 400 Maryland ave., S.W., Washington, D.C. (20202).
- WRITERS GUILD OF AMERICA (East)**, 1212 ave. of the Americas, New York, N.Y. (10036).
- WRITERS GUILD OF AMERICA (West)**, 8955 Beverly blvd., Los Angeles, Cal. (90048).

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Periodicals of Interest To Broadcasters

- ADVERTISING AGE**, 740 Rush st., Chicago, Ill. (60611). \$6 a year. Weekly. "The national newspaper of marketing."
- AUDIO**, 134 North 13th st., Philadelphia, Pa. (19107). \$5 a year, monthly. Everything that has to do with sound, including video-recording, electronic organs and electronic music. Thorough hi-fi coverage.
- AUDIO TIMES**, 156 East 52nd st., New York, N.Y. (10014). Twice monthly.
- BETTER BROADCASTS NEWS**, 423 N. Pinckney, Madison, Wis. (53703). 5 times annually.
- BILLBOARD**, 165 W. 46th St., New York, N.Y. (10036). Weekly.
- BM/E**, The Magazine of Broadcast Management/Engineering, 820 Second Ave., New York, N.Y. (10017). \$5.00 a year. A monthly publication circulated on a *controlled* basis to those persons in the broadcast field responsible for station operation and for specifying and authorizing the purpose of equipment used in broadcast facilities such as: Radio, Television, CATV Systems, networks, studios, and the like.
- BROADCASTING**, 1735 DeSales st., N.W. Washington, D.C. (20036). \$10.00 a year or \$21.50 including the yearbook. Weekly. A good source of news, ideas and information. Its news staff is the biggest in the business newsweekly field. Each week thousands of words are channeled from its bureaus into Washington headquarters, analyzed and evaluated, then printed in easy-to-read, non-technical terms. Every issue has a number of timely features — "how-to" articles; stories on successful broadcast advertising campaigns; by-lines by brains in the business; new ideas in merchandising, programming, promotion. The 600-page Yearbook, published every January, is a veritable encyclopedia — stations, networks, agencies, services — 1001 facts, including 51 separate directories.
- CANADIAN CINEMATOGRAPHY**, 2533 Gerrard St. East, Scarborough, Ont. Bimonthly.
- COMMUNICATIONS NEWS**, 402 West Liberty dr., Wheaton, Illinois (60187). \$3.50 a year. Monthly. "All that's new and newsworthy in voice, signal, and data communications."
- EDITOR & PUBLISHER**, 850 Third ave., New York, N.Y. (10022). Weekly.
- ELECTRONICS WORLD**, One Park avenue, New York, N.Y. (10016). \$6 per year. A monthly covering the latest innovations in electronics industries. Features special reports, book reviews, letters from readers, radio & TV news, new products and literature.
- HIGH FIDELITY**, Great Barrington, Mass. (01230). \$7 a year. Monthly. A magazine for music listeners and deejays.
- HIGH FIDELITY TRADE NEWS**, 25 West 45th st., New York, N.Y. (10036). Monthly.
- THE HOLLYWOOD REPORTER**, 6715 Sunset blvd., Hollywood, California (90028). Daily except Saturday. Deals with the latest in film, TV, and radio affairs.
- JOURNAL OF BROADCASTING**, University of Southern California, University Park, Los Angeles, California (90007). \$6

a year. \$3 student rate. Published quarterly by the Association for Professional Education. The only reference periodical in the United States devoted exclusively to all facets of broadcasting. It serves the common interests of broadcasters, teachers, researchers and students of broadcasting, integrating the classroom and the broadcasting industry. Regular departments on issues in broadcasting, communications law, media research, education for broadcasting, and broadcasting literature keep readers informed of current and past developments as well as issues confronting American and foreign broadcasters today.

THE JOURNAL OF THE SOCIETY OF BROADCAST ENGINEERS, Box 1841, Annapolis, Md.

MEDIA/SCOPE, 750 Third ave., New York, N.Y. (10017). Monthly.

MOTION PICTURE DAILY, including *Television Today*, 1270 Sixth ave., New York, N.Y. (10020).

NATIONAL RADIO-TELEVISION NEWS DIRECTORY, 527 Lexington ave., New York, N.Y. (10017). Annual.

NAB HIGHLIGHTS, 1771 N st., NW, Washington, D.C. (20036). National Association of Broadcasters, Public Relations Service. Weekly.

NAEB NEWSLETTER, 119 Gregory Hall, Urbana, Ill. (61803). Phone: 333-0580. National Assn. of Educational Broadcasters. Monthly.

NAEB JOURNAL, 119 Gregory Hall, Urbana, Ill. (61803). \$6.00 a year. Published bi-monthly by the National Association of Educational Broadcasters to provide for the exchange of ideas related to educational radio and TV. Contributions for possible publication are welcomed.

PRINTERS' INK, The Magazine of Advertising and Marketing management, 100 Garfield avenue, New London, Connecticut (06320). Semi-monthly — \$8 a year. Covering current trends, showing how radio and TV developments are intertwined into most American scenes.

RADIO-TELEVISION DAILY, 1501 Broadway, New York, N.Y. (10036).

RADIO & TELEVISION WEEKLY, 99 Hudson st., New York, N.Y. (10013).

SIGNAL, 1725 I st. NW, Washington, D.C. (20006). Monthly.

SPONSOR, Ojibway Building, Duluth, Minn. (55802). \$5 a year. Biweekly, combined with *TV, U.S. Radio and FM* to give complete coverage in the field of broadcast advertising.

TELECOMMUNICATIONS REPORTS, 1208-1216 National Press Building, Washington, D.C. (20004). \$125 a year. A weekly news service covering the telephone, telegraph, and radio communications fields since 1934.

TELEVISION, 444 Madison ave., New York, N.Y. (10022). \$5 a year. Published monthly, with emphasis on people, finance & special articles on the various phases of TV, including editorial opinion.

TELEVISION AGE, 1270 ave. of the Americas, New York, N.Y. (10020). Bi-weekly.

TELEVISION FACT BOOK, The authoritative Reference for the Advertising Television and Electronics Industry. Published by Television Digest, Inc. 2025 I street N.W., Washington, D.C. (20026). \$19.50. A 1418-page, seven-pound directory of American, Canadian, and Foreign TV stations, CATV systems, manufacturers, Broadcast attorneys, Labor unions, call-letters, TV associations, colleges and universities with TV, advertising agencies and public relations firms.

TELEVISION DIGEST, 2025 I street N.W., Suite 210, Washington, D.C. (20006). \$95 a year. Weekly. Comprehensive, departmentalized news and interpretation in digest form, covering basic television trends and developments.

TELEVISION INDEX, 150 Fifth ave., New York, N.Y. (10011). Weekly, monthly & annual.

TV GUIDE, Radnor, Pa. Murray 8-7400. Weekly.

TV & COMMUNICATIONS, The Professional Journal of the Cable Television Industry, 207 N.E. 38th, Oklahoma City, Oklahoma (73105). \$8 a year. Monthly. Circulated to individuals and firms dealing in products and services for community antenna television, CCTV and MICRO WAVE.

VARIETY, 154 West 46th street, New York, N.Y. (10036). \$15 a year. Weekly. The *bible* of the radio, television and entertainment fields.

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Suggested Reading

This chapter is more than the title implies. It is first a bibliography of the books consulted during the preparation of this *Encyclopedia*. Second, it is a list of books for those who would like to read further on any specific subject. Third, it is a list of recommendations. If the reader has a limited amount of time and wishes to read only those books that are especially well-written, or are especially informative, or are especially well-organized, he is referred to those labelled *recommended*.

The books are listed under chapter headings so the reader interested in certain phases of broadcasting can quickly find books devoted entirely to these specific subjects.

In each entry, first appears the surname of the author, then his first name, followed in italics by the title of the book. Then the name of the publisher and the year of publication, followed in some cases by a description of the contents and a brief comment. If it is an outstanding book for any reason, the word *recommended* appears at the end of the description and comment.

Many books — even good ones — remain in print (are available from the publisher) for only a few years after publication. Others, because of their popularity, are kept in print for years, or are frequently reissued in new editions. Most bookshops have a volume called *Books in Print, U.S.A.*, an annual. Out-of-print books can sometimes be found in second-hand bookshops or through book-searching organizations. (Ask your local bookshop.) Otherwise they must be borrowed from a public library.

Single copies of booklets published by the NAB and listed below are supplied free by the NAB.

Addresses of publishers (if still in business) are given at the end of this chapter.

Chapter 1: What Is Communication?

- BATCHELOR, JULIE FORSYTH: *Communication from Cave Writing to Television*. Harcourt, Brace. 1953. The history of transmitting ideas.
- HEAD, SIDNEY W.: *Broadcasting in America*. Houghton Mifflin. 1956. An excellent reference book on the fundamentals.
- NEAL, HARRY EDWARD: *Communication from Stone Age to Space Age*. Messner. 1960. A fascinating book exploring the whole story of man's endless search for better ways of communication, from his first attempts at speech to bouncing electronic signals off artificial satellites in Outer Space. Recommended.

Chapter 2: What Is a Broadcaster?

- ABBOTT, WALDO: *Handbook of Broadcasting*. McGraw-Hill. 1957. The fundamentals of radio and television explained in great detail by an asst. professor and the asst. manager of a university television station.
- GORHAM, MAURICE: *Training for Radio*. UNESCO. 1949. An excellent, 100-page pamphlet published by the U.N. Educational, Scientific and Cultural Organization on why broadcasters need professional training in all aspects of the broadcasting business. Recommended.

Chapter 3: This Is How It All Began

- DUNLAP, ORRIN E. JR.: *Communications in Space, from Wireless to Satellite Relay*. Harper & Row. 1964. The vice president of RCA and former radio-television editor of the *New York Times* gives as his purpose "to tell the epic story of communication through space."
- LANGDON-DAVIES, JOHN: *Radio: The Story of the Capture & Use of Radio Waves*. Dodd-Mead, 1935. Sub-Title: Valuable reading for anyone wishing to learn something about electricity and wireless waves, and the men who did the pioneering in these fields.
- LINK: *Tom-Tom to Electronics*. Link Radio Corporation, 1944. An historical pamphlet published during World War II by one of the largest mfgs. of radio equipment, giving a good thumbnail history of communications.

Chapter 4: Radio: The Young and Lusty Years

- BANNING, WILLIAM PECK: *Commercial Broadcasting Pioneer*. Howard Un. Press. 1946. The story of WEAf, the first commercial station, from 1922 to 1926.
- CHASE, FRANCIS: *Sound and Fury: An Informal History of Broadcasting*. Harper, 1942. An affectionate and intimate history of broadcasting and broadcasters through the early years.
- EICHBERG, ROBERT: *Radio Stars of Today, or Behind the Scenes in Broadcasting*. Page & Co. 1937. A 218-page book on the headline entertainers, announcers and news men in the early days of radio. Lively reading.

- FLOHERTY, JOHN JOSEPH: *Behind the Microphone*. Lippincott, 1944. Anecdotes about the early days of radio, sprinkled with many tips, most of them still valid, about how to succeed as a broadcaster.
- MCCLEERY, D.: *Radio-Today*. Oxford Press, 1961. Although published in London, this book contains an excellent history of radio and a technical explanation of how radio operates, in terms any layman can understand.
- MORRIS, LLOYD R.: *Not So Long Ago*. Random, 1949. Contains a well-indexed section on early radio days entitled: Listen to the Voices in the Upper Air.
- PROLE, WILLIAM A.: *The Inside Story of the Birth of Radio*. McKinney, 1933. A privately-printed, 14-page pamphlet by the self-styled "forgotten father of radio." A curiosity to be found in a few libraries.
- SCHECHTER, A. A. & ANTHONY, EDWARD: *I Live on Air*. Stokes, 1941. Colorful anecdotes of radio's early years, narrated interestingly by the undisputed pioneer in the field of radio news and special events. Illustrated. Recommended.
- SCHUBERT, PAUL: *The Electric Word: The Rise of Radio*. Macmillan, 1928. Although this book was published long ago, it tells an exciting story of the early days of radio.
- THOMAS, LOWELL: *Magic Dials: The Story of Radio and Television*. Polygraphic Co., 1939. One of radio's oldest and ablest newsmen tells the story of broadcasting from Franklin's kite to the start of World War II.

Chapter 5: Radio: The Mature Years

- BANNISTER, HARRY: *The Education of a Broadcaster*. Simon & Schuster, 1965. Damon Runyon type book of reminiscences by a former vice president of NBC.
- CHILDS, HARWOOD LAWRENCE, & WHITTON, JOHN B.: *Propaganda by Short Wave*. Princeton Un. Press, 1952. The story of radio's role in international affairs, starting with its use for espionage and intelligence in World War I, then the use Hitler made of it, with some good anecdotes about Lord Haw-Haw. Best chapter: Techniques of Persuasion. Recommended.
- COGLEY, JOHN: *Report on Blacklisting. Vol. 2 Radio-Television*. Fund for the Republic, 1956. An important book on thought-control in broadcasting.
- KALTENBORN, HANS: *Twenty Year Club of Pioneers*. Brief biographies of more than 100 of the earliest personalities in radio.
- LANDRY, ROBERT J.: *This Fascinating Radio Business*. Bobbs-Merrill, 1946. A popularized history and interpretation of the radio industry before the advent of television.
- MILLER, MERLE: *The Judges and the Judged*. Doubleday, 1952. A well-authenticated report to the American Civil Liberties Union on the attempted purge of American radio, television, stage and screen.
- SEVAREID, ERIC A.: *Small Sounds in the Night*. Knopf, 1956. Collection of his commentaries on the American scene, doing for American listeners and American radio history what Alistaire Cooke's book did for BBC.
- SLATE, SAM J. AND COOK, JOE: *It Sounds Impossible*. Macmillan, 1963. Up-to-date, breezy history of broadcasting, with emphasis on the anecdotal. Packed with good stories about big people in broadcasting. Perceptive chapter on radio's future. Highly recommended.

Chapter 6: Television, The Dream Come True

- BOGART, LEO: *The Age of Television*. Ungar. 1958. A study of the viewing habits and the impact of television on American life, with 94 tables on every aspect of television. Recommended.
- ELLIOTT, W. Y.: *Television's Impact on American Culture*. Mich. State Univ. Press. 1956.
- FLOHERTY, J. J.: *The Television Story*. Lippincott. 1951.
- GABLE, LUTHER: *The Miracle of Television*. Wilcox & Follet. 1949.
- GORHAM, MAURICE: *Broadcasting and Television Since 1900*. Andrew Dakers. 1952.
- HURRELL, RICHARD W.: *4000 Years of Television*. Putnam. 1942. Sub-titled The Story of Seeing at a Distance.
- ROTHA, PAUL: *Television in the Making*. Hastings House, 1956. Recommended.

Chapter 7: Broadcasting's Most Significant Hours

- SCHECHTER, A. A. & ANTHONY, EDWARD: *I Live on Air*. Stokes, 1941. Recommended.
- SLATE, SAM J. & COOK, JOE: *It Sounds Impossible*. Macmillan, 1963. Recommended.

Chapter 8: How Broadcasting Learned a Lesson

- CANTRIL HADLEY: *Invasion from Mars*. Princeton University Press. 1940. Sub-titled: A study in the psychology of panic, with complete script of the famous Orson Welles broadcast.

Chapter 9: Critics Amateur & Professional

- CROSBY, JOHN: *Out of the Blue*. Simon & Schuster. 1952. Selections from the author's syndicated columns on radio and television. Recommended.
- GROSS, BEN: *I Looked and I Listened*. Random. 1954. Hundreds of pages packed with brilliantly-written stories of radio and television, as seen through the eyes of America's pioneer broadcasting critic. Highly recommended.

Chapter 10: PRO = PA + PT

- ASPLEY, JOHN CAMERON: *The Sales Promotion Handbook*. Dartnell. 1953.
- CUTLIP, SCOTT M. & CENTER, ALLEN H.: *Effective Public Relations*. Prentice-Hall. 1952.
- GROSWOLD, GLENN: *Your Public Relations*. Funk & Wagnalls. 1948.
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- MINOW, NEWTON N.: *Equal Time*. Atheneum. 1964. The former FCC chairman discusses the private broadcaster and the public interest. Recommended.
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- CASSIRER, HENRY R.: *Television Teaching Today*. UNESCO-Columbia Univ. 1960.
- COSTELLO, LAWRENCE: *Teach with Television*. Hasting. 1961. A valuable book of do's and don't's for those interested in using television for instructional purposes. Recommended.
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HODAPP, WILLIAM: *The Television Actor's Manuel*. Appleton. 1955.

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GILMORE, ARTHUR WELLS & MIDDLETON, GLENN: *Radio Announcing*. Hollywood Radio Publishers. 1947. Out-of-date in some reports, but interesting reading for anyone in radio.

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HYDE, STUART: *Television and Radio Announcing*. Houghton Mifflin, 1959.

KAUFMAN, WILLIAM I.: *How to Announce for Radio & TV*. Hastings. 1956. Thirteen famous announcers give valuable tips on what to or not to do if you wish to be a success on the air. Highly recommended.

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BETTINGER, HOYLAND: *Television Techniques*. Harper. 1955.

CHESTER, GIRARD, and others: *Television and Radio*. Appleton. 1963. A vice president of NBC and two university speech professors have collaborated to write a 659-page book packed with practical broadcasting material — even how to reproduce the sound of a cricket. Recommended.

HYDE, STUART W.: *Television and Radio Announcing*. Houghton Mifflin. 1959.

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CHASE, STUART: *Power of Words*. Harcourt, Brace. 1954. This is basic reading for anyone interested in communication. Recommended.

HAYAKAWA, S. I.: *Language in Thought and Action*. Harcourt, Brace. 1964. An up-to-date edition of one of the most popular books on language. A stimulating guide to accurate thinking, reading, listening and writing. Highly recommended.

LEE, IRVING J.: *Language Habits in Human Affairs*. Harper. 1941. Contains some good practical advice about the use of words and language.

Chapter 20: Reporting the News

CBS NEWS: *Television News Reporting*. McGraw-Hill. 1958. A craftsman's handbook, written by craftsmen. It concerns itself with principles, standards and techniques. Recommended.

RIVERS, WILLIAM L.: *The Mass Media: Reporting, Writing, Editing*. Harper. 1964. An associate professor of communications at Stanford University has written a comprehensive, beautifully-organized and very readable book on reporting. Recommended.

SILLER, B. and others: *Television and Radio News*. Macmillan. 1960. Three top news men on radio and TV give practical hints on all aspects of broadcast news. Recommended.

WARREN, CARL: *Modern News Reporting*. Harper. Third edition 1959. Although written for newspaper reporters and rewrite men, this book contains many tips valuable for broadcast news men. Recommended.

WHITE, PAUL W.: *News on the Air*. Harcourt, Brace. 1947. A classic in the principles of broadcast news, by the man who established CBS as a leader in network news.

WILLETTE, LEO: *So You're Gonna Shoot Newscfilm*. WMSB-TV, East Lansing, Mich. 1960. Valuable for broadcasters who use cameras in their reporting.

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ASHLEY, PAUL P.: *Say It Safely*. University of Washington Press. 1956. Recommended for anyone writing news. It tells the limits to which the writer can go and yet remain safe from suit. Recommended.

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HAYAKAWA, S. I.: *Use and Misuse of Language*. Fawcett. 1962. This inexpensive paperback contains excellent chapters by 16 specialists in language, all edited by an internationally noted semanticist. Especially recommended are the chapters on: Can a Radio Commentator Talk Sense? and, The Process of News-Reporting.

HILLIARD, ROBERT: *Writing for TV and Radio*. Hastings. 1962. Recommended.

- KINGSON, WALTER and others: *Broadcasting Television and Radio*. Prentice-Hall. 1955. A thorough treatment not only of writing for radio, but of announcing techniques, broadcast speech, directing, audience measurement and educational TV.
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- CODDING, GEORGE A.: *Broadcasting Without Barriers*. UNESCO. 1959. From Russian doctors watching a heart operation on a dog over TV, to Gandhi praying by radio. An excellent report on how broadcasting leaps international barriers. Recommended.
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Chapter 27: Children on the Air: Danger or Delight

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- AGNEW, CLARK & O'BRIEN, NEIL: *Television Advertising*. McGraw-Hill. 1958.
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SCHAFFER, KERMIT: *Your Slip Is Showing*. Grayson. 1953. A collection of radio and television's most humorous boners, with a foreword by John Daly.

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CHASE, STUART: *Guides to Straight Thinking*. Harper. 1956.

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SEEHAFFER, E. F. & LAEMMAR, J. W.: *Successful Television and Radio Advertising*. McGraw-Hill. 1959. Despite the title, this book contains much valuable material on station management.

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HUBBELL, RICHARD W.: *Television Programming and Production*. Rinehart. 1950.

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BRINDZE, RUTH: *Not to Be Broadcast*. Vanguard. 1937. Sub-titled: The truth about radio.
This book discusses censorship by the networks and certain large local stations.

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LIPPMAN, WALTER: *Public Opinion*. Harcourt, Brace. 1922. Despite the publication date, this book is still the classic that it was declared to be at the time it first appeared. Recommended.

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SELDES, GEORGE: *The Facts Are*. In Fact. 1942. Sub-titled: A guide to falsehood and propaganda in press and radio. Discusses slanting.

Chapter 36: Editorializing

NAB: *Editorializing on the Air*. 2nd. Edition. NAB. 1965. Includes a definition of a broadcast editorial, a discussion of legal problems, and a guide to broadcasters who are planning to editorialize. Recommended.

RIVERS, WILLIAM L.: *The Mass Media: Reporting, Writing, Editing*. Harper. 1964. Chapter 9 contains many pages of good advice about writing editorials. While designed for men writing newspaper editorials, most of the tips can be applied, equally, to editorializing for radio.

Chapter 37: From Automation to Vice

KIMSEY, JAMES E.: *How to Conduct Religious Radio Programs*. Bethany. 1958.

LE BEL, C. J.: *How to Make Good Tape Recordings*. Audio Devices. Third Edition, 1963.
How tape recorders work; selecting a tape recorder; making a tape recording; recording a band or concert in stereo; putting together a tape recorded show. Recommended.

NAB: *Broadcasting and the Lottery Laws*. NAB. 1966. Fourth Edition. Information on questions of federal law and federal administrative regulations of broadcasting advertisements of lotteries.

- NAB: *Broadcasting Public Proceedings*. NAB. 1965. Technical suggestions for operating electronic equipment used in covering court trials and other public proceedings.
- NAB: *A Political Broadcast Catechism*. NAB. 1966. Fourth Edition. An explanation in question and answer form of FCC regulations and decisions on political broadcasts, with citations of specific sources of the decisions and excerpts from the Communications Act of 1934 and from the rules of the commission. Recommended.
- PARKER, EVERETT and others: *Religious Radio*. Harper. 1948.
- PARKER, EVERETT C. and others: *The Television-Radio Audience and Religion*. Harper. 1955. Director of CBS religious broadcasts writes about religious radio and TV programming. Recommended.

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- JOELS, MERRIN E.: *How to Get into Radio and Television*. Hastings. 1955.
- LERCH, JOHN H. (editor): *Careers in Broadcasting*. Appleton. 1962. Assistant professor of broadcasting at Boston University and 26 leaders of broadcasting, including a network president, a writer, a producer, a director, a station manager and a lighting engineer, discuss careers in broadcasting.
- LINDSLEY, CHARLES FREDERICK: *Radio and Television Communication*. McGraw-Hill, 1952. This book contains an especially good chapter, Radio as a Vocation, dealing with job opportunities and requirements on a small radio station. Recommended.
- RANSON, JO, AND PACK, RICHARD: *Opportunities on Radio*. Vocational Guidance Manuals. 1949.
- U.S. LABOR DEPARTMENT: *Employment Outlook in Radio and Television Broadcasting Occupations*. U.S. Govt. Printing Office. 1966.

Technical Books

- DOME, ROBERT B.: *Television Principles*. McGraw-Hill. 1951. Electrical consultant for General Electric explains the technicalities of television. Recommended only for those with a good mathematical background.
- FINNEGAN, PATRICK S.: *Planning the Local UHF-TV Station*. Hayden. 1965. The vice president and chief engineer of WLBC-AM/TV and WMUN-FM, Muncie, Indiana, covers everything from how to select a site to testing equipment before going on the air.
- HORNUNG, J. L.: *Radio Operating Questions and Answers*. McGraw-Hill. 1964. Thirteenth edition of a volume designed to help candidates pass examinations qualifying them for commercial radio operators licenses. A rich storehouse of valuable technical information. Recommended.
- KAUFMAN, MILTON: *Radio Operator's License Q. and A. Manual*. Rider. Sixth edition 1961.
- STERLING, GEORGE E., and MONROE, ROBERT B.: *Radio Manual*. A 890-page reference work for those entering the field of electronics and telecommunications. Highly technical. Well illustrated.
- WALKER, A. PROSE AND OTHERS: *NAB Engineering Handbook*. McGraw-Hill, 1960. Hundreds of pages of technical material. Written by 49 experts. Recommended.

Directories and Dictionaries

- ANONYMOUS: *Dictionary of Electronic Communication Terms*. Sams. 1963. A 157-page unique presentation of 2,500 terms relating to the communication field. Recommended for everyone interested in the technical aspects of telecommunications.
- BENDER, JAMES FREDERICK: *NBC Handbook of Pronunciation*. Crowell. Third edition 1964. First published in 1943 and several times updated since then, this volume containing 20,000 words is an invaluable guide to the perennial question: How do I pronounce it?
- BURTON, PAULU: *A Radio and Television Bibliography*. Nat. Assoc. of Ed. Broadcasters. 1952. A partial list of the books and magazine articles on the non-technical aspects of broadcasting. Valuable for the serious reader.
- CBS: *Radio Alphabet*. Hastings. 1946. An 85-page booklet only slightly out of date, giving hundreds of technical radio and television terms.
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- GORDER, L. O.: *A Dictionary of Radio Terms*. Allied Radio. Concise definitions of commonly used words in radio, electronics and television.
- HARWOOD, KENNETH: *World Bibliography of Selected Periodicals on Broadcasting*. Journal of the University of Southern California. 1961.
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- KENYON, JOHN S.: *Pronouncing Dictionary of American English*. Merriam. 1953.
- LEWIS, LEONARD: *Radio Dictionary*. Dahls. 1938. A small, 50-cent pamphlet published many years ago but still valuable.
- UNESCO: *Professional Associations in the Mass Media*. UNESCO. 1959. Handbook of press, film, radio and television organizations throughout the world.
- U.S. GOVT.: *Broadcasting Stations of the World*. U.S. Govt. Printing Office. 1961. A complete list of all the radio and television stations in the world (except in the U.S.A.) listed by city and country, with call letters, power, wave length and frequency. Also includes a world time chart.
- Who's Who In TV & Radio*. Dell, 1960. A periodical listing 600 stars of broadcasting, with brief biographies.

Miscellaneous

- CREAMER, JOSEPH & HOFFMAN, WILLIAM B.: *Radio Sound Effects*. Ziff-Davis. 1945. A manual for broadcasting stations, sound effects engineers and all others who use or are interested in modern sound effects techniques.
- KLAPPER, JOSEPH T.: *The Effects of Mass Communication*. Free Press. A 257-page study of the impact of television, radio, comic books and newspapers on the minds of young and old; effects of crime and violence in the media; how children are effected by adult programming; the extent to which the media shape attitudes and opinions or create apathy and passivity.
- PACKARD, VANCE OAKLEY: *The Hidden Persuaders*. McKay. 1957. Present and future broadcasters can learn the power of the medium in which they work.

- PICKETT, A. G.: *Preservation and Storage of Sound Recordings*. U.S. Govt. Printing Office. 1957.
- SCHRAMM, WILBER, editor: *Mass Communications*. Univ. of Illinois. 1960. Fifty experts in various fields of communications discuss in a large and important book such provocative subjects as popular taste, patterns of mass culture, who is responsible for quality, daytime serials, freedom and restraint, social control in the news room, the growth of literacy in America, how a television commercial is made. Recommended.
- SETTEL, I. editor: *How to Write Television Comedy*. Writer. 1958. Ten professional TV writers explain how to make people laugh; how to write gags, jokes, situation comedy and dramatic comedy; how to sell TV scripts. Also five sample scripts. Up-to-date. Recommended.
- TURNBULL, ROBERT B.: *Radio and Television Sound Effects*. Rinehart. 1951. Covers every type of manual and recorded sound effect found in the field. Discusses their psychological aspects, uses and history, with examples. Recommended.
- WYLIE, MAX: *Clear Channels*. Funk & Wagnalls. 1955. A 394-page, well-documented, smartly-written reply to the critics of American television, especially in the fields of juvenile delinquency, culture and public health.

Addresses of Publishers

- AMERICAN COUNCIL ON EDUCATION, 1785 Massachusetts avenue, NW., Washington, D.C. 20036.
- APPLETON-CENTURY-CROFTS, 440 Park avenue, S., New York, N.Y. 10010.
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46.

*Pronunciation Guide***DIACRITICAL MARKINGS****A.**

ā	āle
â	châ-ot'-ic
â	câre
ă	ădd
ä	ärm
á	ásk
a	ac-count'

E.

