JULY 1955



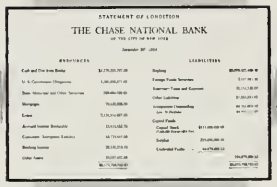
# RADIO AGE

RESEARCH • MANUFACTURING • COMMUNICATIONS • BROADCASTING • TELEVISION

NEW TV DESIGNS

# OVERSEAS
# RADIOPHOTO
# via RCA

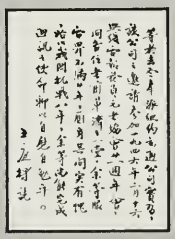
FASHION SKETCHES



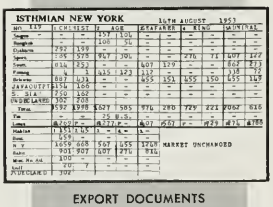
STATEMENT OF CONDITION

THE CHASE NATIONAL BANK

BANK STATEMENTS

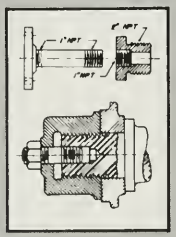


NON-ROMAN LANGUAGE DOCUMENTS

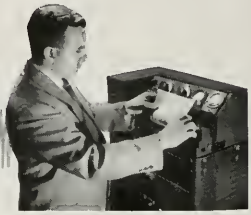


ISTHMIAN NEW YORK — 16TH AUGUST 1951

EXPORT DOCUMENTS



BLUEPRINTS



These reproductions of RCA Radiophotos show a few of the ways in which business* is widening its use of RCA Communications' international electronic picture transmission service.

*RCA Overseas Radiophoto Service was originally developed for the press. In recent years, however, businessmen have found more and more ways to save time and money with RCA Radiophoto Service. Today, more than 35 per cent of all RCA overseas radiophotos are sent by business firms.

**RCA COMMUNICATIONS, INC.**
A Service of
66 BROAD ST., NEW YORK 4, N. Y.

# Radio Age

ARCH • MANUFACTURING • COMMUNICATIONS
BROADCASTING • TELEVISION

JULY 1955

COVER

The new line of RCA Victor black-and-white TV receivers, featuring major style change with elimination of visible controls from face of the set.

NOTICE

When requesting a change in mailing address please include the code letters and numbers which appear with the stencilled address on the envelope.

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VOLUME 14 NUMBER 3

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RADIO CORPORATION OF AMERICA
RCA Building, New York 20, N. Y.

DAVID SARNOFF, *Chairman of the Board*
JOHN Q. CANNON, *Secretary*
FRANK M. FOLSOM, *President*
ERNEST B. GORIN, *Treasurer*

The Chairman of the Board addresses RCA stockholders at the 36th Annual Meeting in NBC Studio 8H.

that a reasonable number of color programs will be broadcast with regularity and this number will increase rapidly as more color sets are installed in homes. He said that RCA is confident that it can sell all the color sets and tubes it will produce between now and the end of this year.

"Sales of black-and-white television sets are continuing at a high level and the extraordinary values offered by the industry as a whole, assure a good market for the remainder of this year," continued General Sarnoff. "RCA continues to hold a leading position in this field and its production and sales programs for the balance of the year are geared accordingly.

"I expect that in 1956 and the years ahead, RCA earnings from sales of color television sets will substantially exceed its earnings from sales of black-and-white sets during those years."

### *NBC Color TV Plans*

General Sarnoff said that today nearly 100 stations affiliated with the National Broadcasting Company are equipped to handle color programs. Calling attention to NBC's plans for expansion of color television in the autumn of this year, he said that the schedule will include a new dramatic series produced by Maurice Evans, featuring plays by Shakespeare, George Bernard Shaw and others. The NBC Spectacular color programs will be continued on Saturday, Sunday and Monday nights as during the past season. In addition, several other major color programs are being planned and color inserts will be featured in the "Today" and "Home" programs. An afternoon color show for children is being scheduled for the 5 to 6 o'clock period, and it is expected that several football games will be telecast in color using the NBC mobile unit, which will go directly to the gridirons.

### *Radio, "Victrola" Phonographs and Records*

New portable radios and the outlook for pocket-size personal radios equipped with transistors will provide radio with a new and extended range of service, General Sarnoff said. Similarly, he pointed out, improvements in sound recording, in high-fidelity and 3-speed phonographs have put the record business on a new upward trend.

Stockholders were informed that first-quarter sales

of the RCA International Division in 1955 reached the highest level for any comparable period.

"A significant development in our international activities during the first quarter of 1955," said General Sarnoff, "was the incorporation of an RCA licensee service and research laboratory at Zurich, Switzerland. This laboratory will conduct scientific research and provide technical assistance to our European licensees in the same way that our licensee laboratory in Japan is furnishing assistance to our licensees in that area."

He stated that RCA operations in Latin America were being expanded, as were operations of the RCA Canadian Company — RCA Victor Company, Limited — which in the first quarter of 1955 was 10% ahead in business over the same period last year. He revealed that phonograph records manufactured under the RCA label were introduced nine months ago in France, Belgium and Holland, with encouraging acceptance.

### *Airborne Radar*

General Sarnoff called attention to the fact that recently RCA received from United Air Lines the largest order for RCA airborne radar in the history of commercial aviation — $2,500,000.

"Broad experience in communications, electronics, airborne television, radar and navigation systems, qualified RCA for an ever-expanding role in the field of commercial aviation," said General Sarnoff. "Our long years of research and development work in military aviation and the missile field lead us naturally into commercial aviation to enhance its safety, sharpen the precision of flight schedules and help to assure dependability in plane performance."

### *Bizmac*

Applications of electronics to business and industry are continually broadening in scope, according to General Sarnoff. He said that in this field RCA has developed a new and highly advanced electronic data processing system known as "Bizmac." It is designed to handle with instantaneous "push-button" operation such business tasks as invoicing, inventory control and other clerical routines. For example, if used in department stores, insurance companies, banks and other organizations which have thousands of accounts, "Bizmac," in one minute, can perform file maintenance on 3,000 accounts.

Under development for more than five years, the first "Bizmac" system is being custom-built for delivery next Fall, General Sarnoff said, to the U. S. Army Ordnance Tank-Automotive Command at Detroit, Michigan, where it will be used for the stock control of parts for military combat and transport vehicles.


On the production line at Bloomington, Ind., RCA Victor 21-inch color TV sets are readied for shipment after final tests.

# *"Sarnoff Plan" to Win the Cold War*

A FIRM and open decision "to win the Cold War," as the "surest way to prevent a Hot War," was urged upon our Government by Brig. General David Sarnoff, Chairman of the Board of RCA, in a memorandum presented to the White House on April 5, and made public on May 10.

Pointing out that the Kremlin's fixed goal is world dominion by means short of an all-out war — propaganda, fifth-column subversion, civil strife, terror and treacherous diplomacy — General Sarnoff declared:

"Logically we have no alternative but to acknowledge the reality of the Cold War and proceed to turn Moscow's favorite weapons against world Communism. Our political counter-strategy has to be as massive, as intensive, as flexible as the enemy's.

"The question, in truth, is no longer whether we should engage in the Cold War. The Soviet drive is forcing us to take counter-measures in any case. The question, rather, is whether we should undertake it with a clear-headed determination to use all means deemed essential, by governments and by private groups, to win the contest."

### *Discussed with President Eisenhower*

General Sarnoff's memorandum, entitled "Program for a Political Offensive Against World Communism," grew out of his discussion of the subject with President Eisenhower in Washington on the morning of March 15, and announced at the time by James Hagerty, White House Press Secretary.

The same afternoon, at the President's request, General Sarnoff conferred with Nelson Rockefeller, Special Assistant to the President on psychological warfare, and officials from the U. S. Information Service and the Central Intelligence Agency. At the end of the meeting he undertook to submit his views on the subject and a suggested program of action.

The result was the memorandum, in which he emphasized that "we must go from defense to attack in meeting the political, ideological, subversive challenge. The problem," he said, "is one of attaining the requisite magnitude, financing, coordination and continuity of action. The expanded offensive with non-military means must be imbued with a new awareness of the great goal and a robust will to reach it."

People everywhere, and especially behind the Iron Curtain, General Sarnoff recommended, should be told that "America has decided, irrevocably, to win the Cold War; that its ultimate aim is, in concert with all peoples, to cancel out the destructive power of Soviet-based Communism."

### *No Substitute for "Adequate Military Vitality"*

General Sarnoff declared that his proposals "should not be construed as a substitute for adequate military vitality," both in the newest weapons and balanced conventional forces.

"But short of a blunder that ignites the Third World War which nobody wants," he added, "the immediate danger is the debilitating, costly, tense war of nerves that is part of the Cold War. The primary threat today is political and psychological."

If we allow ourselves to be defeated in the cold struggle, he warned, "we will have bypassed a nuclear war — but at the price of our freedom and independence. We can freeze to death as well as burn to death."

Existing organization for fighting and winning the Cold War must be "adjusted and strengthened in line with the expanded scale and intensity of operations," General Sarnoff said. He proposed a "Strategy Board for Political Defense, the Cold War equivalent of the Joint Chiefs of Staff on the military side," functioning "directly under the President, with Cabinet status for its head."

The conflict on the political front, he said, "is not a preliminary bout but the decisive contest, in which the loser may not have a second chance. It must therefore be carried on with the same focused effort, the same resolute spirit, the same willingness to accept costs and casualties, that a Hot War would involve."

The specific activities cited as examples in the memorandum would be carried out not only by official agencies but by private groups such as labor unions, veterans' organizations, churches, youth and women's groups. The Soviet-controlled countries, it showed, are extremely vulnerable to precisely the kind of psycho-

logical pressures the Communists are using against free nations.

*Emphasizes New Communications Developments*

In outlining a vastly enlarged propaganda effort, General Sarnoff drew attention to opportunities opened up by new technical developments in communications. For instance, "mobile big-screen television units in black-and-white and in color" would be effective in non-Communist regions where "their very novelty will guarantee large and attentive audiences."

"Vast regions in Asia and elsewhere, where illiteracy bars the written word and lack of radios bars the spoken word," General Sarnoff explained, "could thus be reached."

His plan also included mass distribution of "cheap and lightweight receivers tuned to pick up American signals." In addition, "a simple, hand-operated phonograph device costing no more than a loaf of bread" and "records made of cardboard and costing less than a bottle of Coca-Cola" could be made available by the million in critical areas.

"Propaganda, for maximum effect, must not be an end in itself — it is a preparation for action," the memorandum stated. "Words that are not backed up by deeds, that do not generate deeds, lose their impact."

