RCA - WHAT IT IS, WHAT IT DOES | 1956






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David Sarnoff, Chairman of the Board of RCA, who celebrates his Golden Anniversary in radio communications in 1956.

RCA Building • New York City

RCA

WHAT IT IS – WHAT IT DOES

Published by the Department of Information

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RCA Building • 30 Rockefeller Plaza • New York 20, New York

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RADIO CORPORATION OF AMERICA

Foreword

The year 1955 is recorded in the history of the Radio Corporation of America as the "Golden Achievement Year" in which sales exceeded one billion dollars for the first time.

The year 1956 brings up a Golden Anniversary for Brig. General David Sarnoff, Chairman of the Board, who, in 1906, entered the field of radio communications. Largely through his creative imagination, vision and scientific sagacity, RCA, in thirty-six years, has grown into a billion-dollar enterprise and has become one of the twenty-five leading industrial companies in the United States.

RCA's growth and success through the years have been achieved and shared by many people—customers, employees, stockholders, distributors, dealers and suppliers. But as Theodore Roosevelt once put it, in the last analysis virtually every enterprise that has contributed to American progress has been built upon the initiative and enthusiasm of one individual. In the case of RCA, that vital spark of initiative and enthusiasm has been supplied by General Sarnoff.

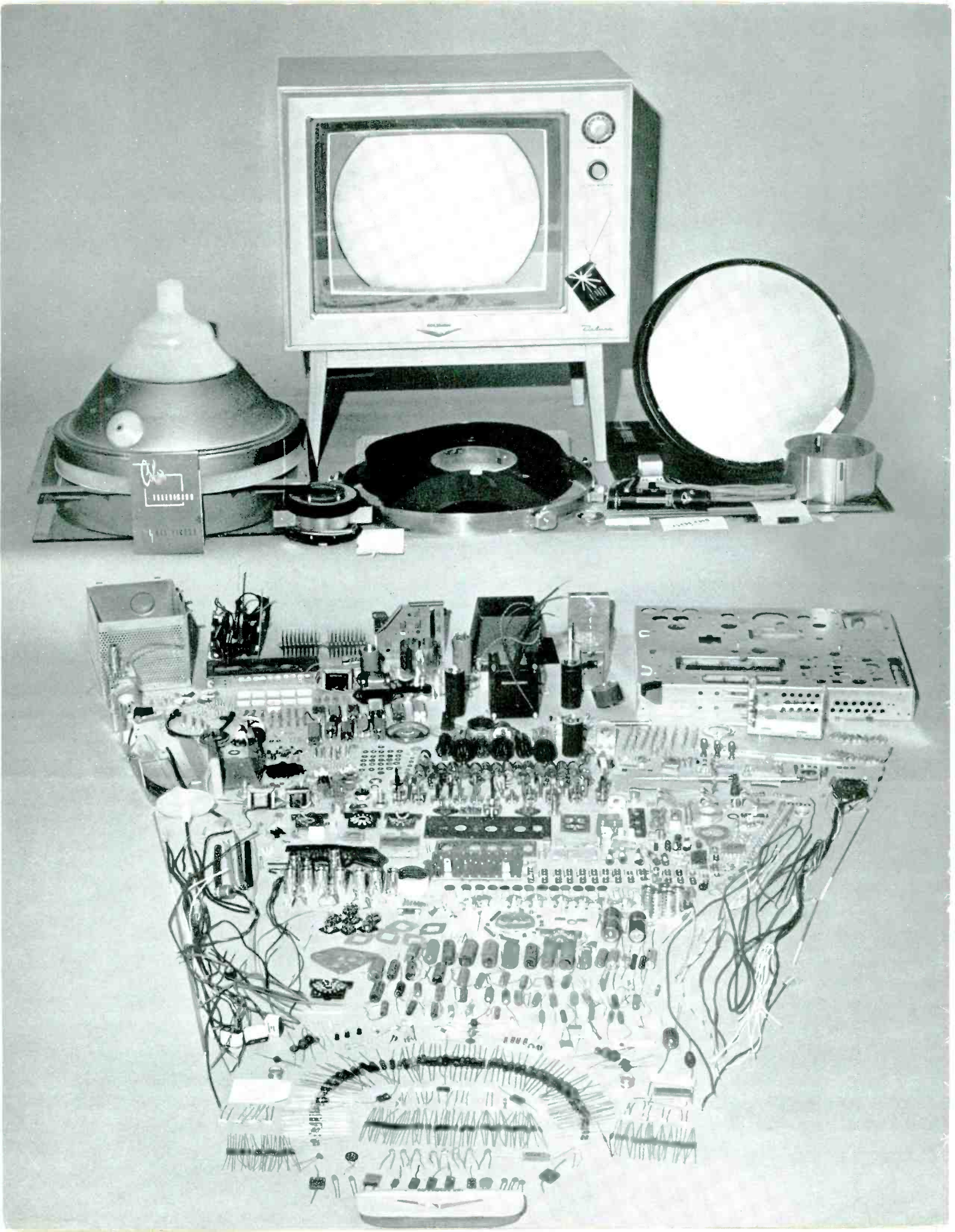
More than any other man, he is responsible for having made radio a great industry and a great art. More than any other man, he has provided the forceful leadership so necessary in opening the way for television, first in black-and-white and now in color.

Under General Sarnoff's guidance and direction, RCA has grown from a $2,000,000-a-year business employing 500 workers in 1920, to a billion-dollar corporation with 78,500 employees in 1956. The RCA monogram has become a symbol of pioneering and progress, and is known the world over as a trademark of quality and dependability.

This booklet, first published in 1942 and revised each year since then, presents the highlights of RCA's activities in question-and-answer form. It is our earnest hope that this booklet will give those who are interested a better understanding of our efforts to contribute to progress, to the public welfare and to national security.

Frederick R. Nelson

President, Radio Corporation of America



General Information

RCA And Its History

What is "RCA"?

The initials "RCA" stand for Radio Corporation of America, which is engaged in numerous phases of radio, television and electronics. Among RCA's activities are research and engineering, design and development, manufacturing, domestic and foreign sales, international and maritime communications, radio and TV broadcasting, technical training and servicing, and the granting of licenses under patents. These activities are conducted through the various RCA divisions and subsidiaries.

When was RCA organized?

In 1919. The first Chairman of the Board was Owen D. Young; the first President, Edward J. Nally. David Sarnoff, now Chairman of the Board and chief executive officer, was then Commercial Manager.

What led to the formation of RCA?

Before and during World War I, the United States depended largely upon foreign-owned cables and wireless stations for communications with many important parts of the globe. Great Britain was the communications center of the world. At the end of the war our Government was determined that the United States should have its own system of worldwide radio communications.

Subsequently, RCA was formed as a result of suggestions by the Navy Department. Arrangements were made to acquire the assets of the Marconi Wireless Telegraph Company of America. A charter was granted RCA under the corporation laws of Delaware on October 17, 1919. The business and property of the American Marconi Company were acquired by RCA November 20, 1919. On December 1, 1919, RCA began business.

When did RCA get into the broadcasting field?

The first broadcast program presented by RCA was the Dempsey-Carpentier heavyweight championship boxing match in Jersey City on July 2, 1921. The blow-by-blow description was telephoned to station WJY, temporarily installed by RCA at Hoboken, N.J., and then read over the air to an estimated 200,000 listeners. It was the first radio broadcast in history to a mass audience. Previously, a few stations had sent voices and recorded music over the air to a limited audience, and a broadcast of the Harding-Cox presidential election returns in 1920 had stimulated interest in radio.

RCA's first regularly operated broadcasting station, WDY in Roselle Park, N.J., was licensed September 19, 1921, and went on the air December 14 of that year to provide programs for the New York metropolitan area. Use of this station was discontinued in February, 1922, when RCA entered into an arrangement with Westinghouse Electric & Manufacturing Company for the operation of Station WJZ in Newark. RCA acquired full ownership of this station in the spring of 1923, and studios were installed in Aeolian Hall, New York. The Company also constructed Station WRC in Washington, D.C., which went on the air August 1, 1923.

When did RCA get into the manufacturing business?

When the Radio Corporation of America was formed, its primary activities consisted of international and marine radio communications. Soon afterward, radio broadcasting began and RCA started selling radio products manufactured by General Electric Company and Westinghouse Electric & Manufacturing Company. The rapid development of this new industry made it necessary for RCA to organize its business in 1929 so that it could combine manufacture and sales under a unified management. To obtain manufacturing facilities, RCA in 1929 acquired the Victor Talking Machine Company whose beginning dated back to 1898.

What does RCA make today?

RCA makes a wide variety of products for the home, for business and industry, and for the Armed Forces. Products for the home include color and black-and-white television sets, radios, "Victrola" phonographs and phonograph records. Among RCA's products for business and industry are

More than 2,000 separate parts
go into an RCA Victor big color television set.

broadcast, communications, theatre and factory equipment, and various electronic components such as receiving tubes, transistors and others. For the Armed Forces, RCA makes equipment like navigation and communications systems, mobile TV transmitters, radar systems, and complex electronic control devices for gunfire, guided missiles and aircraft.

How are the manufacturing operations of RCA organized?

RCA's manufacturing operations in the United States are organized under four broad headings: Consumer Products, Defense Electronic Products, Commercial Electronic Products and Electronic Components. Overseas manufacturing operations are under the direction of the RCA International Division.

Does RCA depend upon suppliers?

Yes, RCA buys materials and components from some 10,000 suppliers situated in forty-three of the forty-eight states. During 1955, the Corporation paid $557,323,000 to other companies for materials and services.

What are RCA's present divisions and subsidiaries?

They are as follows:

RCA Laboratories
National Broadcasting Company, Inc.
RCA Victor Television Division
RCA Victor Radio and "Victrola" Division
RCA Victor Record Division
RCA Defense Electronic Products
RCA Commercial Electronic Products
RCA Tube Division
RCA Semiconductor Division
Radiomarine Corporation of America
RCA Service Company, Inc.
RCA Victor Distributing Corp.
RCA Institutes, Inc.
RCA International Division
RCA Communications, Inc.

Finances

What is RCA's income?