ē	ēve
ê	ê-vent'
ě	ěnd
e	si-lent
ē	mak-ēr
ēē	kēēp

I.

ī	ice
ī	ill
ı	char-ı-ty

O.

ō	ōld
ô	ô-bey'
ô	ôrb
ö	ödd
o	con-nect
ōō	fōōd
ou	owl
ö	fööt

U.

ū	cūbe
û	û-nite'
û	ûrn
Û	Ûp
u	cir'-cus
tû	na'-tûre

WORDS FREQUENTLY MISPRONOUNCED

ABSORB	[ab-sôrb']	To soak up, to take in.
ABSORPTION	[ab-sôrp'-shun]	Entire engrossment of the mind.
ACCLIMATE	[a-kli'-mit]	To habituate to a climate not native.
ADDICT (n)	[ăd'-ikt]	One habitually inclined to take drugs.
ADEPT (n)	[ăd'-ept]	One who is skilled.
ADEPT	[ă-dêpt']	Thoroughly proficient.
AD INFINITUM	[ăd in-fī-nī'-tum]	Without limit.
ADJECTIVE	[ăj'-ĕk-tiv]	A word used with a noun to define the quality of the thing named.
ADULT	[a-dŭlt']	Matured, full-grown.
AESTHETIC	[ĕs-thĕt'-ik]	Having to do with the beautiful as distinguished from the useful, scientific, etc.
AGENDA	[a-jĕn'-da]	Things to be done.
AGRICULTURE	[ăg'-rī-kŭl-tŭr]	Farming; the raising of crops and livestock.
ALIAS	[ă-lĕ-as]	Otherwise called; an assumed name.
ALMOND	[ă'-mund]	The nutlike fruit of a tree which resembles the peach tree in flowers.
ALUMINUM	[a-lŭ'-mī-nŭm]	A silver-white, very light, ductile metal that resists tarnish.
AMATEUR	[ăm'-a-tŭr]	One who cultivates a particular pursuit from taste, not professionally.
AMBIGUITY	[ăm-bī-gŭ'-i-tĕ]	A statement with a possibility of two or more meanings.
AMENABLE	[a-mĕ'-nā-b'l]	Readily brought to yield or submit; tractable; answerable.
AMNESTY	[ăm'-nĕs-tĕ]	An act of sovereign power granting oblivion, or a general pardon, for a past offense.
AMORTIZATION	[ăm-ĕr-tī-zā'-shun]	Act or process of setting aside money regularly for future payment of a debt.
ANECDOTE	[ăn'-ĕk-dŏt]	A brief narrative; a short story.
ANTIDOTE	[ăn'-tī-dŏt]	A remedy to counteract the effects of poison.
ANTITHESIS	[ăn-tīth'-ĕ-sīs]	The direct opposite.
APERITIF	[ă-pā-rĕ-tĕf']	An alcoholic beverage.
APPARATUS	[ăp-a-rā'-tus]	Materials, implements, etc. for a given work; any complex instrument or appliance.
APPLICABLE	[ăp'-lī-ka-b'l]	Fit or suitable.
ARCHIVES	[ăr'-kivz]	A place for keeping public records.
ARCTIC	[ărk'-tik]	Polar or frigid.
ARDUOUS	[ăr'-dŭ-us]	Difficult or laborious.

ASCERTAIN	[äs-ēr-tān']	To learn for a certainty.
ASPIRANT	[as-pīr'-ant]	One who wishes to attain something high.
ASPIRIN	[äs'-pi-rīn]	Medicinally treated pill.
ASSAY	[a-sā']	To try; attempt; test.
ASSOCIATION	[a-sō-shē-ā'-shun]	Confederation, fellowship.
ASSUAGE	[a-swāj']	To ease; to satisfy; to quench.
ATMOSPHERIC	[ăt-mos-fēr'-ĭk]	Pertaining to the gaseous envelope.
ATROPHY	[ăt'-trō-fē]	A wasting away, or lack of growth, from want of nourishment.
ATTACHE	[ăt-a-shā']	A member of a suite or staff; specifically, of the diplomatic staff of an ambassador or minister.
ATTRIBUTE (n)	[ăt'-ri-būt]	That which is imputed as a quality inherent in a person or thing; characteristic.
ATTRIBUTE (v)	[a-trib'-ūt]	To ascribe, impute, or change.
AUTOCRACY	[ô-tök'-ra-sē]	Independent or self-derived powers; supreme government by one person.
AUTOPSY	[ô'-tōp-sē]	Inspection, and partial dissection, of a dead body to learn the cause of death; post mortem examination.
AUXILIARY	[ôg-zīl'-ya-rē]	Subsidiary; secondary; accessory; co-operating.
AVERSION	[a-vūr'-zhun]	Dislike, repugnance; hostility.
AVIATION	[ā-vē-ā'-shun]	Art or science of navigating aircraft.
AVOIRDUPOIS	[äv-ēr-du-poiz']	Colloq: Weight, heaviness.
BADE	[bād]	(past tense of bid). Ordered or commanded; expressed or uttered, as a wish or greeting.
BAYOU	[bī'-ōō]	A creek, secondary watercourse, or minor river, tributary to another river or other body of water.
BECAUSE	[bē-kōz']	For the reason that, since.
BEIGE	[bāzh]	Pale brown, the natural color of unbleached wool or cotton.
BELOVED (adj.)	[bē-lūv'-ēd]	Dearly loved, dear to the heart.
BENEFICIARY	[bēn-ē-fīsh'-ĭ-ēr-ē]	Person who receives something such as a gift or an income from an insurance policy.
BIZARRE	[bĭ-zār']	Involving sensational contrasts or striking incongruities.
BLASE	[blā-zā']	Insensible to pleasure because of excessive indulgence, surfeited.
BLATANT	[blā'-tant]	Brawling, clamorous, noisy; offensively obtrusive, coarse.
BOLOGNA	[bô-lō'-nē]	A large sausage made of beef, veal and pork.
BOUDOIR	[bōō'-dwār]	A small private room, especially one belonging to a lady.

- BOUQUET [bōō-kā'] A bunch of flowers, a nosegay; the distinctive aroma of wine; hence any aroma.
- BOURGEOIS [bōōr-zhwā'] Engrossed in material matters; hidebound; conservative.
- BOURGEOISIE [bōōr-zhwā-zē'] Middle class group having bourgeois characteristics.
- BRAVADO [bra-vā'-dō] Expression or action simulating bravery.
- BRIGAND [brīg'-and] A lawless fellow who lives by plunder.
- BROOCH [brōch] An ornamental pin having the point secured by a catch.
- CACHE [kāsh] A hole in the ground, a hiding place, that which is hidden in a cache. (v) to hide.
- CAMOUFLAGE [kām'-ōō-flāzh] Any disguise or deceptive expedient.
- CANAPE [kän'-a-pā] An appetizer.
- CANDIDATE [kän'-di-dāt] Person who seeks, or is proposed for, some office or honor.
- CAPITULATE [ka-pīt'-û-lāt] To surrender on conditions agreed upon. To make terms of surrender.
- CARAMEL [kār'-a-mel] Burnt sugar used for coloring and flavoring. A small block of chewy candy.
- CARTON [kār'-ton] A lightweight box of pasteboard or the like.
- CARTOON [kār-tōōn'] A large pictorial sketch, a pictorial caricature; a comic strip.
- CELLIST [chēl'-ist] One who plays the cello.
- CELLO [chēl'-ō] An instrument like a violin, only very much larger; a bass instrument of the viol class.
- CEREBRAL [sēr'-ē-bral] Relating to the cerebrum or brain.
- CHAISE LONGUE [shāz lông'] A long, reclining chair.
- CHAMELEON [ka-mē'-lē-un] Lizard which changes color of the skin according to its mood.
- CHAUFFEUR [shō'-fûr] A hired automobile driver.
- CHIROPDIST [kī-rōp'-ō-dīst] One who treats troubles of the feet.
- CHIROPRACTOR [kī'-rō-prāk-tēr] One who treats diseases by manipulating the spine.
- CLANDESTINE [klän-dēs'-tīn] Conducted with secrecy for an illicit purpose; stealthy, sly, furtive, mysterious.
- CLIMACTIC [klī-māk'-tīk] Pertaining to a climax, the highest point, culmination, or acme.
- CLIQUE [klēk] A small, exclusive set or coterie of persons.
- COGNAC [kō'-nyāk] A type of French brandy.
- COGNIZANT [kōg'-nī-zant] Aware; having understanding of some subject.

COLLATERAL	[ko-lăt'-ēr-al]	Security for a loan.
COLLOQUIAL	[ko-lō'-kwê-al]	Pertaining to or used in conversation but unsuited to formal speech or writing; conversational; familiar; informal.
COLUMNIST	[köl'-um-níst]	Journalist who comments on people, events, etc., in a special column in a newspaper.
COMA	[kō'-ma]	A state of profound insensibility.
COMBATANT	[kōm'-ba-tant]	A fighter; person taking part in active fighting.
COMELY	[kūm'-lē]	Pleasing or agreeable to the sight; attractive.
COMFORTABLE	[kūm'-fěrt-a-b'ł]	Free from pain or trouble; at ease, contented.
COMMUNICATIVE	[ko-mū'-ni-kā-tīv]	Ready to give information; talkative.
COMMUNIQUE	[ko-mū-ni-kā']	An official message or communication.
COMPENSATORY	[kom-pěn'-sa-tō-rē]	Making amends; making up for a loss.
COMPLEX (n)	[kōm'-plěks]	A whole made up of complicated parts; an exaggerated fear.
COMPLEX (adj.)	[kōm-plěks']	Complicated; intricate; not simple.
COMPOUND (n)	[kōm'-pound]	Something formed by the union or mixture of elements or parts.
COMPOUND (v)	[kōm-pound']	To put together to form a whole; to combine.
COMPROLLER	[kon-trōl'-ēr]	An officer appointed to check expenditures.
CONCEPT	[kōn'-sěpt]	A thought; an idea; a mental picture.
CONCERTO	[kon-cher'-tō]	A musical composition.
CONCILIATORY	[kon-síl'-ē-a-tō-rē]	Tending to gain good will by pleasing acts.
CONDOLENCE	[kon-dō'-lens]	Expression of sympathy with another in sorrow.
CONFLAGRATION	[kōn-fla-grā'-shun]	A large or extensive fire.
CONGRATULATIONS	[kon-grā-tŭ-lā'-shunz]	Expression of pleasure at another's happiness or good fortune.
CONNOISSEUR	[kōn-ī-sūr']	A person who is a good judge of art or in matters of taste.
CONSENSUS	[kon-sěn'-sus]	Agreement in matters of opinion testimony, etc; accord. The convergent trend, as of opinion.
CONSOMME	[kōn-so-mā']	A light colored, clear soup.
COUP	[kōō]	An unexpected and successful stroke.
CRESCENDO	[kre-shěn'-do]	Gradually increasing in loudness.

CUISINE	[kwê-zên']	Style of cooking or preparing food.
DACHSHUND	[däks'-hōont]	Small German dog.
DECOLLETE	[dā-kôl-tā']	Leaving the neck and shoulders uncovered.
DECOR	[dā-kôr']	That which decorates.
DEMITASSE	[dēm'-ē-tās]	Small cup for black coffee.
DESPICABLE	[dēs'-pī-ka-b'l]	Contemptible; fit or deserving to be despised.
DEVOTEE	[dēv-ô-tē']	One zealously devoted to something.
DIPHTHERIA	[dif-thēr'-ē-a]	Infectuous disease of throat.
DIPHTHONG	[dīf'-thong]	A vowel sound made up of two vowels sounded as one.
DISHEVEL	[dī-shēv'-el]	To let fall in disorder.
ECCENTRIC	[ĕk-sĕn'-trik]	Irregular or odd. A person who is considered unusual or odd.
EFFERVESCENT	[ĕf-ēr-vĕs'-ent]	Bubbling, hissing or foaming.
EFFICACIOUS	[ĕf-i-kā'-shus]	Having the power to produce an intended effect.
EFFICACY	[ĕf'-i-ka-sē]	Power to produce effects. Effectiveness, force.
ELIXIR	[ĕ-līk'-sēr]	A cure-all or panacea.
EMACIATE	[ĕ-mā'-shĕ-āt]	To cause to lose flesh so as to become very thin.
EMIGRANT	[ĕm'-i-grant]	One who departs from a country to settle permanently elsewhere.
EMINENT	[ĕm'-i-nent]	High; lofty; notable.
ENGINE	[ĕn'-jin]	A machine that applies power to some work, especially a machine that can start others moving.
EN MASSE	[än mäs']	In mass.
ENNUI	[än'-wē]	A feeling of weariness and dissatisfaction; tedium, boredom.
EN ROUTE	[än rōōt']	On or along the way.
ENTOURAGE	[än-tōō-rāzh']	Surroundings; specifically, a person's attendants or associates.
ENVELOPE	[ĕn'-ve-lōp]	A piece of folded, gummed paper.
ENVIRONMENT	[ĕn-vī'-run-ment]	Surroundings.
EPITHET	[ĕp'-i-thĕt]	An uncomplimentary name or nickname; a contemptuous term.
EPITOME	[ĕ-pīt'-ō-mĕ]	A brief statement of the content of a topic or work.
EQUITABLE	[ĕk'-wī-ta-b'l]	Reasonable, right. Honest, upright. Impartial, just.
ERA	[ĕ'-ra] or [ēr'-a]	A fixed point of time reckoned from some particular date. An epoch.

ESPIONAGE	[ɛs'-pê-ô-năzh]	Spying.
EXCESS	[ɛk-sɛs']	State of going beyond limits of sufficiency or necessity.
EXORBITANT	[ɛg-zôr'-bi-tant]	Going beyond the established limits of right or propriety; excessive.
EXTRADITE	[ɛks'-tra-dit]	To deliver up to a foreign jurisdiction.
FACADE	[fa-săd']	The side of a building facing the street.
FACIAL	[fă'-shal]	Pertaining to the face.
FACSIMILE	[fak-sim'-i-lê]	An exact copy or likeness.
FAMILY	[fam'-i-lê]	The body of persons who live in one house, under one roof.
FASCISM	[făsh'-iz'm]	Any strongly centralized autocratic national regime with severely nationalistic policies.
FASCIST	[făsh'-ist]	Pertaining to the Fascisti.
FASCISTI	[fă-shê'-stê]	Members of an Italian political organization.
FASTIDIOUS	[făs-tid'-ê-us]	Difficult to please. Delicate to a fault; squeamish.
FAUX PAS	[fô-pă']	An offense against social convention.
FEBRUARY	[fêb'-rôo-êr-ê]	The second month of the year.
FEDERAL	[fêd'-êr-al]	Pertaining to a league or treaty; a union between states.
FETE	[fât]	A festival; especially, an outdoor entertainment on a lavish scale. To feast; to honor or commemorate.
FIANCE	[fê-ăn'-să]	A male betrothed person.
FIANCEE	[fê-ăn'-să]	A female betrothed person.
FIASCO	[fê-ăs'-kô]	A crash. A complete ridiculous failure.
FINANCIER	[fin-an-sêr']	An investor on a large scale.
FLAGRANT	[flă'-grant]	Flaming into notice. Conspicuously bad.
FOLIAGE	[fô'-lê-ij]	Collectively, the mass of leafage of a plant as produced in nature.
FOMENT	[fô-mênt']	To rouse; to instigate.
FORMIDABLE	[fôr'-mi-da-b'l]	Exciting fear or dread. Alarming or menacing.
FOUNDER (v)	[foun'-dêr]	To fall helplessly; to stumble.
FOYER	[foi'-êr]	Entrance hall.
FRACAS	[fră'-kas]	An uproar; brawl.
FRAGILE	[frăj'-il]	Easily broken.
FRICASSEE	[fri-k-a-sê']	Meat cut up, stewed in a sauce.
FUTILE	[fû'-tîl]	Vain or ineffectual.
GALA	[gă'-la]	Pertaining to or attended by festivities.
GARAGE	[ga-răzh']	Building to house automobiles.

- GARNISHEE** [gär-nish-ē'] To attach the salary or other income in satisfaction of a debt.
- GENUINE** [jĕn'-ū-in] Actually belonging to the reputed origin or author; authentic. Of or pertaining to the original stock or source.
- GEOLOGIC** [jĕ-ō-lōj'-ik] Pertaining to the science which treats of the history of the earth.
- GESTICULATE** [jĕs-tik'-ū-lāt] To make gestures, especially when speaking.
- GIBBERISH** [jĭb'-ēr-ĭsh] Senseless chatter.
- GIGANTIC** [jĭ-gän'-tik] Huge.
- GIST** [jĭst] The pith of a matter.
- GOSSAMER** [gös'-a-mĕr] Any gauzelike fabric.
- GOURMAND** [gōōr-män' (nasal)] A greedy eater.
- GOURMET** [gōōr-mā'] A connoisseur in eating and drinking.
- GOVERNMENT** [gŭv'-ĕrn-ment] Exercise of administrative powers.
- GRANDEUR** [grän'-dŭr] Greatness, immensity, vastness; majestic, augustness.
- GRATUITOUS** [gra-tŭ'-i-tus] Given freely without recompense.
- GREGARIOUS** [grĕ-gâr'-ĕ-us] A personable, lovable, aggressive individual.
- GRIEVANCE** [grĕv'-ans] A wrong; an injustice. A cause of uneasiness and complaint.
- GRIMACE (n)** [grĭ-mās'] A distortion of the countenance.
- GUARANTEE** [gär-an-tĕ'] That given or held as security. To warrant. To give security.
- GUBERNATORIAL** [gŭ-bĕr-na-tō'-rĭ-al] Pertaining to a governor.
- GUILFUL** [gĭl'-fōōl] Characterized by deceitful cunning.
- GYROSCOPE** [jĭ'-rō-scōp] A wheel or disk mounted to spin about an axis.
- HANDKERCHIEF** [häng'-kĕr-chĭf] A small piece of cloth.
- HEARTH** [härth] The floor of a fireplace.
- HEIRESS** [âr'-ĕs] A female who inherits.
- HEROINE** [hĕr'-ō-in] The principal female person figuring as the main subject of a poem, story or the like.
- HEROISM** [hĕr'-ō-ĭz'm] Act of courage.
- HICCUP or HICCOUGH** [hĭk'-ŭp] Spasmodic closure of the glottis.
- HORIZON** [hō-rĭ'-z'n] The apparent junction of earth and sky. Figuratively, range of perception or experience.
- HORS D'OEUVRES** [ôr-dŭ'-vr'] Appetizer.
- HOUSED** [houz'd] Covered, enclosed, or sheltered.
- HUMBLE** [hŭm'-b'l] Not proud or assertive. Lowly, not pretentious; unassuming.

HURRICANE	[hûr'-î-kân]	A tropical storm.
HYPOCHONDRIAC	[hî-pô-kôn'-drê-âk]	A person affected with morbid anxiety as to one's own health with conjuring up of imaginary ailments.
IDEOLOGY	[îd-ê-ôl'-ô-jê]	Manner or content of thinking characteristic of an individual or class.
IMMINENT	[îm'-i-nent]	Threatening to occur immediately.
IMPASSE	[îm'-pâs]	A blind alley.
IMPETUOUS	[îm-pêt'-û-us]	Rushing with force or violence. Impulsive or vehement in action or feeling. Hastily or rashly energetic.
IMPETUS	[îm'-pê-tus]	Impulse, incentive.
IMPIETY	[îm-pî'-e-tê]	Irreverence. Ungodliness.
IMPLACABLE	[îm-plâ'-ka-b'1]	Not disposed to forgive; inexorable.
IMPOVERISH	[îm-pôv'-êr-ish]	To make poor; reduce to poverty.
IMPUGN	[îm-pûn']	To call in question; to oppose as false.
INADVERTENTLY	[în-âd-vûr'-tent-lê]	Heedlessly; inattentively.
INCENDIARY	[în-sên'-dê-êr-ê]	Pertaining to missiles containing chemicals which ignite at the bursting of a shell.
INCOGNITO	[în-kôg'-nê-tô]	With one's identity concealed.
INCOMMUNICADO	[în-ko-mû-nî-kâ'-dô]	Without means of communication. In solitary confinement.
INCOMPARABLE	[în-kôm'-pa-ra-b'1]	Without peer or equal; matchless.
INCUMBENT	[în-kûm'-bênt]	Imposed as a duty or obligation. (adj.) One holding a benefice or office. (n)
INDEFATIGABLE	[în-dê-fât'-i-ga-b'1]	Untiring, tireless.
INDEMNITY	[în-dêm'-ni-tê]	Immunity from past offenses; amnesty. Protection or exemption from loss or damage, past or to come.
INEXPLICABLE	[în-êks'-plî-ka-b'1]	Incapable of being explained. Incapable of being interpreted or accounted for.
INFAMOUS	[în'-fa-mus]	Nefarious, odious, detestable. Scandalous to the last degree. Of very bad report.
INGENIOUS	[în-jên'-yus]	Shrewd or resourceful. Curiously or cleverly fashioned. Proceeding from or characterized by cleverness.
INGENUOUS	[în-jên'-û-us]	Of a superior character; noble. Free from reserve, disguise, or dissimulation. Artlessly frank, candid.
INHALATOR	[în'-ha-lâ-têr]	A device to assist in breathing.
INIMITABLE	[în-îm'-i-ta-b'1]	Not capable of being imitated. Matchless.
INQUIRY	[în-kwîr'-ê]	A search for truth, information or knowledge. A seeking for information by asking questions. Research, investigation.

INSATIABLE	[in-sā'-sha-b'1]	Incapable of being satisfied or appeased.
INTEGRAL	[in'-tê-grul]	Essential to completeness. Composite; entire.
INTELLIGENTSIA	[in-têl-i-jënt'-sê-a]	The educated class.
INTERIM	[in'-têr-îm]	The meantime. Time intervening; interval.
INTERLOCUTOR	[in-têr-lök'-û-têr]	A talker, interpreter, or questioner.
INTRICACIES	[in'-tri-ka-sêz]	Complexities, entanglements.
INVETERATE	[in-vêt'-êr-ît]	Firmly established by age; deep-rooted, ineradicable. Confirmed in a habit; habitual.
IRRELEVANT	[ir-rêl'-ê-vant]	Not applicable or pertinent. Extraneous, not pertinent.
ITINERARY	[i-tîn'-êr-êr-ê]	Pertaining to a route, or journeying, or roads.
JEWELRY	[jöö'-el-rê]	Personal ornaments set with jewels.
JOCULAR	[jök'-û-lêr]	Sportive, merry, given or disposed to jesting.
JUDICIARY	[jöö-dîsh'-ê-êr-ê]	
KAPOK	[kâ-pök]	A silky down which is used for stuffing pillows.
KILL	[kîl]	To slay.
LACKADAISICAL	[lâk-a-dâ'-zî-kal]	Affectedly languid, listless.
LAMENTABLE	[lâm-en-ta-b'1]	Mournful, expressing grief. Sorrowful.
LARYNX	[lâr'-îngks]	The modified upper part of the trachea.
LEGIBLY	[lêj'-i-b'lê]	Plainly or clearly.
LEGISLATOR	[lêj'-îs-lâ-têr]	A lawgiver.
LEGUMES	[lêg'-ûmz]	Seeds of a plant.
LETHAL	[lê'-thal]	Deadly, fatal. Of or relating to death.
LIAISON	[lê-â-zôn']	A bond or connecting link.
LIBRARY	[li'-brêr-ê]	A building devoted to books.
LICORICE	[lik'-ô-rîs]	Dried root of a European plant.
LITERATURE	[lit'-êr-a-tûr]	Literary productions.
LONGEVITY	[lôn-jêv'-i-tê]	Length of life.
LONG-LIVED	[lông'-lîvd']	
LOQUACIOUS	[lô-kwâ'-shus]	Given to talking.
MACHINATION	[mâk-i-nâ'-shun]	Scheme. Trick. Plot.
MAGNATE	[mâg'-nât]	A person of rank or distinction.
MANIACAL	[ma-nî'-a-kal]	Affected with, or characterized by madness.
MANUFACTURER	[mân-û-fâk'-tûr-êr]	
MARQUEE	[mâr-kê']	A rooflike shelter over an entrance.
MARQUESS	[mâr-kwêš']	Nobleman of hereditary rank.
MARQUSETTE	[mâr-kî-zêt']	A sheer light silk fabric used for dresses.
MAYORALTY	[mâ'-êr-al-tê]	Office or term of office of the mayor.
MEDICINAL	[mê-dîs'-i-nal]	Curative or alleviative.

MAYORALTY	[mā'-ēr-al-tē]	Office or term of office of the mayor.
MEDICINAL	[mē-dīs'-i-nāl]	Curative or alleviative.
MELEE	[mā-lā']	An affray. A fight between combatants mingled in a confused mass.
MEMOIRS	[mēm'-wärz]	An account of one's life, or of episodes in it, written by yourself.
METEOROLOGIST	[mē-tê-ēr-öl'-ö-jist]	One who specializes in the branch of physics treating of the atmosphere and its phenomena.
METICULOUS	[mê-tik'-û-lus]	Unduly or excessively careful of small details.
MILK	[milk]	To drain, to exploit.
MINIATURE	[mīn'-ē-a-tûr]	Any very small painting, especially a portrait done on ivory. A representation on a much reduced scale.
MIRRORED	[mīr'-ērd]	Reflected.
MISCHIEVOUS	[mīs'-chi-vus]	Causing or inclined to cause petty injury, trouble, or annoyance to others. Naughty, impish.
MORALE	[mô-râl']	Mental state, as of an army.
MORASS	[mô-räs']	A marsh, a swamp.
MULCT	[mülkt]	To deprive of, as by deceit.
MUSKMELON	[müsk'-mël-un]	A sweet, edible melon.
MUTUAL	[mü'-tû-al]	Reciprocally given and received.
MYRIAD	[mīr'-ē-äd]	An indefinitely large number.
NAIVE	[nä-ēv']	Untaught, unsophisticated. Ingenuous, artless. Having unaffected simplicity.
NAPE	[nāp]	The back portion of the neck.
NEGOTIATION	[nê-gō-shê-ä'-shün]	A parley or conference regarding terms.
NEGRO	[nê'-grō]	A person of Negro ancestry.
NICHE	[nich]	A place, condition or the like, suitable to a person or thing.
NUPTIAL	[nüp'-shal]	Of or pertaining to marriage or the wedding ceremony.
OBEISANCE	[ô-bä'-sans]	A bow, curtsy or other genuflection, in token of respect. Deference, homage.
OBSTREPEROUS	[ob-strêp'-ēr-us]	Clamorous, noisy.
OFTEN	[of'-en]	
OMINOUSLY	[öm'-i-nus-lē]	Portentously, inauspiciously.
ORCHESTRAL	[ôr-kēs'-tral]	Pertaining to an orchestra.
ORGANIZATION	[ôr-gan-ī-zä'-shun]	An association, society, business.
OSTENSIBLE	[ös-tên'-si-b'l]	Apparent, plausible. Avowed, professed.
PALATE	[päl'-it]	The roof of the mouth.

PALETTE	[päl'-ět]	A thin board or tablet with a thumb hole at one end, used by painters to lay and mix colors on. The range of colors used by a particular artist.
PALLIATIVE	[päl'-ē-a-tív]	Serving to ease without curing.
PANACEA	[pän-a-sē'-a]	A remedy for all diseases.
PANTOMIME	[pän'-tō-mīm]	The use of body or facial movements to convey meaning.
PARTICULAR	[pēr-tík'-ù-lēr]	Noteworthy, special.
PASTEL	[päs-tél']	Any of various pale colors of very high brilliance and low or medium saturation.
PASTEURIZATION	[päs-tēr-i-zä'-shun]	The partial sterilization of a fluid at a temperature which destroys certain pathogenic organisms and undesirable bacteria.
PASTORAL	[päs'-tō-ral]	A rural picture or scene.
PATHOS	[pā'-thōs]	That quality of human or animal experience or of its representation in art which awakens feelings of pity, sympathy and tender sorrow.
PECULIARITY	[pē-kū-lē-är'-i-tē]	Distinctiveness; singularity.
PENALIZE	[pē-nal-iz]	To handicap.
PERCEPTIBLE	[pēr-sēp'-ti-b'l]	Discernible; capable of being perceived.
PERCOLATOR	[pûr'-kō-lā-tēr]	A type of coffee pot.
PERNICIOUS	[pēr-nīsh'-us]	Highly injurious or destructive in character. Intending or doing evil.
PETITE	[pē-tēt']	Little, small.
PHARMACEUTICAL	[fär-ma-sū'-tī-kal]	Pertaining to a drugstore.
PHILANTHROPIST	[fī-län'-thrō-pīst]	One who practices active good will toward his fellow men.
PHOTOGRAPHER	[fō-tōg'-ra-fēr]	One skilled in taking pictures.
PIANIST	[pē-än'-īst]	A performer on the piano.
PLAGIARIZE	[plā'-ja-rīz]	To steal or purloin and pass off as one's own the ideas, words, writings, etc., of another.
PLEBEIAN	[plē-bē'-yan]	Vulgar, common. Of or pertaining to the common people.
PLEBISCITE	[plēb'-i-sīt]	A vote of the people of some region as to choice of sovereignty.
PLENARY	[plē'-na-rē]	Fully attended or including all entitled to be present; said of a meeting, or an assembly. Full, entire.
POEM	[pō'-ēm]	A composition in verse.
POIGNANT	[poin'-ant]	Keen, piercing, touching.
POLICE	[pō-lēs']	Organized law enforcers.