The arena of action is the whole globe, General Sarnoff believes. We must aim, he said, "to achieve dramatic victories as swiftly as possible, as token of the changed state of affairs." He saw great possibilities for encouraging and guiding "passive resistance" by individuals, with a minimum of risk, in the Soviet empire.

*Help for "Pockets of Guerilla Forces"*

At the same time he took note of the fact that "pockets of guerilla forces remain in Poland, Hungary,

Towers of the Radio Free Europe transmitter in Portugal symbolize today's U. S. Cold War effort.

A German worker for Radio Free Europe launches a leaflet-laden balloon toward Czechoslovakia.

the Baltic states, China, Albania and other areas." These "must be kept supplied with information, slogans and new leadership where needed and prudent."

"We must seek out the weakest links in the Kremlin's chain of power," General Sarnoff declared. "The country adjudged ripe for a break-away should receive concentrated study and planning. A successful uprising in Albania, for instance, would be a body blow to Soviet prestige and a fateful stimulus to resistance elsewhere."

Among the specific activities discussed in the memorandum were intensive collaboration with émigrés and escapees from communist countries and special schools to train personnel for political-psychological warfare.

# *Williamsburg Settlement Award*


THE GOLD MEDAL AWARD of the Williamsburg Settlement was presented to Brig. General David Sarnoff on May 15 at a New York dinner attended by leaders in the fields of journalism, finance, government and diplomacy. The principal speaker was Senator Lyndon B. Johnson, Senate Majority Leader, who paid tribute to General Sarnoff as "one man who has given as much to his country as he has received."

Referring to General Sarnoff's "cold war" plan, Senator Johnson described it as pointing the way to "a solution of the greatest problem before our people."

"We have much to save, much to preserve," Senator Johnson said. "It would be folly if we failed to save and failed to preserve because we had placed our faith in military strength alone. If David Sarnoff has provided us with a clue to the answer — and I believe he has — he will have demonstrated once again that free men can always conquer tyranny. From the brains of such men we can always draw vital ideas."

Presentation of the medal was made by Bernard M. Baruch, who said in part:

"In a long and rather active life, especially in the troublous times through which we have passed and are now passing, one meets many men of all races and creeds, and all nationalities, and in various arenas of life and activities — political, military, scientific, in war and in peace. And out of all of these men and women we select naturally some of those we consider the best. I have always felt privileged to select David Sarnoff as one of those men whom I wished to cultivate on account of many qualities, particularly his vision.

"He's a practical engineer; he's a practical scientist with all the knowledge of modern electronics and the splitting of the atom; he is what I call an industrial statesman. I say that because it is evidenced in what he did in the work particularly in which he is engaged in the corporation which he runs. He thinks not only of the interests of his stockholders but the interests of his workers and the interests of the public and above all, the interests of his country, the latest evidence of which is in this proposal which Senator Johnson has so eloquently spoken of tonight.

"If in my experience I was asked to suggest a small group of men because of their experience, their wisdom, to guide this country in war or in peace on any crisis, David Sarnoff's name would be high on any list no matter how small it would be. . . .

"When you think of David Sarnoff you have to think of him in terms of bigness — of bigness in mind, in spirit, in courage, and in his devotion to his country. . . ."

### *Honored by New York Masons*

The honor was the second bestowed upon General Sarnoff during the month by a prominent organization. On May 3, he received the seventeenth Grand Lodge Medal for Distinguished Achievement at the 174th Annual Communication of the Grand Lodge of New York State Masons. The medal was awarded to General Sarnoff as the Masonic man of the year for "his technical training, creative vision, executive ability and the cultural interest which sparked his plan to carry great music into millions of homes."

Discussing "Monitor" opening at NBC's new Radio Central are, left to right Sylvester L. Weaver, Jr., NBC President; James Fleming, Executive Producer and Editor of "Monitor;" Robert W. Sarnoff, NBC Executive Vice-President; Dave Gorrowoy, "Monitor" Communicator, and Mike Zeamer, program's Entertoinment Producer.

# "Monitor" Takes to the Air

THE NATIONAL BROADCASTING COMPANY has opened a new era in network radio with the revolutionary service, "Monitor." Using the immediacy and mobility of radio, "Monitor" is designed to bring listeners whatever is most interesting, important or entertaining, wherever it may be happening.

The new weekend radio service was introduced June 12 with an ear-and-eye-opening one-hour similcast — a program presented on both radio and television — from NBC Radio Central, the network's new $150,000 world listening post in New York. Continuing on the NBC radio network for eight hours in its opening broadcast, "Monitor" indicated its scope with a virtual kaleidoscope of information and entertainment. Among its features were:

— A tense interview with a prisoner inside the walls of the Federal Penitentiary at San Quentin.

— A jazz concert by Howard Rumsey and his band at Hermosa Beach, California.

— A bewildering conversation between Al Kelly, the double-talk artist, and baseball fans in a Manhattan tavern.

— The departure of a London-bound Constellation carrying a transmitter for later in-flight reports relayed back to "Monitor."

— A pickup of Jerry Lewis at Brown's Hotel in the Catskills and a preview of a segment of his latest film.

— A discussion of "The Spiritual Climate of America," with Dr. William Saltonstall, principal of Phillips-Exeter Academy, interviewing Dr. Nathan Pusey, President of Harvard.

— A dress rehearsal of Victor Jory's "The Fairly Fortune" at Bucks County Playhouse, with a commentary by producer Michael Ellis.

### *The Opening Team*

The initial simulcast was presided over by Sylvester L. Weaver, Jr., President of NBC, and featured James Fleming, executive producer and editor of "Monitor." Also on hand were "communicators" Dave Garroway, Clifton Fadiman, Walter Kiernan, Morgan Beatty, Frank Gallop and Ben Grauer. During the show, Bob Elliott and Ray Goulding roamed NBC Radio Central playing the roles of an NBC page and a confused tourist.

Since this first broadcast, "Monitor," which runs continuously from 8 a.m. Saturday to midnight Sunday, has proven itself as a new concept in electronics — a weekend radio service attuned to modern habits of living and listening. Over and above such basic services as news, sports, time signals and the weather, "Monitor" presents

In the new "Monitor" studio, Editor James Fleming signals to control room during initial broadcast. Seated at his left is Clifton Fadiman, program "Communicator."

vignettes of outstanding comedy, drama, theatre, and films, as well as such features as panel discussions, special events, commentaries and interviews.

At the heart of the "Monitor" concept, according to the NBC announcement, is the rule that material should not be cramped or stretched out to fit arbitrary time periods, as in previous radio programming. Rather, "Monitor's" services, features and vignettes are presented in the length of time best suited to the material itself. Thus its content may range from a single gag or a few lines of verse to a scene from a Broadway play or a full political debate.

"Monitor" makes full use of the immediacy, mobility and intimacy of radio. During its eight-hour debut, the service made 22 remote pickups from 13 places, including such overseas centers as London, Paris, Vienna, Singapore and Tokyo. In a split second, the listener may be transported from the National Open Golf Championship in San Francisco to a concert in Boston. One minute he may enjoy a chat with "America's Most Beautiful Bride" and the next he may sit in on a discussion in the White House.

### *The "Communicators"*

The key people of "Monitor" are its "communicators," the broadcasting personalities who sit at the controls, preside over the events, tie one vignette or feature to another, and generally add their personal touch to the proceedings. Each communicator works for four hours at a stretch and each is backed by a team of experts, including a disc jockey, a news caster, and a sports editor, as well as writers and specialists in program development.

From his post in NBC Radio Central, the communicator is in push-button touch with all parts of the free world. Seated at his control console, he commands direct lines to all important news centers in the United States, overseas circuits to foreign news capitals, connections to every NBC television studio, lines to the news rooms of NBC affiliated stations in 200 cities, and special mobile radio units roving about the country. He can draw on a stockpile of tape recordings, a battery of playback equipment, tickers from all the news services, and one of the world's finest record libraries.

Radio Central, located in the RCA Building, is a concentration of the most modern electronic facilities. Its glass-enclosed control and news rooms and its tape-recording and announce booths are designed for swift and smooth coordination. As a single instance of its capacity for complex communication, Radio Central can handle 12 individual pickup points at one time, whether foreign or domestic or a combination of both. The layout was planned and constructed under the direction of Chester A. Rackey, manager of audio-video engineering, in collaboration with Charles Colledge, Gerald Sellar, Richard H. Edmondson and John R. Kennedy.

In Radio Central, the communicator has before him television monitors carrying whatever NBC-TV program is being broadcast at the time. From these he can pick up the sound. In this way, "Monitor" both entertains its listeners and keeps them abreast of television.

### *Music is a Vital Part*

Another vital part of the "Monitor" service is music, whether dance music, jazz, classical, bop or pop. The communicator can draw on the NBC staff orchestras and the extensive NBC library of high-fidelity records. He can call in music from foreign points by shortwave and tape and he can reach out over the United States by live remote pickup to bring listeners the nation's top dance bands and music festivals.

"Monitor" also features unusual sounds. Its identifying signal is compounded of a long distance telephone tone, and the Morse Code letter "M" sent on an oscillator. Ever since the service was conceived, NBC correspondents the world over have been tape-recording unusual sounds and sending them into Radio Central. Among them: the sounds of corn growing, an earthquake in Madagascar, feeding time in an alligator pit and the mating call of the giant tortoise.

"Monitor" is aimed at being all things to all listeners, keeping Americans abreast of fast-moving events everywhere and entertaining them with the best the world has to offer. "Monitor" as its slogan declares, "is going places and doing things."

# *The Case Against Pay-TV*

PAY-TELEVISION will degrade and ultimately destroy free television, Brig. General David Sarnoff, Chairman of the Boards of RCA and the National Broadcasting Company, warned in a statement filed on June 6 with the Federal Communications Commission in Washington.

"The pay-television promoters' philosophy of cash-on-the-barrelhead television is not in the public interest," General Sarnoff declared. "Their standard of public interest is 'No Fee — No See.' "

Urging that American radio and television broadcasting be kept free to the public, General Sarnoff said that coexistence between free television and pay-television is impractical. Pay-television, he added, would turn the American system of free broadcasting into a restricted system of "narrowcasting."

"To the extent that pay-television might be financially successful, it would jeopardize the basis for economic survival of a free television system," he said. "In these circumstances, free television broadcasters would inevitably be forced by economic necessity to engage in pay-television, and this, in turn, would set off a chain reaction which ultimately would mean the end of our American system of free television. . . .

"The American people now receive, free, the best television service available anywhere in the world. There are more television broadcasting stations in the United States than in all the rest of the world combined. There are more television receivers in the United States than in all the rest of the world combined. American television stations offer the American people more television programs and a wider choice of television programming than any other television service in the world. . . .

"It would be tragic for this Commission to authorize pay-television to cripple this great democratic medium for the free dissemination of ideas, education and entertainment to all the people of America."