In 1955, RCA achieved its first "billion-dollar year." Sales of products and services amounted to $1,055,266,000, putting RCA among the top twenty-five industrial companies in the United States. RCA's billion-dollar business is equivalent to more than $4,000,000 for each working day of the year. At the beginning of 1920, when RCA commenced its operations, the volume of business was running at the rate of $1,000,000 a year.

The Corporation's record gross income in 1955 bettered by 12 per cent the previous all-time high of $940,950,000 established in 1954. It was four-and-one-half times the RCA volume of $237,000,000 in 1946, the first post-war year.

Net profit in 1955, before Federal income taxes, was $100,107,000, and after taxes, $47,525,000, compared with $40,525,000 in 1954. Earnings per share of Common Stock were $3.16 in 1955, compared with $2.66 in 1954. The Corporation had a total 1955 tax bill of $97,998,000, an amount equivalent to $6.98 per Common Share.

Who owns RCA?

Ownership of RCA is widely distributed among some 170,000 stockholders. In fact, RCA is among the top ten corporations in the United States in number of stockholders. These stockholders come from cities, towns and rural areas in every part of the United States, and from all walks of life: housewives, merchants, farmers, clergymen, doctors, lawyers, mechanics, clerks and others. No stockholder holds of record as much as 4 per cent of the outstanding stock of the Corporation.

What is RCA's capital stock?

There are two classes of RCA stock: 900,824 shares of $3.50 Cumulative First Preferred; and 14,031,022 shares of Common Stock.

How much do RCA stocks pay in dividends?

Quarterly dividends at the rate of $3.50 per share per year have been paid regularly on the Preferred Stock since it was issued in 1936. These dividends amounted to $3,153,000 in 1955.

Dividends totaling $143,921,000 have been paid on the Common Stock since 1937, including $20,916,000 for 1955. Dividend payments on the Common Stock for 1955 were $1.50 per share, including an extra dividend of 50 cents.

Both Preferred and Common Stock dividends are paid quarterly.

What capitalization does RCA have in addition to its Preferred and Common Stock?

In November, 1955, RCA offered its Common Stockholders the right to subscribe to an issue of $100,000,000 of 3½ per cent Convertible Subordinated Debentures due December 1, 1980. The debentures were priced at 102½ per cent and are convertible into Common Stock at any time on or before maturity at $50 per share. Proceeds from the sale of debentures, together with other funds, will be used in furthering the expansion and development of RCA's research, manufacturing and service facilities in

the electronic and related fields.

RCA's capitalization also includes $150,000,000 of loans from insurance companies, repayable over an eight-year period starting in 1970. Interest at the rate of 3 per cent is paid on $100,000,000, and 3¾ per cent is paid on $50,000,000.

Does RCA have a program of financial aid to education?

During 1955-1956 the Corporation is sponsoring thirty-three RCA Scholarships and twenty RCA Fellowships. The total amount allocated for scholarships and fellowships for 1955 was $96,400, and for 1956, $117,900. These scholarships and fellowships are established in all classes of colleges and universities, large and small, state and privately endowed. Since the scholarship-fellowship plan was set up in 1945, RCA has aided more than 230 individuals in the advancement of their education. Originally the awards were limited to students of science, but the scope of the program has since been broadened to include the fields of dramatic arts and music as well as industrial relations. In addition to the scholarship-fellowship program, RCA has made special grants to colleges and universities for special purposes.

Employee Relations

How many people are employed by RCA?

On January 1, 1956, RCA and its subsidiaries had approximately 78,500 employees, including 8,500 overseas. When RCA began operations in 1919 it had 500 employees.

What are RCA's labor policies?

The management recognizes that the loyal cooperation of its employees is important to the success and progress of RCA. The company maintains competent personnel administration in all units, and provides facilities for recreational and personal development. Candidates for employment are selected on the basis of ability, without regard to race, creed, color or national origin. Promotion is on the basis of merit and ability.

It is RCA's policy to pay as high wages, under as favorable hours and working conditions in similar classes of work, as those prevailing in the areas in which the company's operations are conducted. Where employees choose to bargain collectively, the company deals willingly and frankly with their authorized representatives. Harmonious relations with sixty-two bargaining agencies, representing employees at eighteen manufacturing and 178 sales and service locations, were reflected in 1955 by the fact that there was not a single significant work stoppage.

Does RCA have a retirement plan?

Yes. All regular RCA employees are eligible for membership in the plan after three years of service. Retirement benefits are provided under the plan by contributions made by employees from their salaries and contributions made by the Corporation. The normal retirement age is 65.

Facilities

How many manufacturing plants does RCA have in this country?

RCA operates manufacturing plants in eighteen cities and towns. The facilities comprise almost 200 buildings, with some 8,800,000 square feet of floor space.

Where are the RCA executive offices?

Headquarters of the Radio Corporation of America are in the RCA Building, 30 Rockefeller Plaza, New York City. This building is the tallest in Rockefeller Center, popularly known as "Radio City."

Does RCA have permanent exhibits of its products?

There are five permanent exhibits altogether. In New York City there is the RCA Exhibition Hall at 40 West 49 Street, which is open to the public daily and Sundays from 11 a.m. to 9 p.m. Other exhibits of RCA products are at the Corporation's manufacturing plant in Camden, N.J., at the Chicago Museum of Science and Industry, and at the Merchandise Mart in Chicago. At the RCA Hall of Progress in the Corporation's new center at Cherry Hill, N.J., six miles east of Camden, there is an impressive historical exhibit for the public of the milestones of electronic communication from the earliest talking machines, radios and television sets to the fine instruments of today. The five permanent exhibits attracted more than 5,000,000 visitors during 1955.

Research

DR. DOUGLAS H. EWING
Vice-President, RCA Laboratories

What is RCA Laboratories?

RCA Laboratories, with headquarters at the David Sarnoff Research Center at Princeton, N.J., is the principal research organization of RCA. The outgrowth of radio research activities which began with the founding of RCA in 1919, RCA Laboratories today is a leading center of the basic and applied electronic research which stimulates progress and strengthens national security.

RCA scientists and research engineers are constantly at work improving existing electronic systems and creating the ideas from which new products and services may develop. At the same time, fundamental research is contributing to greater understanding of electron behavior in a wide range of materials, providing the foundation for future advances in electronic science. While a large part of RCA's scientific work is performed at Princeton, other laboratories are located in New York City; Newark, N.J.; Riverhead and Rocky Point, L.I.; Chicago, Ill.; Hollywood, Calif., and Zurich, Switzerland.

What is the scope of RCA research?

Starting in 1919 with investigations in the field of radio, RCA research has evolved into a major program of exploration over a broad area of electronics and inter-related sciences, including physics, acoustics, optics, chemistry and nucleonics.

How is research organized at RCA?

To facilitate its research in the broad field of electronics, RCA Laboratories has organized its research staff into seven separate laboratories, each covering a specific field or several closely related areas, and all brought together under a Director of Research.

These seven laboratories cover research in tubes and semiconductor devices, in acoustics and electromechanics, physics and chemistry, radio and television, electronic and communications systems, special projects, and the Industry Service Laboratory, which maintains facilities in New York City, Newark and Princeton, N.J., Chicago, Ill., and Hollywood, Calif.

How does RCA share the results of its research?

To encourage electronic progress on the widest basis, RCA makes its inventions and patents available to all by means of patent licenses at reasonable royalty rates and without restriction.

Information gained from research at RCA Laboratories is disseminated

by RCA through professional scientific and technical publications, through RCA Laboratories' own quarterly journal, "RCA Review," and through numerous technical and engineering books and pamphlets.

What is RCA's role in color TV?

RCA pioneered and developed compatible color television. Hundreds of man-years of inventive research and development by RCA scientists and engineers, extending as far back as the 1920's, led to the RCA compatible color television system, operating on the signal standards approved for commercial use by the Federal Communications Commission on December 17, 1953.

Modification and improvement of various parts of the color system, such as cameras, transmitters and receivers are now helping to establish the RCA color television system as a nation-wide service. An example of such improvement is the RCA color television picture tube, demonstrated at RCA Laboratories in September, 1954, and now in commercial production. RCA spent $50 million in research and development of black-and-white television, and another $70 million to advance compatible color television from the laboratory to commercial reality.

What are some other outstanding achievements of RCA research?

Many electronic developments of great value have resulted from past RCA research. Among these are key elements of the all-electronic television system, including the Image Orthicon and Vidicon TV camera tubes in standard use for both broadcasting and industrial television; the velocity microphone used throughout the broadcasting and sound motion picture industries; the electron microscope, which by magnifying far beyond the power of the light microscope has opened new areas of knowledge in medicine, biology and chemistry; the "snooperscope" and "sniperscope," infrared electron-optical devices that permit vision in darkness; Ultra High Frequency (UHF) television; and improved sound reproduction systems, which have set new standards for recorded music.

What recent results of RCA research show promise?

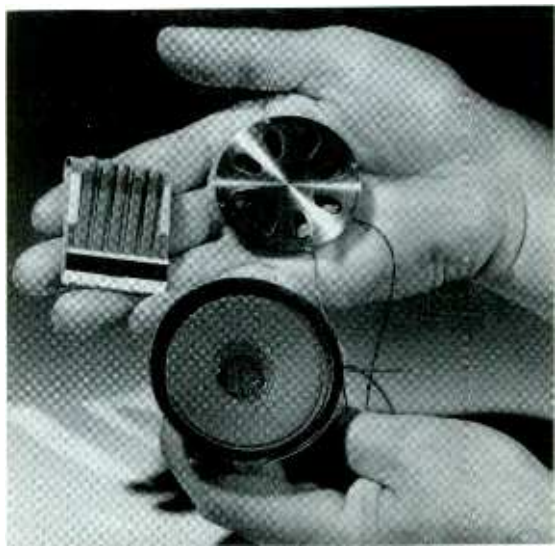
Recent and current RCA research has produced a variety of promising devices and systems which may find wide application in the future. An instrument known as the Electronic Music Synthesizer can generate electronically an infinite range of musical tones or combinations of tones, imitating any known musical instrument or creating sounds for which there is no known mechanical means of generation. The synthesizer offers new and fascinating possibilities for the production of recorded music, tapping the entire world of sound for the creation of yet unheard musical forms.