POLYGAMOUS	[pô-lîg'-a-mus]	Having more than one mate at the same time.
POSTHUMOUS	[pôs'-tû-mus]	Published after the death of the author. Following or occurring after one's death.
POTPOURRI	[pôt-pöör'-ē]	Medley or mixture.
PRECOCIOUS	[prê-kô'-shus]	Exceptionally early development.
PREFERABLE	[prêf'-ēr-a-b'l]	More desirable.
PRELUDE	[prêl'-ûd]	An introductory performance, action, event, etc., preparing for the principal or more important matter.
PREMIER	[prê'-mê-ēr]	Highest in rank or position.
PREMIERE	[prê-mêr']	The first performance, as of a play.
PRESENTATION	[prêz-en-tâ'-shun]	A present, gift.
PRESUMPTUOUS	[prê-zûmp'-tû-us]	Overweeningly proud, self-confident, or venturesome. Overbold, arrogant, insolent.
PREVALENT	[prêv'-a-lent]	Generally or extensively existing. Occurring often or over a wide area.
PRODUCE (v)	[prô-dûs']	To manufacture. To bring forth.
PRODUCE (n)	[prôd'-ûs]	Products.
PROFFER	[prôf'-ēr]	To offer for acceptance.
PROGRAM	[prô'-gräm]	A plan of future procedure.
PROPAGANDA	[prôp-a-găn'-da]	A plan for the dissemination of doctrines or system of principles.
PROPHECY (n)	[prôf'-ê-sê]	The written word.
PROPHESY (v)	[prôf'-ê-sî]	To utter with or as with divine inspiration. To predict, foretell.
PRO RATA	[prô-râ'-ta]	In proportion. Accordance to share or liability.
PROTEGE	[prô'-te-zhâ]	One under the care and protection of another.
PROTEIN	[prô'-tê-în]	An essential food substance.
PROTEST (v)	[prô-têst']	To object formally. To dissent.
PUERILE	[pû'-ēr-îl]	Childish, foolish.
PULCHRITUDINOUS	[pül-kri-tû'-di-nus]	Endowed with physical beauty.
QUINTUPLETS	[kwîn'-tû-plîts]	
RABID	[răb'-îd]	Going to extreme lengths in giving vent to a feeling or opinion.
RABIES	[râ'-bêz]	Hydrophobia.
RAGOUT	[ră-gôo']	Highly seasoned stew of meat and vegetables.
RAPACIOUS	[ra-pâ'-shus]	Given to seizing or extorting that which is coveted. Ravenous, voracious.
RAUCOUS	[rô'-kus]	Hoarse, strident. Disagreeable, harsh.
RECALCITRANT	[rê-kăl'-sî-trant]	Disobedient.

- RECLUSE [rê'-klōōs] A person who lives withdrawn from the world.
- RECOGNIZANCE [rê'-kōg'-nī-zans] In law: an obligation of record entered into before some court magistrate making the performance of some act the condition of non-forfeiture.
- RECOGNIZE [rēk'-og-nīz] To perceive a person or thing previously known. To acknowledge formally, as by special attention.
- RECOMPENSE [rēk'-om-pēns] Compensation.
- RECOURSE [rê'-kōrs'] A resort for assistance. Source of aid.
- REGALIA [rê'-gā'-lē-a] The emblems, symbols, etc., of royalty, such as the crown and scepter. Decorations or insignia of a special order. Finery, special dress.
- REGATTA [rê'-gāt'-a] A rowing or sailing race, or series of such races.
- REGIME [râ'-zhēm'] The prevailing governmental or social system.
- REMONSTRATE [rê'-mōn'-strāt] To say or plead in protest or reproof. Expostulate.
- REMUNERATION [rê'-mū-nēr-ā'-shun] Recompense; reimbursement; payment.
- RENAISSANCE [rēn-e-zāns'] The transitional movement in Europe between the medieval and modern marked especially by revival of classical influence.
- RENDEZVOUS [rān'-de-vōō] An appointed meeting place.
- RENEGE [rê'-nīg'] Card playing, to fail to follow suit when able to do so in violation of the rules of the game.
- REPARTEE [rēp-ēr-tē'] A clever and witty retort.
- REPERTOIRE [rēp'-ēr-twār'] A list of dramas, operas, parts, etc., which a company or person has rehearsed and is prepared to perform.
- REPERTORY [rēp'-ēr-tō-rē] A treasure; storehouse, collection.
- REPRISAL [rê'-prīz'-al] Practice of resorting to force to procure redress for grievances.
- RESERVOIR [rēz'-ēr-vvōr] A store, an extra supply.
- RESILIENCE [rê'-zil'-ē-ens] Elasticity, bouyancy.
- RESPITE [rēs'-pīt] A putting off, postponement.
- RINSE [rīns] Cleansing with clean water.
- RIOTOUS [rī'-ut-us] Wanton, profligate, tumultuous.
- ROBUST [rô'-būst'] Having or evincing strength or vigorous health.
- ROOT [rōōt] To applaud or encourage.
- ROUTE [rōōt] To prearrange and direct the order and course of procedure, as a series of operations.
- RUSE [rōōz] A trick, stratagem.

PRONUNCIATION GUIDE

SABOTEUR	[säb-ô-tûr']	A civilian or enemy agent within a country, who commits any destructive act designed to impede the armed forces, or retard industry.
SACRILEGIOUS	[säk-ri-lî'-jus]	Violating sacred persons or things.
SAGACITY	[sa-gäs'-i-tê]	Keeness of discernment or judgment.
SALIENT	[sä'-lê-ent]	Projecting outwardly. Prominent, conspicuous.
SARDONIC	[sä-r-dön'-îk]	Bitterly scornful, disdainfully or sneeringly derisive.
SARTORIAL	[sä-r-tô'-rê-al]	Of or pertaining to a tailored garment.
SALON	[sä-lôn' (nasal)]	A fashionable shop, meeting room or exhibition place.
SCATHING	[skâth'-îng]	Injuring, as by blasting or burning.
SCHEDULE	[skêd'-ül]	A formal list; often a list, catalogue, or inventory. A roll, a register.
SCHISM	[sîz'm]	Division or separation.
SCINTILLATING	[sîm'-ti-lât'-îng]	Sparkling, twinkling.
SCION	[sî'-un]	A descendant.
SENIORITY	[sên-yör'-i-tê]	The status secured by length of service.
SEQUEL	[sê'-kwel]	That which follows; a logical consequence. A result which ensues. A literary work continuing the course of a narrative begun in a preceding installment.
SHERBET	[shûr'-bet]	A cool, sweetened drink; an iced dessert.
SIMULATE	[sîm'-û-lât]	To assume the appearance of, without the reality. To feign.
SINUOUS	[sîn'-û-us]	Bending in and out. Wavy form.
SOIREE	[swä-rä']	An evening party.
SOLACE	[söl'-îs]	Alleviation of grief or anxiety.
SOPHISTICATED	[sô-fîs'-ti-kât-êd]	Deprived of original simplicity.
SOPHOMORE	[söf'-ô-mör]	A student in the second year of a four year high school or college course.
SPECIE	[spê'-shê]	Coin, usually of gold or silver.
SPECULATIVE	[spêk'-û-lâ-tîv]	Theoretical as of ideas. Involving risks, as of a business venture, security, etc.
SPURIOUSLY	[spû'-rê-us-lê]	Falsely.
STATISTICIAN	[stât'-îs-tîsh'-an]	One versed in compiling classified facts.
STATISTICS	[sta-tîs'-tîks]	The science of the collection and classification of facts.
STATUS	[stâ'-tus]	State or condition of a person. Position of affairs.
STATUTORY	[stât'-û-tô-rê]	Enacted, acquired, or imposed by law.
STERILIZE	[stêr'-i-lîz]	To free from living micro-organisms, as by physical or chemical agents.

SUAVE	[swäv]	Blandly pleasing. Smoothly polite, polished.
SUCCINCT	[sük-singkt']	Expressed briefly and clearly.
SUCCINCTLY	[sük-singkt'-lē]	Concisely, tersely.
SUCCUMB	[su-küm']	To sink down; yield. To give up one's life.
SUGGESTION	[sug-jës'-chun]	Presenting an idea or hint.
SUPERFLUOUS	[sû-pûr'-flöö-us]	In excess of what is sufficient, necessary or normal. Superabundant.
SURPRISE	[sër-priz']	An unexpected or sudden occurrence.
SWANK	[swängk]	Ostentatiously smart and dashing.
SYNCHRONOUS	[sīng'-krô-nus]	Happening at the same time.
SYRINGE	[sīr'-in]	A device used for injecting fluids.
TACIT	[täs'-it]	Implied or indicated but not actually expressed. Unspoken, silent.
TACITURN	[täs'-i-tûrn]	Habitually silent, reserved.
TAPESTRY	[täp'-ës-trê]	An embroidered or painted fabric used for decorative purposes.
TEMPERATURE	[tëm'-për-a-tûr]	The degree of warmth or coolness.
THEORY	[thê'-ô-rê]	The analysis of a set of facts in their ideal relationship to one another. The general or abstract principles of any body of facts. A more or less plausible or scientifically acceptable general principle offered to explain phenomena.
THESIS	[thê'-sīs]	A position or proposition which a person advances and offers to maintain by argument.
TITULAR	[tit'-û-lêr]	Existing in name only, nominal.
TOTALITARIANISM	[tô-täl-ī-târ'-ê-an-iz'm]	The exercise of rigid and complete control by a ruling body.
TOWARD	[tôrd]	In the direction of.
TRAGEDIAN	[tra-jê'-dê-an]	A writer or actor of tragedy.
TRANSIENT	[trän'-shent]	Passing quickly from existence. Fleeting; momentary; shifting.
TRANSPORT (n.)	[träns'-pört]	Conveyance. Vehement emotion.
TRANSPORT (v.)	[träns-pört']	To convey, especially to carry from one place to another.
TRIBUNAL	[tri-bû'-nal]	A court or forum of justice.
ULTIMATUM	[ül-ti-mä'-tum]	A final proposition or condition, especially the final conditions or terms offered by either of the parties in a diplomatic negotiation.
VACUUM	[väk'-û-um]	A void. A space devoid of matter.
VAUDEVILLE	[vöd'-vil]	A theatrical performance containing a variety of acts.

VEHEMENTLY	[vē'-e-ment-lē]	Furiously, impetuously. Very urgently; eagerly.
VEHICLE	[vē'-i-k'1]	A conveyance such as an automobile or bus. A medium by which something else is transported.
VERBATIM	[vûr-hâ'-tîm]	Word for word. In the same words.
VESTIGE	[vès'-tij]	A trace, mark or visible sign left by something lost, perished or no longer in existence.
VIA	[vî'-a]	By way of.
VIRTUALLY	[vûr'-tû'-al-lē]	Being in essence or effect, but not in fact.
VISCOUNT	[vî'-kount]	A nobleman next below an earl or count and next above a baron.
WASH	[wösh]	To cleanse.
WHEAT	[hwët]	A cereal grain used in the manufacture of flour.
WHITE	[hwit]	The absence of color.
WRESTLE	[rës'-'1]	To struggle for mastery.
ZOOLOGY	[zô-öl'-ô-jē]	The science dealing with the biology and classification of the animal kingdom.

PLACE NAMES OFTEN IN THE NEWS

ACAPULCO	[ä-kä-pööl'-kô]	Seaport in Mexico.
ACRE	[ä'-kēr]	Ancient city in Israel.
ADDIS ABABA	[äd'-is äb'-a-ba]	Capital of Ethiopia.
ADEN	[ä'-d'n]	City and state in Southwest Arabia.
ADIRONDACK	[äd-i-rön'-däk]	Range of mts. in New York State.
AEGEAN	[é-jē'-an]	Sea between Greece and Asia Minor.
AFGHANISTAN	[äf-gän'-i-stän]	Country in western Asia.
AGUADILLA	[ä-gwä-thē'-yă]	Puerto Rican seaport.
AGUASCALIENTES	[ä-gwäs-kä-lyän'-täs]	Mexican city.
ALAMEDA	[äl-a-mē'-da]	Californian city.
ALBUQUERQUE	[äl'-bu-kûr-kê]	Largest city in New Mexico.
ALEUTIAN	[ä-lû'-shän]	Alaskan islands.
ALGONQUIN	[äl-göng'-kwîn]	Towns in Ontario and Illinois.
ALLEGHENY	[äl-e-gä'-nē]	Mts. and river in Pennsylvania.
ALSACE	[äl'-säs]	Region in northeast France.
AMALFI	[ä-mäl'-fê]	Seaport in Italy.
AMMAN	[äm-män']	Capital of Jordan.
ANTILLES	[än-tîl'-ēz]	Two island groups in West Indies.
ANTIOCH	[än'-tē-ök]	Ancient capital of Syria.
ANTIPODES	[än-tîp'-ô-dēz]	Rocky islands off New Zealand.
APALACHICOLA	[äp-a-läch-i-kô'-la]	River from Florida to the Gulf.
APARI	[ä-pär'-rē]	Seaport, Luzon, P. I.

APENNINES	[äp'-e-nīnz]	Central Italian mountains.
AQABA	[ä'-kō-ba]	Seaport town in southwest Jordan.
ARCHIPELAGO	[är-kī-pēl'-a-gō]	Greek island.
ARGENTINA	[är-jen-tē'-na]	South American republic.
ARKANSAS	[är'-kan-sō]	State in south central United States.
ASTRAKHAN	[äs'-tra-kan]	Russian town on island in Volga River.
AUCKLAND	[ök'-land]	Northern seaport city in New Zealand.
AU SABLE	[ô-sä'-b'l]	River in northern Michigan.
AVIGNON	[ä-vē-nyon]	City in southern France.
AVON	[ä'-vun]	River in England.
AZORES	[ä'-zōrz]	Islands in northern Atlantic.
BAGDAD	[bäg'-däd]	Capital of Iraq.
BAHAMAS	[ba-hä'-maz]	Islands northeast of Cuba.
BAHAWLPUR	[ba-hä-wal-pōör']	Punjab state in India.
BAHIA	[ba-ē'-a]	State in Brazil.
BALAKLAVA	[bäl-a-klä'-va]	Crimean territory near Black Sea.
BALBRIGGAN	[bäl-brīg-än']	City, Dublin County, Ireland.
BALEARIC	[bäl-ē-är'-ik]	Islands in the Mediterranean.
BALI	[hä'-lē]	South Pacific island.
BALMORAL	[bäl-môr'-al]	Castle in Scotland.
BANFF	[hämf]	Town and resort in Alberta, Canada.
BANGKOK	[bäng-kök']	Capital of Thailand.
BARBADOS	[bär-bä'-döz]	British island in West Indies.
BARBIZON	[bär'-ba-zän]	City in northern France.
BARCELONA	[bär-se-lō'-na]	City in northeastern Spain.
BASEL	[bä'-zel]	City in Switzerland.
BATAAN	[ba-tän']	Province of Luzon, P. I.
BATTICOLA	[bät-tē'-kō-la]	City in Ceylon.
BAYONNE	[bä-yōn']	Cities in France and in New Jersey.
BEAUCAIRE	[bō-kair']	City in France.
BEAUSOLEIL	[bō-sō-lē'-y]	City in France.
BEDFORDSHIRE	[bēd'-fērd-shēr]	County in England.
BELFAST	[bēl'-fast]	City in Ireland.
BELLEFONTAINE	[bēl-fōn-tän']	City in France.
BELLE ISLE	[bēl-īl']	Island in Detroit River.
BELLICOURT	[bēl-ī-kōōr']	City in France.
BENARES	[bi-nä'-res]	City in India.
BENGASI	[bēn-gä'-zē]	One of the two capitals of Libya.
BEREA	[bē-rē'-a]	Town in Kentucky.
BERGEN	[būr'-gen]	Norwegian seaport.
BERGERAC	[bēr'-zhē-räk]	French city.

BESSARABIA	[bĕs-a-rā'-bĕ-a]	Russian province, formerly Rumanian.
BISCAY	[bĭs'-că]	French and Spanish common bay, Atlantic Ocean.
BOLOGNA	[bô-lô'-nyä]	University city in northern Italy.
BORDEAUX	[bôr-dô']	Southwest French seaport.
BORNEO	[bôr'-nĕ-ō]	Third largest island in the world.
BOULOGNE	[bōō-lôn']	Northern French seaport.
BOURBON	[bōōr'-bun]	Island in Indian Ocean, now Reunion.
BRATISLAVA	[brät-i-slä'-va]	City in Slovakia on Danube.
BRESLAU	[brĕs'-lou]	Prussian city.
BREST LITOVSK	[brĕst' lĭ-tôfsk']	East Polish city.
BRISBANE	[brĭz'-bān]	Seaport in east central Australia.
BUCARAMANGA	[bōō-kä-rä-mäng'-gä]	Coffee center, Colombia.
BUCHAREST	[bōō'-ka-rĕst]	Capital of Rumania.
BUDAPEST	[bōō'-da-pĕst]	Capital of Hungary.
BUENAVENTURA	[bwā-nä-vān-tōō'-rä]	Colombian city and seaport.
BUENOS AIRES	[bwā'-nus ār'-ĕz]	Capital of Argentina.
CADIZ	[ka-dĭz']	Spanish seaport, southwest Spain.
CAIRO	[kĭ'-rō]	Capital of Egypt.
CAIRO	[kā'-rō]	Town in southern Illinois.
CALAIS	[käl'-ā]	French city on Strait of Dover.
CAPE VERDE	[kāp-vûrd']	Island off Portugal.
CAPRI	[kā-prĕ']	Island in Bay of Naples.
CARIBBEAN	[kār-i-bĕ'-an]	Part of the Atlantic Ocean.
CARMEL	[kär-mĕl']	Artist and literary center in northern California.
CARMEL, MOUNT	[kär'-mel]	Mountain in Israel.
CARTAGENA	[kär-ta-jĕ'-na]	Seaport in Colombia; city in Spain.
CAUCASIA	[kô-kä'-zha]	Regions between Black and Caspian Seas.
CHAMPAGNE	[shām-pān']	Province in France.
CHANUTE	[shā-nōōt']	City in Kansas.
CHARLEVOIX	[shär'-lē-voi]	City in Michigan.
CHÂTEAU-THIERRY	[shä-tō'-tyĕ-rĕ']	Dept. and battlefield in France.
CHATTahoochee	[chät-a-hōō'-chĕ]	River in southern United States.
CHAUDIÈRE	[shō-dĕ-air']	River in Quebec, Canada.
CHAUTAUQUA	[sha-tô'-kwa]	Village and lake in New York state.
CHEBOYGAN	[shĕ-boy'-gān]	City in Michigan.
CHEMUNG	[shĕ-mŭng']	County in western Pennsylvania.
CHESAPEAKE	[chĕs'-a-pĕk]	Bay in eastern United States.
CHEYENNE	[shĭ-ān']	City in Wyoming.
CHIANTI	[kĕ-ān'-tĕ]	Mountain range in Italy.
CHICKAMAUGA	[chĭk-a-mô'-ga]	National Park in Tennessee.
CHILE	[chĭl'-ĕ]	State in South America.

CHILLICOTHE	[chil-i-köth'-ê]	Town in Ohio.
COBLENZ	[kō-blēnts']	City in Germany.
CONNAUGHT	[kōn'-ôt]	Northwest province of Irish Free State.
CORDOVA	[kôr'-dō-va]	City in Spain.
CORREGIDOR	[ko-rég'-i-dôr]	Fortress at entrance of Manila Bay.
COSHOCTON	[kō-shök'-tōn]	City in Ohio.
COSTA RICA	[kōs-ta rē'-ka]	Republic in Central America.
CÔTE D'AZUR	[kôt dà-zür']	Mediterranean coast of France.
CÔTE D'OR	[kôt'-dôr']	Department in east France.
COVENTRY	[kōv'-en-trê]	County borough in England.
CRETE	[krēt]	Greek island.
CRIMEA	[krī-mē'-a]	South Russian peninsula.
CRISTOBAL	[krīs-tō'-bal]	Atlantic terminal of Panama Canal.
CUYAHOGA	[kà-hō'-gà]	River in Ohio.
CYPRUS	[sī'-prus]	Island in Mediterranean.
CYRENAICA	[sīr-e-nā'-i-ka]	District in northeast Libya.
CZECHOSLOVAKIA	[chěk'-ô-slô-vä'-kê-a]	Northeast European country.
DALMATIA	[däl-mā'-sha]	District of Yugoslavia.
DANZIG	[dän'-zīg]	Port on Vistula River.
DARDANELLES	[där-d'n-ēlz']	Turkish straits.
DARIEN	[dâr'-ē-en]	Province of Panama.
DARJEELING	[där-jē'-līng]	District of Bengal, India.
DARMSTADT	[därm'-shtät]	City in western Germany.
DAVOS	[dä-vōs']	Swiss ski resort.
DELHI	[dēl'-ē]	Former capital of India.
DELPHI	[dēl'-fī]	Greek city.
DES MOINES	[de-moin']	Capital of Iowa.
DEVONSHIRE	[dēv'-un-shēr]	Southeast England district.
DIJON	[dē-zhôn']	University city in east central France.
DJAKARTA	[ja-kär'-ta]	Capital of Indonesia.
DJIBOUTI	[ji-boo'-tē]	Seaport in French Somaliland.
DNIEPER	[nē'-pēr]	River through Ukraine.
DNIESTER	[nēs'-tēr]	River through Poland and Rumania.
DODECANESE	[dō-dēk'-a-nēs]	Islands in southeast Aegean Sea.
DOLOMITES	[döl'-ô-mīts]	Division of the Alps.
DONEGAL	[dōn-ê-gól']	County in Irish Free State.
DUNSTABLE	[dūn'-sta-bl]	English coast town.
DUQUESNE	[dōō-kān']	City in Pennsylvania.
DÜSSELDORF	[dōō'-s'l-dōrf]	Prussian city.
EAU CLAIRE	[ō klār']	City in Wisconsin.
EDINBURGH	[ēd'-'n-bûr-ô]	Capital of Scotland.

EIRE	[âr'-e]	Formerly Irish Free State.
ELBE	[ël'-be]	River in Czechoslovakia and Germany.
EPHESUS	[ěf'-e-sus]	City in ancient Syria.
EUPHRATES	[û-frâ'-têz]	River rising in Turkey.
FALKLAND ISLANDS	[fôk'-land]	Island group in South Atlantic.
FIJI	[fê'-jê]	British islands in South Pacific.
FIUME	[fyôo'-mâ]	Italian city.
FRANKFURT-AM-MAIN	[frängk'-föört-äm-min']	West German city.
FREIBURG	[fri'-böörk]	City in south Germany.
FRIEDRICHSHAFEN	[frê-drik-shä'-fën]	City in Germany.
FUJIYAMA	[fôo-jê-yä'-ma]	Mountain in Japan.
GALLIPOLI	[ga-lip'-ô-lê]	Peninsula near Aegean Sea.
GANGES	[gân'-jêz]	River in India.
GASPÉ	[gäs-pä']	Peninsula in Quebec, Canada.
GATUN	[ga-töön']	Canal zone town; location of locks.
GENOA	[jën'-ô-a]	City in Italy.
GHENT	[gënt]	City in Belgium.
GIBRALTAR	[ji-brôl'-têr]	British Crown Colony on shore of Spain.
GIRONDE	[zhê-rônd']	Department in France.
GLASGOW	[gläs'-gô]	City in Scotland.
GLOUCESTER	[glôs'-têr]	Town in Massachusetts.
GRAND PRE	[grän-prä']	Village in Nova Scotia.
GREENWICH	[grên'-ij]	Borough of London.
GREENWICH	[grên'-wich]	Town in Connecticut.
GROSSE POINTE	[grôs' point]	City in Wayne County, Michigan.
GUADALAJARA	[gwöd-a-la-här'-a]	City in Mexico.
GUADALQUIVER	[gwöd-'l-kwiv'-êr]	River in south Spain.
GUADALUPE	[gwöd-'l-ôop]	River in Texas.
GUANTÂNAMO	[gwän-tä'-nä-mô]	State in Mexico; Cuban Bay.
GUAYAQUIL	[gwî-'à-kêl]	City in Ecuador.
GUERRERO	[gêr-rê'-rô]	State in Mexico.
HAGÛE, THE	[häg]	City in Netherlands.
HAIFA	[hî'-fa]	Second largest city in Israel.
HAITI	[hâ'-tê]	Island in West Indies.
HAMTRAMICK	[häm-träm'-ik]	City in southeast Michigan.
HANOI	[hä-noi']	Capital of North Vietnam.
HAVRE, LE	[lê ä'-vr]	Seaport city in northern France.
HAWAII	[ha-wî'-ê]	Island in Pacific.
HEBRIDES	[hêb'-ri-dêz]	Islands off Scotland.
HEIDELBERG	[hî'-dêl-hêrk]	German city.
HELSINKI	[hêl'-sîng-kê]	City in Finland.

HERZEGOVINA	[hûr-tse-gô-vê'-na]	Yugoslavia region.
HIALEAH	[hî-a-lê'-a]	Town in Florida.
HIMALAYAS	[hi-mâ'-la-yaz]	Mountains in India and Tibet.
HIROSHIMA	[hê-rô-shê'-ma]	Japanese city destroyed by atomic bomb.
HOKKAIDO	[hō-kî'-dō]	Japanese island, north of Honshu.
HOLSTEIN	[hōl'-stîn]	Part of Schleswig-Holstein, Prussia.
HOLYOKE	[hōl'-yōk]	City in Massachusetts.
HONAN	[hō'-nân']	Island province of China.
HONG KONG	[hōng' kōng]	British Crown Colony in China.
HUNAN	[hōō'-nân']	Province in central China.
HWANG HO	[hwäng'-hō']	Chinese river.
IBERIA	[i-bêr'-ē-a]	Small Louisiana town; also Iberian peninsula.
ÎLE-DE-FRANCE	[êl'-dê-frâns']	Province including Paris, France.
ILLINOIS	[îl-i-noi']	Middle western state.
INTERLAKEN	[în'-têr-lä-ken]	Swiss summer resort.
INVERNESS	[în'-vêr-nêš]	Scottish County.
IOWA	[i'-ô-wa]	Middle western state of the Union.
IPSWICH	[îps'-wîch]	County borough in Suffolk, England.
IRAN	[ê-rân']	Country formerly Persia.
IRAQ	[ê-räk']	Middle Eastern country.
ISHPEMING	[îsh'-pê-mîng]	Mining city in north Michigan.
ISRAEL	[îz'-rê-êl]	Independent state in Middle East.
ISTANBUL	[îs-tâm-bōōl']	Turkish city on Bosphorus.
JAFFA	[yâf'-a] or [jâf'-a]	Former Arab city in Israel.
JAIPUR	[jî'-pōōr]	The "pink city" of India.
JAVA	[jä'-va]	Island in Malay archipelago.
JEHOL	[je-hōl']	Mongolian province.
JENA	[yâ'-nä]	City in Germany.
JERICO	[jêr'-i-kō]	Biblical city in Jordan.
JOHANNESBURG	[yô-hän'-es-bûrg]	Largest city in South Africa.
JOHORE	[jô-hôr']	Southernmost sultanate of Malaya.
JUNEAU	[jōō'-nō]	City in Alaska.
JUTLAND	[jût'-land]	Peninsula off coast of Germany.
JUAREZ	[hwä-rêš']	Town in Mexico.
KAMAKURA	[kâ-mâ-kōō'-râ]	Japanese town.
KAMCHATKA	[kâm-chât'-ka]	Peninsula in Russia, southeast Asia.
KARACHI	[kâ-râ'-chê]	Largest city in Pakistan.
KIEV	[kê'-yef]	District in northwest Ukraine, city on Dnieper.
KISHINEV	[kîsh'-i-nêf]	Rumanian city.
KITCHENER	[kîch'-e-nêr]	City in south Ontario, Canada.
KLAMATH LAKES	[klâm'-ath]	Waters in Oregon and California.