### *Major Points Against Pay-Television*

Among major points against subscription television made by General Sarnoff were:

1. Free television programming quality would suffer.
2. Outstanding programs and stars would move from free to pay-television.
3. Sports events would move from free to pay-television.
4. Public service programming would suffer.
5. Motion picture producers may gain control of TV programs.
6. Pay-television would black out free television for millions.

He pointed out that none of the promoters of pay-television had said that he would invest any of his money in building new broadcasting stations to transmit pay-television programs. They plan, he said, to use the facilities that free television has built and supports at great cost.

"The pay-television promoters attack present free television programming with the statement that it is not in fact free because it is paid for by advertisements reflected in the prices of the products," General Sarnoff said. "This argument is as absurd as contending that purchases of automobiles and clothing subsidize the press and that, were there no press, automobiles and clothing would cost the consumer less. Of course, it is elementary economics that advertising produces increased sales, which in turn make possible increased production, lower costs and lower prices to the consumer. . . ."

### *Free Television Programming*

Pointing out that as the size of the television audience has increased the free television broadcaster has had more available to spend on improved programming, General Sarnoff said:

"The pay-television promoters assert that their programs would attract audiences of many millions. Their programs would be broadcast at choice times to ensure the largest possible cash audience. Since television receivers can receive only one program at a time, the audiences available for free television during these hours would be diminished by many millions. To the extent that the free television audience is diminished, there would be less circulation available to the sponsor. And if there is less circulation available to the sponsor, there would be less money available to stations and networks for free television programming. All this would mean that the quality and quantity of free television programming would decline."

### *Effect on Programs and Stars*

"The pay-television promoters say they would offer better programs because their system furnishes the

means to pay more for stars and program material," he continued. "If this is so, the result would be that any free television star or program material good enough to attract a large audience would be approached by the pay-television promoters who could offer more money than free television.

"Commander McDonald of Zenith has belittled NBC's free presentation of Peter Pan by saying that 'with the same show on subscription television, and the same audience paying twenty-five cents per set to watch the attraction at home, the box office would have received five million dollars to be divided between the producer, the distributors, and the broadcasting stations.' Clearly, there can be no Peter Pan or similar broadcasts on free television in Commander McDonald's calculations; nor can it be suggested that Peter Pan could have been a better program if the pay-television promoters had been able to exact five million dollars from the American TV public.

"The most popular stars and program material could vanish from free television just as soon as they had demonstrated their drawing power and were attracted by the cash box of pay-television promoters. Free television programming would thus suffer irreparably, and the public would have to pay for what it now receives free."

### *Sports Events*

After citing statements of the presidents of Madison Square Garden, the Brooklyn Dodgers and Skiatron indicating that the public would be expected to pay for important sports programs now on free television, General Sarnoff said:

"Bluntly stated, the pay-television promoters are speaking out of both sides of their mouth at the same time. They tell the public they would continue to get the same free programs they now receive and that pay-television would be just a 'supplementary service'. . . . But these same promoters have already pointed out that should this Commission adopt their proposals vast sums could be obtained from the public by moving programs, such as Peter Pan and outstanding sporting events, from free television to pay-television.

"Further, the petitions these promoters have filed with this Commission carefully avoid any commitment that pay-television would not carry advertising. Obviously this omission was not merely inadvertent."

### *Public Service Programming*

Stating that shrinking revenues of television broadcasters would force curtailment and perhaps abandonment of public affairs, cultural and educational programs now presented by free television, General Sarnoff said:

"Under the present American system of free television, broadcasters have assumed a public service responsibility to present programs in the public interest even though many of these programs represent substantial expenditure and may produce no monetary return. . . .

"The pay-television promoters, while promising all things to all people, carefully limit their promises to all things to all people — for cash. A well-rounded TV service should — and under the free broadcasting system does — include programs of information, education, culture, and religion, even though these programs may not attract sponsors. But because there is no cash in such programs, they would not be carried on pay television. . . .

### *Motion Picture Producers*

"Pay-television makes strange bedfellows, and the recent alliance between the powerful motion picture interests and the pay-television promoters is highly significant. For years the large motion picture companies have refused to make their products available for television. . . .

"On May 24, 1954, a new approach was signaled by the spokesman for the motion picture industry, Eric Johnston, President of the Motion Picture Association. Mr. Johnston wholeheartedly endorsed pay-television.

"The reason for the abrupt Hollywood turnabout is obvious. Paramount Pictures, promoters of Telemeter pay-television, and other motion picture producers, having been legally divorced by the courts from several thousand theater box offices to which they were so long wedded, are now panting for marriage to cash boxes that can be attached to thirty-five million television receivers now in American homes.

"We believe it would be fatal to the continued dynamic growth of television to enable Hollywood to dominate and control television programming. . . .

". . . And pay-television, as administered by Hollywood, would operate without responsibility for balanced and diversified programming in the public interest — a responsibility which the broadcasters have assumed."

### *Free Television Blackout for Millions*

General Sarnoff said there are presently forty-five areas throughout the country, with six and a half million people, in which only one station renders acceptable service; that, in addition, there are sixteen areas, with about a million and a half people, in each of which there is outstanding a single construction permit for a television station. Accordingly, he pointed out, there are now, or soon will be, more than eight million people who receive all their television service from a single free television station.

*(Continued on page 30)*


# *Color Telecast from Magnetic Tape*

A COLOR TELEVISION program recorded on magnetic tape was transmitted over commercial television network facilities for the first time on May 12 by RCA and the National Broadcasting Company.

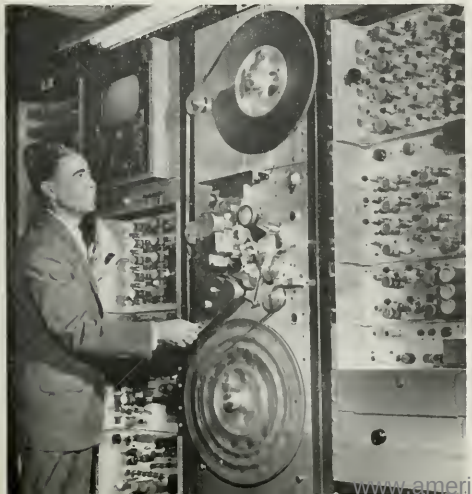
The tape-recorded telecast originated with the prototype RCA television tape recorder that has been installed for field testing at the NBC studios in Rockefeller Center, New York. Transmitted over a closed circuit from New York to Saint Paul, Minnesota, it highlighted the dedication ceremonies of the new research center of Minnesota Mining and Manufacturing Company, makers of magnetic tape used in the RCA system.

The historic program was recorded in advance on the developmental video tape system at the NBC studios, and the tape was stored until the scheduled transmission time. The telecast was sent to Saint Paul over the microwave relay facilities used by NBC for commercial network programs.

On the tape were televised remarks by Brig. General David Sarnoff, Chairman of the Boards of RCA and NBC, who hailed the opening of the new research center as a "historic occasion," adding:

"It is most gratifying to all of us in RCA that the scientists and engineers in our laboratories have built and are now field-testing the first television magnetic tape recorder which brings this message and other portions of this program to you in Minnesota. . . . It is most fitting that you who developed and made the tape and we who developed and built the recorder should share in this great achievement."

TV tape recorder at NBC is readied for its first color telecast by W. D. Houghton of RCA Laboratories.



### *On TV Screen and In Person*

In addition to General Sarnoff's remarks, the program included a brief explanation of the system by Dr. Harry F. Olson, Director of the Acoustical and Electro-mechanical Research Laboratory, RCA Laboratories, and an entertainment program featuring Eddie Fisher, Bambi Linn, Rod Alexander, and Al Kelly. Dr. Olson, under whose direction the TV tape recorder was developed at the David Sarnoff Research Center of RCA in Princeton, N. J., not only appeared on TV screens in Saint Paul during the tape telecast, but attended the ceremonies in person to discuss the recording system.

Describing the demonstration as "a progress report" involving the new equipment installed at NBC, Dr. Olson said in the tape-recorded telecast that "some problems remain to be solved."

"These involve both the machine and the tape," he said. "We are certain that these problems will be solved. . . . We are confident that electronic photography will be an important tool first in television and later in industry and the home."

The RCA TV magnetic tape recording system was first demonstrated under laboratory conditions on December 1, 1953, at the David Sarnoff Research Center. The system was described by General Sarnoff as the first major step into an era of "electronic photography," in which motion pictures in color or black-and-white will be produced quickly and economically, eliminating most of the time and all of the chemical processing involved in photography.

It was pointed out at that time that RCA's objective in developing such a system was to achieve a swift, economical and efficient means of recording color television programs for storage, playbacks or re-broadcast.

How TV Turns . . .

# *"Strangers into Customers"*

THE NATIONAL BROADCASTING COMPANY has completed the most far-reaching survey ever attempted in television. The monumental Fort Wayne study, which took two years and $250,000 to complete, reveals for the first time the full impact of television on the way people spend their time and money.

The survey's most startling departure was to cover the market both before and after television. Researchers interviewed no fewer than 7,500 households — one out of every six families — before television came to Fort Wayne. Then they re-surveyed the same homes about six months after the city's first TV station went on the air. As a result of this research in depth, the survey came up with such findings as these:

After getting television, people spend nearly twice as much time with it as they spend with newspapers, magazines and radio combined.

Television provides seven out of every ten "advertising impressions" absorbed by set owners.

Brands that are advertised on television enjoy a preference of nearly two-to-one over competing non-TV brands.

Discussing Fort Wayne survey, left to right, are Sylvester L. Weaver, Jr., NBC President; Bernard C. Duffy, President of Batton, Barton, Durstine and Osborn, and Dr. Thomas Coffin, NBC Monager of Research.

### *Motives of the Survey*

The study, titled "Strangers into Customers," was undertaken by NBC after a thorough canvassing of advertising people. The network discovered that advertising leaders were already convinced of television's tremendous impact. What they most wanted to know was just how the power of television is brought to bear. For example: At what stage of the sale does the TV influence come in? How does it affect the non-TV brand?

To answer these and other questions would go far beyond anything before attempted in TV research. Ideally, a solution would require a double survey: first in a market without television, then in the same market after the advent of TV. NBC chose Fort Wayne, Indiana, as a medium-sized, Midwestern city without its own television station. The survey, conducted by W. R. Simmons & Associates, got underway in October, 1953, a month before Fort Wayne's first TV station, WKJG-TV, was scheduled to go on the air.

In the first wave of interviews, researchers questioned 7,500 households — a sample size approaching a census. After about six months of television, the same homes were re-contacted, with some 90 per cent being successfully re-interviewed. To make up the survey data only those homes interviewed on both occasions were counted.