RCA also has developed an electronic light amplifier capable of increasing by more than twenty times the brightness of a dim projected image. This eventually is expected to find important application in X-ray fluoroscopy, radar, and other systems in which dim images normally are encountered, and its principles may be applied to novel developments in television. The light amplifier consists of a thin panel against which a low-intensity image is projected, to appear on the other side of the panel as a bright picture.

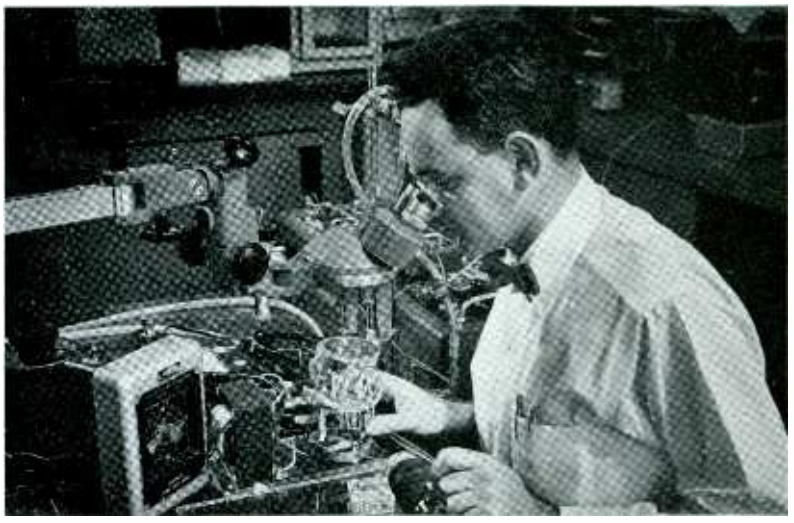
Another interesting recent development is the RCA electronic cooling system, which produces cooling and freezing temperatures in a normal room temperature environment entirely by electronic means. A small experimental refrigerator employing this system has been demonstrated, and further research is directed toward design of a self-contained electronic air conditioner for home use, without any moving parts and noiseless in operation.

In another area of research, RCA has developed a high-speed process called "Electrofax" for printing information by electronic means on any solid surface. "Electrofax" involves projection or exposure of written or photographic information upon an area covered with a special photosensitive coating. This imposes an electronic image which is made visible by brushing the surface with a pigmented powder, and fixed permanently by brief exposure to heat. Many useful applications for "Electrofax" are being developed, including the swift production of printing plates, making

Smallest loudspeaker ever built for commercial radio receivers shown in comparison with a match packet and, foreground, smallest RCA radio loudspeaker now in production.



RCA "Electrofax" is a high-speed process of electronic printing on any solid surface. One use is in production of printing plates as shown above.



RCA scientists have performed important developmental work on transistors, tiny devices that handle many functions of the electron tube and offer great opportunities for miniaturization.

master copies for office duplication, enlarging microfilm records, addressing packages, and producing printed circuits.

What has RCA done in the field of TV tape recording?

A system for recording and reproducing television signals, both in color and in black-and-white, by means of magnetic tape was originally demonstrated by RCA in 1953. Early in 1955, a television tape recorder was installed at NBC in New York for field testing. In May, 1955, this equipment originated the first long-distance transmission of a color TV program pre-recorded on magnetic tape, sending the program over commercial network facilities from New York to St. Paul, Minn.

Compared with recording on film, the magnetic tape system has three advantages: First, magnetic tape recording of TV programs is a practical, low-cost solution to problems faced by the industry in recording for quick playback and rapid distribution. Second, the program can be preserved indefinitely or be electronically erased, permitting re-use of the tape many times. Third, a tape recording can be played back immediately, whereas several hours are required for processing conventional color film.

This technique of tape recording can provide useful services not only in TV broadcasting, but also in the motion picture and theatre industry, in home entertainment and education, as well as in industry in general.

What is meant by electronics of solids?

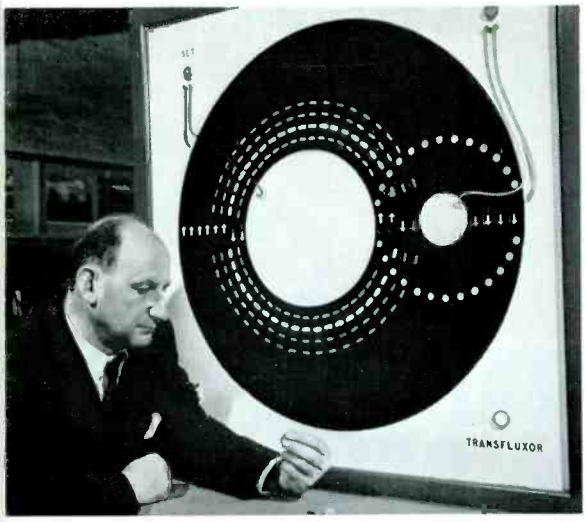
This newest branch of electronic science deals with the control of electrons inside tiny amounts of solid material, as contrasted with the older, conventional technique of controlling electrons in a vacuum as is done in the electron tube. An example of solid-state electronics is the transistor on which RCA scientists have performed important developmental work in recent years.

What is a transistor?

A transistor consists of a particle of the metal germanium or silicon imbedded in a plastic shell smaller than the eraser on a lead pencil. It can perform many functions of the electron tube. The transistor has no heated filament, requires no warm-up and uses little power. It is rugged, shock-resistant and has long life. These qualities offer great opportunities for making smaller and simpler electronic equipment. RCA has been active in research, engineering and production of transistors and transistorized equipment.

What is a Transfluxor?

A Transfluxor is another example of solid-state electronics. A tiny ceramic button no larger in diameter than a pencil, the Transfluxor can control the flow of electric power over an indefinite period in accordance with an instruction fed in by a single electrical pulse. The Transfluxor has important potential uses in electronic storage and control systems.



Working model of a Transfluxor, new solid-state device for controlling flow of electric power and storing electronic data.

What are some electronic products we can look for in the future?

On the basis of present research at RCA Laboratories, a number of important new electronic devices for the home and for industry may appear in commercial form in the next ten to fifteen years.

Among these are mural television, a TV receiver with a thin screen which may be hung on the wall and controlled remotely by the viewer; two-way radios no larger than a wristwatch, capable of communicating over distances of several miles; portable television receivers with picture-frame viewing screens like those of mural television, and transistorized circuits operating from batteries; home tape-recorders for television, with which recorded programs can be made for playback on the home television set, or favorite TV programs recorded for repeated viewing; electronic room cooling and heating panels which can either raise or lower room temperatures, depending upon the direction of current applied to them.

RCA magnetic tape recorder for color TV can record programs for immediate play-back or for later rebroadcast.

Broadcasting: radio and television

ROBERT W. SARNOFF
President, National Broadcasting Company, Inc.

What is "NBC"?

The letters "NBC" are the initials of the National Broadcasting Company, a wholly owned subsidiary of RCA.

NBC was established on September 9, 1926, as America's first network, "to provide the best programs available." The inaugural network program, on November 26, 1926, was broadcast by twenty-four stations in twenty-one cities extending from the Eastern seaboard to Kansas City. On January 1, 1927, NBC broadcast the first coast-to-coast program—the Rose Bowl football game from Pasadena, California.

NBC introduced television as a service to the public in 1939 at the New York World's Fair. Two years later, the Company's station atop the Empire State Building became the first commercially licensed television transmitter to go on the air. In 1951, NBC inaugurated its coast-to-coast television network, and in 1953 began transmitting commercial color TV programs, using the RCA compatible color system.

How many radio stations are on the NBC network now?

In April, 1956, the NBC radio network included 196 stations. Five of them are owned and operated by the Company: WRCA, New York; WRC, Washington, D.C.; WRCV, Philadelphia; WMAQ, Chicago; KNBC, San Francisco. These stations, with the exception of WRCV, broadcast all programs simultaneously over both FM (frequency modulation) facilities and the standard AM (amplitude modulation) facilities.

How many television stations are on the NBC TV network?

In April, 1956, there were 201 stations on the TV network. Six of these stations are owned and operated by the Company: VHF stations WRCA-TV, New York; WRC-TV, Washington, D.C.; WRCV-TV, Philadelphia; WNBQ, Chicago; KRCA, Los Angeles; and UHF station WBUF-TV, Buffalo, N.Y.

How did the idea of broadcasting to the public originate?

In 1916, when David Sarnoff was Assistant Traffic Manager of Marconi Wireless Telegraph Company of America, he suggested the manufacture of "radio music boxes" so that purchasers could enjoy "concerts, lectures, music, recitals, etc." His memorandum to E. J. Nally, who was then Vice President and General Manager of that Company, said: "I have in mind a plan of development which would make radio a household utility in the same sense as a piano or a phonograph. The idea is to bring music into the house by wireless...

For example, a radio telephone transmitter having a range of say 25 to 50 miles can be installed at a fixed point where instrumental or vocal music or both are produced... The receiver can be designed in the form of a simple 'radio music box' and arranged for several different wave lengths, which should be changeable with the throwing of a single switch or pressing a single button... The same principle can be extended to numerous other fields—as for example—receiving lectures at home which can be made perfectly audible; also events of national importance can be simultaneously announced and received. This proposition would be especially interesting to farmers and others living in outlying districts removed from cities. By the purchase of a 'radio music box' they could enjoy concerts, lectures, music, recitals, etc., which may be going on in the nearest city within their radius... Should this plan materialize, it would seem reasonable to expect sales of 1,000,000 'radio music boxes' within a period of three years."

Demonstration of the practical value of the Sarnoff plan was delayed by World War I. However, on November 2, 1920, when the Westinghouse station, KDKA, Pittsburgh, broadcast the Harding-Cox election returns, the "radio music box" became a reality. Today 132,400,000 radio sets are in use, including 31,200,000 in automobiles.

When did NBC begin its experimental broadcasts in color TV?

On February 20, 1941, NBC transmitted its first color television pictures in motion over experimental station W2XBS in New York using mechanical methods. Later development in color transmission centered around the RCA all-electronic, compatible color system, on which were based the all-industry standards approved by the Federal Communications Commission on December 17, 1953. NBC was the first network to go on the air with a color TV signal under the new FCC regulations, the signal being broadcast within minutes after the announcement.