KNUTSFORD	[nüts'-fërd]	Urban district in Cheshire, England.
KOBE	[kō'-bê]	Seaport city in south Honshu, Japan.
KÖNIGGRÄTZ	[kû'-nik-grâts]	East Bohemian town, Czechoslovakia.
KOREA	[kô-rē'-a]	Peninsula in Sea of Japan.
KOSCIUSKO, MT.	[kōz-ē-üs'-kō]	Highest peak in Australia.
KUALA LUMPUR	[kwä'-la-lōöm'-pöör]	Capital of Federation of Malaysia.
KUMAMOTO	[kōō-mä-mô-tô]	City in West Kyushu, Japan.
KURIL ISLANDS	[kōō'-rīl]	Island group off Hokkaido, Japan.
KYOTO	[kyō'-tô]	Japanese manufacturing city.
KYUSHU	[kyōō'-shōō]	Japanese island.
LACHINE	[la-shēn']	Canadian city.
LADOGA	[läd'-ô-ga]	Largest lake in Europe; in Finland.
LAGARINE	[läg'-ä-rē-ně]	Valley of Adige River, Italy.
LAGOS	[lä'-gōs]	Capital of Nigeria.
LAGUNA	[lä-gōō'-na]	Province in Central Philippine Islands.
LA JUNTA	[lä hōōn'-ta]	City in Colorado.
LAMBETH	[lām'-bēth]	Metropolitan borough in south London.
LANARK	[län'-ērک]	County in south central Scotland.
LAOS	[lä'-ōs]	Country in southeast Asia.
LAREDO	[la-rä'-dō]	City in south Texas.
LAS ANIMAS	[läs ä'-nē-mäs]	Southeast Colorado county.
LAS VEGAS	[läs vä'-gas]	City in Nevada.
LAUSANNE	[lô-zän']	University city in Switzerland.
LEGHORN	[lēg'-hōrn]	Seaport city in Tuscany, Italy.
LEICESTER	[lēs'-tēr]	City and county in England.
LEIPZIG	[lip'-sik]	German city.
LENINGRAD	[lën'-īn-gräd]	Russian city.
LHASA	[lä'-sa]	Buddhist Tibetan city.
LIANGCHOW	[lyēng-jō']	City in China, south of the wall.
LILLE	[lël]	City in northeast France.
LIMA	[lē'-ma]	Capital of Peru.
LIMA	[lī'-ma]	City in Ohio.
LIMOGES	[lē-mōzh']	City in west central France.
LINGAVEN	[līng-gä-yēn']	Seaport and gulf, Luzon, P. I.
LITHUANIA	[līth-ū-ä'-nī-a]	Baltic republic.
LODI	[lō'-dē]	Italian town.
LOIRE	[lwär]	Largest river in France.
LOMBARDY	[lōm'-bēr-dē]	North Italian province.
LONGCHAMP	[lōN-shän']	Abbey and park west of Paris.
LORELEI	[lō'-rē-li]	Rock on bank of Rhine River.

LOS ALAMOS	[lɔs-əl'-a-mɔs]	City in New Mexico.
LOS ANGELES	[lɔs-ən'-je-les]	Southern California city.
LOURDES	[lɔrd]	Town in southwest France, famous for its shrine.
LOUVAIN	[lɔv'-văn]	Belgian province.
LUBBOCK	[lúb'-uk]	City in northwest Texas.
LUCCA	[lɔok'-kă]	Cathedral city in Tuscany, Italy.
LUCERNE	[lû-sûrn']	Swiss tourist resort.
LUGANO	[lɔo-gă'-nô]	Swiss city.
LUNGCHOW	[lɔng-jô']	Chinese seaport.
LURAY	[lû-ră']	Town in north Virginia; site of famous caverns.
LUZON	[lɔo-zôn']	Chief island of Philippines.
LYON	[lê-ôn']	French city.
MACASSAR	[ma-kăs'-ěr]	Straits between Borneo and Celebes.
MACEDONIA	[măs-e-dô'-nê-a]	Division of Greece.
MACKINAC	[măk'-i-nô]	Straits and island in north Michigan.
MADAGASCAR	[măd-a-găs'-kěr]	Island off Africa.
MAGDALENA	[măg-da-lê'-na]	River in Colombia, South America.
MAGELLAN	[ma-jěl'-an]	Straits in south end of South America.
MAGGIORE	[măd-jô'-râ]	Lake in north Italy and Switzerland.
MÁLAGA	[mă'-lă-gă]	Province in south Spain.
MALAY	[mă'-lă]	Peninsula in southeast Asia.
MANCH, LA	[mănsh'-lă]	French name for English Channel.
MANCHESTER	[măn'-chês-těr]	Industrial city in west England.
MANITOWOC	[măn'-i-tô-wök]	Wisconsin city.
MANNHEIM	[măn'-hîm]	South German district.
MANTUA	[măn'-tû-a]	City in Lombardy, Italy.
MARSEILLE	[măr-sâ'-y]	French seaport.
MARTINIQUE	[măr-t'n-êk']	Island colony in French West Indies.
MASSILLON	[măs'-l-un]	City in northeast Ohio.
MECKLENBURG	[mêk'-lên-böörk]	State in north Germany.
MELBOURNE	[mêl'-bêrn]	Capital of Victoria, Australia.
MESSINA	[me-sê'-na]	City in northeast Sicily.
MIAMI	[mi-ăm'-ê]	Famous winter resort city in Florida.
MILANO	[mê-lă'-nô]	City in north Italy.
MINSK	[mînsk]	Capital of Byelo-Russian Republic.
MIRABEAU	[mê'-ra-bô]	Department in Algeria, Africa.
MONTEVIDEO	[môn-te-vi-dă'-ô]	City in Uruguay.
MONTPELIER	[môn-pê-lyă']	City in south France.
MONTREUX	[môn-trû']	Swiss resort city.
MONT-SAINT MICHEL	[môn-săn mē-shêl']	Abbey and town in France.

MOSCOW	[mö's'-kō]	Capital of Soviet Russia.
MOZAMBIQUE	[mō-zam-bēk']	Colony in southeast Africa.
MÜNSTER	[mün'-stēr]	City in Prussia.
MURMANSK	[mōōr-mānsk']	Arctic seaport, northwest Soviet Russia.
NAGASAKI	[nä-ga-sä'-kê]	Japanese seaport and commercial city.
NASSAU	[nä's'-ô]	Capital of Bahama Islands.
NATAL	[na-täl']	Province of South Africa.
NATCHEZ	[näch'-ěz]	Mississippi city.
NEUCHÂTEL	[nû-shä-tël']	Canton of northwest Switzerland.
NEVADA	[ne-vä'-da]	Southwestern state of the union.
NEW CALEDONIA	[käl-e-dō'-nê-a]	Island in South Pacific.
NEWFOUNDLAND	[nü'-fun(d)-länd]	Province of Canada.
NEW GUINEA	[gīn'-ē]	Second largest island in world.
NEW HEBRIDES	[hēb'-ri-dēz]	Islands in South Pacific.
NEW ORLEANS	[ôr'-lē-anz]	City and port in Louisiana.
NICARAGUA	[nik-a-rä'-gwa]	Central American republic.
NICE	[nēs]	Resort town on Mediterranean.
NIGERIA	[nī-jēr'-ē-a]	West African country.
NORFOLK	[nôr'-fuk]	Seaport city in southeast Virginia.
NOTRE DAME	[nō'-tēr-dām']	University in South Bend, Indiana.
OAHU	[ô-ä'-hōō]	Hawaiian Island.
OBERAMMERGAU	[ô-bēr-äm'-ēr-gou]	Upper Bavarian city, Germany.
ODESSA	[ô-dēs'-a]	Area and town, southwest Ukraine.
OKEECHOBEE	[ô-kê-chō'-bê]	Lake in Florida.
ONEIDA	[ô-nī'-da]	Lake in New York state.
ONONDAGA	[ôn-un-dô'-ga]	Lake in central New York state.
ORINOCO	[ô-ri-nō'-kō]	River in South America.
ORIZABA	[ô-ri-zä'-ba]	Volcanic peak in Vera Cruz, Mexico.
ORLÉANS	[ôr-lä-än']	City in north central France.
OSAKA	[ô'-sä-kä]	Japanese seaport.
OSCEOLA	[ôs-ē-ô'-la]	County in central Florida.
OSKALOOSA	[ôs-ka-lōō'-sa]	Iowa county.
OSSINING	[ôs'-n-īng]	Village in southeast New York.
OSTEND	[ôs-tënd']	Seaport town in Belgium.
OSWEGO	[ôs-wē'-gō]	City in central New York.
OUCHY	[ōō'-shē]	Swiss village.
PADUA	[päd'-û-a]	North Italian city.
PADUCAH	[pa-dû'-ka]	City in Kentucky.
PAGO PAGO	[päng'-o päng'-o]	City in Samoa.
PALAU	[pä-lou']	Island group in West Pacific.
PANAY	[pä-nī']	Island in central Philippines.

PAPEETE	[pa-pé'-tê]	Tahitian seaport.
PARAGUAY	[pär'-a-gwä]	South American republic.
PARANÁ	[pä-rä-nä']	River in Brazil and Argentina.
PARNASSUS	[pä-räs'-us]	Greek mountain.
PASSAIC	[pa-sä'-ik]	New Jersey river.
PECOS	[pä'-küs]	County in west Texas.
PENANG	[pê-näng']	British island off west coast Malay peninsula.
PERTH	[pûrth]	Capital of western Australia.
PIERRE	[pêr]	Capital of South Dakota.
PISA	[pê'-za]	Province in Italy; site of famous tower.
PISCATAQUA	[pîs-kät-ä'-kwa]	New England river.
PITCAIRN ISLAND	[pî't-kârn]	South Pacific island.
PLOESTI	[plô-yësh'-tê]	City in south Rumania.
PONTICELLI	[pôn-tê-chêl'lê]	Part of Naples, Italy.
PORT-AU-PRINCE	[pôr-tô-prîns']	Seaport in Haiti.
PORT DARWIN	[där'-wîn]	Harbor of northern territory of Australia.
POUGHKEEPSIE	[pô-kîp'-sê]	City in New York state.
PRAGUE	[präg]	Capital of Czechoslovakia.
PUERTO RICO	[pwër-tu rê'-kô]	West Indies island.
QUITO	[kê'-tò]	Capital of Ecuador.
RAINIER	[rà-nêr']	Peak in Washington state.
RANGOON	[räng-göön']	Capital of Burma.
RAPPAHANNOCK	[räp-a-hän'-uk]	Virginia river.
REIMS	[rêmz]	City in northeast France; site of famed cathedral.
REYKJAVIK	[rà'-kyä-vêk]	Capital of Iceland.
RIGA	[rê'-ga]	Seaport capital of Latvia.
RIO DE JANEIRO	[rê-ô de zha-nä'-rô]	Major city of Brazil.
RIO NEGRO	[rê-ô nä'-grô]	Territory of Argentina.
SAIGON	[sî-göñ']	Capital of South Vietnam.
SAINT CROIX	[sânt kroi']	River between Maine and New Brunswick.
SAINT-ÉTIENNE	[sän-tä-tyên']	City in southeast France.
ST. PIERRE	[sän pyâr']	Town on Martinique island.
SALINAS	[sä-lî'-nas]	California city.
	[sä-lê'-nas]	Seaport of Ecuador.
	[sä-lê'-nas]	Puerto Rican city.
SALISBURY	[sôlz'-bêr-ê]	Capital of Rhodesia.
SAN CRISTÓBAL	[sän-krîs-tô'-b'l]	Ecuadoran island; Cuban city.
SAN FELIPE	[sän fâ-lê'-pê]	Cities in Chile and Venezuela.
SAN GIOVANNI	[sän jô-vän'-ê]	Italian city.
SAN JOAQUIN	[sän wô-kên']	River in California.
SAN JOSE	[san hô-zä']	City in California.

SAN JOSÉ	[san hô-zâ']	Capital of Costa Rica.
SAN JUAN	[sán wõn']	Capital of Puerto Rico.
SAN LUIS OBISPO	[sán lōō-îs' ô-bis'-pō]	City in southwest Calif.
SANTIAGO	[săn-tê-ä'-gō]	Capital of Chile.
SÃO PAULO	[soun pou'-lōō]	City in southeast Brazil.
SARAJEVO	[sä'-rä-yě-vò]	Yugoslavian city.
SARAWAK	[sa-rä'-wä (k)]	State in Federation of Malaysia.
SASKATCHEWAN	[säs-käch'-e-wõn]	Province in West Canada.
SAUDI ARABIA	[sa-ōō'-dē]	Kingdom in Arabia.
SÈVRES	[sâ'-vr]	French department noted for porcelain.
SILESIA	[si-lē'-zha]	Region of Germany including Berlin.
SINAI	[si'-nī]	Peninsula northeast of Red Sea.
SINGAPORE	[sîng'-ga-pōr]	Island at tip of Malay Peninsula.
SMOLENSK	[smô-lěnsk']	City in west area of Soviet Russia.
SMYRNA	[smûr'-na]	Seaport in west Turkey; inlet of Aegean Sea.
SOFIA	[sô-fē'-a]	Capital of Bulgaria.
STATEN ISLAND	[stät'-'n]	In New York City bay.
STUTTGART	[shtōōt'-gärt]	City in West Germany; steel center.
SUMATRA	[sōō-mä'-tra]	Large island south of Malay Peninsula.
SUSQUEHANNA	[süs-kwe-hän'-a]	River in N. Y., Penna., Md.
SYDNEY	[sid'-nē]	Capital of New South Wales, Australia.
TAHITI	[ta-hē'-tê]	Island in South Pacific.
TAHOE	[tä'-hō]	Lake in California and Nevada.
TEHERAN	[tê-he-rän']	Capital of Iran.
TEL AVIV	[těl' a-vēv']	City in Israel.
TERRE HAUTE	[těr'-e hōt']	City in Indiana.
THAILAND	[ti'-länd]	Kingdom in southeast Asia.
THAMES	[tēmz]	English river.
TICONDEROGA	[ti-kõn-dēr-ō'-ga]	New York state town; site of fort.
TOKYO	[tō'-kî-ō]	Capital city of Japan.
TOURS	[tōōr]	City in west central France.
TRIESTE	[trē-ěst']	Italian province.
TRONDHEIM	[trôn'-hām]	City in central Norway.
UPPSALA	[üp'-sä-la]	University city in southeast Sweden.
URAL	[ū'-ral]	Mountain and plateau area in west Russia.

UTRECHT	[ū'-trēkt]	Capital of Utrecht; Dutch province.
VENEZIA GIULIA	[vâ-nâ'-tsyä jōō'-lyä]	Region in northeast Italy.
VERDUN	[vēr-dün']	Town in northeast France.
VERSAILLES	[vēr-sī']	French city.
VICHY	[vē'-shē]	French city.
VIGAN	[vē-gän']	Town in Luzon, P. I.
VILNA	[vil'-na]	Province and city in northeast Poland.
VLADIVOSTOK	[vläd-i-vōs'-tök]	City in Siberia.
WORCESTER	[wōōs'-tēr]	Southwest central England.
YAKIMA	[yäk'-i-mô]	City in south central Washington state.
YALTA	[yäl'-ta]	Seaport in Russia.
YEMEN	[yēm'-en]	Country in Arabia.
YOKOHAMA	[yō-kō-hä'-ma]	Japanese seaport.
YOSEMITE	[yō-sēm'-i-tē]	National park in California.
YUGOSLAVIA	[yōō-gō-slä'-vē-a]	Balkan country.

47.

Musical Dictionary

TERMS USED IN MUSIC

A CAPPELLA	[ä kă-pël'-lä]	Singing without accompaniment.
ACCELERANDO	[ät-châ-lâ-rän'-dô]	Speeding up the tempo.
ACCIDENTALS	Flats, sharps and naturals not included in a key signature.	
ACCOMPANIST	[a-kum'-pa-nîst]	One who plays or sings an accompaniment.
ADAGIO	[a-dä'-jô]	Slow, but not as slow as largo.
AD LIBITUM	[äd lib'-i-tum]	Musicians play the written notes with great freedom.
AGITATO	[ä-jê-tä'-tô]	Excited or restless.
ALLARGANDO	[äl-lär-gän'-dô]	Slowing down.
ALLEGRETTO	[äl-e-grêt'-ô]	Slower than allegro.
ALLEGRO	[ä-lâ'-grô]	Fast and lively.
ALTO	Upper range of male voice and lower range of female voice.	
A MEZZO ARIA	[ä mäd'-zô ä'-rê-a]	Between singing and speaking.
A MEZZO VOCE	[ä mäd'-zô vö'-chě]	Subdued and soft.
AMORE	[ä-mö'-rě]	Lovingly.
ANDANTE	[än-dän'-tä]	Flowing easily.
ANDANTINO	[än-dän-tê'-nô]	Not quite andante.
ANIMATO	[ä-nê-mä'-tô]	Animated.
ANTHEM	Vocal composition sung with or without accompaniment, generally in a church.	
ANTIPHON	[än-tî-fôn]	Alternate responses by choir.
ANTIPHONAL	[än-tîf'-ô-nal]	Pertaining to a collection of antiphons.
A POCO	[ä pô'-kô]	Gradually.
A QUATRE VOIX	[ä kätre vwä]	For four voices.
APPASSIONATO	[äp-päs'-sê-ô-nä-tô]	With great feeling.

- ARIA [ä'-rē-a] Sung by one voice with or without accompaniment.
- ARPEGGIO [är-pěj'-ō] Series of notes played quickly, one immediately after the other.
- AVEC DOULEUR [ä-věk dōō-lûr'] Sadly.
- BACCHANALE [bäk'-a-nal] Drinking song.
- BALLAD Romantic song having the same melody for each stanza.
- BALLET [bäl'-â] Dramatic dance.
- BARCAROLLE [bär'-ka-rōl] Venetian boat song.
- BARITONE Middle range of male voice.
- BRILLANTE [bril'-län'-tě] Bright or sparkling.
- CACOPHONY [ka-kof'-ō-nē] Harsh or discordant sounds.
- CADENCE [kā-dens] Rhythm.
- CADENZA [ka-děň'-za] Solo passage in which singer displays his virtuosity.
- CALLIOPE [ka-lî'-ō-pě] Steam organ.
- CANON [kän'-un] Composition in which each voice imitates exactly what the first voice sang.
- CANTABILE [kän-tä'-bē-lā] Melodious and flowing.
- CANTATA [kan-tä'-ta] Poem set to music.
- CANTICLE [kän'-tî-k'1] Sacred hymn.
- CANZONE [kän-tsō'-nâ] Italian song.
- CAPELLA [ka-pěl'-a] Accompaniment.
- CAPRICCIO [kä-prět'-chô] Instrumental composition in rather free form, often whimsical.
- CAPRICE [ka-prēs'] Sudden change of mood.
- CAROL Joyful hymn.
- CHORD Group of related notes played together.
- CHROMATIC SIGNS [krô-măt'-ïk] Sharps, flats and naturals.
- CLEF [klěf] Character used to determine the pitches to be represented by the lines and spaces of the staff.
- CODA [kō'-da] Ending of a movement.
- COLORATURA [kül-čr-a-tû'-ra] Upper range of female voice.
- CON BRIO [kôn brě'-ō] With great spirit.
- CONCERT In unison.
- CONCERTO [kôn-chěr'-tō] Concert in which one instrument stands out in bold relief against the orchestra.
- CON MOTO [kôn mō'-tō] With strong feeling of motion.
- CONTRALTO Lower range of the female voice.
- CRESCENDO [kre-shěň'-dō] Growing louder.
- CZARDAS [tshär'-däs] Hungarian or Bohemian dance.
- DECRESCENDO [dä-krě-shěň'-dō] Growing softer.
- DIATONIC [dî-a-tōň'-ïk] Tones of standard minor, major scale.

- DIMINUENDO [dī-mīn-ū-ēn'-dō] Diminishing in tone or volume.
 DIVERTISSEMENT [dē-vēr-tēs-män'] A diversion.
 DOLCE [döl'-châ] Sweet, soft.
 ELEGY [ĕl'-ê-jē] Mournful funeral song.
 ENSEMBLE [än-söm'-b'1] In music, the united performance of all voices and instruments rendering concerted music.
 ESPRESSIVO [ĕs-prĕs-sē'-vò] With expression.
 ETUDE [â-tüd'] A study or exercise of some technical difficulty.
 FALSETTO [fôl-sĕt'-ō] Upper range tones artificially produced.
 FANTASIA [fän-tä'-zha] Free form composition.
 FIFTH Interval or five steps between tones.
 FINALE [fê-nä'-là] The last act or scene of an opera.
 FLAT Half step below a given note.
 FLAUTIST [flô'-tĭst] Flute player.
 FORTE [fôr-tâ] Strong and loud.
 FORTISSIMO [fôr-tĭs'-ĭ-mō] As loud as possible.
 FUGUE [füg] Several voices overlapping sing the same melody.
 GALOP [gäl'-up] Lively dance in 2-4 time.
 GAVOTTE [ga-vôt'] Old French dance.
 GLISSANDO [glĕ-sän'-dō] Slurring from one note to another.
 GLOCKENSPIEL [glök'-en-spĕl] Chimes, set of bars on steel base.
 GRANDIOSO [grän-dyō'-sō] In grand or noble style.
 GREGORIAN CHANT [grĕ-gō'-rĭ-an] Ritual plain song.
 HABANERA [ä-vä-nä'-rä] Slow Spanish dance in $\frac{3}{4}$ time.
 HYMENEAL [hĭ-me-nē'-al] Marriage song.
 IMPRESARIO [ĭm-prä-sä'-rĭ-ō] Opera or concert manager.
 IMPROVISATION [ĭm-prô-vĭ-zä'-shun] Without score or preparation.
 INTERMEZZO [ĭn-tĕr-mĕd'-zō] Placed between acts, or sections of a composition.
 INTERVAL Difference in pitch between two tones expressed in the steps of the scale.
 INTIMO [ĭn'-tĭ-mō] Intimately.
 KEY To regulate the pitch of.
 LACRIMANDO [lä-kri-män'-dō] Tearfully, mournfully.
 LACRIMOSO [lä-kri-mō'-sō] Slightly faster than largo.
 LARGO [lä'-gō] Slowest movement; large and broad.
 LARGHETTO [lä'-gĕt'-ō] Slower than adagio.
 LEDGER LINE Short line drawn above or below the staff, used for any note too high or low to be drawn on the staff.
 LEGATO [lä-gä'-tō] Graceful and smooth.
 LEGGERAMENTE [lĕd-jĕr-ä-mĕn'-tĕ] Very lightly.
 LEGGIADRO [lĕd-jä'-drō] Gracefully.

LENTAMENTE	[lĕn-tă-mân'-tă]	Slowly.
LENTO	[lĕn'-tō]	Slow; between andante and largo.
LENTISSIMO	[lĕn-tĕs'-sĕ-mō]	Very, very slow.
LIBRETTO	[lĭ-brĕt'-ō]	The text of an opera, oratorio, or any composition involving voice and plot.
LIEBESLIED	[lĕ'-bĕs-lĕt]	A love song.
LIEDCHEN	[lĕt'-kĕn]	A short song or melody.
LIEDER	[lĕ'-dĕr]	German folk songs.
LYDIAN CHANT	[lĭd'-ĭ-an]	Melancholy chant.
MADRIGAL	[măd'-rĭ-gal]	Any part song or glee.
MAESTERSINGERS	[mĭ'-stĕr-sĭng-ĕrs]	Poet-musicians who succeeded the Minnesingers in Germany.
MAËSTEVOLE	[mä-ĕs-tă'-vō-lĕ]	Majestically.
MAËSTOSO	[mä-ĕs-tō'-sō]	Dignified.
MAESTRO	[mĭs'-trō]	Master.
MAGGIORE	[măd-jō'-rĕ]	Greater; major.
MAGNIFICAT	[măg-nĭf'-ĭ-kăt]	Part of Roman Catholic vespers.
MAJOR		One of the two basic modes of music.
MAZURKA	[ma-zûr'-ka]	Polish song.
MEASURE		Unit of musical time containing an indicated number of beats.
MEZZO	[mĕd'-zō]	Medium.
MINNESINGERS	[mĭn'-ĕ-sĭng-ĕr]	Singers of love songs, Middle Ages.
MINOR		One of the two basic modes of music.
MODERATO	[mōd-e-ră'-tō]	Moderate tempo.
MODULATION	[mōdū-lă'-shun]	Moving from one key to another.
MOLTO	[mōl'-tō]	Very much.
MOTIF	[mō-tĕf']	A figure; a motive.
NATURAL		A note neither flat nor sharp.
NOCTURNE	[nōk'-tûrn]	A composition of romantic and dreamy nature suitable for evening presentation.
OBLIGATO	[ōb-lĭ-gă'-tō]	Improvised counter melody.
OCTAVE	[ōk'-tĭv]	An interval of eight notes.
OPERETTA	[ōp-ĕr-ĕt'-a]	A light opera.
ORATORIO	[ōr-a-tō-rĭ-ō]	A species of musical drama, generally founded on some scriptural narrative.
OVERTURE		Orchestral composition introductory to an oratorio or opera.
PASSACAGLIA	[păs-sa-kăl'-ya]	A slow dance in a minor key.
PASSIONATA	[păs-sĕ-ō-nă'-ta]	Passionately.
PASSIONE	[păs-sĕ-ō'-nĕ]	Passion.
PASTORAL		Simple rural melody in 6-8 time.
PEZZO	[pĕd-zō']	Piece.
PIANO	[pĭ-ă'-nō]	Soft.

- PIANOFORTE [pī-ān-ō-fōr'-tê] The piano.
- PITCH Lowness or highness of a note.
- PIZZICATO [pīt-sê-kä'-tō] Strings picked or plucked.
- PLACIDO [plä'-chê-dō] Calm, quiet.
- PLAIN SONG Ecclesiastical chant in simplest form.
- POLKA Spirited, hopping dance of Bohemia.
- POLONAISE [pō-lō-nāz'] A Polish dance.
- PREMIÈRE [prê-mēr'] A first performance.
- PRESTO Very fast.
- PRIMA DONNA [prê'-ma dōn'-a] Leading female singer in opera.
- PSALM [sä'm] Sacred song.
- RAPIDO [rä'-pê-dō] Rapid.
- RECITATIVE [rês-i-ta-têv'] Musical declamation that is nearer to speech than it is to singing.
- REPRISE [rê-prīz'] A return to the first theme.
- REQUIEM [rê'-kwī-ēm] A mass for the dead.
- RONDEAU [rōn'-dō] A form of composition based on a dance with alternating themes.
- ROUND Short form in which several voices sing the same theme.
- RUBATO [rōō-bä'-tō] A stolen tempo.
- SCALE Series of notes leading from one tone to its octave.
- SCENE [sēn] Scene of play or opera.
- SCHERZO [škēr'-tsō] A gay, whimsical movement.
- SHARP Half step above a given note.
- SONG CYCLE Group of poems set to music as a unit.
- SOTTO VOCE [sōt'-tō vō'-châ] Softly; in low voice.
- STACCATO [sta-kä'-tō] Distinct; sharply separated.
- STAFF Five horizontal lines and spaces between them. Notes are printed or written on the lines and spaces.
- SUITE [swēt] Modern instrumental composition free as to the character and number of its movements.
- SYMPHONY An elaborate instrumental composition for full orchestra.
- TARANTELLA [tär-an-têl'-a] Swift Italian dance in 6/8 time.
- THIRD Interval of three steps between notes.
- TYMPANI [tīm'-pa-nē] Kettledrums.
- VIBRATO [vê-brä'-tō] A strong, vibrant tone.
- VIRTUOSO [vûr-tû-o'-sō] A highly skilled performer.
- VIVACE [vê-vä'-châ] Lively or very fast.
- VOCE [vō'-châ] Voice.