Researchers found that between the two interviewing waves 35 per cent of the families in Fort Wayne bought television sets. These new set buyers, who had owned their sets an average of three and a half months, were the group whose habits were most closely scrutinized.

The survey showed that television had a profound effect on the way people budget their time. Before television, they spent 190 minutes on all media. Afterward, they spent 94 minutes on radio, newspapers, and magazines combined; and 173 minutes on television. Of their total media time, in other words, two out of every three minutes were spent with TV.

### *"Remembered Advertising"*

In this way, television vastly expands the advertiser's opportunity to get across his message. The survey showed that TV becomes the viewers' most powerful source for "remembered advertising."

One of the most revolutionary aspects of the study was its investigation of television's role in pre-selling the customer. It was the first time that a survey had

ever measured the influence of TV on the consumer at every step along the road to purchase.

The first step in successful advertising is to make people aware of the brand name. Using a check-list including six TV-advertised brands, interviewers found that, on the average, television lifted brand awareness from 51 per cent "before" to 74 per cent "after". For Beautiflor, as an example, brand awareness rose from 48 to 64 per cent. Kent climbed from 43 to 75 per cent.

Besides recognizing the brand name, people must also associate it with the product. Interviewers used the same check-list to press respondents with other questions: What is it, what is it used for? In three and a half months of television, correct identification of Kents sky-rocketed from 27 to 63 per cent; Beautiflor from 41 to 57 per cent. The overall average for all six brands rose from 41 to 65 per cent.

### *Driving Home the Trademark*

Still farther along on the road to a sale is recognition of the trade mark. Interviewers showed masked trademarks ranging from the virtually unknown Armstrong encircled "A" to RCA Victor's attentive dog listening to his master's voice. Recognition of Armstrong's mark rose from 1 to 13 per cent after television, while RCA's climbed from 66 to 82 per cent.

Similar results were found in TV's power to put across the advertising slogan. In Fort Wayne, it raised the best-known slogan to a point where almost nine out of ten women knew the product it was selling. This was Glo-Coat, which jumped from 62 to 86 per cent. Lucky Strike's slogan rose from 37 to 64 per cent and Camay's from 54 to 83 per cent.

What was TV's effect on a brand's reputation? Women were asked to offer their opinion of the TV brands on a scale ranging from "Poor" to "Very Good." After TV, the "Poor" and "Fair" responses decreased while the "Very Good" opinions increased — from 12 to 17 per cent for Lilt, and from 17 to 24 per cent for Cheer. The "Very Good" rating increased on every single TV brand checked, for an average increase of nine points.

Fort Wayne, Ind., selected by researchers for far-reaching survey of TV's impact on consumers.

But television does more than improve a brand's score on a rating scale. It literally tips the preference scale in favor of the TV brand — the last step before purchase. Researchers took pairs of competing products — a TV brand and a non-TV brand — and asked the direct question: "Which of these two do you think is better?" Pet milk started out 19 per cent behind Carnation, which was a non-TV brand in Fort Wayne. After television, Pet emerged 71 per cent ahead.

### *The Final Test of Sales*

In the final test — sales — TV achieved some of its most spectacular results. After television, the average TV brand increased sales to new set buyers by 33 per cent. Before TV, for example, 14.8 per cent of the respondents bought Gleem; after TV, 24 per cent of the new set buyers bought it. In the case of Ajax, the percentage rose from 32.8 per cent to 48.3 per cent.

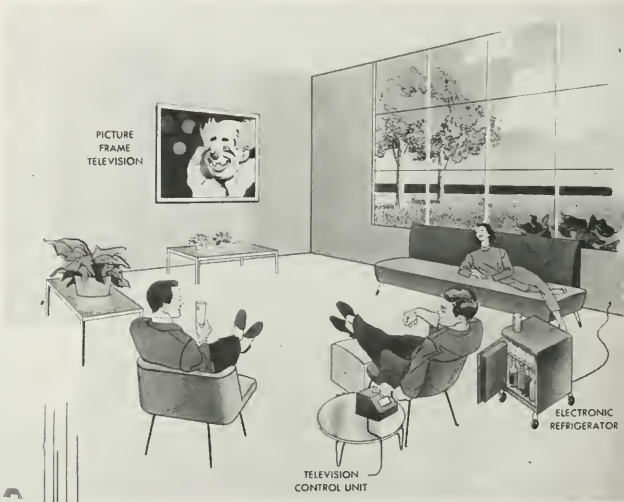
Thus, in the chain of converting strangers into customers, television sharpens the awareness of brand names, rivets the brand name to the product, drives home the trademark, sells the slogan, enhances brand reputation, tips the scales of preference and finally makes the sale.

The survey also covered managers of every food and drug store in Fort Wayne. Dealers agreed that they could hardly fail to notice the effects of TV. As one of them put it, "I don't have to look at television to see what's being advertised. I can tell from the bare spots on the shelves." When dealers were asked which national advertising does the best job of moving goods in their stores, 47 per cent chose television, as against 17 per cent for newspapers, seven per cent for radio and five per cent for magazines.

Dr. Thomas E. Coffin, NBC Manager of Research, who planned and supervised the survey, summed up the lessons of Fort Wayne with these words: "Television is a tremendous advertising force with an inherent talent for doing the intensive pre-selling job that is so vital in marketing today. It is a force for growth-minded, survival-minded manufacturers. For under the marketing conditions which exist today, few retailers have the time, or the inclination, or the capacity to influence individual customers as effectively as television does — at every stage of the buying process as it converts 'Strangers into Customers.'"

# Products of the Future...

What lies ahead in electronics for the American consumer? On the basis of today's research, the devices and systems shown on these pages may well form a substantial part of RCA's business by 1975. Prepared in consultation with scientists at the David Sarnoff Research Center of RCA, these drawings were created for the United States Chamber of Commerce as a representation of the products which RCA may be manufacturing and marketing in the years to come.



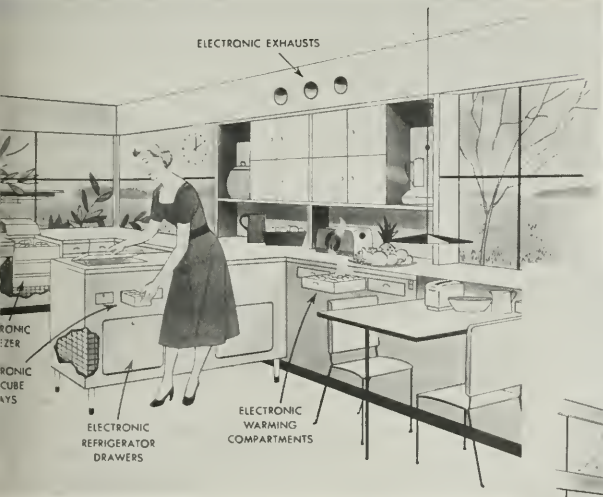

Picture frame television, controlled remotely from small box on table in the foreground, and noiseless, portable electronic refrigerators may be living room features in 1975.

Two-way wrist radios, capable of communicating over distances of several miles, can be expected to develop from today's trend toward miniaturization of electronic equipment.

Portable television sets, with the same type of thin screen used in picture-frome TV in the home, can ultimately provide versatility available today only in portable radios.

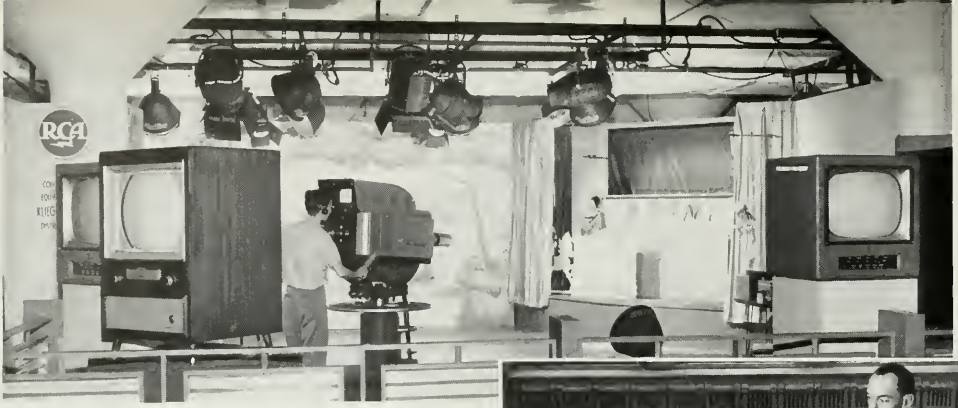
Electronic music synthesizers, developed from today's prototype RCA system, will be put to ever wider use as a tool for creating recorded music for the home listener.

Portable TV tape recorder, based on today's developmental RCA system for broadcast use, may be used for home electronic motion pictures, or for recording favorite TV programs.




Electronic refrigeration, warming and ventilation may bring major changes in kitchen design by permitting greater dispersal of refrigerator and stove. Exhausts have no moving parts.

Electronic room cooling and heating, achieved with panels which will cool or heat according to the direction of current, may be developed on the basis of principles employed in RCA experimental electronic refrigerator.



Color TV broadcast studio, above, was feature of RCA exhibit at the NARTB convention. At right, a model of the exhibit is studied by T. A. Smith, center, Vice-President and General Manager, RCA Engineering Products Division, with A. R. Hopkins, left, Manager, Broadcast Equipment Marketing, and John P. Taylor, Manager, Advertising and Sales Promotion.

# New Aids to Color TV Broadcasting

THREE NEW DEVELOPMENTS that promise greater flexibility, economy and efficiency in color television broadcasting were introduced by RCA during May at the annual convention of the National Association of Radio and Television Broadcasters in Washington.

The developments include:

1. A new-type studio color TV camera that costs 25 per cent less than previous RCA color camera equipment, while offering savings in operating costs, studio space, and maintenance;

2. A new universal multiplexer which integrates monochrome and color projection facilities, permitting broadcasters to use a single multiplexer and the same projectors for televising both color and monochrome slides and films;

3. Special color-effects equipment that will enable broadcasters to originate television commercials, program titles, and station identification in color from black-and-white slides and art work.

Developed by the RCA Engineering Products Division, the new equipment was shown in a completely equipped color TV broadcast studio installed for the NARTB meeting. The studio formed the major feature of an overall exhibit which also included RCA's new "Ampliphase" AM radio broadcast transmitter and a versatile, high-power broadcast microwave system capable of delivering stronger and more stable TV signals over greater distances than comparable equipment.

The new RCA color TV studio camera incorporates a revolutionary "all-in-one" signal processing amplifier which combines and performs all signal processing functions and eliminates various components, according to A. R. Hopkins, Manager, Broadcast Equipment Marketing, of the RCA Engineering Products Division. Compared with previous color camera equipment, the new model offers a number of important advantages, Mr. Hopkins said. Among these he emphasized that the new camera equipment requires little more studio space than do black-and-white camera chains, employs 134 fewer electron tubes, and eliminates 50 per cent of the DC power supplies required previously.