What TV programs does NBC broadcast in color now?

In line with its policy of making RCA-pioneered compatible color television a reality for the vast American audience as quickly as possible, NBC has been broadcasting an ever increasing schedule of color programs.

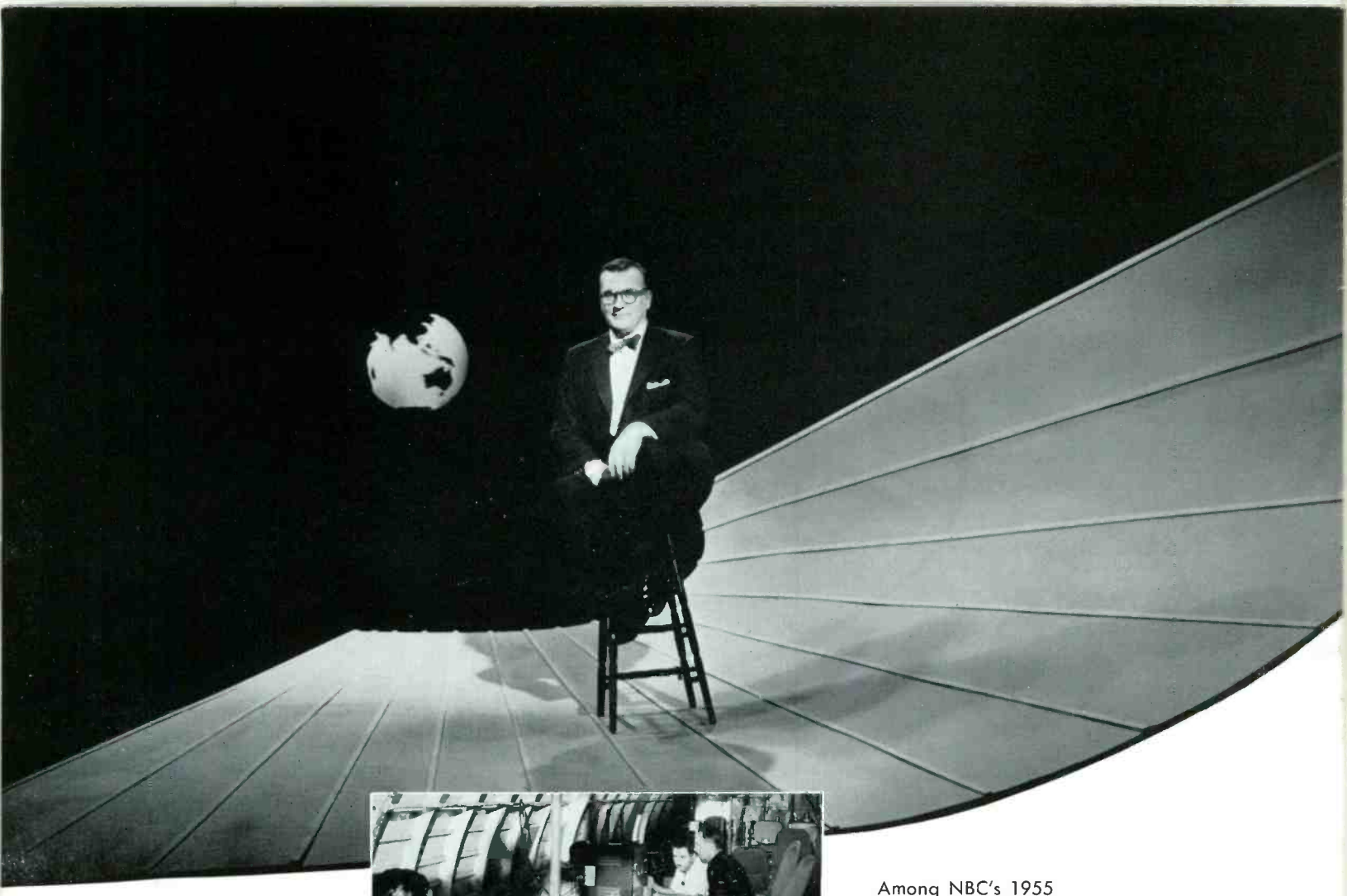
In September, 1955, the network expanded its color programming fivefold to forty hours of color a month, and new facilities to be completed by the fall of 1956 will make it possible to broadcast eighty hours a month.

Among the major NBC colorcasts are the "Spectaculars" and "Producers' Showcase," the Milton Berle Show, the new daily, hour-long "NBC Matinee Theatre," the "Howdy Doody" show and segments of "Home," and "Today." Remote color pickups have included the World Series, the Davis Cup finals, and major college football games.

What are NBC's color facilities?

In April, 1956, thirty-two NBC-TV affiliates were equipped to originate local color programs. A total of

Chester Bowles, former U.S. Ambassador to India, interviewing Prime Minister Nehru for NBC's color TV documentary, "Assignment: India."



Among NBC's 1955 achievements was the introduction of "Wide Wide World" with Dave Garroway (top) as master of ceremonies. The show has taken viewers via "live" television to all parts of the United States, and to Canada, Mexico and Cuba. The sequence from Cuba—relayed by airplane (upper left)—marked the first time such a picture had been telecast from a foreign land across water to the United States. In roaming this country, "Wide Wide World" cameras caught skiers in action at Mount Hood, Oregon (lower left).

Puccini's opera, "Madame Butterfly," was presented in English by the NBC Opera Theatre.

Arlene Francis' "Home" show takes viewers sightseeing to interesting places like the Capitol in Washington.

Dr. Benjamin Spock, noted pediatrician, discusses topics of interest to parents of babies and young children.

106 affiliates were equipped to transmit network-originated color programs, making these shows available to more than 90 per cent of all television homes.

The main color production center in New York is NBC's Brooklyn studio, the world's largest television facility. Also situated in New York is NBC's Colonial Theatre, the first fully equipped color television studio. Another NBC color facility in New York is Studio 3-K.

In California, NBC color television activities were expanded in March, 1955, with the dedication of Color City at Burbank. This studio, the first to be built specifically for color telecasting, has become NBC's West Coast color headquarters. Situated on a 50-acre tract, Color City incorporates features stemming from NBC engineers' experience in the design and operation of color TV studios and can handle productions of any size with convenience.

In November, 1955, NBC announced a $12,000,000 program to expand color television facilities in New York, Los Angeles and Chicago. This program is designed to permit NBC to broadcast eighty hours of color by the fall of 1956, an increase of 100 per cent over the previous season. The expansion program includes construction of a second color studio in Color City and a second color studio in Brooklyn; conversion of the newly-purchased Ziegfeld Theatre in New York into a color studio; conversion of WNBQ, Chicago, into the world's first all-color television station; construction of an office building and additional technical workspace at Color City; and the acquisition of four new color film chains and other color equipment.

The NBC color mobile unit provides the network with flexibility of color origination and can operate many miles from the nearest network line through a built-in radio relay.

How does NBC gather its news?

NBC has a staff of accredited reporters and cameramen on all world news fronts to provide material for the radio and television networks' news programs. In addition, NBC receives

the full service of the Associated Press, United Press and International News Service. NBC maintains news bureaus in principal American cities and in foreign capitals. Each correspondent is equipped with a tape recorder to bring on-the-spot recordings direct to the radio audience. NBC also has arrangements for exchange of news film with agencies in various European countries.

May the public visit NBC studios and attend broadcasts?

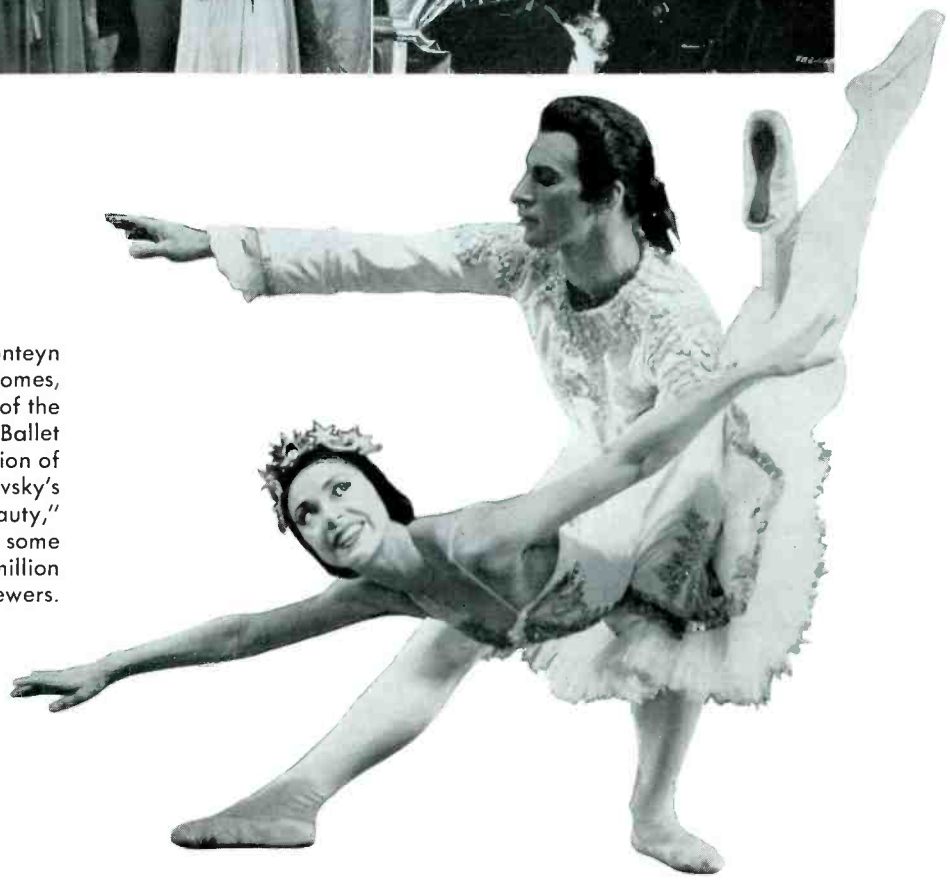
NBC is pleased to have the public take its guided tour through the Radio City studios in New York. The tours, which began twenty-two years ago, attracted their 9-millionth visitor in 1955. Tickets to attend broadcasts may be obtained free by writing at least two weeks in advance to NBC Guest Relations Department.