MUSICIANS' NAMES

ALBÉNIZ, ISAAC	[äl-vä'-nëth ē-sä-äk]	Spanish composer
ANDERSON, MARIAN	[än'-dër-s'n mâr'-ê-an]	American contralto
ARENSKY, ANTON	[ä-rën'-shkê än'-tôn]	Russian composer
BACH, JOHANN SEBASTIAN	[bäk yô'-hän zâ-bäs'-tê-än]	German composer
BACHAUS, WILHELM	[bäk'-hous vîl'-hëlm]	German composer
BALAKIREV, MILY	[bä-lä-kê'-rëf mē'-lê]	Russian composer
BARBIROLI, JOHN	[bär-bê-rôl'-ê]	English-American conductor
BARGIEL, WOLDEMAR	[bär'-gël vól'-dê-mär]	German pianist-composer
BARTÓK, BELA	[bôr'-tök bā'-lô]	Hungarian composer
BEECHAM, SIR THOMAS	[bē'-cham]	English composer
BEETHOVEN, LUDWIG VAN	[bâ'-tô-vën lööd'-vîg vän]	German composer
BELLINI, VINCENZO	[bâl-lê'-nê vën-chën'-tsò]	Italian composer
BERLIOZ, HECTOR	[bâr'-lê-öz êk-tôr']	French composer
BERSTEIN, LEONARD	[bërn'-stën]	American conductor
BIZET, GEORGE	[bê-zâ' zhôzh]	French composer
BJOERLING, JUSSI	[byâr'ling yôô'-sê]	Scandinavian tenor
BLECH, LEO	[bläkh]	German composer
BOITO, ARRIGO	[bô'-ê-tô är'-rê-gô]	
BORI, LUCRETIA	[bô'-rê löö-krâ'-tsyä]	Metropolitan soprano
BORODIN, ALEXANDER	[bu-rü-dyën' ü-lyi-ksän-dër]	Russian composer
BRAHMS, JOHANNES	[bräms yô-hän'-ës]	German composer
CARUSO, ENRICO	[kä-rôô'-zò]	Italian tenor
CASADESUS, ROBERT	[käs-ä-dës-üs']	French pianist and composer
CASALS, PABLO	[kä-säls' pä'-vlò]	Spanish cellist
CHABRIER, ALEXIS	[shäb-rê-ä' ä-l-ëx'-ës]	French composer
CHAMINADE, CECILE	[shä'-mê-näd sâ-sël']	French composer
CHERUBINI, MARIA LUIGI	[kä-rôô-bê'-nê mä-rëä' lwê'-jê]	Italian composer
CHOPIN, FREDERIC	[shô-pän' frä-dä-rëk']	Polish composer-pianist
COATES, ALBERT	[kôts ä'l'-bert]	English composer
COPLAND, AARON	[kôp'-land]	American composer
CORTOT, ALFRED	[côr-tô' ä'l'fréd]	French pianist-conductor
CROOKS, RICHARD	[krôöks]	American tenor
CUI, CESAR	[kü-ê' sâ-zâr']	Russian composer
CZERNY, KARL	[chër'-nê]	Austrian composer
DAMROSCH, WALTER	[däm'-rôsh wäl'-ter]	American conductor
DEBUSSY, CLAUDE	[dü-bü'-sê klöd]	French composer
DE FALLA, MANUEL	[dâ fä'-yä män-wel']	Spanish composer
DELIBES, LEO	[dü-lëb' lä'-ô]	French composer
DOHNANYI, ERNEST	[dô-nän'-yê êrnst]	Hungarian composer

- DOMENICO, CIMAROSO [dô-mă'-nê-kô chê-mă-rô'-sô] Italian composer
- DONIZETTI, G. [dôn-i-zët'-ê] Italian composer
- DORATI, ANTAL [dô-ră'-tê ân'-täl] American conductor
- D'OYLY CARTE, RICHARD [doi-lê kărt'] Producer of Gilbert and Sullivan operettas
- DUCASSE, ROGER [dü-kăs' rô'-zhă] French composer
- DUKAS, PAUL [dü-kă' pôl] French composer
- DVORAK, ANTON [dvôr'-zhăk ân'-tôn] Bohemian composer
- ELGAR, SIR EDWARD [ël'-găr] English composer
- ELMAN, MISCHIA [ël'-man mē'-sha] Russo-American violinist
- ENESCO, GEORGES [ā-nēs'-kôô] Bohemian composer
- FARRAR, GERALDINE [fa-răr'] American soprano
- FAURÉ, GABRIEL [fô-ră' găbr-ël'] French composer
- FERRARI, ERMANNO WOLF [fêr-ră'-rê] Italian composer
- FIEDLER, ARTHUR [fêd'-lêr] American conductor
- FINSTERBUSCH [fîn'-stêr böösh]
- FLAGSTAD, KIRSTEN [fläg'-sh-tă kîr'-st'n] Norwegian soprano
- FLONZALEY [flôn-să'-lê] Famous string quartette
- FLOTOW, FRIEDRICH VON [flô'-tô frê'-drîk fôn] German composer
- FRANCK, CESAR [fränk sâ'-zr] French composer
- FUCHS, K. [föoks] German composer
- GABRILOWITSCH, OSSIP [gä-brî-lô'-vich ô'-sîp] Russian pianist-conductor
- GALLI-CURCI, AMELITA [gäl'-lê-kôör'-chê âm-â-lê'-tä] Italian-born soprano
- GEGENBAUER [gä'-gên-bou-êr]
- GIORDANO, UMBERTO [jôr-dă'-nô ûm-bêr'-tô] Italian composer
- GLAZOUNOFF, ALEXANDER [glă'-tsôô-nôf] Russian composer
- GLINKA, MICHAEL [glîn'-ka mî-kă-êl'] Russian composer
- GLUCK, CHRISTOPH W. [glöök krîs'-tôf] German composer
- GODARD, BENJAMIN [gô-dăr] French composer
- GODOWSKY, LEOPOLD [gô-dôf'-skê lâ'-ô-pöld] Russian-Polish pianist
- GOETZ, HERMANN [gêts hâr-män]
- GOOSSENS, EUGENE [göös'-sens] English conductor
- GORIN, IGOR [gô'-rîn ê'-gor] Russo-American basso
- GOUNOD, CHARLES [göô-nô' shărl] French composer
- GRANADOS, ENRIQUE [gră-nă'-dhôs ên-rêe'-kă] Spanish composer
- GRIEG, EDWARD [grêg êd'-vârd] Norwegian composer
- GROFÉ, FERDE [grô-fă' fêr'-dê] American composer
- HALÉVY, FROMENTAL [ă-lă'-vê' frô-män-täl'] French composer
- HÄNDEL, GEORGE FREDERICK [hăn'-d'l] German composer

- HAYDN, FRANZ JOSEPH [hī'-d'n fränts yō'-zēf] Austrian composer
- HEIFETZ, JASCHA [hī'-fētz yä'-sha] American-Russian violinist
- HINDEMITH, PAUL [hīn'-dī-mīt] German composer
- HONNEGAR, ARTHUR [ōn'-ēg-ēr] Swiss composer
- HOROWITZ, VLADIMIR [hō'-rō-wīts vlä'-dī-mēer] Russian pianist
- HUMPERDINCK, ENGELBERT [hööm'-pēr-dīngk ɛn'-gəl-běrt] German composer
- IPPOLITOF-IVANOFF, MICHAEL [ēp-pō'-lè-tōf ē'-vā-nōf] Russian composer
- ITURBI, JOSE [ē-tōōr'-bē hō-zā'] Spanish pianist
- JAGEL, FREDERICK [yā'-gəl] American tenor
- JERITZA, MARIA [yē'-rē-tsä mä-rē'-a] Austrian soprano
- JOURNET, MARCEL [zhōōr'-nä mär-sēl'] French tenor
- KABALEVSKY, DIMITRI [kā-bē-lēf'-skē di-mē'-trē] Russian composer
- KHACHATURIAN, ARAM [kā-chä-tōōr'-ē-an ä'-rām] Russian composer
- KIEPURA, JAN [kē-ä-pōō'-rā] Polish tenor
- KILENYI, EDWARD [kīl-en'-yē] Russian composer
- KOUSSEVITSKY, SERGE [kōō-sē-vēt'-skē sērzh] Russian conductor
- KREISLER, FRITZ [krīs'-lēr frītz] Austrian violinist
- KREUTZER, RODOLPHE [kroi'-tsēr] French violinist and composer
- LALO, EDOUARD [lä-lō' ēd'-ōō-ärd] French composer
- LANDOWSKA, WANDA [län-dōf'-skä vān'-dä] Polish pianist
- LECUONA, ERNESTO [lä-kwō'-na är-nēs'-tō] Spanish composer
- LEHÁR, FRANZ [lē-här' fränts] Hungarian composer
- LEHMAN, LOTTIE [lä'-män lōt'-ē] German soprano
- LEINSDORF, ERICH [līns'-dōrf ä'-rik] American conductor
- LENDVAI, ERWIN [lēnd'-vī] Hungarian composer
- LEONCAVALLO, RUGGIERO [lä-ōn-kä-väl'-lō rōōd-jä'-rō] Italian composer
- LEVANT, OSCAR [lē-vānt'] American pianist—composer
- LEVITZKI, MISCHA [lē-vēt'-skē mē'-sha] Russian pianist
- LHEVINNE, JOSEF [lä-vēn' jō'zēf] Russian pianist
- LIADOFF, ANATOLE [lyä'-dōf än-ä-tōl'] Russian composer
- LISZT, FRANZ [līst fränts] Hungarian pianist
- LORTZING, ALBERT [lōr'-tsīng] German composer
- MAGANINI, QUINTO [mäg-ä-nē'-nē kwīn'-tō]
- MAHLER, GUSTAV [mä'-lēr göōs'-täf] Bohemian composer
- MARSCHNER, HEINRICH [märsh'-nēr hīn'-rik] Composer
- MARTINELLI, GIOVANNI [mär-tī-nēl'-lē jō-vān'-nē] Italo-American tenor
- MASCAGNI, PIETRO [mäs-kän'-yē pyä'-trō] Italian composer
- MASSENET, JULES [mäs-n-ä' zhōōl] French composer

- MELCHIOR, LAURITZ [mēl'-kyor lou'-rêts] German tenor
- MENDELSSOHN-BARTHOLDY, FELIX [bär-tól'-dē] German composer
- MENUHIN, YEHUDI [mēn'-û-în yē-hōō'-dē] American violinist
- MEYERBEER, GIACOMO [mi'-ēr-bār jä'-kô-mô] German composer
- MILHAUD, DARIUS [mē-yô' dà-ryüs'] French composer
- MITROPOULOUS, DIMITRI [mĩ-tröp'-ô-lüs dĩ-mē'-trē] Greek-American conductor
- MONTEMEZZI, ITALO [môn-tē-měd'-sē ē'-täl-ô] Italian composer
- MONTEUX, PIERRE [môn-tōō'] American conductor
- MONTEVERDE, CLAUDIO [môn-tā-vēr'-dē klou'-dyô] Italian composer
- MOSCHELES, IGNAZ [mô-shě-lěs] Czech pianist-composer
- MOSZKOWSKI, MORITZ [môsh-kôf'-skē mō'-rĩts] Polish pianist-composer
- MOUSSORGSKY, MODESTE [mōō-sôrg'-skē mō-děst'] Russian composer
- MOZART, WOLFGANG AMADEUS [mō'-tsärt vòlf'-gäng ä-mä-dä'-ōōs] German composer
- MUNCH, CHARLES [mōōn-ch] (French u) French conductor
- NICOLAI, OTTO [nē'-kô-lĩ] German composer
- OFFENBACH, JACQUES [ôf'-en-bäk zhäk] French composer
- ORMANDY, EUGENE [ôr'-mon-dē ũ-jēn'] American conductor
- PADEREWSKI, IGNACE JAN [pä-dě-rěf'-skē ē-nyäs' yän] Polish pianist
- PALESTRINA, GIOVANNI [pä-lěs-trē'-na] Italian composer
- PETRI, EGON [pä'-trē ē'-gôn] Dutch pianist
- PIATIGORSKY, GREGOR [pē-ät-ē-gôf'-skē grē'-gôr] Russian cellist
- PIERNÉ, GABRIEL [pyâr'-nä gä-brē-ěl'] French composer
- PONCHIELLI, AMILCARE [pôn-kē-ěl'-lē ä-měl-kä'-rě] Italian composer
- PONS, LILY [pôns lē-lē'] French coloratura
- POULENC, FRANCIS [pōō'-lěnc] French composer
- PROKOFIEFF, SERGEI [prô-kô'-fē-ěf sēr'-gä] Russian composer
- PUCCINI, GIACOMO [pōōt-chē'-nē jä'-kô-mô] Italian composer
- RACHMANINOFF, SERGEI [rāk-mä'-nē-nôf sēr'-gä] Russian pianist-composer
- RAMEAU, JEAN PHILIPPE [rä-mô' zhän fē-lēep'] French composer
- RAVEL, MAURICE [rä-věl' mō-rēes'] French composer
- REINER, FRITZ [ri'-nēr frĩtz] American conductor
- RESPIGHI, OTTORINO [räs-pē'-gē ô-t-tô-rē'-nô] Italian composer
- REUTTER, GEORG [roit'-tēr gâ-ôrkh'] Austrian composer
- RIES, FERDINAND [rēs fâr'-dē-nänd] German composer-conductor
- RIMSKY-KORSAKOV, NIKOLAI [rim'-skē kôf'-sa-kôf nĩk'-ô-lĩ] Russian composer

RODZINSKI, ARTHUR	[röd-zhën'-skê rô-jin'-skê]	American conductor
ROSENTHAL, MORIZ	[rô'-zen-täl]	Polish pianist
ROSSINI, GIOACCHINO	[rôs-sê'-nê jô-äk-kê'-nô]	Italian composer
RUBINSTEIN, ARTHUR	[röö'-bin-stin]	American pianist
SAINT-SAËNS, CAMILLE	[sän sän käm-ê'-ya]	French composer
SANDOR	[sän'-dôr] ^{sa}	Hungarian-American pianist
SCHNABLE, ARTUR	[shnä'-bel är'-töör]	German pianist
SCHUBERT, FRANZ	[shöo'-bêrt]	German composer
SCHUMANN, GEORGE ALFRED	[shöo'-män]	German composer
SCHUMANN, ROBERT	[shöo'-män]	German composer
SCHUMANN-HEINK, ERNESTINE	[shöo'-män hink' êr-nês-tê'-ne]	German contralto
SCRIABIN, ALEXANDER	[skrê-ä'-bên]	Russian composer
SELINSKY, VLADIMIR	[sêl-in'-skê vlä'-dī-mēēr]	Russian pianist-composer
SERKIN, RUDOLF	[sûr'-kīn]	Austrian-born pianist
SHOSTAKOVICH, DIMITRI	[shös-ta-kô'-vich dī-mê'-trê]	Russian composer
SIBELIUS, JAN	[sī-bä'-lē-öös yän]	Finnish composer
SPOHR, LUDWIG	[shpör]	German composer-violinist
SPONTINI, GASPARO	[spôn-tê'-nê gäs-pä'-rô]	Italian composer
STEVENS, RISE	[stê'-venz rê'-sê]	American singer
STOKOWSKI, LEOPOLD	[stô-kôf'-skê lê'-ô-pöld]	Russo-American conductor
STRAUSS, RICHARD	[shtrous rik'-ärt]	German composer
STRAVINSKY, IGOR	[strä-vīn'-skê ê'-gôr]	Russian composer
SUPPÉ FRANZ VON	[zü-pä' fränts fôn]	Austrian composer
SVEDROFSKY, HENRY	[svê-drôf'-skê]	American conductor
TCHAIKOVSKY, PETER ILYTCH	[chī-kôf'-skê pyô'-têr il-yech']	Russian composer
TOMMASINI, VINCENZO	[tôm-mä-zê'-nê vê-chên'-zô]	Italian composer
TOSCANINI, ARTURO	[tôs-kä-nê'-nê är-töör'-ô]	Italian conductor
VERDI, GIUSEPPI	[vâr'-dê jöo-zêp'-pä]	Italian composer
WAGNER, RICHARD	[väg'-nêr rik'-ärt]	German composer
WALTER, BRUNO	[väl'-têr bröo'-nô]	German conductor
WEBER, KARL MARIA VON	[vä'-bêr kärll mä-rê'-ä fôn]	German composer
WEINGARTNER, FELIX	[vīn'-gärt-nêr fê'-līx]	American conductor
WOLF-FERRARI, ERMANNNO	[völf fā-rä'-rê air-mä'-nô]	Italian composer
ZIMBALIST, EFREM	[zīm'-ba-līst êf'-rêm]	Russian violinist

MUSICAL COMPOSITIONS

- AIDA** [ä-ĕ'-da] Opera by Verdi.
ALCESTE [äl-sĕst'] Opera by Gluck.
ANDREA CHENIER [än-drä'-üh shĕn-yä'] Opera by Giordano.
BARBIERE DI SIVIGLIA [bär-bĕ-air'-ĕ dě sä-vĕĕ'-lĕ-a] Opera by Rossini.
BOHEME, LA [bô-em' là] Opera by Puccini.
BORIS GODOUNOV [bô'-ris gö-döo-nôf'] Opera by Moussorgsky.
CAVALLERIA RUSTICANA [kä-väl-lä-rĕ'-ä rōos-tĕ-kä'-nä] Opera by Mascagni.
COSI' FAN TUTTI [kô-zĕ' fan tōōt'-tĕ] Opera by Mozart.
DANSE MACABRE [däns' ma-kä'-b'r] Composition by Saint-Saens.
DINORAH [dĕ-nô'-ra] Opera by Meyerbeer.
DON GIOVANNI [dön jō-vä'nĕ] Opera by Mozart.
DON JUAN [dôn hwän'] Opera by Mozart.
DON PASQUALE [dön pä-s-kwä'-lä] Opera by Donizetti.
EN SAGA [än sä'-gä] Composition by Sibelius.
ERNANI [ĕr-nä'-nĕ] Opera by Verdi.
EROICA [ĕ-rô'-i-ka] Composition by Beethoven.
EUGENE ONEGIN [ū-zhân o-nyä'-gĭn] Opera by Tchaikovsky.
FAUST [foust] Opera by Gounod.
FAVORITA, LA [lä fä-vô-rĕ'-tä] Opera by Donizetti.
FIDELIO [fĕ-däl'-yo] Opera by Beethoven.
FORZA DEL DESTINO, LA [fôr'-tsä děl dĕs-tĕ'-nō] Opera by Verdi.
GANI SCHICCHI [zhĕ-ä'-nĕ skĕ'-kĕ] Opera by Puccini.
GIOCONDA, LA [jô-kôn'-dä lä] Opera by Ponchielli.
GÖTTERDÄMMERUNG [gût-ĕr-dĕm'-ĕr-ōōng] Opera by Wagner.
HÄNSEL UND GRETEL [hĕn'-sĕl ünt grä'-tĕl] Opera by Humperdinck.
HERODIADE [air-ō'-dĭ-äd] Opera by Massenet.
HUGUENOTS, LES [hū'-gō-nō lä] Opera by Meyerbeer.
I PAGLIACCI [ĕ päl-yät'-chĕ] Opera by Leoncavallo.
JONGLEUR DE NOTRE DAME [zhōn-glūr' dĕ nōtra dām] Opera by Massenet.
KAMARINSKAJA [käm-ä-rĭns-kä'-yä] Composition by Glinka.
KAMMENOI-OSTROW [käm'-ĕn-oi ōs'-trō] Composition by Rubenstein.
KHOVANCHINA [kô-vän-chĕ'-na] Opera by Moussorgsky.
LE CID [lĕ sĭd] Opera by Massenet.
LE COQ D'OR [lĕ kôk dôr'] Opera by Rimsky-Korsakoff.
LE NOZZE DE FIGARO [lĕ nôz'-tse dĭ fĕ'-gä-rō] Opera by Mozart.
LES CONTES D'HOFFMAN [lä kōnt' dôf-män'] Opera by Offenbach.

- LOHENGRIN [lō'-ēn-grīn] Opera by Wagner.
- MANON [mä-nôn'] Opera by Massenet.
- MEERSTILLE OVERTURE [mâr'-shtë-lä] A fugue by Bach.
- MEISTERSINGERS, DIE [dē mīs'-tēr-zīng-ērs] Opera by Wagner.
- MIGNON [mē-nyôn'] Opera by Thomas.
- OTELLO [ō-těl'-ō] Opera by Verdi.
- PARSIFAL [pär'-sī-fäl] Opera by Wagner.
- PECHEURS DES PERLES, LES [pā'-shēr dā pairl' lä] Opera by Bizet.
- PELLEAS ET MELISANDE [pě-lā-ās' ā mâ-lē-zänd'] Opera by Debussy.
- PRINCE IGOR [prīns ē-gör] Opera by Borodin.
- PROPHETTE, LE [prô-fět' lē] Opera by Meyerbeer.
- RHEINGOLD, DAS [rīn'-gölt dās] Opera by Wagner.
- RIGOLETTO [rīg-ô-lēt'-ō] Opera by Verdi.
- ROMEO ET JULIETTE [rō'-mā-ō ā zhul-ē-ēt'] Opera by Gounod.
- ROSENKAVALIER, DER [rō'-zen-kä-vä-lēr'] Opera by Richard Strauss.
- SADKO [säd'-kō] Opera by Rimsky-Korsakoff.
- SALOME [säl'-ō-mā] Opera by Richard Strauss.
- SAMSON ET DELILA [sän-sôn' ā dā-lē'-la] Opera by Saint-Saens.
- SCHEHERAZADE [shē-hēr-e-zäd'] Symphonic suite, by Rimsky-Korsakoff.
- SIEGFRIED [zēk'-frēt] Opera by Wagner.
- SOIREE DE VIENNE [swä-rā' dē vyēn] Composition by Franz Liszt.
- SYMPHONIE PATHETIQUE. [säm-fō-nē' pä-tē-tēk' or pa-the-tēk'] by Tchaikovsky.
- TANNHÄUSER [tän'-hoi-zēr] Opera by Wagner.
- THAIS [tä'-ēs] Opera by Massenet.
- TILL EULENSPIEGEL [tīl oi'-len-shpē-gel] Composition by Richard Strauss.
- TRAVIATA, LA [trä-vyä'-tä lä] Opera by Verdi.
- TREPAK [trä'-päk] Part of the Nutcracker Suite.
- TRISTAN UND ISOLDE [trēs'-tän ūnt ē-söl'dē] Opera by Wagner.
- TROIKA EN TRAINEAUX [troi'-ka än trē-nō'] by Tchaikovsky.
- TROVATORE, IL [trō-vä-tō'-rā ēl] Opera by Verdi.
- WALKÜRE, DIE [väl-kü'-re dē] Opera by Wagner.

48.

Dictionary of Broadcasting Terms

- aberration.** Failure of all light rays in an optical system to be brought into the same focus.
- abstract set.** Purely decorative set without definite locale.
- accent.** Change of emphasis in delivery of a passage, in a musical presentation, or in emphasis in a scene, thus avoiding monotony.
- account.** Sales term for buyer of radio-TV space.
- account executive.** Official in ad agency who has charge of the advertiser's account.
- acetate.** Sometimes erroneously used to describe cellulose-nitrate recording discs.
- AC generator.** See generator, AC.
- acoustic.** Referring to the production, transmission or reception of sound.
- across-mike.** Speaking or singing across the face of the mike.
- across the board.** Radio or TV program scheduled three, five or six times a week at the same time.
- action.** Movement of any sort before camera.
- adapter.** Device used for changing the terminal connections of a circuit.
- adjacencies.** Programs or commercial announcements preceding or following a given program.
- adjacent-channel interference.** See interference, adjacent-channel.
- ad lib.** To speak without a script or to say words not in the script. In music, improvising.
- aerial.** Wires or electrical conductors used for reception or transmission of radio waves.
- agency commission.** Fee paid an advertising agency by the station or network; usually 15% of the net billing to the advertiser.
- agent.** One who represents talent and negotiates for clients for a fee.
- air check.** Recording made from a radio broadcast.
- alibi copy.** Duplicates of news scripts kept on file in case of complaints.
- align.** To bring into a straight line; to adjust tuned circuits for a desired response.
- alignment.** The result of adjusting the tuned circuits.
- alligator clip.** Metal clip with long nose and meshing jaws used on test leads to make temporary connections.
- alternating current.** Electric current usually supplied by power lines, produced by rotating machines.
- alternator.** A device for converting mechanical energy into alternating electrical energy.
- amateur band.** See band, amateur.
- amateur call letters.** Identification assigned by the FCC, usually consisting of one or two letters, followed by the number of the call area, then additional letters.
- amateur operator.** Anyone holding a license to operate a licensed amateur station. Often called a "ham."
- ambient light.** General level of light in the studio not directed especially at the subject.
- American Morse code.** See Morse code, American.

- ammeter.** Instrument for measuring the amperes of current in an electrical circuit.
- ampere.** Unit of current; the amount of current that will flow when one volt of emf is applied across one ohm of resistance.
- ampere hour.** Unit of measurement equaling one ampere flowing for one hour.
- amplification.** Difference between input and output signals in a circuit.
- amplifier.** Mechanical or electrical device to increase voltage, power or current.
- amplifier, final.** Last RF stage of a transmitter. Sometimes called "the final."
- amplifier, speech.** Class A amplifier with limited audio frequency response, used for amplification of voice signals, as from a microphone.
- amplify.** To increase current or voltage by either mechanical or electrical means.
- amplitude.** The magnitude of a simple wave or part of a complex wave.
- angle, critical.** The maximum angle at which a radio wave may be emitted from an antenna and still be returned to earth by refraction or reflection.
- angle of radiation.** Angle at which most RF or light energy is radiated.
- angle shot.** A camera shot taken from any position except straight on the subject.
- animate.** To film static drawings or objects so that when the photographs are shown on TV or on a movie screen they produce the illusion of movement.
- animator.** A contrivance of lights, mirrors and other mechanical devices used to animate scenes in television.
- announcement.** Short advertising message, usually about 100 words and running about one minute; a spot announcement.
- annunciator.** Device which indicates reception of a signal by aural or visual means, such as on-the-air lights.
- antenna.** Device used for receiving or radiating RF energy.
- antenna, directional.** One which radiates or receives RF energy more efficiently in one direction than in other directions.
- antenna transmission line.** Conductors connecting antenna to receiver or transmitter.
- aperture.** The opening of the diaphragm in front of the camera through which light passes to the TV tube.
- armored cable.** Insulated electrical conductor with metallic covering over insulation, such as BX cable used in indoor power circuits.
- art still.** Portrait photograph of TV talent or product.
- aspect ratio.** Relationship of the width of the TV picture to the height. The normal TV aspect ratio is four wide by three high. In movies it is 4 x 5.
- assemble.** To carry out the first step of film editing; to collect together the shots to be used and join them in correct order. The product of this process is the rough cut.
- astigmatism.** Defect in a lens causing part of picture to be out of focus.
- atmosphere.** Music or sound effects used to enhance the scene's mood.
- atmospheric diffusion.** Process by which a radio wave is scattered by atmospheric particles.
- atmospheric interference.** See interference, atmospheric.
- audience composition.** The people listening to a given program, listed according to age, sex, income, etc.
- audimeter.** Electro-mechanical device attached to receivers which records set operation and station tuning, thus supplying information for measuring program popularity.
- audio.** Sound transmission as contrasted to visual. Frequencies within the range of human hearing. Also devices operating within this range.
- audition.** Studio test of talent. Also test recording. Also film of a show presented to prospective purchaser.
- automatic brightness control.** Circuit used to maintain brightness of image at a certain average value.
- automatic frequency control.** Electronic circuit that keeps superheterodyne receiver or transmitter used to a predetermined frequency.
- automatic gain control.** Has same function for television as automatic volume control has for radio.
- automatic volume control.** Radio circuit which automatically maintains constant output volume, within narrow limits which the received carrier signal is varying widely in amplitude.
- availability.** Radio or television time free for sponsorship by a prospective advertiser. Known also as "time availability."
- available audience.** Number of sets tuned in to all stations at a specific time.

average transmitter power output. Amount of RF power delivered to output terminals of an amplitude-modulated transmitter averaged over one modulation cycle.

baby spot. Small spotlight used in studio highlighting.

background. Sound or music held behind dialogue to suggest the setting or increase the emotional impact.

background controls. Individual brightness controls for each color in color TV.

back-timing. Timing the final part of a script, prior to air-time, in order to clock exactly when the broadcaster should reach this part of the script to insure a smooth and unhurried finish.

baffle. Metal, wood or composition flat surface or horn used with a loudspeaker to increase length of air path from front to back of speaker diaphragm, thus improving fidelity. Also, portable wall or heavy mat hung beside a set or object on the set to absorb sound or light, or prevent echo.

balance. Placement of musicians, actors, vocalist and sound effects in relationship to microphones to get the desired level of volume from each.

balanced coverage. Coverage of all geographical sections with a minimum of duplication.

band. The range of frequencies lying between two defined limits.

band, broadcast. Frequencies extending from 535 kc to 1,605 kc, used for transmission of amplitude-modulated signals intended for public reception.

band, citizens. One of several bands allocated for the Citizens Radio Service.

band, commercial. Any frequencies used by profit-making organizations.

band, communications. Frequencies used for two-way radio communications between two or more points.

band, FM broadcast. Frequencies from 88 mc to 108mc.

band-television. Channels allocated for transmission or reception of TV signals.

band, UHF. Frequencies from 300 to 3,000 mc.

band, VHF. Frequencies from 30 to 300mc.

band, VLF. Frequencies from 10 to 30kc.

bandwidth. Section of frequency spectrum needed to transmit visual or aural or both.

banks. Batteries of incandescent, florescent or kleig lights.

barn door. A shade fitting over large flood lights to narrow the light field.

basic station. TV or radio station which forms part of the basic network structure.

bass. Low audio frequencies.

bass booster. Components connected in circuit so that bass frequencies are emphasized.

bass compensation. Offsetting by electrical or acoustical means the natural drop in the response of the ear to low audio frequencies at low volume levels.

batten. Thin metal rod or strip of wood used to brace or anchor scenery.

battery, A. Source of filament power for battery-operated tubes.

battery, B. Battery which supplies plate-power for battery-operated tubes.

battery eliminator. Power supply powering battery-operated equipment which operates from an AC power source.

battery pack. Individual chemical cells combined in one package.

beam. Angle in which microphone or speaker is functioning at its maximum efficiency.

beards. Errors made during a broadcast; fluffs.

beat. Written direction in a script to take a one-count pause; also an exclusive story; a scoop.

belcher. Performer with a frog in his throat.

bend the needle. Using so much volume or working so close to microphone that needle on VU meter shoots far past normal maximum peak.

bidirectional microphone. See microphone, bidirectional.

big close-up. Very narrow angle shot; usually just one feature of the subject or the object so that it fills the frame.

big-name talent. Broadcasting performers with a large public following.

billboard. Announcement at beginning of broadcast which lists those starring in the show.

billing. Name credit on the air in order of importance.

birdie. The *tweet-tweet* sound sometimes heard on transmitting or receiving equipment.

bit. Small part in a dramatic program. (The actor or actress is called a "bit player.")

bite off. To cut off a line, a cue, or a musical number while the show is in progress.