Discussing the new color-effects equipment, Mr. Hopkins emphasized its value to television stations now equipped to transmit network color programs. At the present time, such stations return to black-and-white during station breaks in network programs, unless they happen to be equipped with live or film color cameras. With the new equipment, however, they will be able to add electronically up to 24 different pre-selected colors to the black and to the white portions of a picture.

# "Harmony—Keynote for Our Times"

THE DAY OF "warrior leaders," on the side of either capital or labor, is history, Brig. General David Sarnoff, Chairman of the Board of RCA, told the American Federation of Musicians in an address to its annual convention in Cleveland on June 7. General Sarnoff was the first representative of business management ever to address the convention.

"Together," he said, "we have made America a nation of music lovers." He called attention to the fact that more people attend musical concerts than major league baseball games — 15 million Americans pay to attend baseball games in a year, 35 million pay to attend classical musical concerts, and the amount of money spent at the music box office is $50 million compared with baseball's $40 million.

Selecting "Harmony" as the keynote of his address, Gen. Sarnoff said that in this advanced era, honest differences must be settled by negotiation characterized by reason, understanding and fair-dealing.

"Never before has economic statesmanship, on the part of leaders of management and of labor, been more essential," he said. "Fortunately we have, together, already mapped out vast areas of agreement and common interest. Our job is to protect those areas and constantly to enlarge them, so that we may confront and solve the inevitable problems of living together in a mood of mutual trust and respect.

"Because we live in a time of great technological development and rapid change, the need for understanding and adjustment is imperative. Above all, it applies to the relations between employers and employees. The machinery of our nation's life is too complex, too deeply integrated, too finely balanced, to be subjected to the blows of unnecessary, unwanted, uneconomic strikes, lockouts, or boycotts."

General Sarnoff said that some people seem to be scared by a new word in the industrial lexicon — "automation" — which he defined as "the process of substituting automatic for human controls in the manufacture, packaging and distribution of goods; and the equivalent process in mines, office work, accounting and the like."

The only thing really new about automation, he asserted, is the label.

"The evolutionary process of mechanizing work has been going on for a long time, and at an accelerated rate of change. Surely we have no reason for regrets on that score, as we look around this great nation, freer and more prosperous than any in history. We may be confident that a generation hence our posterity will have just as little regret about the fruition of the progress now in blossom."

Pointing out that the American workman's right to organize and to bargain collectively for a larger share of the fruits of his labor has not merely been recognized but is sanctioned and protected by law, General Sarnoff added, "labor has won its long and heroic struggle, but capital has not lost it." Both, he declared, share equally in the victory, which has brought them a substantial measure of enduring peace.

"Harmony is desirable at all times, by any common sense test," said General Sarnoff. "In the present period it has become an absolute necessity. For America it has become the very condition of survival.

"We are living in a world of unprecedented change and great peril. Our civilization, our morality, everything we cherish for ourselves and our children is today at stake in the contest between freedom and slavery.

"The challenge is real and the danger is present. Not in centuries has mankind faced a historical crisis as basic, or as far reaching in its possible consequences. Destiny has placed our beloved America in a position of leadership on the side of freedom. It is a position we must not surrender."

"It is to the eternal glory of American labor," he said, "that it has never allowed itself to be trapped by Communist blandishments."

## *Pioneering in Television*

The following testimony to General Sarnoff's farsighted encouragement of television was offered by Harold Hough, Director of Radio and TV for WBAP, Fort Worth, Texas, at the Washington convention of the National Association of Radio and Television Broadcasters in May:

"It was not until the NAB (National Association of Broadcasters) meeting in Atlantic City in the spring of 1947 that we really got in high. Our plans up to that time were timid, but like many others after listening then to General Sarnoff's authoritative and electrifying picture of television, we began to realize its real possibilities—then we got hot. Many of you felt the same shock. I know I rushed home, went in to see my boss and tried to deliver word for word the ideas the General had given us. Of course, you understand I used much smaller words! At the conclusion, the boss said, 'Well, the General seems to be quite bullish on television.' And I remember saying, 'Bull nothing, he is elephant'—whereupon I was instructed to get into it on an elephant scale."

*Official Opening . . .*

# New RCA Center at Cherry Hill

THE COMPLETION of an ultra-modern five-building center for the administrative and engineering facilities of RCA consumer products and the RCA Service Company was marked with an "open house" on May 6 at Cherry Hill, a suburb of Camden, N. J.

The official opening of the new center, in construction for more than a year, was commemorated by the regular meetings of the Boards of Directors of RCA, the National Broadcasting Company, and RCA Communications, Inc. Brig. General David Sarnoff, Chairman of the Boards, presided, and later joined with Frank M. Folsom, President of RCA, and other executives to welcome local community leaders and other guests invited to inspect the premises.

The new installation, located on a 58-acre tract, was designed to accommodate the executive, administrative and engineering staffs of the RCA Victor Television Division, the RCA Victor Radio and "Victrola" Division, and the RCA Service Company, Inc., which formerly were located in Camden and Gloucester, N. J., respectively. RCA's Engineering Products Division, as well as various RCA Corporate Staff activities, still are maintained in downtown Camden.

Brig. General David Sarnoff and Frank F. Folsom inspect an early "Victrola" phonograph in the historical exhibition at the new Cherry Hill Center of RCA.

### *Equivalent of 35-Story Office Building*

Approximately 1,400 persons are employed at the new center. The two- and three-story buildings, designed to blend with the rolling countryside in which they are located, have a total of 325,000 square feet of space — roughly the equivalent of a conventional 35-story office building.

A major attraction at the Cherry Hill installation is the "RCA Hall of Progress," a historical exhibition located on the entrance floor of the administration building. The exhibit is devoted to a visual history of the development of "Victrola" phonographs, radios and television.

Among the displays of principal interest is a collection of RCA Victor television sets, ranging from a pioneer 5-inch model of pre-war days to the latest 21-inch color receiver, and including the famed 630TS which helped to launch television as a nation-wide public service in the immediate post-war period.

Also on hand in the exhibit is a replica of the earliest hand-wound "Victrola" phonograph, leading into a display culminating in the latest RCA Victor $1,600 high fidelity phonograph. Tubes on display range from the first practical radio tubes to a replica of the mammoth RCA transmitter tubes used at the powerful U. S. Navy radio station at Jim Creek, Washington. The radios on display cover an equal range, beginning with a replica of the set with which Marconi sent the first signal across the Atlantic.

Already the exhibition has started to establish itself as a tourist attraction, with groups visiting the displays almost daily.

### *New Construction Method Used*

Two years of planning preceded the start of construction which utilized newest building techniques, including the so-called "lift slab" method of pouring all floors at ground level and lifting them to position by means of hydraulic jacks. It was estimated that use of the latest building development resulted in a 20 per cent saving in the usual time to build such a project.

Each of the structures was designed to permit peak efficiency while employees work in pleasant surroundings. The layout of the floors permits a maximum num-

An air view of RCA's new five-building center at Cherry Hill, near Camden, N. J. Executive offices and museum are housed in building in left foreground. Others contain affices and engineering laboratory.

ber of persons to occupy space near windows, thus giving them more natural light. The artificial lighting system was scientifically planned to reduce glare.

The buildings feature year-round air conditioning. Office and laboratory space is acoustically treated to minimize noise. Work space is arranged to achieve a minimum of travel between floors and buildings. Adjacent paved parking lots provide adequate facilities for all employees, as well as visitors.

A completely modern cafeteria and dining room, equipped to serve more than 1,400 people in shifts, also is included. Plans call for the future development of such employee recreational facilities as a picnic ground, softball diamond and tennis courts.

Vincent G. Kling, Philadelphia, was the architect on the project. Turner Construction Co., Philadelphia, was general contractor. Supervising construction activities of RCA were Frank Sleeter, Vice-President, Facilities Administration, and Robert F. McCaw, Manager, Facilities Planning Division.

## Transistorized Car Radio

An experimental transistorized automobile radio that operates directly from a 6-volt car battery and requires only about one-tenth the power used by a conventional car radio has been developed by RCA Scientists.

The new radio, employing nine transistors and no electron tubes, is equal in performance to standard car radios, according to its developers—a team including Larry A. Freedman, Thomas O. Stanley, and David D. Holmes, of the technical staff at the David Sarnoff Research Center of RCA.

The scientists emphasized that the set requires no vibrator, power transformer or rectifier—elements needed in vacuum-tube car radios.

## Synthesizer Record Released

The first record of simulated musical sounds made by the RCA Electronic Music Synthesizer, which creates by electronic means any known or imaginable combination of tones, will go on sale to the public this month through RCA Victor record dealers.

The historic recording, "The Sounds and Music of the RCA Electronic Music Synthesizer," has been designed to explain how it is possible to create electronically any musical sound and to demonstrate the infinite versatility of the synthesizer.

Released both as a 12-inch long-playing disc and as a 45-rpm album, the record bears the RCA Victor designation LM-1922, Experimental, and is priced at $3.98.

# RCA Introduces New Hi-Fi Line

On the basis of surveys indicating that the public now wants "ready-to-plug-in" high fidelity equipment. RCA introduced on June 1 a complete line of assembled high fidelity phonographs embodying a number of new features and ranging in price all the way from $129.95 to $1,600.

Speaking at a press preview of the new models in New York, Robert A. Seidel, Executive Vice-President, RCA Consumer Products, pointed to the possibility that the high fidelity market can be more than doubled within the next few years.

"Best available industry estimates are that $300,000,000 worth of assembled high fidelity phonographs, tape recorders and component parts will be purchased this year by the American public," he said. "This compares with total sales of approximately $241,000,000 in 1954.

"The tremendous growth of high fidelity in the past several years is just the beginning of this new experience in musical enjoyment. I am confident that high fidelity is going to revitalize the phonograph industry in the months and years ahead."

### *Five Models in New Line*

J. M. Toney, General Manager, RCA Radio and "Victrola" Division, told guests at the preview that the new line of five New Orthophonic "Victrola" models makes true high fidelity available for every taste and pocketbook.

Each of the models features for the first time the new RCA Victor Panoramic Speaker System, employing at least three separate speakers in each instrument, meeting the highest standards known in sound reproduction, he said. In addition, the angle of the speakers in relation to one another provides for room-wide dispersion of high and low frequencies.

The models range from the $1,600 Mark I, a twin-console unit with four speakers in a separate cabinet, a high fidelity tape recorder, 3-speed record changer and AM-FM radio, to the $129.95 Mark VI, a table model with three speakers and 3-speed record changer.