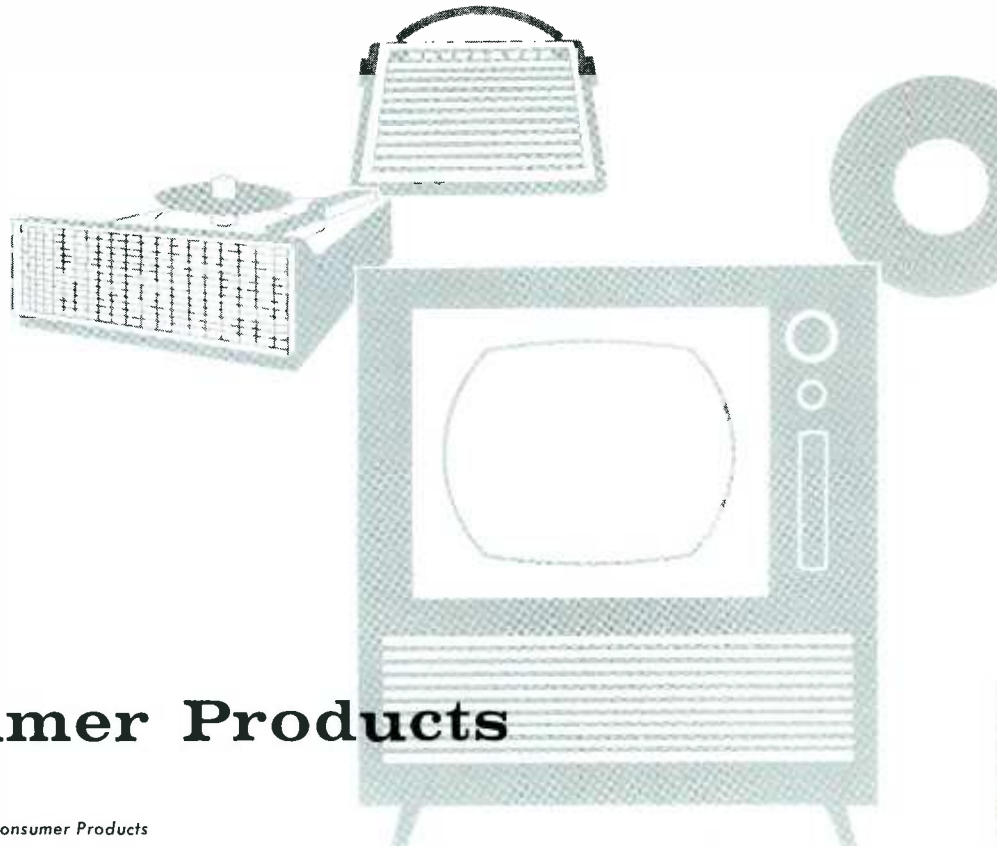
Maurice Chevalier made his first personal appearance on American television on NBC.

A scene from Shaw's "Caesar and Cleopatra" which was presented in color on NBC's Producers' Showcase.

Sir Laurence Olivier (left) in the title role of Shakespeare's "Richard III" which had its American premiere on NBC-TV.

Margot Fonteyn and Michael Somes, stars of the Sadler's Wells Ballet production of Tchaikovsky's "Sleeping Beauty," seen by some 30-million TV viewers.





Consumer Products

ROBERT A. SEIDEL
Executive Vice-President, Consumer Products

What are RCA's activities in the field of consumer products?

RCA designs, develops, manufactures and merchandises consumer products including radio and TV receivers, tape recorders, "Victrola" phonographs and phonograph records.

These activities are conducted by the RCA Victor Television Division, the RCA Victor Radio and "Victrola" Division, and the RCA Victor Record Division.

In September, 1955, RCA transferred the assets of its kitchen range and room air conditioning business, cash and certain rights to use the RCA trade-mark, to a newly organized company which was merged with Whirlpool Corporation and Seeger Refrigerator Company to form Whirlpool-Seeger Corporation. Whirlpool-Seeger manufactures and sells a variety of home appliances under the name RCA Whirlpool.

How did the RCA Victor dog trade-mark originate?

This trade-mark, one of the most famous in American industry, stems from a painting entitled "His Master's Voice," created by Francis Barraud in 1899. The dog featured in the painting was the artist's fox terrier, "Nipper." Through the Victor Talking Machine Company, RCA acquired rights to this trade-mark.

How many distributors and dealers handle RCA consumer products?

There are ninety RCA distributors in eighty-six cities throughout the United States, and approximately 45,000 retail dealers.

Where are RCA's consumer products manufacturing plants situated and what do they make?

Bloomington, Ind.—television receivers

Cambridge, Ohio—record players, tape recorders, television receiver parts

Canonsburg, Pa.—radio receivers, "Victrola" phonographs

Hollywood, Calif.—recording studio, custom record pressing

Indianapolis, Ind.—television receivers, phonograph records

Monticello, Ind.—television cabinets

New York, N.Y.—record pressing, recording studio

Rockaway, N.J.—phonograph records

What is the RCA Victor Television Division?

This Division engineers, designs and manufactures for consumer sales black-and-white and color television receivers in a wide variety of styles, finishes and screen sizes.

Does RCA make a full line of color TV receivers?

In January, 1956, RCA introduced the industry's first complete line of color sets. The company was geared to manufacture and merchandise more than 200,000 color receivers during 1956.

Early in the year, RCA completed the conversion of its Bloomington, Ind. plant for mass production of color TV receivers. Each of the plant's five production lines can turn out color TV sets — completely tested, packed and ready for shipment — at the rate of one-a-minute.

Does a color television set receive black-and-white programs too?

Yes, because of the compatible color television standards, pioneered and developed by RCA, a color set receives black-and-white programs in black-and-white pictures. These standards also permit owners of black-and-white sets to receive color programs in black-and-white without making any changes on their sets.

Why is a color TV receiver more expensive than a black-and-white set?

A color set has many more parts and requires more man-hours of labor to build. It functions as a black-and-white set; it also receives color signals and "translates" them into color pictures. The color picture tube, a vital part of the color set, is more complicated than the black-and-white picture tube. RCA continually strives to achieve cost reductions which result in lower consumer prices. The first color set was introduced at a nationally advertised price of $1,000. The price of the larger-size color receiver introduced nine months later was $895. In January, 1956, RCA introduced a table model color set nationally advertised at $695.

Is a black-and-white set still a good investment?

Yes, because the value of RCA Victor TV receivers has never been greater and they are at their lowest prices in history. RCA Victor manufactured and sold more than 1,000,000 black-and-white TV receivers in 1955, a big increase over any previous year.

Can Ultra High Frequency (UHF) television stations be received by RCA Victor sets?

Yes, RCA Victor television receivers are equipped for either VHF (Very High Frequency, channels 2 to 13) reception, or, with combination tuners, for both VHF and UHF (Ultra High Frequency, channels 14 to 83).

Skilled workers assembling color TV chassis at the RCA Victor plant in Bloomington, Indiana.

Bloomington plant is geared to turn out big color sets at rate of one-a-minute on each of its assembly lines.

RCA Victor's
newly designed
45-rpm self-contained
"Victrola" phonograph.

High Fidelity
instruments in
production at
Canonsburg, Pa.

RCA Victor's
new portable television
receiver, only slightly
larger than a
table model radio.

RCA Victor Radio and "Victrola" Division

What is the RCA Victor Radio and "Victrola" Division?

It is the organization responsible for the development, manufacture and distribution of all radios, record players and tape recorders bearing the RCA Victor trademark. These products include a full line of 45-rpm and three-speed "Victrola" phonographs, as well as New Orthophonic High Fidelity instruments. The radio line includes a wide selection of table models, clock-radios and portables.

What is RCA's position in the phonograph industry?

The Victor Talking Machine Company, a predecessor company, led the world in the early progress of the phonograph with the well-known "Victrola" instrument. RCA Victor since has pioneered in the development and introduction of the universally-accepted 45-rpm system of recording and reproduction; has made important contributions in the field of High Fidelity; and has been in the forefront in the industry's march of progress. In 1955 RCA Victor introduced the industry's first full line of New Orthophonic High Fidelity music instruments. These instruments were so popular that initial inventories were exhausted almost immediately after the sets were placed on the market.

What are the advantages of RCA Victor High Fidelity "Victrola" phonographs?

High Fidelity "Victrola" phonographs plus New Orthophonic High Fidelity recordings combine to bring home listeners new realism in music. The instruments are the result of nearly a half-century of development in sound reproduction and contain RCA Victor's famous "Golden Throat" tone system, newly-designed loudspeakers (with some multi-speaker instruments), powerful amplifiers and a high-quality, three-speed record changer. Models are available in table, console and portable versions, and in a variety of styles.

What is the RCA Victor Record Division?

Since 1901, RCA Victor Record Division and its predecessor company, the Victor Talking Machine Co., have produced quality phonograph records of the world's great music. Today, the RCA Victor Record Division is a leader in the industry, a position that was established by a combination of unexcelled artists, repertoire and engineering skill. Through the years, the Division has pioneered in improving techniques in reproduction, including the introduction of New Orthophonic High Fidelity sound.

The Division now manufactures records under the labels "RCA Victor," "RCA Victor Red Seal," "Camden," "Vik," "Bluebird," and "Groove." Custom-made records and transcribed radio programs are among other services offered by the Division.

RCA Victor record albums include a complete repertoire of popular, jazz and classical selections by the world's finest artists.

What part has RCA played in the field of High Fidelity?

Since 1949, RCA has been making the industry's most complete line of High Fidelity recordings. As a result, in 1956 RCA had the widest variety of High Fidelity recordings in the world. These New Orthophonic High Fidelity discs were made possible by the use of special microphones and the most advanced type of studio acoustics, which produce a brilliant, highly defined sound with a maximum of separation between instrumental choirs and exceptional clarity on the solo instruments.

What types of entertainment are available on RCA Victor Records?