black light. Almost invisible light used to

- illuminate scenes in which normal light would interfere with desired effect.
- black time.** Time during which TV screen remains black.
- blank out.** To turn volume of microphone down and then completely off.
- blast.** Too much volume, causing distortion.
- blasting.** Overloading an amplifier or speaker with a resulting distortion of loud sounds.
- blinker.** Lights used to signal orchestra conductor or people in a studio; operated from control room. Also used about talent scouts.
- blizzard head.** Blonde actress whose hair, unless correctly lighted, will cause flare.
- block.** A set of consecutive time periods, or a strip of the same time on consecutive days.
- blocked-out time.** Time withheld from sale by the station or network for non-commercial programs.
- bloom.** Glare resulting from strong light on white or polished objects.
- bloop.** Splice bump causing a dull thud in sound reproduction.
- blooper.** Device for making hole in sound track of film where a splice occurs to avoid a bloop as it passes sound head, or, marking film negative for later synchronizing with sound. Also, a fluff
- blossom.** See bloom.
- blows.** See fluffs.
- blow-up.** Enlargement of a photograph or printed material, or a part thereof, to insure more legible TV reception.
- blue gag.** Comedy line improper for broadcasting use.
- blurb.** Publicity release; a puff.
- board.** Technician's control panel, also called the "panel" or "mixer", located in studio control room, which permits balancing, mixing, fading and switching.
- board fade.** A fade-away in a program accomplished manually by the technician at the control board.
- bonus station.** Station which carries network commercial program without compensation.
- boom.** Crane-like device for suspending microphones or cameras over the heads of those broadcasting, and for moving them from position to position during telecast.
- boom down.** To move the camera from a higher to a lower position.
- boom-down, tilt-up shot.** Dolly boom arm is lowered and camera is tilted up, giving an upward view of the subject.
- boom up.** To move camera from lower to higher position.
- boom-up, tilt-down shot.** When the dolly boom-arm is raised, the camera is tilted down, giving a downward view of the subject.
- booster.** Amplifier used to compensate for loss of volume which occurs in transmission.
- border.** Strip of any material hung to mask lights, grid, stationery mikes.
- break.** Time out; pause in a rehearsal; scheduled or unscheduled interruption of a program or rehearsal.
- breakaway.** Any prop purposely constructed so it will fall apart easily in a fight or other on-camera action.
- breaker, circuit.** See circuit breaker.
- break-up.** Incorrect colors resulting from rapid motion in color telecasting.
- bridge.** Musical or sound effect linking two dramatic scenes.
- bridging shot.** A shot used to cover a jump in time or other continuity break.
- brightner.** Newsman's term for short, bright, generally humorous news item.
- brightness.** Intensity of light produced on screen of cathode-ray tubes.
- brightness control.** Adjustment on TV receiver that varies amount of illumination of image.
- brilliance.** Same as brightness.
- brilliance control.** Potentiometer which permits adjustment of output level of the high frequency speaker to achieve proper relationship of volume between the treble and lower frequencies produced by the speaker system.
- bring it up.** Increase volume or picture definition.
- broad.** Illumination unit used in lighting studio.
- broadband amplifier.** One which maintains flat response over wide range of frequencies.
- broadcast.** To radiate an intelligible signal using broadcasting techniques.
- broadside.** Floodlight used to illuminate studio.
- bromide.** Trite, hackneyed expression; a stereotype.
- buckling.** Film that becomes entangled in camera or projector because of improper threading.

bugs. Trouble in equipment.

build-up. Technique used to increase popularity of a program, a product or a personality; publicity campaign to increase popularity.

bulletin. Urgent last-minute news item, often only one or two sentences long.

burn in. Retention of an image on camera tube after completion of shot.

burps. Noises sometimes heard on long-distance transmission lines.

business. Minor action of an actor or actress to add more atmosphere to a scene.

busy. Something too elaborate, or too complicated, thus diverting attention from the desired focus of interest.

button-puncher. Announcer responsible for switching a studio to the proper circuit.

cabinet. Metal, wood or plastic housing enclosing electronic equipment.

cabinet resonance. Acoustical vibration of an enclosure or other cabinet containing speaker or speaker system.

cable, coaxial. See coaxial cable.

cable, control. Mechanical connection between equipment and control head to permit tuning from a remote point, or electrical conductors which are extensions of various controls, permitting equipment's operation from a remote location.

calibration. Method of comparing a dial, device or instrument with a standard to determine its accuracy, capacity or graduation.

call. Offer of a job on a show. Also, the time that a rehearsal starts.

call letters. Radio or television station's identifying letters assigned by the FCC.

camera. In television, the unit containing the optical system and light-sensitive pickup tube.

camera rehearsal. Comparable to a dress rehearsal in the theater. Costume rehearsal. Generally shot in full by cameramen.

canaries. Vocalists. Coloratura sopranos.

canned. Recorded or transcribed material.

canned copy. Publicity material.

cans. Earphones.

capstan. Revolving shaft or flangeless pulley on a tape recorder by which the tape is driven and which controls rate at which it passes over the heads.

carbon microphone. See microphone, carbon.

cardioid microphone. See microphone, cardioid.

cardioid pattern. Reception pattern, the shape of a heart, of a cardioid microphone.

card rate. Cost of radio or TV time, as listed on station's published rate card.

carrier. A radio-frequency wave having constant amplitude, frequency and phase, as assigned to the station. When no sounds are being transmitted, only the carrier signal is present in the transmitting and receiving system.

carrier amplitude. The magnitude of the carrier signal.

carrier current. The current associated with the carrier wave.

carrier frequency. The number of cycles per second occurring in a carrier wave, which must be maintained within a few cycles of the frequency assigned by the FCC.

cartridge. Device used in pickup arms of hi-fi systems or phonographs to convert recorded sound into electrical energy. Or, a reel of recording tape, which fits into a cartridge-loading recorder, eliminating the necessity of threading the tape through the recorder.

cast. Performers in a radio program.

casting director. Official on a station or in an agency responsible for selecting cast.

cathode-ray tube. Vacuum tube containing the screen on which the picture is reproduced in the receiver.

center. Direction to talent indicating the middle of the stage, or direction of a camera-man to center the picture on the tube.

centering control. Control in television receiver used to shift entire image on the screen.

chain break. Station-break announcement used between two adjacent network programs.

channel. Band of frequencies, including the assigned carrier frequency, within which a broadcast station is required to keep its signal, to avoid interference with other stations.

channel, clear. One reserved for night-time operation of a single high-powered station.

channel, local. One occupied by 50 or more low-powered stations, separated in some cases by as little as 100 miles.

channel, regional. One shared by five to fifteen stations located so as to minimize interference with each other.

character actor. One who can do dialect

- parts and play many a wide variety of roles.
- chassis.** Metal structure on which parts of radio, TV or other electronic circuits are mounted.
- cheating.** An acting technique whereby performer cheats on perspective or normal position in relation to others in the cast.
- chip.** Waste material removed from surface of a recording by the stylus cutting into the groove.
- choreographer.** One who plans or directs dance or ballet numbers.
- circle in.** A film effect whereby an image disappears as it is replaced by another image from the center out.
- circle out.** A film effect whereby an image disappears as it is replaced by another image from the outside in.
- circle wipe.** Scene appears as a small dot in center of screen, then grows to full size, while preceding scene is simultaneously covered.
- circuit breaker.** Electromagnetic device for opening a circuit if the current amplitude becomes excessive.
- clambake.** A bad performance due to mistakes, fluffs, poor showmanship.
- clean it up.** An order for additional rehearsals to improve the quality of the performance.
- clearance.** Permission to use copyrighted material.
- clear channel.** Wave used for nighttime broadcasting by only one high-powered station.
- clear time.** To arrange with a station to provide time for a program or commercial.
- client.** An actual or prospective advertiser.
- client's booth.** Viewing room for clients.
- cliff hanger.** A dramatic serial program played at a high pitch of excitement, with emphasis on the element of suspense.
- clinkers.** Noise on a long-distance network line.
- close the rights.** Check musical and literary copyrights.
- close-up.** Narrow angle picture with no background at all.
- closed-circuit television.** Transmission of TV signals over a closed circuit for reception only by inter-connected receivers and not by ordinary receivers.
- coaxial cable.** Two-conductor cable, one being a flexible or non-flexible metal tube and other being a wire centrally supported inside tube by insulators. Also called coax, coax cable, or concentric cable.
- coaxial speaker.** Speaker which employs separate reproducing elements for treble and bass tones. Used in hi-fi.
- co-channel interference.** Conflict between two signals being transmitted in the same radio channel.
- cold.** Starting a program with talk by announcer or performers, before music. Also "perfect," as in the expression: "I have it down cold."
- cold copy.** Unrehearsed script.
- cold dramatics.** Dramatics without music.
- cold light.** Light with little red value, produced by mercury, arc, vapor or fluorescent lamps, which produce less heat than incandescent lamps.
- color balance.** Adjustment of electron-gun emissions to compensate for difference in light-emitting efficiencies of the three phosphors on screen of color picture tube.
- color carrier.** The composite color signal.
- color code.** Any system of colors used to specify the electrical value of a radio part.
- color correction.** Altering tonal colors by use of filters, lights and shades.
- color fidelity.** Ability of TV system to reproduce colors of an original subject.
- color kinescope.** Type of picture tube used in color TV receivers.
- color primaries.** The saturated colors of definite hue and variable luminance produced by TV receiver.
- color television signal.** The entire signal used to transmit a full color picture.
- coming up.** Program is about to begin.
- commercial.** Program sponsored by an advertiser. Also the sales talk given by an announcer.
- commercial credits.** Specific mention of the advertiser and/or his products.
- concentric groove.** Final groove on a phonograph record which starts the change cycle in automatic record players. Also known as cut-off groove.
- condenser.** Type of microphone with a 180-degree beam.
- conductor.** A substance (solid, liquid or gas) offering little opposition to flow of electrical current.
- conduit, electrical.** Type of metal tubing through which electrical conductors are run.
- Conelrad.** Short for Control of Electromagnetic Radiation. System of emergency ra-

dio broadcasting on 640 and 1240 kilocycles, minimizing chance of enemy using broadcasting stations as navigational aids.

console. Large metal cabinet housing the operating controls for a radio transmitter. Also used for cabinet housing radio, TV set or combination.

continuity. The written form of a broadcast program.

contrast. Ratio of white to black portions of a TV picture.

contrast control. Manual control in television receiver which adjusts contrasts between highlights and shadows.

control room. Soundproof booth with windows just off the studio from which engineers and directors can control the show.

co-operative advertising. Radio or TV advertising paid for jointly by a national and a local advertiser. Also called "dealer co-operative advertising."

copy. Any broadcast script.

cornfield. A studio set-up in which many standing mikes are used.

corny. Exceedingly obvious or old material.

correspondent. An out-of-town reporter.

co-sponsor. An advertiser sharing the cost of a program with other advertisers.

cost per thousand. The cost to reach 1,000 listeners or viewers with a program.

counter, footage. Device on tape recorder showing number of feet of tape that have passed over the heads.

courtesy announcement. Credit to an advertiser whose time has been recaptured for a special program.

cover. To get all possible details about a news event, accident or disaster.

cover shot. Wide-angle television picture used as an alternate to a close-up when director wishes to show audience the overall action.

coverage. The area in which a station's or a network's programs can be heard clearly.

cowatcher. Commercial at start of program featuring a product of the sponsor, but not the product featured in the main commercial.

crawk. An animal imitator.

crawl. Hand or mechanically operated device used in giving credits.

credit. Specific mention of the sponsor or his products.

credits. Names of performers, producers, directors and others involved in the program, given at start and/or finish of program.

creeper. A performer who works too close to the microphone.

cross-fade. Blending one sound (music, dialogue or sound effects) into another, by diminishing the volume of one and increasing the volume of the other.

cross-over frequency. Frequency in woofer-tweeter loudspeaker combination at which both speakers receive equal power.

crosstalk. Amount of one channel signal that leaks into other channel in stereo hi-fi equipment.

crowfoot. Three-legged device placed under camera and tripod to prevent slipping.

crusade. A campaign to bring about a reform or improvement in conditions.

crystal. Piece of natural quartz or similar material that will generate voltage when subjected to a physical strain or motion when voltage is applied. Also called rock.

crystal calibrator. Crystal-controlled oscillator producing a reference signal used to set or check the frequency tuning of a receiver or transmitter.

cue. Hand signal to a performer, or word signal in the script, or words, sounds or music that precede a performer's participation in the program ("Your cue will be the ringing of the doorbell."), or a pre-established word signal for switching from one pickup to another, or music used for background or bridges in dramatic programs, or (cueing) to have records or transcriptions ready to play when needed.

cut bite. To speak before the previous actor has finished.

cue cards. See cue sheets.

cue light. Red reflector light in front of camera, lit only when camera is on the air.

cue sheet. Large pieces of cardboard held next to camera, on which are written words of a song, a commercial or other material to be spoken into the mike. Also known as "idiot boards."

cuffo. Applied to work without pay, or "on the cuff."

cumulative time. Total time elapsed since start of show. Also known as "running time."

current, alternating. Electrical current that alternately reverses its direction of flow, the rate of such alterations being the frequency of the current.

current, direct. Pulsating or constant current that flows in only one direction.

- cushion.** Dialogue, music or sound inserted in a script which may be eliminated, if necessary, in order to get the show off on time.
- cut.** To eliminate. Also, a groove in a transcription.
- cut a platter.** To make a recording.
- cut-in.** Insertion of local announcement on network or transcribed program. Also called "local cut-in" or "cut-in announcement."
- cut-off groove.** See concentric groove.
- cut-outs.** Film not used. Also called "overs." Generally retained in film library for possible future use.
- cutter.** Device using electrical energy modulated by sound to drive a tool to cut the grooves in a blank platter or disc.
- cutting angle.** Angle between stylus and record surface.
- cutting head.** The part of a recorder which cuts the grooves on a disc.
- cut to.** A fast switch from the picture on one camera to the picture on another.
- cycle.** The change of an alternating wave from zero to a positive peak and back to zero, then to a peak in the negative direction and back to zero. Number of cycles occurring in one second is the frequency of AC current.
- cycloorama.** Neutral background used on a set. Also called a "cyc."
- dampen the studio.** To use sound-absorbent objects, such as rugs and draperies, to improve the quality of the sound.
- damping control.** Control which helps remove horizontal distortion on left side of picture.
- dark spot.** Unilluminated spot caused by malfunction of television transmitter.
- dateline.** Place of origin of a news story. (Originally, in newspaper parlance, it also meant the date the dispatch was filed.)
- dawn patrol.** Staff members who open the studio and put on the first morning program.
- daytime station.** One which leaves the air at sundown.
- dead.** Insensitive side of a microphone, or a closed microphone, or that part of a script which is not used, or, said about a room possessing considerable sound absorbency.
- dead air.** Silence, either accidental or deliberate.
- dead book.** File of material already used on air.
- dead end.** That part of the studio having the greatest sound absorption.
- dead mike.** Microphone not in use.
- dead pan.** To read lines without expression.
- dead spot.** Location within normal listening area of a station in which signal is weak.
- decibel.** Unit of measurement of sound intensity or electrical signal strength, generally expressed in reference to some fixed level. One decibel (db) is the smallest increase or decrease in sound volume perceptible to the human ear.
- definition.** The fidelity of an image.
- deflection.** Deliberate movement.
- defocusing dissolve.** One camera is thrown out of focus until the image is no longer recognizable, then the next camera is cut in, equally out of focus, and the second image is gradually brought into focus.
- delayed broadcast.** Postponed airing of a program by means of recording made from network lines during original broadcast.
- demodulator.** Device used to recover the intelligence impressed on a waveform.
- depth of field.** Distance person or object can move to or from camera without being out of focus.
- diagonal dissolve.** Holding one camera picture in the lower left corner and a second picture in the upper right corner and dissolving them on the air at half-lap.
- diamond stylus.** Diamond-tipped needle used in cutting master records or playing records.
- diaphragm.** Thin, flexible sheet which vibrates when hit by sound waves, as in a microphone.
- diffusor.** Material (often silk gauze) used to soften the light.
- diorama.** Miniature setting complete in perspective, used for long shots.
- directional antenna.** An antenna designed to concentrate a station's signal in certain areas.
- director.** Man or woman who casts, then rehearses and directs the actual performance of a broadcast program.
- disc.** A recording or transcription.
- disc jockey.** Master of ceremonies of a program of transcribed music.
- discrepancies.** Changes from the script that are noted in the log.
- dish.** Parabolic-shaped reflector used to transmit or receive radio energy.
- dissolve.** Slow fade-out of one picture and slow fade-in of another.

distance shot. Also called long shot. Subject is actually or apparently a long distance from the camera.

distortion. Unfaithful reproduction of video or audio signals due to changes occurring in wave form of original signal.

distortion, amplitude. Distortion produced by non-linear amplification in tube or transistor stage.

distortion, frequency. Distortion resulting from failure of amplifier to amplify all frequencies equally.

distortion, signal. Distortion due to change in signal waveform.

documentary. Non-fiction film or show utilizing material from real life.

dog. A mediocre musical number or a hackneyed piece of writing.

dog watch. The 11 p.m. to 2 a.m. shift for an announcer.

dolly. Movable platform on which a camera or microphone is mounted.

dolly in. Movement of camera toward person or object being photographed.

dolly out. Movement of camera away from person or object.

dolly pusher. Person who pushes dolly while cameraman is shooting.

dolly shot. Shot taken while camera is in motion on the dolly.

dolly track. Mechanical device attached to base of dolly to clear the camera cable.

double. An actor or actress taking more than one part.

double spotting. TV station practise of placing a second or third announcement immediately after the first.

double system kinescope. Film and sound recorded on separate films.

down and under. Instruction for musicians or sound effects men to decrease volume and to sneak under the lines of dialogue that follow.

down in the mud. Very low production volume.

dress. Final rehearsal before performance.

Dressing the program. Adding the final touches, just before air time.

drift. Change in a station's signal from original dial setting, resulting from instability in transmitter or receiver. Also used to describe any gradual change in voltage or current from its normal value.

dry run. Full rehearsal or run-through without cameras.

dual-track recording head. Magnetic recording head which records on half the width of the tape.

dubbing. Transposing recorded material to a new record, or making a copy of a tape recording.

duct, electrical. A channel or conduit used for wire runs.

dummy load. Device simulating an antenna, used during transmitter tests.

dupe. Carbon copy of a script.

duping. Making duplicates by re-recording.

dutchman. Strip of cloth a few inches wide pasted over the crack between two flats.

dynamic range. Ratio between softest and loudest sounds that can be recorded or reproduced by amplifier without distortion.

earphone. See headphone.

echo chamber. A reverberant room or enclosure through which sound or voices are channeled to give them an echo or far-away quality.

editorialize. To inject the writer's opinion into a script.

effects. Techniques or tricks used in changing film scenes. Also called optics.

eighty-eight. A piano, derived from the number of keys.

electrical frequency response. Variation in the ability of an audio system to transmit or reproduce sound accurately, as measured by comparing the electrical input and output amplitude at various frequencies.

embossed recording. Method of recording sound on discs by mechanical pressure.

engine noise. Interference caused by the electrical or ignition systems of engines.

episodes. Series of related scenes in a dramatic sequence.

equalize. To balance a program channel to assure equal transmission over the entire frequency range.

erasing head. That part of a tape recorder consisting of an electromagnet which removes all magnetism in the tape, leaving it ready to be used for another recording.

establishing shot. Long shot at start of a scene to establish the entire picture in the viewer's mind.

ether. The theoretical medium through which radio and light waves flow.

exclusive. A news story which no other station has; a scoop or beat.

exposé. Broadcast about a situation or conditions that are illegal or evil.

- facilities.** Technical equipment of a station.
- facsimile communication.** System of transmitting photographs and printed matter by wire or radio communication.
- fade.** To decrease or increase video or audio volume. ("Take a fade" means for an actor to move away from or toward the microphone.)
- fade in.** Screen is dark and picture gradually appears in full brightness.
- fade out.** From full brightness picture gradually disappears until screen is black.
- fade to black.** Method of ending a TV dramatic presentation by gradually fading the picture down until the screen is black.
- fader.** Knob on audio or video amplifying equipment to lower or raise the level.
- fake.** To improvise.
- fanfare.** Few bars of music, often by trumpets, to announce an entrance.
- Federal Communications Commission.** The board, appointed by the President, which regulates all electrical communications systems originating in the United States.
- feed.** To send a program over the air to other stations or groups of stations.
- feed-back.** Hum or whistle caused by a return of part of an amplifier's output to its input, as when a public address microphone is too close to its loud speaker.
- feeder.** Lines used to transfer electrical power from source to distribution points. Also, the transmission lines between a transmitter and the antenna system.
- fidelity.** The accuracy of a signal.
- field pickup.** Transmission of program being filmed away from studio by mobile unit.
- field strength.** Intensity of a station's signal at various points in its coverage area.
- fight the music.** A vocalist who lacks ease in singing.
- fill.** Material prepared in advance of broadcast for stretch purposes, or to fill dead spots during sportscasts or special events broadcasts.
- fill-in.** One who stands by to perform in case a program change has to be made.
- film clip.** Short piece of film used in a program.
- film cue.** Perforation in film to indicate time remaining.
- film loop.** Length of film with ends spliced together so it may be projected continuously.
- film scanning.** Converting film images into electrical signals.
- filter.** A device for changing the quality of transmitted sound by eliminating certain frequencies, to give the effect for example, of a voice on the telephone.
- filter, line.** Device or circuit that filters out or decreases interference present on AC power lines.
- filter mike.** Microphone built to give special effect of voice coming over a telephone.
- filter, noise.** Combination of electrical components designed to lessen noise pulses without material loss of signal.
- filters.** TV lens filters used to eliminate or reduce glare.
- fish bowl.** Client's observation booth in the studio.
- fish him out.** Send the boom down to pick up the sound, but keep the boom and mike out of the picture.
- flashback.** An extract from earlier action. Reference to something that has gone before.
- flats.** Flat vertical sections of scenery used in a television studio.
- flicker.** Fluctuations in the brightness of a picture.
- flies.** Space above the studio or stage, housing the grid, flying apparatus, lights, etc.
- flip.** A command to turn to the next card on the easel.
- flip cards.** Pieces of cardboard on which appear credits, program titles or commercial slogans and which are flipped up or down for pickup by the camera.
- flood.** The floodlight used to light up a whole area.
- floor manager.** Under orders from the director, he supervises a program while it is being televised.
- fluff.** A mistake made on the air by a performer.
- flutter.** Distortion in sound caused by uneven motion of a film or tape feeding mechanism. Also occurs in record players when speed of turntable is uneven.
- flux.** Material used to assure the joining of metals in soldering or welding.
- fly.** To pull the lights, scenery or properties into the area above the set.
- focusing control.** Knob on a receiver for bringing picture into sharp definition.
- follow shot.** To follow talent by moving camera and dolly.
- format.** The arrangement of the elements of

a program in the proper pattern.

four-track tape recorder. Recorder built so that two stereo channels are recorded on half the tape width and another two on the other half.

frame. A single, complete television picture.

frame frequency. The number of times per second the picture area is completely scanned. In color or black and white it is 30 cps.

framing. Including people or objects within the area of a single frame.

framing control. Any of the controls for adjusting the width, height or centering of the image.

free-lance. Someone who is not a staff member.

frequency. The number of cycles an electric current completes in one second.

frequency allocation. The particular frequency assigned to a transmitting station.

frequency, amateur. A frequency assigned for use by amateur radio stations.

frequency, audio. Range of frequencies from 20 to 20,000 cycles.

frequency deviation. The amount a carrier changes from its center frequency.

frequency modulation. Method of broadcasting which provides reception almost free of interference in an area about twice the radius from the transmitter to the horizon. (FM.)

frequency range. The frequencies a device or circuit can effectively handle.

frequency shift. A change in the frequency of an oscillator or station carrier.

frequency stabilization. Maintaining the frequency of an oscillating source within certain limits.

from the top. A director's order to start rehearsing from the start of the script or the start of the scene.

frying. Hissing sound caused by defective microphone or amplifier.

full net. A program fed to all stations of the network.

full shot. Shot revealing all parts of the object or person.

fulltime station. Station licensed to operate 24 hours a day.

fuse. A device made of a short piece of wire which melts when the current passing through it exceeds the rated value of the fuse. Used in radio circuits to open the circuits automatically in case of serious overload.

fuzzy. Used about a voice lacking clarity.

gag. A joke.

gain. An increase in volume. The apparatus for controlling such increase.

gain control. Volume control.

generator. Device consisting of armature that is rotated in a magnetic field to convert mechanical energy into electrical energy.

generator, AC. Device which converts mechanical energy into alternating current.

generator, audio. Oscillator capable of producing AC voltage at audio frequencies.

generator, DC. Device that converts mechanical energy into direct current.

ghost. An unwanted image appearing in a TV picture, the result of signal reflection.

gimmick. Any clever idea, trick, device or stunt to increase the appeal of a program.

giving credits. Naming the source of material used on the air.

gobo. A light-deflecting fin used to direct light and protect the camera lens from glare. Also, a shield to protect a microphone from extraneous sounds.

go hunting. Turning the TV cameraman loose to find a good shot in a spontaneous program.

goof. Broadcasting error.

gooseneck. A microphone hung from a gallows-support, for use over a table when broadcaster is seated. (Gallows mike.)

Greenwich Mean Time. The standard time used in England, reckoned by setting noon as the time the mean sun passes the prime meridian — the meridian passing through Greenwich. Used as a standard for setting time through out the world.

grille. Wood or metal bars in front of a loudspeaker in a radio receiver for protective purposes.

grille cloth. Loosely woven piece of material stretched behind loudspeaker grille of a radio receiver to keep dust out of the speaker and to conceal diaphragm.

grip. Studio carpenter or stage handyman.

groan box. Accordion.

groove. Track cut in a record by stylus during sound recording; track in which needle rides during playback.

ground. An electrical connection to the earth, generally through a ground rod.

ground glass. The glass in the TV viewing system on which the picture is projected for viewing by the cameraman.

ground system. That part of an antenna,

- transmitter or receiver used as ground reference.
- ground wave.** See wave, ground.
- guard band.** Band of unused frequencies on either side of a channel to assure separation from signals of stations with adjacent frequency assignments.
- guard circle.** Inner concentric groove on a record to prevent the needle from being thrown to the center of the disc.
- guy anchor.** Supporting device to which the lower end of a guy wire is attached.
- guy wire.** Steel wire or cable used to support antenna towers and masts.
- half-lap.** Control technique by which two pictures in a dissolve or over-lap are both held at maximum definition so that both are visible to viewers.
- ham.** Amateur radio operator.
- ham-fest.** Discussion of a just-concluded TV presentation.
- ham it.** Overacting.
- handout.** Publicity material.
- hand props.** Objects used by talent or in dressing a set.
- handset.** Device having transmitter and receiver mounted at either end of single frame.
- harmonic distortion.** Distortion measured by passing a single-frequency signal through a recorder or amplifier and measuring the amplitude of the harmonics generated. (One to two per cent distortion is accepted as a desirable maximum.)
- hash.** Interference produced by man-made devices.
- hash session.** See ham-fest.
- hashing.** Jumble of signals from two stations on adjacent frequencies.
- head, erasing.** Head which demagnetizes tape so new recording can be made.
- headphone.** Small sound reproducing device used singly or in pairs to permit individual listening.
- headphone adaptor.** Device placed under audio-output tube to provide terminals to which headphones can be connected.
- head, playback.** The reproducing head.
- head, recording.** The electromagnet which magnetizes the tape to make the recording.
- head, reproducing.** Coil and core assembly in which a voltage is generated as the tape moves by. It picks up the recorded sound from the tape and converts it to a form that can be amplified.
- head shot.** Camera shot of head only.
- Heaviside Layer.** Region extending from 50 to 400 miles above earth, containing ionized gases capable of bending radio signals back to earth.
- heavy.** Theater and television term for the villain in a play.
- heroic.** Larger than life.
- hiatus.** Summer period, usually eight weeks, during which sponsor may discontinue program without losing time on air.
- high fidelity.** Ability to reproduce with minimum of distortion the full audio range of frequencies; that is, 20 to 20,000 cycles. (Also called hi-fi.)
- high hat.** An elevated camera.
- high key.** TV picture with tones lying toward lighter end of scale.
- highlight.** Emphasizing a subject or object by special lighting effects to make subject or object stand out from rest of picture.
- highs.** High frequency sounds. High-pitched notes.
- high tension.** Said of circuits and lines carrying extremely high potentials.
- hit.** Momentary crash on a wire line caused by lightning or other outside disturbance.
- hit it.** Command for sudden attack by music.
- hitchhiker.** Commercial announcement at end of program featuring a product of the sponsor, but not the product featured in the regular program commercials.
- hold it down.** Reduce the volume.
- hook.** Offer, contest or other program device to attract audience response.
- horizontal frequency.** The number of times per second the spot sweeps across the screen in a horizontal direction. By U.S. standards, 15,750 per second.
- horizontal resolution.** The clarity of image in a horizontal line.
- horse opera.** TV show involving fighting, chases, gunplay.
- hot.** Energized. Live. Not grounded.
- hot background.** Background light that is too strong, resulting in lack of contrast.
- hot canary.** High soprano. Very photogenic female singer.
- hot light.** Concentrated light used to emphasize features.
- hot mike.** A live microphone.
- hot switch.** Rapid program transfer from one point of origin to another.
- house show.** Packaged TV show owned, written, directed by station or network, rather than by an advertising agency.