One of the new features of the Mark I and Mark II is the first use of transistor circuits in commercial phonographs, delivering quieter performance and greatly reducing hum level, Mr. Toney said. He explained that RCA Victor engineers had devoted more than a year of research, development and testing to create the new line, starting with construction of "the finest high fidelity instrument without price limitations." This became the Mark I, he added, and as many of its features as possible were incorporated in the design of the lower-priced instruments. The transistor circuits are used in the preamplifiers of the Marks I and II to eliminate hum when the volume is turned high.

### *Popularity of Hi Fi Music*

Mr. Seidel, citing the possible doubling of high fidelity equipment in the next several years, said:

"It has become apparent that music lovers of all kinds, whether 'pops' or classic, are talking about high fidelity. This interest and enthusiasm cuts across all economic levels. We are convinced that it is no passing fad."

A prediction that popular music fans will account for a majority of the sales of assembled home high fidelity instruments in the next few years came from George R. Marek, Manager of the Artists and Repertoire Department, RCA Victor Record Division.

"One of the popular misconceptions about high fidelity is that it is primarily for classical music," he said. "This is definitely not true. Eddie Fisher, the Three Suns, or any of the other 'pop' music artists sound just as thrilling in high fidelity as does a Beethoven piano concerto or a Brahms symphony."

The Mark VI, $129.95 table model with three speakers and 3-speed record changer, is feature of the new RCA line of high fidelity phonographs.

# *Television in an Ultra-Modern Style*

Two of the new RCA Victor television receivers, showing design change eliminating visible controls from the front of the black-and-white sets.

AN ULTRA-MODERN new line of RCA Victor television receivers, featuring important technological developments and what is described as "the first major change in television styling since the introduction of table models and open-face consoles," was announced on June 8 by Robert A. Seidel, Executive Vice-President, RCA Consumer Products.

A prominent style innovation in the new line, which is being introduced to the public this month, is the complete elimination of any visible controls from the front of the black-and-white sets. Besides twenty-three basic black-and-white models in 17-, 21- and 24-inch screen sizes, the line includes two basic models of compatible color 21-inch receivers priced at $795 and $895.

The new color receivers, production of which was announced in May by Mr. Seidel, feature greatly simplified electronic circuits. Both incorporate a 26-tube chassis, a reduction of fourteen tubes from the forty used in RCA Victor's previous 21-inch color sets.

In his announcement of the new color receivers, Mr. Seidel emphasized that nine years of development were required to reduce the number of tubes in black-and-white television sets from thirty to twenty, while the reduction from forty to twenty-six tubes in RCA color sets had been achieved in a single year.

"As in the case of black-and-white receivers, this reduction has been accomplished not by sacrificing performance but by improving it," he said.

Simplification of the circuit and improved performance in the new color sets were credited by Mr. Seidel to:

The development and use of entirely new circuit designs not previously available;

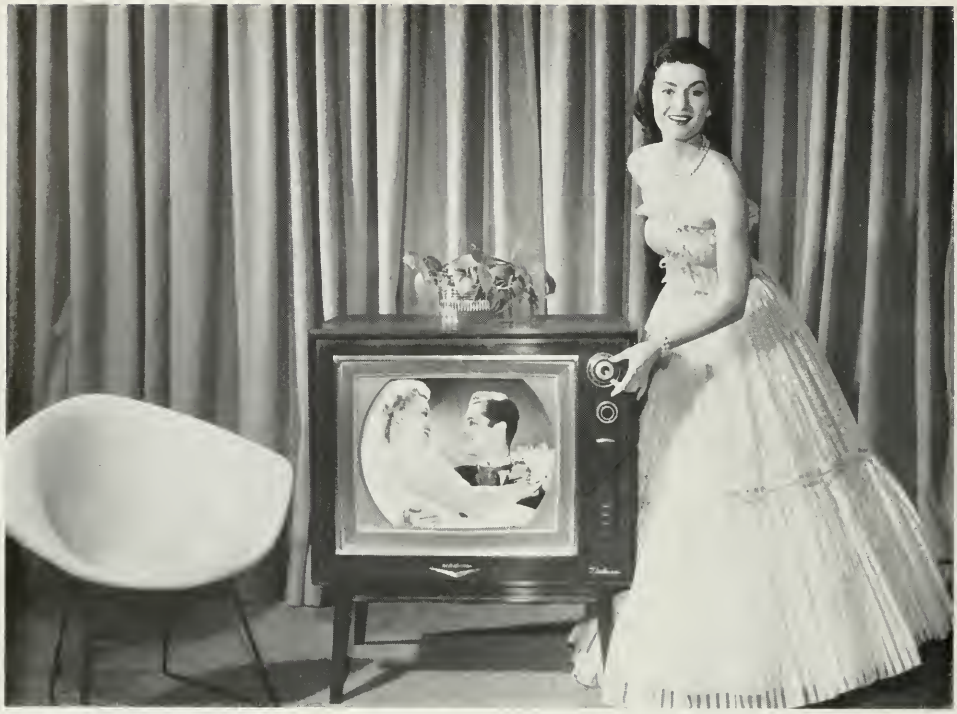
The use of engineering and production techniques previously tested and proven in black-and-white receivers, such as printed circuits in various parts of the chassis;

The use of newly-developed RCA dual-purpose rectifier and triode-pentode tubes.

### *Printed Circuits Used*

Describing the new RCA black-and-white receivers, Mr. Seidel emphasized that every instrument in the new line has a totally new chassis in which printed circuits are used extensively. Five printed circuit boards are employed in each of the receivers in all three of the series which comprise the new line.

Production of 21-inch color picture tubes for the new RCA color TV sets at Lancaster, Pa., tube plant.



The "Seville," new simplified RCA Victor 21-inch color receiver, has suggested list price of $795.

"Use of printed circuits will provide consumers with greater reliability and freedom from service, since each of the printed circuit boards is used in an important phase of the overall circuitry of the chassis," Mr. Seidel said.

"Tests, both in the field and in our laboratories, have conclusively proven the advantages of printed circuits for greater reliability and improved performance for viewers. In the new RCA Victor chassis, we believe we are making a more extensive use of printed circuits than anyone else in the television industry."

### *Technical Advances Listed*

In addition to the wider use of printed circuits, other technical advances in the new RCA Victor television sets include:

1. A "noise suicide circuit" which automatically sets up voltages to "kill off" various types of interference before the picture on the TV screen is disturbed;
2. Increased second anode voltage, which will provide greater brilliance in the picture;
3. Greater video drive voltage, resulting in better picture contrast;
4. Improved automatic gain control, which assures the consistency of a picture in the face of widely varying signal strengths.

"We have sought to create a new concept in television styling which we call the 'big change,'" said Mr. Seidel. "Not only does the entire line represent the first major change in television styling since the debut of table models and open-face consoles, but the receivers also feature the latest technical developments designed to provide viewers with unsurpassed performance and values.

"In designing these new instruments, we asked our engineers, technicians and craftsmen to come up with three things: new and better performance, new and better styling, and new and better value. We are confident that the RCA Victor merchandisers and the American public from coast to coast will agree that these objectives have been achieved."

# TV on the Tepee

Chief White Eagle and his TV-equipped tepee.

FROM SMOKE SIGNALS to television signals is a long step forward, but Chief White Eagle of the Iroquois Tribe at Caughnawaga, Quebec, made the transition with no trouble at all.

Two years ago, the Chief, whose legal name is Stanley Myiow, collected enough wampum to buy his RCA Victor television set, a twenty-inch model called the "Shelby". The flickering magic of the white man provided good entertainment for White Eagle, his wife and five daughters as they watched the programs from CBMT and CBFT, Montreal.

Then word was received that TV stations had opened at Burlington, Vermont and Plattsburg, New York. Being a curious fellow, the Chief began seeking a place to erect an outdoor antenna so that he could receive the more distant American stations.

Now many moons ago, Chief White Eagle had gone into the forest and had cut a number of stout saplings. Stripping the branches from the young trees, he lashed them together in his front yard in the shape of a cone forty feet high. Then he peeled the thick white bark from the trunks of many birch trees and covered the framework with the bark to form a huge tepee. It stood for many seasons by the highway, a landmark for motorists driving to and from Caughnawaga.

Looking for a place to erect his antenna, Chief White Eagle's gaze fell on the top of the tepee standing only a few yards from his house. Since the Chief, among other things, is a skilled bridge worker, it was a simple matter for him to scale the tepee and fasten the antenna in place.

Chief White Eagle, born and educated in Caughnawaga, says he is able to trace his ancestry to the first Iroquois settlers at the Indian Mission in the reserve.

"I'm one of the few remaining pure-blooded Indians in Caughnawaga," he states. "My forefathers came from New York and Pennsylvania to the Jesuit mission here."

Chief White Eagle is multi-vocational. He can turn his hand to almost anything. Apart from being a bridge-worker, he also prepares secret Indian herbal medicine, he is a professional wrestler, Indian souvenir maker and well-known lecturer on Indian folk lore. And too, he is probably the first Indian to place a TV aerial on his genuine birch bark wigwam.

As a result, when night comes on and the fire burns low, and the wind sighs across the marshlands that stretch behind the house, Chief White Eagle and his family sit before their set enjoying Deep Image television at its best, while outside the lonely tepee reaches up into the sky to bring in the signal from many miles away.

In his modest home, Chief White Eagle poses with his RCA Victor television set, connected to antenna on the birch bark tepee in his front yard.

*North of the Border...*

# RCA Grows with Canada

By F. R. Deakins
*President*
*RCA Victor Company, Ltd.*

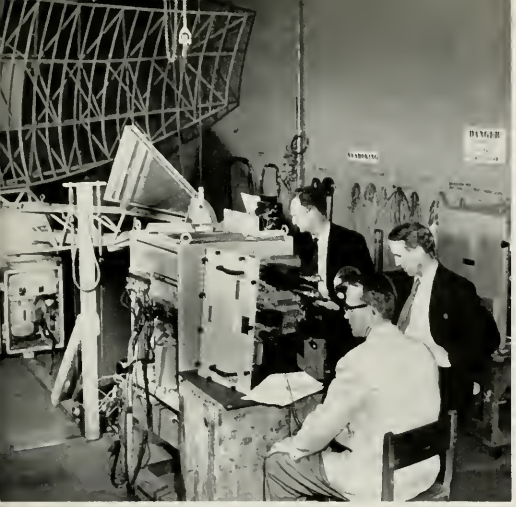
MANY YEARS OLDER than RCA itself is its Canadian subsidiary, RCA Victor Company, which started in 1898 and became a member of the RCA family in 1927. Its growth and its national importance have paralleled that of Canada, which during the last few decades has been transformed from an agricultural to an industrial nation.