In addition to a complete repertoire of popular, classical and jazz selections, RCA Victor also produces children's songs and stories, country and Western hits, the increasingly important rhythm and blues records and international music.

What special services are offered by the RCA Victor Record Division?

The Division's Custom Record Department not only affords a complete service for pressing the brand line records of other manufacturers but also for production of special records for radio transcriptions, spot commercials, professional sales training, educational, slide film and other specialty recordings. Through its Recorded Program Service, the Division is one of the top producers and distributors of transcribed programs for radio broadcasting. The RCA Thesaurus library service offers radio programs in every musical category for station broadcast. RCA Victor Record Division also maintains five recording studios throughout the United States, the facilities of which are available to other companies.

Defense Electronic Products

THEODORE A. SMITH
Vice-President, Defense Electronic Products

What are RCA's defense electronic products?

RCA develops, designs and produces a broad range of electronic equipment and devices for all branches of the Armed Forces. These products include navigation and communications systems, walkie-talkies, mobile and air-borne television systems, radar, and electronic control devices for gunfire, guided missiles and aircraft.

What is RCA's role in military electronics?

As early as 1932, RCA undertook basic research work on apparatus and techniques later used for the location of ships and planes by radio.

The Company has been active in military electronics on a large scale since before World War II. It contributed importantly to the development and improvement of radar, sonar, shoran, infrared, guided missiles and various types of radio communications equipment. The first loran systems, for long-range navigation, were designed and built by RCA. It also developed the basic concepts of shoran, a short-range navigation system. For nearly a decade, RCA has been active in guided missile work and now performs the electronic operations necessary in the testing of long-range guided missiles at the Patrick Air Force Base in Florida.

What kind of specialized air-borne equipment does RCA produce?

Many types of air-borne electronic equipment are designed and manufactured for military aircraft, and for commercial and private planes. This equipment includes radio transmitters and receivers, highly accurate altimeters which utilize radar principles, and weather-detection radar systems which enable pilots to "see" storm formations up to 150 miles ahead. In 1955, radar designed by RCA for all-weather purposes was purchased by five commercial airlines in the United States and by four European airlines.

Has RCA contributed to the reliability of military electronics?

The quality of RCA defense electronic products has set high standards for the industry. During 1955, for example, the U. S. Air Force and RCA jointly sponsored a conference of designers, manufacturers, and users of military electronic equipment, and suppliers of components to acquaint them with RCA's experience with advanced ideas and techniques for achieving greater operating reliability in military electronic equipment.

U.S. Army Photos

In the field, RCA-built portable television unit enables soldier-scouts to send battle picture to the command post.

At the monitor, push-button controls enable officer to see TV pictures sent by soldier-scouts a half-mile away.

What are some recent RCA developments in military electronics?

During 1955, RCA developed the smallest walkie-talkie radio ever built — a transistorized instrument tiny enough to be carried in a shirt pocket, yet powerful enough for two-way communication over a quarter-mile range. The U.S. Army Signal Corps has purchased a quantity of the instruments for field tests and evaluation as a communication device for squads and other small tactical military groups.

Early in 1956 the Signal Corps unveiled an RCA-built portable television unit which a soldier-scout can use to send battle pictures to his command post. The new unit consists of a camera weighing eight pounds, and a transmitter or sending station — complete with built-in power supply — which weighs forty-seven pounds. Pictures up to a mile distant can be picked up by the camera and sent to a receiver another half-mile away.

The unit enables the Signal Corps TV cameraman to reach previously inaccessible spots and to move unhampered through protective forests and over ditches. The camera can serve as a silent sentry to watch a road and report enemy movements, and can also be used in helicopters to direct air-sea rescue operations. The new TV unit was built by RCA to Signal Corps specifications.

Another new development is an interphone system which weighs less than fifteen ounces and can be worn by ground crewmen to provide communication with personnel inside a plane being serviced or checked for take-off. The transistorized interphone offers important savings in space and weight over conventional means for providing inside-outside communication on military planes, because it enables ground personnel to carry equipment normally installed in the aircraft.

Where are RCA's defense electronic products developed and produced?

A substantial percentage of engineering for all RCA defense equipment is carried out in the Corporation's Camden, N.J. plant. At Moorestown, N.J., work is carried forward on the engineering, manufacturing, and assembly of radar systems. RCA's Los Angeles plant is devoted principally to engineering and manufacture of air-borne radar for military and commercial use. From this plant comes RCA's weather-radar system. In Waltham, Mass., RCA operates an engineering laboratory for the development of specialized electronic fire-control systems for military aircraft. High-precision mechanisms, such as elaborate gear trains and automatic tuning devices for Government projects are engineered in Camden and produced at RCA's Detroit plant.

Commercial Electronic Products

A. L. MALCARNEY
General Manager, Commercial Electronic Products

What are RCA's commercial electronic products?

Commercial electronic products designed, developed, produced and marketed by RCA include equipment for use in the radio and television broadcasting industry, in communications, in industrial and business services, and in the theatrical, scientific, educational and medical fields.

What equipment does RCA manufacture for radio and TV stations?

RCA manufactures virtually all types of equipment necessary for AM and FM radio stations and for VHF (Very High Frequency) and UHF (Ultra High Frequency), and color television stations. This equipment ranges from transmitters, antennas and control devices to "live" and film cameras, monitoring and testing equipment, studio turntables, disc and tape recorders. For color television broadcasting, RCA has supplied many stations with RCA-developed compatible color TV cameras for "live" programming, and three-Vidicon color film cameras for televising color motion picture film and slides. RCA has also supplied hospitals, schools and colleges with color and black-and-white TV equipment for closed-circuit application.

What products does RCA manufacture for industry?

RCA manufactures and markets a variety of equipment and electronic devices which enable modern industrial plants to produce new products and to introduce greater efficiency, safety and economy in manufacturing operations. Typical of these RCA products are electronic beverage inspection machines, metal detectors, automatic machines for uncasing beverage bottles and cans, and closed-circuit television systems for production control and observation.

What products does RCA supply the theatre and film industry?

RCA markets virtually all equipment and accessories for the completely equipped theatre, from projection, sound and screen products to theatre carpet and seating facilities. Specialized equipment is manufactured for Drive-In theatres and for movie houses converting for wide-screen film projection. RCA also manufactures professional disc, film, and magnetic tape recording equipment for use by studios in recording the sound portion of motion picture films. In addition to 35mm sound-film motion picture projectors for theatres, RCA produces 16mm equipment for use

in education, commerce and industry, and for operation with television equipment for televising films.

Does RCA make microwave and mobile radio equipment?

Yes, RCA develops and produces microwave and mobile radio equipment for civil and industrial communications. Microwave equipment is being used increasingly by utilities, pipeline operations and turnpike commissions. By the end of 1955, RCA microwave relay in use around the world totaled more than 800,000 circuit miles. RCA two-way radio communications systems are used by police, fire and forestry departments, public utilities, oil, construction and transportation companies.

What is RCA's "Bizmac"?

RCA has developed an electronic data-processing system, known as "Bizmac," which converts months of business paperwork into minutes of "push-button" operations. With lightning speed and accounting accuracy, "Bizmac" will: file on a single reel of magnetic tape more than 2,500,000 characters; electronically "read" and "write" at the rate of 10,000 letters or digits per second; add, subtract, multiply and divide with electronic speed and "remember" specified information indefinitely for recall in a few millionths of a second; at a speed of 600 lines a minute, print inventory procurement recommendations, shipping orders and other business paperwork. A "Bizmac" system, incorporating some 200 units of thirteen different but fully integrated types of electronic equipment, was purchased in 1955 by the U.S. Army for $4,000,000. The system was designed for use at the Army Ordnance Tank-Automotive Command, Detroit, to keep track of tank and auto parts all over the world.

Where is the RCA electron microscope used?

Approximately 600 RCA electron microscopes are now in use at leading manufacturing centers, Government bureaus, foundations, hospitals, college laboratories and other important research centers throughout the world. The first commercial electron microscope, developed and introduced by RCA in 1940, provided useful magnification of 100,000 diameters. RCA's latest type will permit study of particles smaller than one 10-millionth of an inch in diameter and provide useful photographic enlargements up to 300,000 times the size of the specimen.

Where are RCA's commercial electronic products manufactured?

RCA's commercial electronic products are manufactured at plants in Camden, New Jersey, and Detroit, Michigan. From the Camden plant come radio and television broadcast equipment, communications equipment, theatre, sound, and industrial products, scientific instruments, and closed-circuit television systems. The Detroit plant produces 35mm motion picture projectors.

New RCA color TV camera, especially designed for medical use, had its first public demonstration at Veterans Administration Hospital, Philadelphia.

RCA TV camera encased in special diving bell televises underwater life, and may lead to improvements in fishing techniques and equipment.

Bizmac, the RCA-developed electronic data-processing system, will perform in minutes inventory control procedures previously requiring months.

Electronic Components

W. WALTER WATTS
Executive Vice-President, Electronic Components

RCA Tube Division

What is the RCA Tube Division?

The RCA Tube Division designs, develops, manufactures and merchandises RCA electron receiving tubes, cathode-ray tubes, power tubes, phototubes, and television camera tubes. They are used for the operation, maintenance, and improved design of home radios, phonographs and television instruments, and sound systems; radio and TV broadcast equipment, and a wide range of industrial and military control and communications equipment. The Division markets a line of test instruments used in the production and servicing of electronic apparatus, as well as a line of dry batteries for portable radios and industrial applications. It also designs tube parts and tube-making machinery for its own use, as well as for sale to other manufacturers of electron tubes. Products merchandised by the RCA Tube Division also include Geiger counters for uranium prospecting and selenium rectifiers for radio and television instruments.

How many types of electron tubes does RCA market?

The RCA Tube Division currently sells more than 850 different types of electron tubes for industry, communications, and home entertainment, including several hundred types manufactured for use by industry and the Armed Forces. More than fifty new tube types were added to the line during 1955.

Are Tube Division products used extensively in the home?