- howl.** Sound resulting from electrical or acoustical feedback.
- hum.** Humming background noise sometimes heard in reproduction.
- human interest.** A news story with emotional appeal, contrasted with straight news.
- idiot board.** See cue sheets.
- ike.** Iconoscope camera.
- image.** Photographic likeness on TV tube or film.
- impedance.** Total resistance of an electrical circuit to the flow of current, measured in ohms.
- impedance match.** Used to describe when impedance of a circuit or component is the same as the impedance of the circuit or device to which it is attached.
- impedance-matching transformer.** A transformer designed to match the impedance of one circuit to that of another.
- implosion.** Opposite of explosion. A bursting inwards. Sometimes happens to cathode-ray and television picture tubes.
- independent station.** Station not owned by a network.
- indicator.** A device used to inform of a condition. A meter or tuning eye to indicate voltage or current.
- ingenue.** Actress who plays youthful roles.
- inherited audience.** Those who listened to preceding program on same station.
- inky.** 150-watt spotlight used for lighting eyes or face in close-up. Sometimes called an inky-dinky.
- input.** Power, current or voltage fed into a device or a circuit.
- input stage.** The first electronic circuit through which an incoming signal passes within a tape recorder.
- in the beam.** Within directional range of microphone or speaker.
- in the can.** Completed TV program or commercials that are in metal containers ready for shipping.
- in the mud.** Lifeless delivery. Uninteresting quality.
- institutional.** Program designed to build good will for sponsor rather than to stimulate sales directly.
- insulation.** Material used to prevent leakage of electricity from a conductor.
- insulator.** Device with high resistance used to support or separate conductors.
- intelligence signal.** Any signal that transmits music, voice, code, TV pictures, facsimile pictures or any written or printed matter.
- intercom.** Short for intercommunications system.
- intercommunication.** Communications between points in a closed-circuit system.
- intercutting.** Succession of short scenes or flashes of the same scene from different angles.
- interference.** Anything which interferes with proper reception of a station's signal.
- interference, adjacent-channel.** Interference caused by a signal originating in an assigned adjacent channel.
- interference, atmospheric.** Interference caused by electrical disturbances in the atmosphere.
- interference, background.** Miscellaneous undesired noises.
- interference, broadcast.** Any transmitted signal that interferes with reception of the broadcast signal.
- interference, heterodyne.** Audible whistle resulting from reception of two stations with nearly the same frequency.
- interference, man-made.** Electrical disturbances produced not by nature but by man-made devices.
- interference, static.** Electrical discharges in the atmosphere.
- interference, television.** Electric or electromagnetic disturbances occurring on same frequency as the broadcast.
- interior dialogue.** Stream of consciousness soliloquy.
- interlacing.** Technique of dividing each picture into two sets of lines to eliminate flicker.
- interlock.** Safety device which opens a circuit.
- intermittent duty.** Operation of a device intermittently.
- intermittent operation.** Defective device which goes on and off.
- intermodulation distortion.** Distortion caused by two signals of different frequencies interfering with each other. Measuring this distortion is a way of measuring how much a tape recorder distorts sound.
- inverter, DC to AC.** Device which changes direct current into alternating current.
- ionosphere.** Region of earth's atmosphere from 30 to 300 miles above earth which is ionized by sun's radiation.
- ionospheric storm.** Fluctuations in amount

- of atmospheric ionization, produced by sun-spot activity.
- iris in.** Gradual appearance of a picture from a small spot until it finally fills the entire picture. Also called circle in.
- iris out.** Reverse of iris in.
- iron oxide.** Magnetic particles in coating of a tape which are magnetized in making a tape recording.
- jack.** Plug-in spring-type terminal used in making temporary connections.
- jam session.** Spirited, instrumental, ad lib rendition of popular tunes.
- jamming.** Use of disturbing radio signals to interfere intentionally with reception of signals from another station.
- juicer.** TV electrician.
- jump cue.** When an actor, musician, sound effects man or anyone else comes on too soon.
- jumper.** Short length of conductor used in making temporary electrical connection.
- junction.** Point in a circuit where two or more wires are connected, or a point in an electrical or magnetic network at which three or more conductors meet.
- junction box.** Box, often of metal, into which two or more wires or cables are led and connected.
- junction station.** Microwave relay station connecting legs of the microwave system to main route.
- juvenile.** Actor who plays young roles.
- Kennelly-Heaviside Layer.** See Heaviside Layer.
- key.** The tone of a show. (High-key or low-key.)
- key station.** One of the network stations serving as the originating point for important programs.
- kick back.** Any form of secret rebate on rates.
- kill the mike.** Turn off the current on a microphone.
- kill.** Cut or eliminate.
- kilo.** Prefix meaning 1,000, as kilowatt, kilovolt.
- kilocycle.** One thousand cycles.
- kilowatt.** Measure of power; 1,000 watts.
- kine.** See kinescope.
- kinescope.** Method of making delayed TV presentation by making a film from the monitor kinescope as the show is staged. Or, cathode-ray receiving tube.
- kiss it.** Hit a note accented for solo entrants.
- kleig lights.** Type of wide angle lights, generally 1,500 kw.
- klinker.** Incorrectly played note.
- knee shot.** Camera shot from knees up.
- lacquer disc.** Phonograph record having surface coated with lacquer.
- land line.** Telephone line.
- lap-dissolve.** Pictures from two cameras are held at half-lap so that both are seen on receivers.
- lapel mike.** Small microphone attached to breast pocket or lapel, permitting freedom of movement.
- LASER.** Acronym for Light Amplification by Stimulated Emission of Radiation. A device which generates and amplifies light waves of pure color in a narrow and extremely intense beam of light.
- laugh it up.** Actors should laugh at their own lines.
- lavalier mike.** Small microphone worn suspended from neck by cord, leaving hands free.
- lay an egg.** Gag or whole show that proved to be a failure.
- lead.** Most important role in dramatic show. Also, introductory sentence or paragraph of a news story.
- lead-in.** Conductor providing path for RF energy between antenna and receiver or transmitter.
- lead-in spiral.** Blank spiral groove at start of a record to guide needle into sound groove.
- lead sheet.** Cues to guide musical director or notes to cameraman.
- leader.** Blank film or blank recording tape at the start or end of a reel.
- lecher wires.** Parallel wires coupled to transmitter or receiver for measuring wave length.
- leg man.** Reporter who gathers news but does not write or broadcast it.
- lens turret.** Revolving device on TV camera carrying two or more lenses, which can be turned into position for shooting.
- level.** Amount of volume of transmitted sound.
- libel.** Any defamatory material used on the air.
- library shot.** Shots taken from the library, or for the library files.
- light flare.** White spot in TV picture caused by bad lighting.
- light meter.** Device used to measure amount of light in the set.

- light script.** Chart used by lighting technician to record intensity and position of lights to be used in a certain TV scene.
- limbo.** TV background to which no light reaches.
- limiter.** A circuit designed to limit the magnitude of a signal.
- line, balanced.** Two-wire transmission line carrying identical signals on both conductors.
- line drop.** Voltage loss in transmission or power line.
- line level.** Strength of a signal at a given point on a transmission line.
- lip sync.** Recording of sound at same time face of announcer or actor is being filmed.
- listening area.** Area in which the station's signal can be received with distinction.
- live.** Program which is aired at the same time it is produced. Also, an open microphone. Also, a studio with excessive reverberation.
- live studio.** One with excessive reverberation.
- live titles.** Title material that is televised directly by studio cameras instead of supplied by film or slides.
- loaded.** Script calling for excessive amount of action, camera shots, music or sound effects.
- local.** Program originating in a local station, as contrasted with network program.
- location.** Place outside studio where action is being filmed.
- lock jaw.** One who sings as if tired.
- locked groove.** Blank endless groove on a record to prevent needle from going further.
- log.** Schedule of broadcasting activities.
- logging.** Making a written record of station operation.
- logo.** Symbol or trademark.
- long hair.** Classical music.
- long-play.** Ten-inch or 12-inch record operating at speed of 33-1/3 rpm, with finely cut grooves. (L.P.)
- long shot.** Full view of figures and objects.
- long underwear.** Sheet music.
- long wave.** Wavelengths at or below 300 kc.
- loop.** Telephone circuit between any two points.
- loss.** Decrease in volume.
- low-definition television.** Television using less than 200 scanning lines.
- low pressure show.** Easy-going TV program.
- lows.** Low frequency sounds; bass notes.
- magnetic field.** Area around a magnet in which the magnetism has an effect.
- magnetic recording.** Recording audio frequencies by magnetizing areas of tape or wire.
- magnetic storm.** Disturbance in earth's magnetic field capable of disrupting radio transmission.
- make good.** Offer to an advertiser of comparable facilities for a program or announcement cancelled because of an emergency.
- make local.** To identify local station by announcing call letters.
- make system.** To announce the network by name as a warning cue to wire line company and as a reminder to audience.
- makeup.** Cosmetics used to change or improve the appearance of talent about to go on camera.
- manuscript.** The usually-mimeographed text of a presentation, used by cast, director and others involved in production of a telecast. (Script for short.)
- mark in.** Outlining position of actors on studio floor with chalk or washable paint.
- mask.** Shield placed around a camera lens to cut off some part of the field.
- master.** Negative phonograph record produced directly from original recording and used in manufacturing commercial records. Also, complete and official script. Also, fader on control console with over-all regulation of volume.
- master control board.** Panel from which a station is operated, containing switches, gain controls, meters for controlling transmitter and receiver operation.
- master shot.** Single shot occasionally taken of dramatic action in order to facilitate assembly of component shots.
- match dissolve.** Perfect overlap or cross fading from one scene to another in which individuals and objects are in identical positions and the illusion is created of a single shot.
- matrix.** Negative from which duplicate phonograph records are moulded.
- maximum undistorted output.** Maximum audio power output a radio receiver or audio amplifier will deliver without more than 5% harmonic distortion.
- Mayday.** International distress signal used in radiotelephone communication. Equivalent of SOS, used in radiotelegraph communication.

- medium close-up.** Medium angle picture showing object and limited amount of background.
- mega.** Prefix meaning million.
- megacycle.** Million cycles.
- mercury switch.** Electric switch consisting of large globule of mercury in glass tube with electrodes arranged so that tilting tube causes mercury to make or break the circuit.
- meter.** Metric system equivalent of 39.37 inches. Common unit of measurement for wavelength. Also, instrument with calibrated scale used in electrical or electronic measuring.
- meter, absorption frequency.** Meter designed to measure frequency by absorbing energy from source being measured.
- meter, db.** Meter having a scale calibrated in decibels.
- meter, field-strength.** Instrument designed to receive a radio wave and indicate strength of the signal existing at antenna.
- meter, frequency.** Instrument designed to provide an indication of the frequency of the wave.
- meter, VU.** Meter to indicate level of a signal in volume units.
- mic.** Abbreviation for microphone.
- micro.** Prefix for one-millionth.
- micromicro.** Prefix for one millionth of one one-millionth.
- microphone.** Instrument which converts mechanical energy into electrical energy.
- microphone amplifier.** Used to raise the output level of a microphone to voltage adequate to drive a conventional audio amplifier.
- microphone, antinoise.** One designed to discriminate against unwanted background noise.
- microphone, astatic.** One with omnidirectional characteristics.
- microphone, bidirectional.** One responsive in two opposite directions, with pattern like figure eight.
- microphone cable.** Shielded cable used to connect microphone to amplifier.
- microphone, capacitor.** One consisting of a rigid metal plate and a flexible diaphragm which form an air capacitor.
- microphone, carbon.** One consisting of a flexible diaphragm connected to a container or button filled with carbon granules.
- microphone, cardioid.** One having a heart-shaped response pattern.
- microphone cartridge.** Part of the microphone containing device to change sound waves into electrical energy.
- microphone, ceramic.** One using a ceramic slab as the voltage-generating element.
- microphone, crystal.** One using a crystalline material with piezoelectric properties to produce electrical current that corresponds to sounds entering the instrument.
- microphone, directional.** One that permits maximum sound pickup in one or more directions, but not in all directions.
- microphone, dynamic.** One using a moving coil and a permanent magnet as voltage-producing elements.
- microphone, eight-ball.** Non-directional, having shape of a ball.
- microphone, omnidirectional.** One that exhibits an equal response to sounds from all directions.
- microphone impedance.** Total impedance of the mike to the flow of alternating current.
- microphone mixer.** Used to feed two or more microphones into a single input.
- microphone pre-amplifier.** Used to amplify output of a microphone enough so audio signal may be sent over transmission line to a main amplifier.
- microphonic.** Condition in which mechanical movement of radio parts other than microphone causes corresponding variations in circuit current.
- microvolt.** One-millionth of a volt.
- microwave.** Electromagnetic wave with length less than one meter.
- microwave relay system.** For transmitting information on ultra-high radio frequencies by a series of relay towers at 10 to 25 mile intervals between point of origin and destination.
- middle break.** Station identification near middle of program.
- mike.** Short for microphone.
- mike boom.** Microphone suspended from long boom which is retracted or extended, raised or lowered during program as members of cast move around.
- mike hog.** One who elbows fellow performers away from the microphone.
- mike mugger.** One who works too close to the microphone.
- mike technique.** Ability of performer to get most effective results from microphone.
- mike wise.** Skillful in microphone technique.

milli. Prefix for one one-thousandth.

milk. To extract every possible bit of pathos or humor from a scene, situation or line in a script.

mist shot. TV shot or still photo taken through gauze with lens out of focus to obtain soft, blurred effect.

mix. To manipulate faders on control-room console, blending two or more program elements to achieve desired balance.

mixer. Device used in broadcasting and sound-recording and reproduction systems, with two or more inputs, the signals of which are combined in desired proportion to produce the output signal.

mixer's itch. Tendency of some engineers to adjust the mixer unnecessarily.

mobile radio. Radio equipment for use in motion or during halts. Also used for hand-carried or pack-carried portable radio equipment.

mock-up. Facsimile, photostat or replica of scene or set made by art department for experimental purposes before flats are constructed.

model shot. One in which models are used.

modeling light. Such intense light that it brings out contours of an object. Opposite of flat light.

modulate. Process of varying the phase, amplitude or frequency of a signal.

modulated continuous wave. Radio transmission in which carrier is transmitted at all times.

modulation. Process in which the amplitude, frequency or phase of a carrier wave is varied in accordance with the wave form of an intelligence signal.

modulation, amplitude. Variation in the amplitude of a wave that corresponds to the amplitude variations of the modulating signal.

modulation capability. Maximum percentage of transmitter modulation possible without producing undue amounts of distortion.

modulation, frequency. Type of modulation in which amount of carrier deviation is proportional to the amplitude of the modulating signal and the rate of the carrier deviation is equal to the modulating frequency.

monaural. Single-channel system in which all sound amplification is of a single dimension. (Monophonic.)

monitor (v). To listen to or watch a program.

monitor (n). TV kinescope for checking pictures before or during transmission. Also, device used to provide visual or aural condition of voltages, circuit parameters or signals, or changes in such conditions. Also, loudspeaker in control room.

monitor, modulation. Device used at transmitter to indicate percentage of carrier modulation.

montage. Series of events indicating a lapse of time. Also, in a dramatic program, a change of scene.

more wax. Please sing more softly.

Morse code. Code system in which letters, numbers and punctuation are represented by dots and dashes.

mosaic. Photo-sensitive plate mounted in the TV iconoscope.

mother. Positive recording produced directly from the master or negative record.

motion picture pickup. Use of a TV camera to pick up scenes directly from a movie film.

motivation. Reason or cause of an event or an action, whether inferred or in the spoken lines or action.

muffs. Same as fluffs.

mugger. Person who persists in working too near camera or mike.

multiple-unit tube. Two or more sets of elements in the same envelope. (Multiple-element tube.)

multiplex. Simultaneous transmission of two or more signals using a common carrier wave. Most recent use of multiplex is for transmission of stereophonic FM broadcasts.

multiplex operation. Simultaneous transmission and reception of several radio signals within same channel.

mural. Photographic enlargement of set or scene used to give impression that a scene actually exists in the studio.

mushy. The sound is O.K. but the microphone pickup is poor.

music clearance. Checking to be sure station or network has permission to broadcast copyrighted material, or obtaining that permission.

musical curtain. Music used at end of scene or play, as a final curtain.

narrate. Technique in which one of the characters in a story or film does all the voice-over, telling the story.

- narrator.** Off-camera or background voice known as VO, or voice-over.
- natural sound.** Sounds of action the source of which is shown; sight and sound simultaneous. Also called sync sound. Opposite of non-sync or off-screen sound.
- needle scratch.** Noise due to friction of needle riding groove.
- needle talk.** Sounds produced by vibration of phonograph needle. (Needle chatter.)
- negative grid generator.** Type of oscillator using negative feedback.
- nemo.** Program originating away from studio.
- network.** Combination of two or more electrical components performing a specific function. Also, hookup of broadcasting stations.
- network time.** Broadcasting time on an affiliated station available for network programs.
- neutral.** Theme music used under voice announcements.
- news analyst.** Person who interprets meaning of news, as opposed to announcer, who merely reports it.
- nick 'em.** Play music staccato.
- noise, atmospheric.** Electrical disturbances producing unwanted sounds in communications transmissions.
- noise, electrical.** Unwanted electronically produced sounds present in background.
- noise limiter.** Circuit that reduces amplitude of noise pulses by clipping them at level slightly above signal level.
- noise, modulation.** Noise which varies in strength with recorded sound and hence makes recording sound fuzzy.
- nooding.** The tuning up of musical instruments. Also, to play a few bars of background music behind titles.
- null.** No effect. No value. No reading.
- nut.** Complete cost of radio or TV show.
- obituary.** Biography of a dead person (Obit for short.)
- oblique dissolve.** Same as diagonal dissolve.
- off mike.** Position away from the microphone.
- off screen.** Any narration that is not lip sync.
- off the record.** Information given to a reporter that is not to be used on the air.
- offside.** off-color gag.
- ohm.** Electrical unit of resistance.
- ohmmeter.** Instrument for measuring resistance.
- oleo.** Any roll curtain or backdrop.
- omnidirectional.** All directional.
- on camera.** Talent is on the air being televised.
- on the beach.** Unemployed.
- on the cuff.** Program for which no compensation is paid to talent.
- on the head.** Program concluded with perfect timing.
- on the line.** An acceptable picture is leaving the studio for live telecasting.
- on the log.** Entry in studio record.
- on the nose.** Program ended exactly on time.
- one and one.** Play (or sing) one verse and one chorus of a song.
- one and two.** Play (or sing) one verse and two choruses of a song.
- one shot.** Single program; not one of a series.
- one-shot multivibrator.** Group of oscillators employing two amplifying units connected to cause the output of second stage to be fed back to first with phase relationship causing the stages to oscillate.
- opaque.** Complete slide, as distinguished from a transparency.
- open cold.** To open a program without theme or musical introduction; also to play without a rehearsal.
- open-end transcription.** Transcribed program with allowance for local commercials at start, possibly middle, and at close.
- open left.** Place object to extreme left.
- operating power.** Amount of RF power actually delivered to the antenna terminals.
- operator.** Person whose duty includes adjustment, maintenance and operation of equipment.
- optical.** Trick effect done mechanically.
- optical view finder.** TV camera device used to frame accurately and focus scene to be televised.
- originate.** To broadcast a program from a certain location; also, to create a program.
- orthicon.** Very light-sensitive tube used for outdoor pickups.
- oscilloscope.** Electronic instrument to provide visible indication of voltage or current wave forms for purpose of measurement or analysis.
- out of sync.** When TV image rolls vertically or horizontally, usually the result of receiver circuits being out of synchronization with transmitted signal. When voice track on film doesn't correspond to picture being seen.

out in the alley. Out of microphone range.

outlet. Station which puts a program on the air.

outside job. See nemo.

over. Program is too long for allotted time.

overboard. See over.

overlap. Trick shot in which two views are combined.

overload. Greater load than device or equipment is designed to handle.

overload capacity. Amount of overload device or equipment can handle without permanent damage.

overload protection. Device for automatic protection against excessive voltage or current.

overload relay. One which cuts off current in circuit when it exceeds predetermined value.

overloading. Feeding into a reproducing or recording system more voltage (volume) than it can handle without distortion.

overmodulation. Modulation in excess of 100% resulting in distortion of modulated wave due to carrier being cut off during part of modulating cycle.

pace. Rate at which show is being played.

package show. Program sold or purchased as a unit.

pad. Additional material to lengthen a program.

pan. To move camera horizontally to right or left to follow action.

pancake turner. Sound technician who controls playing of double-faced records.

panel. Sheet, sometimes of metal, on which operating controls are mounted.

panning. Horizontal sweep of the camera. (From panorama.)

papier-maché. Substance made of paper, glue and water. Also, three-dimensional shapes used to obtain certain effects in TV sets.

parabola. Directional microphone mounting, usually circular, used to pick up crowd noise, or band music.

participating announcement. One hundred to 150 words of commercial copy used in course of a program which also contains other such announcements.

participating program. One arranged to accommodate advertising messages of a number of sponsors.

participating sponsors. Two or more sponsors of same program.

part-time station. One licensed to broadcast only a certain number of hours a day.

patch. To connect pieces of equipment by patch cords.

patchboard. Board or panel with a number of jacks at which circuits may be terminated.

patch cord. One with plug at each end, used to connect two jacks on switchboards.

patch it on. To tie together various pieces of equipment to form a circuit.

patch panel. See patchboard.

pay off. Solution to plot of a drama.

peak (n). High point in sound or electrical signal strength.

peak (v). To cause peaks by using an uneven voice level.

peaks. Distortion because amplitude is too great.

peak-to-peak. Difference between maximum and minimum values of alternating wave.

pedal pusher. Organist who makes incidental music.

pedestal up. Raise the camera height.

per inquiry advertising. Advertising paid for based on number of inquiries received from the advertising of a product.

Phillips screw. One with indented cross instead of recessed slot.

phone cartridge. Small unit containing a crystal, magnetic coil or ceramic element.

photoelectric cell. Light-sensitive cell for converting light variations into variations in voltage or current.

photogenic. Person or object which lends itself to making of a good photograph or TV picture.

pick it up. Increase tempo. Speed up the show.

pick-up. Transcription or phonograph arm. Also, program origination location. Also, the transmission of the sound.

pickup arm. Used on record changers, record turntables and record players, with one end mounted on a pivot; other end holding a cartridge with stylus.

pick up the cue. Be prompt in speaking a line immediately after preceding speaker has finished.

picture. The image telecast.

picture dot. In color TV, the basic or picture element of each color pulse.

picture element. Smallest sub-division of TV image.

- picture frequency.** Number of complete pictures scanned per second, standardized at 30 per second in the U.S.A.
- picture transmission.** Electrical transmission either through air or by wires of picture with graduation of shade values.
- picture tube.** Image-reproducing cathode-ray tube.
- piezoelectric.** Pressure electricity. Property of some crystals to generate voltage.
- pilot lamp.** Small lamp used to illuminate tuning dial of electronic equipment.
- pipe.** To feed a program from one point to another.
- piped program.** One transmitted over wires.
- pitch.** Property of a tone which is determined by its frequency.
- plant.** To establish for the audience a fact or an idea at the start of a program.
- platter.** Disc or transcription.
- playback.** Playing of a recording. Also, to monitor a tape or disc immediately after it has been made.
- play off.** Exit music used at end of comedy or dramatic routine.
- play on.** Music used to bring performer on-stage.
- plops.** Unpleasant sound resulting when someone pronounces b's and p's too close to a microphone, or over-emphasizes those letters.
- plug.** Free commercial mention on the air.
- plug-in.** Having terminals so that connections are made automatically when the device is plugged into a socket or a series of jacks.
- point it up.** To accent or emphasize an action, music, or sound effect, or a line of dialogue.
- pointer.** Needle-shaped rod that moves over the scale of a meter or tuning dial.
- port.** Vent in a bass-reflex speaker enclosure.
- potential audience.** The number of homes within the clear reception range of a station.
- potential, electrical.** Voltage or electrical pressure.
- potentiometer.** Instrument for measuring small voltages.
- power.** Amount of work per unit of time.
- power amplifier.** Final stage in a series of amplifiers.
- power gain.** Ratio of amount of power delivered from a device.
- power level.** Amount of electrical power passing through a given point in a circuit.
- power level indicator.** AC voltmeter calibrated in terms of audio power level.
- power line.** Two or more wires used for conducting power.
- power loss.** Ratio of total power to circuit.
- power pack.** Unit made up of batteries or transformers, rectifier and filters necessary to power an electronic device.
- power pack, AB.** Power source for filament and plate-supply voltages.
- power switch.** Main switch in radio or TV receiver, transmitter or other equipment.
- practical.** Prop, such as a door, that really works.
- preamplifier.** Voltage amplifier made up of one or more stages of amplification used to increase a weak signal to level that can be handled by another amplifier.
- pre-empt.** Capture of program time because of first priority.
- pre-recorded.** Method of recording parts or all of a program prior to it being telecast.
- pre-score.** To compose and record any sound for a film or TV program before the action has been shot.
- presence.** In hi-fidelity, to indicate realism of the sound. Also, on-mike pickup which has effective intimacy.
- pressing.** A record produced in a record-moulding machine from a matrix.
- preview.** Dress rehearsal with audience.
- primary color.** A color that can be mixed with other colors to create a variety of hues required for color TV.
- primary coverage.** Area in which station's signal strength is 0.5 Mv/M or better.
- primary service area.** Area around a station where ground wave is not subject to fading and interference.
- print.** Positive copy of a film made from a negative.
- print-through.** Transfer of magnetism (recorded sound) from one layer of tape to layers adjacent to it on the reel.
- printed circuit.** Electrical circuit made up of interconnecting conductors printed, painted or etched on an insulating surface.
- printer.** Teletype receiving machine.
- process.** To develop and fix exposed film.
- producer.** Person in charge of all phases of the production of a radio or TV program.
- production.** Building, organizing and presenting a program.
- production log.** One kept by producer or director.

program analyzer. Device with which a listener may indicate by using buttons his second-by-second reactions to the program.

program balance. Proper arrangement of musical, dramatic and other elements of a TV show.

program, commercial. One paid for by a sponsor.

program, sustaining. One supported entirely by the network or individual station.

projecting. To increase volume of voice.

prop. Objects used on a set other than scenery and costumes. Set props are objects such as scenery and furniture. Hand props are handled by the performers.

prop truck. Portable cabinet containing hand props and sound effects.

propagation. Movement of wave energy through a transmitting medium.

property manager. Person responsible for obtaining props.

property plot. Detailed list of props to be used.

proscenium arch. Low wall dividing studio stage from studio audience.

provisional cut. Deletion in a program planned before air time, to be used in case of necessity.

public address amplifier. Audio-frequency amplifier capable of giving sound coverage at a public gathering. (P.A.)

puff. Free advertising or publicity.

pulse. Current or voltage that changes abruptly from one value to another and back to original value.

punch. Exaggerated emphasis in announcing.

punch it. Read it with exaggerated emphasis.

push-button control. Control of equipment by pushing buttons which operate relays and switches.

quick cutting. Cutting camera shots so short that they follow each other in rapid succession.

quickie. Program made cheaply.

quote. Quotation.

rack panel. One on which radio or telephone electronic equipment is mounted.

radiant energy. Energy in form of electromagnetic waves.

radiation. Process by which energy is propagated through space.

radiation pattern. A description of the radiation characteristics of an antenna.

radiation, spurious. Any undesirable radia-

tion from an electronic device.

radiocommunication. The transfer of information between distant points by radio waves.

radio fix. Determination of the direction from which a radio transmission is originating by use of a radio direction finder.

radio spectrum. Range of useful radio waves, classified by the FCC into seven bands, ranging from very low to superhigh.

radio telegraphy. System of telegraphy employing radiocommunications methods.

radio waves. Electromagnetic waves of frequencies lower than 3,000,000 mc propagated in space without artificial guides.

rain. Fine scratches on kine or film, resulting from repeated usage.

rake a flat. Shift its position or angle of alignment.

rates. Station time charges.

rating. Percentage of a sampling of broadcast audience watching or listening to a particular program.

reach. When writer gives an obviously contrived solution to a plot.

read for story. Examine the script quickly to get the general idea.

read-through. First reading of the script by the cast.

reader. Actor who sounds as if he is reading his lines, instead of saying them.

recall. Method of measuring the number of people who remember viewing a certain TV program.

receiver, all-wave. Radio receiver designed to receive on all commonly used bands.

receiver, communications. One for reception of signals originating from stations in the radiocommunications services.

receiver, mobile. One that can be operated while in motion.

receiver, panoramic. One designed to give a visual indication of any transmission occurring within a given range of frequencies. The receiver is periodically swept through the frequency range and any signal causes an indication on the screen.

receiver, radio. Electronic device to detect and demodulate electromagnetic energy emitted by a radio transmitter.

receiver, radiotelegraph. One capable of selecting and reproducing modulated or unmodulated CW transmissions.

receiver, short-wave. One capable of tuning in signals at frequencies above the commercial broadcast band.