RCA Victor Company, Limited, of Canada, still manufactures records as it did back in the early days of the century, and as the RCA Victor Record Division of RCA does today. Like RCA, it is also an important electronics company, serving the defense needs of both Canada and the United States, supplying superior transmitting and studio equipment for commercial broadcasters and telecasters, and manufacturing radio and television sets for home listeners and viewers.

Recently the Canadian company added to its line home appliances, and it now supplies Canadian housewives with freezers, ranges and other household equipment. In this field, as in others it has occupied for a longer period, it is establishing a reputation for quality and service.

A significant fact about the Canadian company, in which the parent company also takes pride, is that in consumer products RCA Victor Company leads all other manufacturers in sales of radio, television and records. With over twenty other companies in Canada vigorously seeking larger shares of the Canadian market, there are today more entertainment instruments in Canadian homes bearing the familiar trademarks of RCA than of any other make.


A night view of the RCA Victor Company, Ltd., head office and plant at Montreal.



Above, a government inspector looks on as radar set control and pedestal are tested at RCA Victor Montreal plant. At right, new RCA antenna provides communications link in British Columbia.


Map shows location of RCA Victor installations.

The Canadian company also occupies the leading position in the sale of television ttansmitters. Three years ago, it provided the antenna and transmitter for the first television station to go on the air in Canada. Since then it has furnished 16 of the 26 transmitters installed, including the first station in Newfoundland, which goes on the air this summer. Much of this success in the commercial telecasting field has been due to the record and prestige of the company in Canada.

### *Specialized TV Antenna Development*

But credit is also due to the Canadian company's research and development activities, which in 1953 resulted in an entirely new type of television antenna being developed by one of RCA's Canadian professional engineers. Following a considerable period of experimenting, the Montreal plant produced the Wavestack antenna, which has many qualities particularly suitable to Canadian conditions. Its design is so simple that it is easy to maintain, a boon when Canadian winter storms make prolonged work atop an antenna dangerous.

Resembling a smokestack, the main supporting section also serves as a wave guide, conducting audio and visual signals ro the slotted antenna at its top. Highly efficient, it limits signal loss from transmitters to antenna to a negligible amount. It can be erected by any regular crew of steelworkers supervised by one trained erector.

Because of its high percentage of radio and television consumer market and the fact that it is serving many of the nation's radio and television stations, RCA Victor Company is recognized as the leading Canadian

company in the field of communications other than wire lines. During and since the second World War, however, RCA Victor Company has moved far beyond the home entertainment and commercial communications fields to become one of the important designers and manufacturers of North American defense equipment.

### *A Major Role in Defense*

It was RCA Victor Company's staff and engineers who worked with McGill University to develop the internationally famous McGill Fence. Ships of the Royal Canadian Navy are equipped with radar equipment from RCA Victor. The Canadian company is supplying radar and other equipment for the Mid Canada Line and Pinetree, both of which are essential to North American Arctic defense. While the importance of these defense projects is recognized in Canadian defense circles and generally understood by many Canadians, many of the vital contributions being made by the Canadian company are virtually unknown to the public because of their "classified" nature. In the Arctic and at bases where American and Canadian forces are operating jointly, RCA Victor engineers are working with government and armed forces officials bringing to these extensive defense operations the benefit of years of engineering and development experience under northern Canadian conditions.

In the over-all picture of RCA, the Canadian company occupies a unique and particularly significant position. In the first place, it is one of eleven associated companies in RCA's International Division, and as such it gains from and contributes to all other companies in the group. A certain amount of work is carried on in the Montreal laboratories for the parent company as well as for the Canadian government and the government of the United States. There are plans for extending this research activity in the near future.

The Canadian company shares, of course, the research and engineering developments at Princeton and Camden, N. J., which help to keep RCA in front of the world-wide electronics field. However, much original development is carried on in the Montreal Engineering Products Department. Here, too, U. S. designs are adapted to Canadian conditions.

More than 75 engineers are constantly at work on special Canadian projects in this department and from their activity have come original achievements in design.

### *Transistor Pilot Plant*

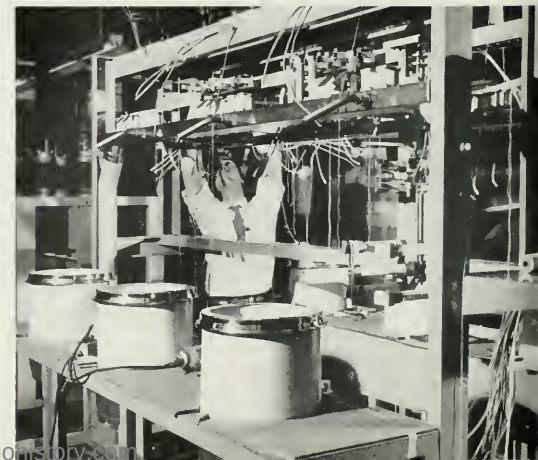
A pilot plant for the manufacture of transistors is in operation in the Montreal plant to permit the Canadian company to acquire the experience and knowledge for large scale transistor production when this becomes necessary.

Physically, the growth of the Canadian company has been in keeping with the sudden and immense industrial expansion in Canada. When the company started as the Berliner Gramophone Company in 1898, it had fewer than 10 employees. It now employs throughout Canada more than 3,500 people and is steadily adding to its technical and work force. In 1954, the Canadian company spent more than $22,000,000 in Canada for materials; its payroll was more than $12,000,000 and it paid $8,000,000 in taxes to Canadian governments.

RCA Victor Company has established itself in a strong position to take advantage of the expanding

Demand keeps production line active at the Prescott, Ontario, RCA Victor television plant.

At Montreal plant, RCA Victor has designed Canada's most powerful radio transmitter, shown here in assembly.



Canadian economy. Canada's population is steadily increasing; there are approximately a million more Canadians now than there were a year ago. The nation's vast hinterland, unexplored and undeveloped for centuries, is being opened up — another process in which RCA Victor is involved through such contributions as microwave communication through hitherto inaccessible areas. New industries are establishing themselves in each of the ten provinces, and construction of the St. Lawrence Seaway is regarded by Canadians as the greatest impetus to new industrial development in the country's history.

In view of all these important changes, eighty-five per cent of the Canadian company's earnings have been reinvested in new plant, machinery and service.

### *Plant Expansion*

Before the war, RCA Victor Company served all of Canada from one plant located at Montreal.

In the spring of 1953, a new radio and television manufacturing plant was built at Prescott, Ontario, and all the company's home receivers are now made there. At peak employment more than 900 workers are employed at Prescott. In addition to supplying Canadian consumers, this plant has shipped radio sets to 49 countries and television sets to two. These shipments are made, of course, through the International Division.

Also in 1953, the company opened a new plant at Smith's Falls for the manufacture of records. Here, high fidelity records are manufactured for the home and for broadcasting stations. Both the radio and television manufacturing and record production were formerly carried out at the Montreal factory.

RCA Victor Company pioneered in the recording of music in Canada and maintains Canada's outstanding recording studios in Montreal and Toronto. Through the decades it has fostered Canadian talent, and Canada's largest chemical firm awards a Victor Red Seal recording contract as part of its grand prize in an annual nation-wide singing competition.

At Owen Sound the company operates its own cabinet and woodworking plant. Here, wood is processed from log to finished cabinet for the company's own use and for sale to others.

Later this year, the company will open another new plant at Renfrew, Ontario. This will add to the company's electronics production. In the meantime, the original Montreal plant has been expanded and modernized to provide greater facilities for the engineering products department and to allow for an expanded tube manufacturing department to make vacuum tubes previously purchased from other sources.

The demand for tubes in Canada continues to rise sharply. Accordingly, the Canadian company is now producing miniature tubes at the Montreal plant. While the bulk of the output goes to the Prescott, Ontario, plant for RCA Victor TV sets, the company expects to sell to other manufacturers and to distributors.

Accompanying this expansion of production facilities has been an even greater expansion in company-owned distribution centres. The company operates distributing offices, warehouses, showrooms, and service centres in all the principal cities of Canada. Within the last three years it has built new, modern-type centres at Vancouver, Calgary, Winnipeg, Toronto, Montreal and Halifax. A new television and engineering products service centre has also been opened in Montreal as headquarters of what is regarded as the best nation-wide service system in the industry.

Winter weather foils to interfere with operations at RCA Victor cabinet factory in Owen Sound, Ontario.

Chassis and cabinet meet on the television assembly line at the Prescott, Ontario, plant.

# *The Case Against Pay-TV*

*(Continued from page 12)*

"None of the pay-television promoters even remotely suggests that he would risk any investment of his own to build new stations for pay-television," he declared. "Each of the pay-television promoters wishes to utilize, without any investment of his own, the facilities free television has built and supports. If the pay-television promoters should be successful, the more than eight million people living in single station areas would be deprived of all free television service whenever pay-television programs were broadcast. . . .

"In addition, there are sixty-four areas in which acceptable television service can be obtained from but two TV broadcast stations. About twelve and a half million people live in these areas. Whenever one of the two stations in these areas transmits a pay-television program, these twelve and a half million persons would lose half of their free programming. And, if pay-television is not to be the monopoly of one promoter alone, competing pay-television programs could completely black out all free television service in two-station areas. The result would be that about twenty million Americans would have their choice of pay-television — or nothing."

In conclusion, and apart from the question of the Commission's authority to determine that it is in the public interest to authorize pay-television, General Sarnoff said:

"We believe that before the Commission adopts a policy the end result of which might well prove to be the end of the American system of free broadcasting, there are matters of political, economic and social import which should properly be resolved only by the Congress.

"Unlike the present free system of television, pay-television would come into homes like gas and light and telephone service for which the consumer pays. The rates and other aspects of such public utility services are now regulated by the Government. If pay-television were to be authorized, the public interest may require that it likewise be treated as a public utility and made subject to similar regulation by the Government. In such an event, the practical difficulties of maintaining part of the American radio and television system free and part regulated, would seem almost insurmountable. Such a situation might ultimately lead to Government regulation, on a common carrier basis, of all radio and television broadcast services — a result that no one advocates but all must guard against. Only the Congress can set the legal bounds of such regulation.

"Many years ago I said 'The richest man cannot buy for himself what the poorest man gets free by radio.' After almost a half century of service in this science, art and industry, I am proud that we have thus far been able to keep both radio and television free to the American people.

"My earnest plea to the Federal Communications Commission is: Keep American Radio and Television Broadcasting free to the public."

### *Sarnoff Testimony of 1924 Cited*

In a brief submitted to the FCC subsequently against pay-television, the National Association of Radio and Television Broadcasters cited testimony given by General Sarnoff in 1924 at a public hearing before the House Committee on Merchant Marine and Fisheries in Washington. It was made clear in the NARTB brief that General Sarnoff had studied the problem far back in the days when "coin-box-radio" was proposed.