Yes, millions of Americans are in daily contact with products of the RCA Tube Division. Broad categories of Tube Division products for initial or replacement service in electronic devices in the home include: electron receiving tubes for all types and makes of home, personal, and auto radios; phonograph, black-and-white TV, and color TV instruments; black-and-white picture tubes including 26 types of "Silverama" aluminized picture tubes for virtually all makes of home TV receivers; "Colorama" color TV picture tubes; service parts and components for electronic devices in home use; a comprehensive line of dry batteries for portable and farm-home radios; phototubes for automobile headlight dimming, and a wide range of tubes for amateur radio operators.

Did RCA produce the first commercial color TV picture tubes?

Yes, in December 1953, the RCA Tube Division announced as a com-

RCA's round metal color TV picture tube and aperture mask undergoing inspection at the RCA Tube Division plant in Lancaster, Pa.

One of the intermediate inspection steps in the manufacture of RCA Image Orthicon camera tubes at the Lancaster plant.

mercial product an 88.5-square-inch color television picture tube, together with deflecting yokes, transformers, and essential circuit components for compatible color receivers. Within a year, the Division was in commercial production on the industry's largest commercially available color tube with a picture area of 255 square inches. This tube represented a major step toward large-screen home color sets at mass-market prices. Added manufacturing facilities will make it possible to produce color tubes at the rate of 30,000 monthly, in late 1956.

Where are RCA Tube Division plants situated?

Electron receiving tubes are manufactured at Harrison and Woodbridge, N.J., Indianapolis, Ind., and Cincinnati, Ohio. Black-and-white television picture tubes are produced at Marion, Ind.; color television tubes, power tubes, Image Orthicon and Vidicon camera tubes, special purpose tubes and phosphors, at Lancaster, Pa. Component parts are manufactured in Camden, N.J., and Findlay, Ohio.

Does the RCA Tube Division publish tube data for the equipment designer, user and serviceman?

Yes, RCA publishes a comprehensive library of technical publications on RCA electron tubes. These include manuals of receiving tubes, power tubes and phototubes, and interchangeability charts for power tubes and TV picture tubes.

RCA Semiconductor Division

What is the RCA Semiconductor Division?

The RCA Semiconductor Division was created in 1955 to design, develop, manufacture and market semiconductor devices such as transistors and crystal diode rectifiers. A plant to house engineering and manufacturing facilities for the production of these products is under construction at Somerville, N.J., and is expected to be ready for use in the last quarter of this year.

What are the principal uses for semiconductor devices?

One of the important electronic developments during the last decade, transistors utilize properties of metals such as germanium and silicon to perform many of the functions of electron tubes. Transistors have the advantages of compactness and low power consumption. They have been generally adopted by manufacturers of hearing aids, and are coming into constantly wider use in portable radio receivers, automobile radios and military equipment. Semiconductor diodes are being employed as current rectifiers in many types of radio and television instruments.

Radiomarine Corporation of America

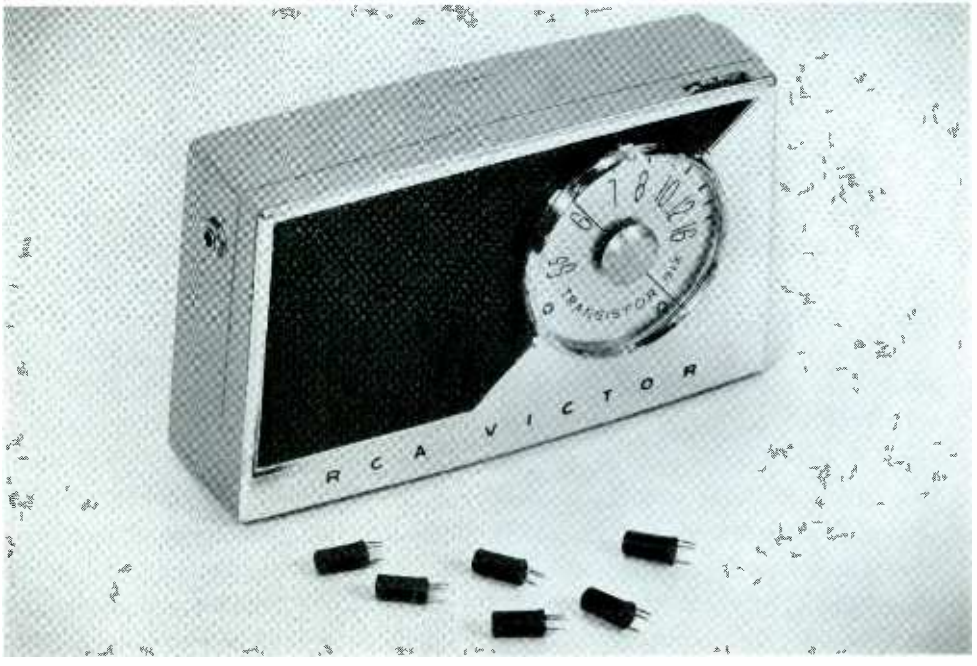
What is Radiomarine Corporation of America?

Radiomarine Corporation of America, formed on December 31, 1927, as a wholly-owned subsidiary of RCA, develops, produces, sells and services marine radio communications equipment and electronic navigational devices. This equipment includes shipboard radars, loran receivers, radiotelegraph transmitters and receivers, automatic radio alarms, radio direction finders, lifeboat radios, radiotelephones, depth recorders and specialized electronic equipment. Radiomarine also operates a radiotelegraph and radiotelephone communications system for contact with ships in all parts of the world.

Radiomarine has branch sales and service offices in all principal seaports of the United States as well as on the Great Lakes and inland rivers. More than 200 authorized dealers throughout the country sell and service Radiomarine small craft radiotelephones, depth sounding equipment and radio direction finders.

What is the role of Radiomarine's communication service?

Radiomarine is engaged in commercial shore-to-ship, ship-to-shore and ship-to-ship radiotelegraph and radiotelephone communications. It maintains eleven coastal stations and two affiliates on the Atlantic, Pacific and Gulf Coasts, the Great Lakes and inland waterways. This network handles radiograms, government weather reports, news bulletins, medical advice to vessels not carrying doctors, "Gifts-by-Radio" and plane-to-shore service. Radiograms to ships may be filed at any RCA Communications, Inc., or Western Union office. They should be marked "Via RCA".



Tiny transistors (foreground) are being used in a host of new electronic devices including RCA Victor's latest pocket-size radio.

Sales and Services

CHARLES M. ODORIZZI
Executive Vice-President, Sales and Services

What are RCA's sales and service subsidiaries?

The sales and service subsidiaries of RCA are: the RCA Service Company, Inc., which installs, maintains and services consumer and technical products; the RCA Victor Distributing Corp., which distributes products made by RCA and other companies; and RCA Institutes, Inc., which trains students in the technical phases of radio, television and electronics.

RCA Service Company, Inc.

What is the RCA Service Company?

The RCA Service Company, Inc. is a specialized organization set up expressly to handle field installation and service activities. One of its principal roles is to develop and promote skillful installation and servicing methods for RCA products. The organization also does an extensive contract installation and maintenance servicing business with consumers, with industrial and scientific organizations, and with the Armed Forces and other Government agencies. The Company's activities are grouped in three major fields: Consumer Products, Technical Products and Government.

What are the Consumer Products services?

One of the most widely recognized Consumer Products services is a nation-wide network of factory service branches for the installation and servicing of such products as RCA Victor television receivers and other equipment on either a contract or per job basis.

The extensive technical assistance the Company provides to RCA Victor distributors, their dealers, and independent servicemen on RCA consumer products is also important. Besides furnishing a comprehensive array of technical manuals, it sponsors a nation-wide series of free service instruction clinics and workshops which have a total annual attendance of up to 35,000 persons.

What steps have been taken to assure skillful servicing of color television receivers?

Nearly 1,000 RCA Service Company technicians have already been trained to service RCA Victor color television, with more technicians receiving color training continually. The RCA Service Company branches have been provided with all the complex equipment necessary to service color. This equipment, which was developed by the RCA Service Company and made available to the entire service industry, includes the demagnetizing coil, the color bar generator, and the dot generator.

The RCA Service Company prepared and published the first comprehensive textbook on color TV for the service industry. The book, "Practical Color Television For The Service Industry," has been revised twice since publication to introduce new material.

Branch technicians are kept up-to-date on latest servicing techniques and methods through published service notes which are also made available to independent service organizations. Periodic field bulletins are also issued to help solve specific problems on color as they arise. Often, difficult cases are referred to the Company's laboratory for special consideration. More than 75,000 independent technicians have participated in some 375 color clinics conducted by the Company throughout the country. In addition, home study courses were made available to independent servicemen.

What are the Technical Products services?

Many services for theatres, science, business and industry are performed by the Technical Products Department. These services include supervision of the installation of equipment, preventive maintenance and other functions which are carried out by experts stationed in field offices across the nation. Products installed or maintained include motion picture sound systems, closed-circuit television apparatus, electronic computing systems, television transmitters and antennas, studio equipment for radio and television broadcast stations, microwave equipment, electron microscopes, various types of electronic inspection and classifying machines, sound systems, industrial television systems, and industrial radio frequency generators. In addition to services performed in connection with the above RCA-manufactured equipment, the Department's facilities are also available for the servicing of any type or make of equipment within its field of activity.

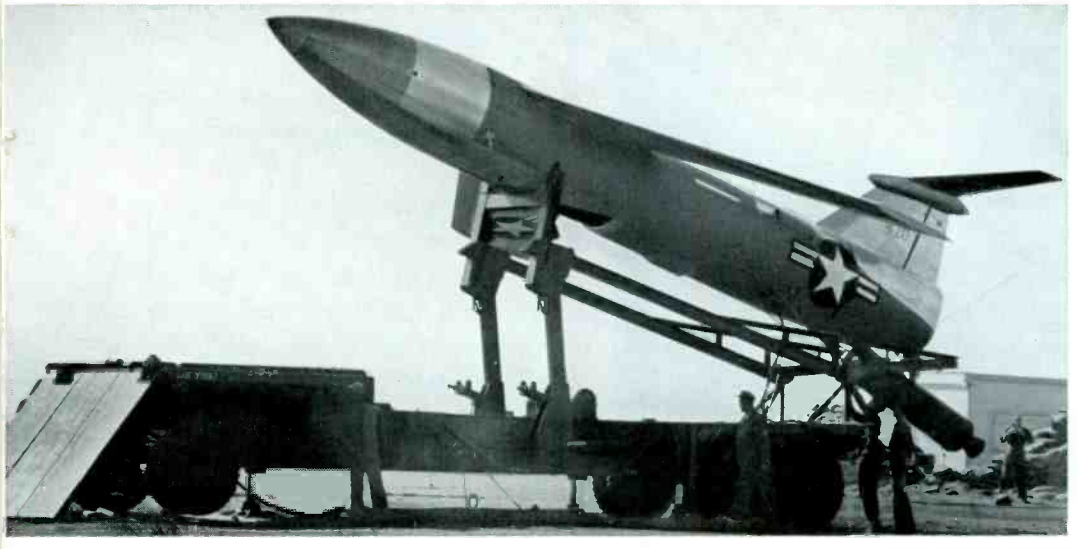
Are repair and overhaul facilities available for technical products?