- receiver, universal. One capable of operating from either AC or DC current.
- receptacle. Outlet or sockets into which a plug can be fitted or screwed for making electrical connection.
- record player. Motor-driven turntable and crystal or magnetic pickup, used for converting a phonograph record into audio frequency signals.
- recording head. Electro-magnet in tape recorder which, when energized, magnetizes the oxide coating on the tape. Also, device used when making disc recordings to cut grooves.
- recording level. Volume or amplitude of the electrical voltage operating the recording head of a tape recorder.
- rectifier. Device to conduct current more readily in one direction than the other. Used principally to change AC current to DC.
- rectifier, crystal. One that employs a semi-conducting crystal such as a silicon and a small contact called a cat's whisker.
- reduction print. To produce a 16 mm print of a 35 mm film by mechanical reduction.
- reflector. Antenna element used to reflect a portion of radiated energy and thus improve directional characteristics of antenna.
- refraction. Bending of radio wave when it passes obliquely from one transmission medium into another.
- regulator, voltage. Used to maintain constant voltage on line supplying power to equipment.
- relay. Device using relatively weak electrical charge in one circuit to cause a stronger one in another circuit.
- relay, change-over. One used to switch antenna between receiver and transmitter.
- relay, overload. One designed to open the supply line whenever current exceeds given value.
- relay, transfer. One used to switch a circuit from one circuit to another.
- release. Direction to cameraman that he is free to move to his next position.
- release print. Final print of a commercial film.
- release studio. Director's expression to indicate rehearsal is over.
- remote. Broadcast originating outside station or network studios.
- remote control. Operation of equipment from a distance, electrically or by radio waves.
- rep. Station's national representative.
- repeater. Amplifying station used to boost volume on long lines.
- resistor. Radio part offering resistance to flow of electricity.
- resolution. Degree of reproduction of the detail of a TV scene.
- resolution chart. Pattern of black and white lines and picture elements used to check resolution of TV equipment.
- resolve chord. Musical ending at the conclusion of a scene or a show.
- resonance. Characteristic of a circuit to oscillate at a particular frequency.
- resonator. Device employing resonance effects.
- returns. Results from a broadcast offer.
- reverse angle shot. Pickup the subject or object as on an existing camera shot, but from an opposite angle.
- rheostat. Resistor designed so a number of resistance values may be obtained without opening circuit.
- ribbon. Velocity microphone.
- ride gain. To control, manually, volume of a signal in order to obtain maximum results.
- rim drive. Method of driving turntable of phonograph by rubber-covered wheel attached to shaft of motor, the wheel contacting inside rim of turntable.
- rim light. Light around the edge of a subject.
- ring mike. Microphone installed over the ring at a boxing or wrestling event.
- riser. Small platform used to elevate part of an orchestra, or members of the cast.
- roll it. Start the film.
- roll up. Changing from one scene to another by rolling first picture from the bottom, revealing the second picture.
- rotating wipe. Optical technique in which a line moves over the screen clockwise or counter clockwise, seeming to uncover another scene as it moves.
- rotator, antenna. Motor used to turn antenna to get best reception or transmission.
- rotor. The rotating member of a machine.
- round robin. Telephone loop that makes a complete circuit, permitting points of origin to change during program without more than slight pause.
- rumble. Low pitch noise originating in motor or mechanism of record player, turntable or record changer.
- rumble filter. Circuit used in high-fidelity

amplifiers to eliminate noises of low pitch originating in some turntables or record changers.

running time. The final timing of a program, page by page of the script, during the last rehearsal.

runover. When a program goes past its scheduled finishing time.

rushes. First prints from a film.

safety. A second recording usually made simultaneously with the first, for use in case the first is lost or damaged.

sawtooth. Wave of electrical current or voltage employed in scanning.

scan. The process of changing a light image into an electrical signal, or vice versa.

scanning. In television, the tiny elements of a picture are passed over systematically, line by line, from top to bottom, as in reading, but so rapidly as to appear instantaneous. This is done by an electron beam which produces voltages corresponding to the shades of black and white in the scene being televised. In the receiver the modulated electron beam scans synchronously the fluorescent coating on the face of the kinescope.

scanning frequency. The U.S. and Canadian standard is 30 frames per second; 525 lines per frame.

scatter propagation. Propagation of radio waves beyond horizon by reflection from ionosphere or troposphere.

scattered reflections. Ionoscope reflections that cause fading and interference to the signal.

scene. Single sequence in a TV show. One or more shots.

scenery dock. Place where scenery is stored when not in use.

schematic diagram. One which shows electrical connections of a TV, radio or other electronic device by symbols.

schmalz. Overly sweet or mawkish style of writing, delivery, or musical presentation.

schmaltz it. Do it in a sentimental manner.

scoop. An exclusive story; a beat.

scoops. Multiple lighting units.

score. To scratch or score the groove in playing a record because of too much pressure or a bad needle. Also, to score a script by selecting or composing music for it. Also, as a noun, the score or musical accompaniment of a program.

scrambled speech. Speech inverted in frequency to make it unintelligible.

scratch. Groove noise on record or transcription making it unsuitable for broadcast use.

scratch filter. Low-pass circuit filter inserted in circuit of phonograph pickup to suppress the noise of needle scratching.

script girl. TV director's assistant who helps with script preparation, clearances, editing, time-keeping and prompting.

segue. Overlapping of two elements as one fades in over another which is being faded out. Can be music, sound effects or voices. Also, in music, transition from one number or theme to another.

selective calling. System by which any or all stations on a network can be alerted for a message.

selectivity. Ability of a circuit or device to select a desired signal and reject those on adjacent frequencies.

sensitivity. Characteristic of TV or radio receiver which determines the minimum input signal strength required for a given output value.

sequence. Complete scene in a TV show. Also, succession of shots or scenes, action or music. Also, main division of a show.

serial. Series of radio programs telling a continued story.

service the script. To cast, rehearse and present the program described in the manuscript.

servomechanism. Device actuated by mechanical or electric energy which performs some mechanical function.

servo system. One which transfers accurate mechanical positions from one place to another by electrical means.

set. To place in position. Also, an assembly of parts that operate as a whole.

set up. Arrangement of musicians, performers and sound effects in studio to get the best acoustical effect.

sets in use. Percentage of all radio families whose radios are turned on at a specific time.

shank. Part of phonograph or recording needle that is held by a setscrew.

shield. Screen or sheet of aluminum or copper placed around an electronic circuit or between circuits to short to the ground unwanted radiation. Also placed around or between circuits to give easy path for magnetic lines of force.

shielded cable. Wire or wires enclosed by protective tape or metal braid to prevent

- wires from picking up unwanted signals. **shielded wire.** That which is enclosed in metallic shield.
- short.** A show that lacks sufficient material to fill the allotted time.
- short voice.** One with limited range. A short circuit.
- shoulder shot.** Camera shot of head and shoulders only.
- sideband.** One of two sets of frequencies produced on each side of the carrier by the modulating signal.
- signal.** Broadcast picked up by a receiver.
- signal, driving.** That which is applied to the output or power stage of a transmitter.
- signal generator.** Instrument containing oscillators and associated circuits to develop special waveforms with waveshapes, amplitude and frequencies for use in making tests.
- signal strength.** Measured strength of radio signal at given distance from transmitter.
- signal-to-noise ratio.** Ratio of signal level to noise level in receiver or amplifier. (S/N)
- signature.** Musical number or sound effect that identifies the program.
- silent period.** Period during each hour when operators of all ship stations using radio-telegraphy must monitor one of the emergency bands for distress calls.
- silicon.** Semi-conducting element used in diodes, rectifiers, transistors and other electronic devices.
- simulcast.** Radio broadcast and telecast of same program, aired simultaneously.
- skip.** Condition in which radio waves sent skyward are bent back to earth by ionized layers of gases in the ionosphere.
- skip distance.** A region where broadcast signals are not audible because of having skipped over that area.
- slap bass.** To play a bass violin by slapping the strings.
- slip horn.** Trombone.
- sneak.** Gradual fade in or fade out of sound or music so as not to be obtrusive.
- sneak in.** Bring music in softly behind dialogue.
- snow.** Flickering of small light and dark particles, giving the effect of snowfall in the TV picture.
- soap opera.** Daytime dramatic serial programs.
- sock it.** To speak a word or line with great emphasis.
- solenoid.** Coil of wire through which an electric current is passed to produce an electromagnet.
- song plugger.** Music publisher's representative who promotes the firm's songs.
- sound effects.** Sounds in a radio or TV show generally produced synthetically from records or by means of gadgets and devices.
- sound man.** Technician who creates manually or with recordings desired sound effects.
- sound panel.** Movable panels of rock wool for sound absorption.
- sound-proofing.** Preventing the passage of sound through walls, doors or ceilings.
- sound table.** Movable table on which are placed small sound effect properties.
- sound track.** Sound reproduced on film.
- sound truck.** Movable cabinet with multiple turntables and attachments for playing recorded sound effects.
- sour.** Voice or instrument off pitch.
- spaghetti.** Varnished cloth tubing used to provide insulation for radio circuit wiring.
- speaker.** Short for loudspeaker.
- speaker, capacitor.** One in which movement of the diaphragm results from electrostatic interaction between two large, closely-spaced metal plates.
- speaker, crystal.** One in which mechanical displacement of the diaphragm is produced by piezoelectric action.
- speaker, dynamic.** One made of a diaphragm with a voice coil attached and a source of magnetic energy.
- speaker, electromagnetic.** Dynamic speaker using electromagnet as source of magnetic energy.
- speaker, permanent-magnet.** Dynamic speaker using permanent magnet to provide necessary magnetic field.
- spectrum.** Frequencies or radiations existing in a continuous range and having a common characteristic.
- speech clipper.** Circuit employed to reduce or cut off high audio peaks to prevent over-modulation of a carrier wave.
- speech level.** Measure of energy in speech or music as indicated by VU meter.
- speed.** In tape recording, the speed at which the tape moves past the heads, measured in inches per second. Tape speeds of 3¾ and 7½ inches per second are most popular. Also, in disc recording or playing, the turntable speed of rotation: 78, 45 or 33½ revolutions per minute.
- spell a line.** To read a line in the script carefully enunciating every word.

spider. Flexible fiber ring serving to center the voice coil of a loudspeaker.

spindle, supply. The spindle of a tape recorder on which is mounted the reel of tape to be recorded.

spindle, takeup. The spindle of a tape recorder on which is mounted the reel which holds the tape after passage over the recording or reproducing head.

splice. An end-to-end joint between two pieces of magnetic tape.

splice. Connection of two or more conductors or cables to provide strength and conductivity.

splicing tape. Special self-adhesive tape used to make splices.

split channel. Two or more network sections using different programs.

split focus. TV picture of two or more objects or persons in which none is sharply focused at the expense of the others.

split network. A network divided into two or more practical market sections, with simultaneous transmissions of different programs to different sections.

split setup. Arrangement of instruments of orchestra to take full advantage of the two-directional pickup characteristics of the microphone.

split screen. Electronic effect whereby parts of pictures from two cameras divide the screen.

sponsor. Advertiser who pays the cost of a program.

spot. Visible spot of light formed by the impact of the electronic beam on the screen as it scans the picture. Also, individual TV spotlight directed on a restricted stage area. Also a spot announcement.

spot announcement. Fifty to 70-word commercial used during a station break.

spot broadcasting. Purchase of time on one or more local stations for advertising a product by transcriptions or live local talent.

spot news. Live, urgent news, as opposed to feature stories.

spots. Time location selected for spot broadcasting.

spread. To stretch any part of a broadcast in order to fill all the allotted time of a program.

spreader. Performer who takes longer on the air than he had been allowed in rehearsal.

spurious emission. Emission on frequencies

outside the necessary band, the level of which may be reduced without affecting the corresponding transmission of information.

squeak-stick. Clarinet.

squeezed up. A sound reproduction that accentuates the high frequencies to the exclusion of lows.

stagger through. First camera rehearsal.

stand by. An order to get ready to begin the show. Also, a substitute program for use in case of an emergency.

standby group. Performers engaged to take part in a standby program.

standard broadcast band. Frequencies from 535 kc to 1605 kc.

static. Interference on receiver as result of electrical or atmospheric disturbances. Also, fixed, not moving.

station. Transmitter, antenna and other equipment for sending radio waves into space.

station audience. That portion of the available audience tuned in to a particular station at a particular time.

station, base. Principal or key station in a radio system. Also, a station not intended for operation while in motion.

station break. Interval between programs, usually at the hour, half-hour and quarter-hour, used for station identification. Also, the announcements that are broadcast during the interval of a station break.

station, land-based. One operated from a permanent location on land.

station license. One issued by FCC authorizing installation and operation of a station.

station log. A record of station operation, as required by FCC.

station, mobile. One designed to be operated while in motion or during stops at unspecified points.

station, portable. Two-way radio equipment built to permit easy movement from one location to another.

station, relay. One receiving and rebroadcasting signals to one or more stations beyond normal range of station from which signal originates.

step-down transformer. One in which the secondary winding has fewer turns than the primary, so a lower voltage is delivered.

step it up. Increase the volume.

step-up transformer. Opposite of step-down transformer.

- stereo cartridge.** Special type of phonograph pickup used in stereophonic phono systems for playing stereo records.
- stereophonic recording.** Recording which gives a three-dimensional effect. Usually two recordings made simultaneously from separate microphones and reproduced through separate speakers. Sometimes three or more separate and simultaneous recordings are made.
- stereophonic sound.** One with depth and direction that captures the acoustics of the place of origin. Recorded with two microphones. Playback is through separate amplifiers.
- stick a pin in it.** The final rehearsal is perfect. There will be no changes before air time.
- stick-waver.** Orchestra-leader.
- stop.** The size of the iris in the TV camera lens, adjustable to admit more or less light.
- straight reading.** Reading material without special emphasis or characterization.
- stretch.** To slow down a performance.
- strike.** To pull down, dismantle, remove sets.
- strip show.** A serial program.
- stroboscopic disc.** Specially printed disc with series of lines or dots or both, which, when placed on a rotating record player turntable, indicates whether turntable is turning at proper speed.
- stylus.** Needle used in sound recorder to cut record grooves. Also, record playback needle.
- stylus drag.** Friction between stylus and surface of record groove.
- stylus pressure.** Pressure exerted on disc by stylus.
- stylus pressure gauge.** Indicator used to determine how much vertical pressure stylus exerts on disc.
- subcarrier.** Carrier used to modulate a main carrier.
- sunspot.** Areas of increased solar activity known to be the cause of magnetic and electrical disturbances.
- super.** The superimposition of one picture over another by electronic means.
- superfluous radiocommunication.** Any transmission not necessary in carrying on a station's authorized service.
- super imp.** Use of two or more cameras at the same time, each with its own picture, but transmitted as a single picture. Superimposition.
- superimposed.** Condition in which two images are visible at the same time.
- supersonic.** Speed in excess of the speed of sound.
- supply, power.** Battery or device composed of filters, rectifiers, transformers to supply electric power.
- supply, vibrator.** Power supply using a vibrator to convert direct current from a battery into alternating current. Usually used for car radios.
- suppressor.** Device to eliminate or reduce unwanted actions in electric or electronic circuits.
- surface noise.** Mechanical noise produced by the grain of a record surface.
- suspended interest.** News story or dramatic program in which the climax is near the end.
- sustaining program.** One presented by the station or network with no commercial sponsorship.
- sweep.** Curved piece of scenery.
- switch.** To transfer a station or line from one source of program service to another.
- switcher.** Electronic technician who regulates brightness and contrast of TV pictures and cuts fades and dissolves from one picture to another.
- sync.** See synchronize.
- synchronization.** The maintenance of synchronism between the scanning motions of the electronic beams in the camera tube and the cathode-ray tube in the receiver.
- synchronize.** Simultaneous termination of programs on two networks so stations may switch from one to the other. Also, synchronization of two or more stations to one wavelength.
- synchronous.** When applied to the driving motor of a tape recorder, a motor with the speed controlled by and synchronous with the frequency of the AC current which runs it.
- tag.** Live announcements following a transcribed announcement. Also, an addition to a commercial.
- take.** The making of a recording or section of a recording. Also, switching instruction. (Ready One. Take One.) Also, picture or scene held by a TV camera.
- take a balance.** See take a level.
- take a level.** Test of microphone before actual broadcast to determine sound level.
- take five.** Direction for a brief recess in rehearsal.
- take it away.** Cue from studio engineer to

engineer of following program.

takeup drive. Motor and mechanism which turn reel holding the tape after recording.

talk-back. Communication system permitting control room personnel to talk to those in studio.

talk-listen switch. One which permits use of loudspeaker as a microphone or a speaker.

talking down. Condescension on part of a radio speaker.

talking in the beard. Speaking with a muffled voice.

tally light. Indicator light on camera to show when camera is on the air.

tape deck. Device for recording and playing back tapes, with heads for erasing, recording and playing back.

tape hiss. Hissing noise heard in playing a tape, due to faults in the machine, not the tape.

tape recorder. Mechanical-electronic machine for recording any audio frequency material, by converting sound to electrical energy.

tape tension. The amount of force exerted on magnetic tape in a tape recorder as it is pulled past the heads of the machine.

tape transport. The mechanism that moves tape from one reel to the other in a tape recorder.

tear jerker. Script with sad emotional appeal.

telecast. A television program.

telegraphy. System of telecommunication for transmission of written matter by use of signal code.

telephony. System of telecommunications for transmission of speech or sounds.

teleprompter. Device above lens of camera or on special stand permitting performer to follow script by reading words typed in large letters on continuous roll of paper.

teletype. System of sending and receiving typewritten material by using typewriter at both sending and receiving ends.

television. Transmission and reception of images and sound by means of radio waves.

television channel. Band of frequencies for a single television broadcast station.

terminal. Point in circuit or device that provides electrical access for connecting other components or leads.

terminal, common. One shared electrically by a number of conductors or components.

test pattern. Drawing containing lines, cir-

cles and diagrams for making TV tests.

test record. One for checking and adjusting audio reproducing systems.

thread. Material removed from phonograph disc by the recording stylus during recording.

theme. Signature melody used at start or/and finish of a program.

thick. When the sound of individual instruments in an orchestra are not distinguishable.

three-shot. Camera shot of three performers or objects.

throwing it away. Direction to performers or engineers to fade the last line of the script.

thunder sheet. Lightly suspended piece of thin metal used to create low-pitched sounds imitating thunder or distant guns.

tie-in announcements. Those given by a local station after the network cue.

tight show. Program that has been timed accurately so it exactly fits its allotted time. Also, program which in rehearsal runs slightly over assigned time and therefore must either be cut or played faster.

tilt. Move camera vertically up or down.

tilting. Vertical sweep of camera.

time-buyer. Executive of advertising agency responsible for buying time on a radio or television station.

time check. Synchronization of all watches and clocks.

time holder. Program substituted during vacation of the regular show.

time signals. Time announcements made at five-minute intervals by the National Bureau of Standards radio station WWV, Washington, D.C.

tinny. Sound which is very deficient in lows.

tolerance. Permissible deviation from assigned or rated value.

tone. Character of reproduced sound.

tone arm. In a phonograph, record player or changer, the arm containing cartridge and stylus.

tone control. Device on many radios, record players and recorders for altering the treble or bass.

tongue. That part of the crane of a TV camera dolly that controls angle and height.

tower. Structure used to support an antenna.

town crier. Vocalist who sings too loudly.

track. Area on magnetic tape which is magnetized by passage over the recording head.

- tracking.** Path of a phonograph stylus in following record grooves.
- traffic.** Messages handled by radiocommunications.
- transceiver.** Combination of transmitter and receiver, using common chassis.
- transcribe.** To record a radio program for later rebroadcast.
- transcription.** Any recording of a complete program. Usually 16 inches in diameter and recorded at speed of 33 $\frac{1}{3}$ rpm.
- transducer.** Device capable of receiving power from one or more sources and delivering it to one or more systems.
- transformer.** Electrical device that transforms electrical energy by electromagnetic induction from one or more circuits to one or more other circuits.
- transformer, matching.** In recording, an audio frequency transformer connected between a microphone and the input to the recorder to change the impedance of the one so it will match the other.
- transistor.** Variety of solid-state devices used to control flow of electricity.
- transistor base.** Control electrode in a transistor.
- transistor, germanium.** One using germanium as the semi-conducting material.
- transistor, silicon.** One using silicon as the semi-conducting material.
- transition.** Music, sound or silence used to change from one scene to another.
- transmission.** Transfer of electric or electromagnetic energy from one point to another through conductors or by radiation through free space.
- transmission level.** Ratio of signal power at one point in a transmitting system to another point used as a reference.
- transmission line.** Two or more conductors used to transfer energy from one location to another.
- transmission line, coaxial.** Cylindrical transmission line with center conductor and outer shielding conductor, separated by dielectric material.
- transmitter.** Any device capable of generating and radiating RF energy.
- transmitter, aural.** Electronic device used to transmit sound signals from a television station.
- transmitter, auxiliary.** Standby transmitter for use in emergencies.
- transmitter, crystal-controlled.** Radio transmitter using quartz crystal or similar material as frequency-determining element in oscillator.
- transmitter, fixed frequency.** One designed for operation on single frequency or channel.
- transmitter, multiband.** One designed for operation on one or more bands of frequencies.
- transmitter, short wave.** One capable of producing and radiating signals at frequencies above the commercial broadcast band.
- trap.** Filter used to absorb an undesirable signal.
- traveler.** Scene curtain on pulleys.
- trickle charge.** Continuous charging of a storage battery at a low rate to keep battery fully charged at all times.
- truck.** To move camera parallel to piece of furniture or background. Also, to move with a performer as he crosses the set.
- tubby.** Reproduction of sound which is deficient in highs and generally muddy.
- tube.** Device producing amplification, oscillation, rectification or other results by controlling flow of electrons in a circuit external to the tube and through a vacuum, gas or vapor inside the tube.
- tube, electron.** Evacuated container enclosing number of electrodes arranged to provide control of an electrical current.
- tube, electron-ray tuning indicator.** Indicator containing plate made to fluoresce by controlling the manner in which the electrons strike the screen.
- tube, cathode-ray.** Vacuum tube producing electron beam focused on a fluorescent screen.
- tube, doorknob.** Vacuum tube shaped like doorknob for use in UHF transmitter.
- tuner.** Device for reception of AM, FM or both. Identical with AM or FM radio, except it does not include speaker or audio power output unit.
- tuning eye.** Device, looking like the iris of an eye, indicating volume by degree to which glowing green areas close up a dark space between them.
- tuning indicator.** Device providing visual indication of tuning.
- turkey.** An outstanding failure.
- turn over.** Relinquish control at close of a program.
- turntable.** Rotating platform on which records are played.
- two-shot.** Composition of two performers or objects.

- tying-in.** When a station or group of stations picks up a program already in progress.
- ultrasonic.** Sound so high in frequency that it is not audible to the human ear. Often used instead of older word, supersonic. Having frequency above 20,000 cycles per second.
- ultraviolet.** A region of the electromagnetic radiation spectrum at about 4,000 angstroms.
- under.** Program which is too short for allotted time.
- undercutting.** Cutting too shallow a groove during sound recording.
- underload relay.** One which operates when the circuit load drops below the minimum value.
- undermodulation.** Insufficient modulation of a radio transmitter.
- undistorted output, maximum.** Maximum power a device or circuit will deliver without exceeding the fixed low level of distortion.
- unilateral.** Velocity microphone sensitive on only one side.
- unit.** Piece of electrical apparatus used for one specific purpose.
- universal supply.** Power supply capable of operating from either AC or DC without circuit changes.
- unmodulated groove.** One cut without sound.
- vernier dial.** Tuning system for fine tuning of radio or other electronic equipment, whereby tuning knob must be rotated several times to move tuning shaft one revolution.
- vertical hand control.** Device for changing frequency of vertical sweep oscillator in TV receiver.
- vertical linearity control.** Device on back of TV receiver for controlling height of the screen of a television picture tube.
- vertical recording.** One in which the grooves move up and down instead of side to side. (Hill and dale recording.)
- vertical resolution.** Number of horizontal wedge lines clearly discerned by the eye on TV image test pattern before they merge together.
- vertical retrace.** Return of spot from bottom to top of image after each vertical sweep.
- vertical sweep.** Downward movement of the scanning beam from top to bottom.
- video.** Transmission of visual images. Television.
- video tape.** Magnetic tape especially designed for recording a composite television signal, color, or black and white.
- vidicon.** TV camera pickup tube.
- visual show.** Radio program presented before live audience.
- voice-operated control.** System in which voice is used to initiate a specific action.
- volt.** Amount of pressure that will move one ampere of current through one ohm of resistance.
- voltage.** Intensity of electrical charge in an electrical circuit, measured in volts.
- voltage regulator.** Circuit or device used to maintain terminal voltage at a fixed value or to vary voltage as desired.
- volt-ohm-milliammeter.** Test instrument for measuring voltage, resistance and current.
- volume.** Loudness, intensity, sound level.
- volume compression.** Limitation of volume range of audio frequency sound amplitude to variation of 30 to 40 db at transmitter.
- volume control.** Potentiometer or rheostat used to vary audio frequency output.
- volume expander.** Arrangement of audio frequency circuit to increase volume range of a program or recording by making weak sounds weaker and loud sounds louder.
- volume indicator.** Meter in control room which registers program volume.
- volume limiter.** Device or circuit which automatically limits amplitude of an audio signal.
- waist shot.** Camera shot from waist up.
- walkie-talkie.** Compact portable receiver-transmitter, light enough to be carried in hand or on the back, which contains own battery supply.
- walla walla.** Ad lib mumble in crowd scenes, said several times.
- warm up.** Three-minute to five-minute period immediately preceding broadcast in which announcer or star of program puts studio audience in receptive mood by amiable chatter.
- watch.** To monitor a certain frequency.
- watt (W).** Unit of electrical power equal to energy represented by one ampere flowing under pressure of one volt.
- wattmeter.** Device which indicates the power moving in an electrical circuit in terms of watts.
- wave analyzer, harmonic.** Device for measuring harmonic content in a complex waveform.
- wave, carrier.** Wave energy which can be modulated to convey intelligence.

- wave, continuous.** One in which each successive peak has the same amplitude.
- wave, direct.** One which follows a line-of-sight path from transmitter to receiver.
- wave, divergent.** One which spreads out from its source.
- wave, electromagnetic.** Magnetic and electric fields in the form of wave energy.
- waveform.** The graphical representation of a waveform.
- wave, ground.** The part of a transmitted wave associated with both the ground and the troposphere.
- wave, indirect.** One that reaches a receiving antenna after being reflected or refracted.
- wave, interference.** Signals that arrive faded, garbled or fluctuating because of two waves of nearly the same frequency arriving together at the receiver.
- wave, interrupted continuous.** Type of radio-telegraph communication in which carrier is turned on and off by code impulses.
- wave, ionospheric.** One that has been reflected back to earth by an ionized layer.
- wavelength.** Distance between nodes of a wave. Also, ratio of velocity to frequency of a wave.
- wave propagation.** Transfer of energy along or through a medium by wave motion.
- wave, reflected.** One arriving at receiver after being reflected from one or more surfaces.
- wave, sky.** That part of a transmitted wave that travels upward into space.
- wave, tone-modulated.** Interrupted continuous waves that have been amplitude-modulated at an audio-frequency rate.
- wave, tropospheric.** One that is reflected or refracted in the troposphere.
- wax original.** Original sound recording made on a wax surface.
- weaver.** Performer who moves about nervously in front of microphone.
- web.** Network.
- west of Denver.** Used about unexplainable engineering difficulties.
- whodunit.** Mystery story, script or program.
- whoof.** Word used by engineers to check peaks, because of its explosive sound. Also used for time, reverberation and frequency checks.
- windshield.** Perforated metal cover fitting over microphone which protects it from drafts caused by air-conditioning systems.
- wire recorder.** Similar to tape recorder except it uses round stainless steel wire instead of tape.
- wire-shield.** One composed of a center conductor, insulating material and an outer shielding conductor.
- womp.** Sudden surge in signal strength resulting in flareup of the light in the picture.
- woodchopper.** Xylophonist.
- wood pile.** Xylophone.
- woofer.** Large loudspeaker for reproducing low audio frequency at relatively high power levels. Also, a breathy singer.
- wood shed.** Working rehearsal.
- wood shedding.** Rehearsing the lines of a program outside the studio. Also, in the case of a musical director, making an ad lib arrangement of a number during a rehearsal by verbal rather than written instructions to orchestra or vocalists.
- wow.** Sudden change in speed in recording or playing a recording. Also, changing sound pitch resulting from imperfections in recording or reproducing device.
- zampa.** Musical passage with much brass, blown hard and bitten off sharply.
- zilch.** Name used for anyone whose name is not known.
- zone coverage.** Reporting news from a suburban zone.
- zone of silence.** Area in which normal radio signals cannot be received.
- zoom.** Camera action using a zoomar lens in which camera does a fast and smooth push-in or pull-out from a subject or scene without losing focus.

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