The extract from the NARTB brief follows in part:

"Perhaps one of the most foresighted statements made during these early hearings was that by David Sarnoff, then Vice-President of the Radio Corporation of America, who in his testimony and examination on H.R. 7357 stated the case against 'fee' radio so cogently that his statement merits quotation . . .

> 'It has been said by a great many people and a great many corporations, some very large and able, that broadcasting depends upon a solution of the problem whereby the consumer will pay for the entertainment which he receives . . .
>
> 'I want to go on record very definitely today . . . in saying to you that it is my firm conviction that that sort of solution to the problem is not necessary, that broadcasting can be made commercially practicable without any means being found for collecting from the consumer, that the greatest advantage of radio lies in its universality, in its ability to reach everybody, everywhere, anywhere, in giving free entertainment, culture, instruction, and all the items which constitute a program . . .
>
> 'I cannot help feeling that not only should the public be left free from the payment of any license fee to the Government or others for the privilege of listening on a broadcast receiver, but that it should also be free from fees or tolls of any kind in the field of broadcasting through space . . . The air belongs to the people. It should be regulated by the will of a majority of the people. Its main highways should be maintained for the main travel. To collect a tax from the radio audience would be a reversion to the days of toll roads and bridges, to the days when schools were not public or free, and when public libraries were unknown. . . .' "

# *Quotes from RCA*

Dr. E. W. Engstrom, *Executive Vice-President*, RCA Research and Engineering, at Engineers Club of Minneopolis, April 19, 1955.

### *Industrial Research:*

"Our great problem today is the proper cultivation and exploitation of the nation's intellectual resources. We must learn to make the most effective use of our research staffs. We must know what we want and what we can expect to get from the research worker. We must understand his motivations and his personal characteristics. Having an understanding of these things, we must provide an environment conducive of good research. We must use creative imagination in the administration of research. We must follow this with sound engineering and good business planning. This is effective research, the kind which will maintain our position today and control our destiny tomorrow."

Ewen C. Anderson, *Executive Vice-President*, RCA Commercial Department, to Chicogo press representotives at RCA Laboratories, June 10, 1955.

### *Patent Licenses and Competition:*

"Our patent licenses stimulate competition. They render impossible monopoly and restraint of any branch of the radio business by RCA or others. They make it impossible for RCA or any of its licensees 'to put on the shelf' any radio invention and thus keep it from the public. . . . That these licenses are in the interest of the public, and that the public receives great benefit from them, is beyond reasonable doubt."

Robert A. Seidel, *Executive Vice-President*, RCA Consumer Products, to National Appliance and Radio-Television Dealers Association, Milwaukee, May 17, 1955.

### *Dealers are Important:*

"Alert dealers, working with progressive, intelligent distributors and manufacturers, form the distribution pattern that has taken television from a dream into the home of 36,000,000 persons. Dealers today have a greater opportunity for progress and profit than at any time since the early kick-off days of television."

Dr. Douglas H. Ewing, *Administrative Director*, RCA Laboratories, at RCA Tube Division dinner, Newark, N. J., April 26, 1955.

### *Broader Tasks for Engineers:*

"With more enterprises than ever before engaged in the innovation of new systems and devices through research and engineering, there is an ever greater need for good engineers in areas hitherto remote or at least totally distinct from engineering. In the field of merchandising, for example, the client who is planning installation of a complete electronic business machine system needs far more than an energetic sales talk and prompt delivery of the equipment. These may have sufficed for the simpler types of equipment designed to perform existing tasks more efficiently. They will hardly do for complex data handling or microwave radio relay systems."

W. Walter Watts, *Executive Vice-President*, RCA Electronic Products, to a press group at RCA's Lancaster, Pa., tube plant, June 9, 1955.

### *Color Tube Development:*

"RCA's color tube has been tested and proved through substantial factory production; it has proved itself on the receiver production line; and it has stood the test of nationwide introduction to the public. . . . We know now that we can meet reasonable demands for color tubes — and can accelerate our program to keep pace with the set makers. We know, too, that a number of other tube makers now share our confidence and will produce this type of tube as a demand develops."

Edword Stanley, Manager of *Public Service Programs*, NBC, at School of Radio and Television, University of Indiana, May 5, 1955.

### *Enlightenment through Exposure:*

"We are continuously expanding and extending not only those programs which are essentially cultural, such as the NBC Opera Company presentations and the Wisdom Series . . . but we are constantly seeking ways to incorporate this aspect of our civilization into every program, even football. This is a small thing, perhaps, but you may have observed that when NBC presents football, the camera takes a little tour of the campus before the game, and there is discussion of what the school does, and some of its distinguished graduates. Just a reminder for the watching millions that it is, first of all, an educational institution."

# RCA news in brief

*Another Eye*

RCA's "TV Eye," the versatile closed-circuit television system for industry, has worked its way into a new location. It is now keeping a watch over a critical operation in one of the nation's largest cigarette paper plants. The installation has been made at the Spotswood, N. J., plant of Peter J. Schweitzer, Inc., for remote observation of a paper-pulp washing tank to guard against jamming or plugging that could result in a costly shutdown for repairs. The camera, about the size of a home movie camera, is focused on the pulp washing tank and projects a continuous picture of operations to a monitor for viewing by an attendant in charge of various pulp-preparation machines.

*Treasure Chest*

A happy premium for the radio-TV serviceman is announced by the RCA Tube Division in the form of a new, improved carrying case for electron tubes. Known as the "Treasure Chest," the case weighs eleven pounds and has room for 134 tubes as well as the small tools most frequently needed in home service calls. Dealers will be able to obtain the new case by turning in to distributors a total of 20 RCA "Treasure Notes," one of which is given to dealers with each purchase of 25 RCA receiving tubes or one RCA picture tube.

*Trois, Deux, Un —*

In addition to its other distinctions, NBC is helping to train French army, navy and air force officers. The French Ministry of National Defense recently asked NBC for copies of the prize-winning television films "Three, Two, One — Zero" and "Victory at Sea" for use as training films in the instruction of officers and officer candidates of the French military services. "Three, Two, One — Zero" was the first TV program to tell the over-all story of atomic energy, while "Victory at Sea" was a 26-week TV film series on the history of naval operations in World War II. Both were produced by Henry Saloman, chief of the NBC Television Film Documentary Unit, who presented copies to French Ambassador Maurice Couve de Murville in response to the French request.

*Good Neighbors*

Two key television stations in Cuba's Television Nacional and CMQ networks are installing their new 10 KW RCA television transmitters in a single Havana building and will use the same tower. The two stations, broadcasting on Channels 4 and 6, have had separate locations. The combined installation was instigated by construction of a 23-story hotel near their present sites, and officials of both networks think the sharing arrangement will result in substantial economies. The two transmitters are the sixth and seventh furnished by RCA to Cuban broadcasters.

*Station Switch*

NBC and the Westinghouse Broadcasting Company have agreed to exchange their radio and television stations in Philadelphia and Cleveland, subject to approval by the Federal Communications Commission. Under the agreement, announced by Sylvester L. Weaver, Jr., President of NBC, and Chris J. Witting, President of WBC, the Westinghouse stations in Philadelphia, WPTZ and KYW, will be taken over by NBC, while NBC will turn over to Westinghouse its Cleveland stations WNBK and WTAM and WTAM-FM. The agreement calls for payment of $3 million to the Westinghouse Broadcasting Company in addition to the exchange of stations.


*Find that Ore . . .*

Now you can get an RCA Geiger counter for your uranium hunting. Six models, ranging in sensitivity and price to suit the requirements of professional and amateur prospectors as well as laboratory technicians, have just been introduced by the RCA Tube Division. The two simplest models, weighing only 5 pounds including batteries, are intended basically for the weekend and vacationing prospector. As the Tube Division puts it, anyone who can operate a portable radio can operate an RCA Geiger counter. At the upper end of the scale is a sturdy model equipped with ten Geiger tubes, sensitive enough to measure radiation in certain types of surveys conducted from the air and moving vehicles.

*Superimposed over this man's head is the matrix (or heart) of RCA Electronic "Memory." See description below.*

# New RCA Magnetic "Memory" recalls thousands of facts in a fraction of a second

Each dot you see in the squares above is actually a magnetic "doughnut" so tiny that it barely slides over a needle point. Despite its size, however, each "doughnut" stores away one bit of information for future reference. And 10,000 of them fit on a framework smaller than the size of this page!

Here are the cells of the RCA magnetic "memory" that is the key element in virtually all high-speed electronic computers now being produced or in development. Perhaps the greatest significance of this "memory" is its ability to deliver, in a few millionths of a second, any information it stores away.

Almost instantly, an insurance company can process a claim. Just as fast, a manufacturer with inventories spread around the country can determine what products are making money—and *where*.

With the help of such magnetic "memories," electronic computers will be able to make accurate predictions of the next day's weather for the nation, using data on atmospheric pressure, temperature, and wind velocity from every part of the United States and from overseas as well.

The leadership in electronics that created this man-made RCA "memory" is responsible for one achievement after another in television, radio, radar—as well as any other RCA product or service you may name. And continually, RCA scientists at the David Sarnoff Research Center, Princeton, N. J., are thinking, planning, pioneering even greater triumphs in "Electronics for Living"—electronics that make life easier, safer, happier.

RCA®

**RADIO CORPORATION OF AMERICA**

**ELECTRONICS FOR LIVING**


# MONITOR

## a new kind of radio listening!

NBC's exciting new weekend radio programming is here! It's MONITOR – a continuous 40-hour service:

**NEWS:** regular reports and instantaneous pick-ups the minute important news breaks – anywhere in the world

**COMEDY:** everything from one-line jokes by master humorists to audience "warm ups" from big TV shows

**MUSIC:** Broadway musicals to Wagner at Bayreuth... music of every type and tempo, for every taste

**SHOW BUSINESS:** Highlights from current movies, plays and TV specials... dressing room visits with stars

**SPORTS:** periodic round-ups of results... play-by-play coverage of key contests, wherever they take place

**SPECIAL EVENTS:** all the way from interviews with VIP's to an assault on the sound barrier with a jet pilot

*And dozens of other exciting features and specials!*

Your MONITOR hosts, ready to switch you anywhere in the world at a moment's notice, are all favorites of yours:

**DAVE GARROWAY JOHN CAMERON SWAYZE CLIFTON FADIMAN RED BARBER JIM FLEMING BEN GRAUER WALTER KIERNAN MORGAN BEATTY FRANK BLAIR**

Every weekend, wherever you are... at home, in the car, at the beach... go *everywhere* with...

**MONITOR** NBC RADIO NETWORK *a service of* RCA

*Saturdays 8:00 a.m. to midnight Sundays (N. Y. time)*