Yes, facilities for repair and overhaul of television studio equipment, RCA test and measuring equipment and other RCA technical products are available at convenient locations.

What services are performed for the Armed Forces?

The RCA Service Company, through a large specialized field engineering and technician force, provides supporting services for RCA defense products and world-wide assistance to the Armed Forces on the installation, operation and maintenance of military electronic equipment. It also prepares special training devices, training manuals, operating and maintenance instructions, and installation plans. In addition, the Company undertakes special projects on behalf of the Armed Forces. Its operations at the Air Force Guided Missile Test Range in Florida represent a typical example. Field engineers are performing maintenance and training services on electronic equipment at most military bases within continental United States and overseas installations world-wide.

RCA specialists perform the electronic operations necessary in testing long-range guided missiles at Patrick Air Force Base in Florida.



U.S. Air Force Photo

RCA Victor Distributing Corp.

What is the RCA Victor Distributing Corp.?

This organization, with headquarters in Chicago, is responsible for the distribution of RCA Victor and other products through dealers served by its branches. In addition to the Chicago headquarters, branch offices and warehouses are located in Los Angeles, Calif.; Davenport, Iowa; Wichita and Kansas City, Kans.; Detroit and Grand Rapids, Mich., and Buffalo, N.Y. The Distributing Corp. also has branch warehouses in Rockford, Ill.; Springfield, Mo., and Erie, Pa.

RCA Institutes, Inc.

What is RCA Institutes, Inc.?

RCA Institutes, founded in 1909, pioneered in teaching radio, and today is recognized as one of the foremost television and electronics schools in the United States. It is a service made available by RCA to the individual who wants training to take advantage of the excellent opportunities in a rapidly growing field, and to the industry and the nation to fill an ever increasing need for well trained technical personnel. The school offers both resident and home study programs, designed to train engineering aides for research and development laboratories, electronic technicians for manufacturing plants and broadcasting stations, and servicemen for the television industry.

What kind of courses are offered in the Resident School?

The courses of study are in the fields of advanced technology, television and general electronics, radio and television servicing, and operating. Color TV and industrial electronics have become important features.

Day and evening classes are conducted in all courses, 49 weeks each year. New terms start about the first of March, June, September and December. Candidates for the Advanced Technology course are required to have a high school diploma. Those for the other courses are required to have two years of high school education. All courses are for the general public, and study may be financed by the individual or by sponsors. The school is fully approved for Veterans Administration sponsorship.

What kind of courses are offered for home study?

Three courses, written and administered by qualified teachers and technicians, are available for home study: (1) a Color Television course for technicians qualified in black-and-white television servicing; (2) a Monochrome Television Servicing course for those having an adequate background in radio fundamentals, and (3) a Radio-Television-Electronics course for beginners with a grade-school background. Each course is planned to qualify the student for advancement into the next higher course, as he chooses.

Does RCA Institutes maintain a Job Placement Service?

Students and former students have available an active Placement Service for assistance in obtaining satisfactory jobs. The principal fields of employment are in design and testing with electronic laboratories and manufacturers; as technicians in broadcasting stations and industrial plants; and as technicians with radio and television service companies.

How may detailed information about RCA Institutes courses be obtained?

Write for a catalog of Resident or Home Study courses, or call at the school from 9 a.m. to 8 p.m. on school days (Monday through Friday), at 350 West 4th Street, New York 14, New York.

Students of RCA Institutes at work on a laboratory experiment.

International

MEADE BRUNET
Vice-President and
Managing Director, RCA International Division

What is the RCA International Division?

This is the Division that handles all foreign business of the Radio Corporation of America. RCA International, with headquarters at 30 Rockefeller Plaza, New York, has three main functions. First, it exports RCA products — everything from a tiny transistor to a complete microwave system — to more than 200 major distributors, Governments and other customers, and to United States military personnel overseas. Second, it provides management counsel to RCA's fourteen associated companies throughout the world on their manufacturing, distributing and service activities. Third, in the field of licensing, it makes RCA inventions and patents available to all those overseas by means of patent licenses at reasonable royalty rates and without restriction.

What products and services do the associated companies handle?

The associated companies handle a wide variety of products and services. Depending on various conditions of the national markets, they manufacture, assemble, distribute and service RCA television sets, radios, phonographs, records, motion picture equipment, and aviation, marine, broadcast, communications and industrial products.

Where does RCA have associated companies?

RCA's fourteen associated companies are situated as follows: six in Europe, four in Latin America, and one each in Canada, Australia, India and Japan.

The RCA associated companies are:

RCA Victor Argentina, S.A.; Buenos Aires
RCA of Australia Proprietary Limited, Sydney
RCA Victor Radio, S.A.; Rio de Janeiro, Brazil
RCA Victor Company, Limited; Montreal, Canada
Corporacion de Radio de Chile, S.A.; Santiago
RCA Photophone Limited; Middlesex, England
Radio Fernseh Elektro GmbH; Frankfurt, Germany
American Radio Television (Hellas), S.A.; Athens, Greece
Photophone Equipments Limited; Bombay, India
American Electronic Enterprises, Ltd.; Tokyo, Japan
RCA Italiana, S.p.A.; Rome
RCA Victor Mexicana, S.A., de C.V.; Mexico, D.F.
Industria Electronica, S.A.; Madrid, Spain
Laboratories RCA, Ltd.; Zurich, Switzerland

What part is RCA playing in the development of television abroad?

RCA International has launched television in many countries, and has supplied about 40 per cent of the Free World's regularly operating television transmitters outside the United States. RCA television equipment is now being used in Brazil, Canada, Colombia, Cuba, Dominican Republic, England, Italy, Japan, Mexico, Norway, the Philippines, Puerto Rico, Sweden, Switzerland, Thailand and Venezuela. During 1955, Southeast Asia was introduced to TV through an RCA-equipped station in Thailand, and Central America saw its first television program over RCA equipment in Guatemala.

How does RCA International contribute to a nation's progress?

RCA International contributes to progress in many ways. It has improved national and international communications. RCA communications equipment has aided the steel industries in Brazil and Venezuela, the oil industry in the Middle East, and public utilities in Australia and Canada. The RCA electron microscope has advanced health, agricultural and industrial programs in several countries. RCA radar equipment has helped the fishing or commercial fleets of Japan, Norway and the Belgian Congo. Navigation time on the Congo River has been cut in half, thanks to radar equipment installed on river boats. New RCA broadcasting installations are helping to spread education and information in South Korea, Thailand, Pakistan, the Philippines and elsewhere.

How is RCA expanding its international activities?

RCA is broadening and diversifying its distribution and manufacturing facilities around the world, to assure specialized merchandise services for the ultimate consumer in package goods and in the major electronic fields. The manufacturing facilities of the RCA associated companies are also expanding. In England, new facilities have been established by the RCA associated company for the manufacture of Hi-Fi equipment and other merchandise. The factory in Spain is now assembling communications equipment for the Spanish Government. A new tube factory is in operation in Canada, and other tube plants are going up in Brazil and Chile.

Southeast Asia was introduced to TV in 1955 through an RCA-equipped station in Thailand.

Electronic pavilion at World's Fair in Ciudad Trujillo, Dominican Republic, built in cooperation with RCA International Division's distributor.

Communications

THOMPSON H. MITCHELL
President, RCA Communications, Inc.

What is RCA Communications, Inc.?

RCA Communications, Inc. is a wholly owned subsidiary of RCA which provides international radiotelegraph, radiotelephone, radiophoto, program transmission, teleprinter exchange and leased channel service.

In 1919, the first activity of the Radio Corporation of America was the establishment of a world-wide radiotelegraph system to give the American public the facilities for independent international communications. Ten years later, the growth of this system had progressed to a point where RCA Communications, Inc. was formed as an RCA subsidiary. Today, international telegrams can be sent from the United States "Via RCA" directly to 67 countries. To improve and broaden the scope of its international communications, RCA spent more than $2,000,000 for plant additions and new facilities in 1955.

How is a radiogram sent?

RCA maintains many traffic offices conveniently located in the business districts of New York, San Francisco, and Washington, D.C. Elsewhere in the United States, direct RCA service may be obtained by sending overseas messages through any telegraph office and writing the free routing indicator "Via RCA" after city of destination.

RCA also owns and operates traffic offices and transmitting and receiving stations in Honolulu, Guam, Manila, Tangier, Ciudad Trujillo (Dominican Republic), Port-au-Prince (Haiti), San Juan (Puerto Rico) and Havana (Cuba Transatlantic Radio).

During 1955, more than 7,300,000 overseas radiograms totaling 188,000,000 words were handled over RCA's world-wide radiotelegraph circuits.

How do RCA's other communications services operate?

Teleprinter Exchange Service (TEX), the newest system of overseas communication, connects subscribers in the United States in direct, two-way teletypewriter conversations with associates abroad. Inaugurated in 1950 with a single overseas circuit, RCA's TEX network today reaches twenty-five countries in Europe, Africa, the Caribbean and the Pacific. In 1955, a total of 104,000 international TEX calls were processed.

RCA radiophoto service between the United States and foreign points provides fast transmission of news

RCA Communications' branch offices, like this one at the Honolulu Airport, serve hosts of travelers.

Most RCA radiotelegrams are channeled through "package sets" like these in traffic room at RCA Communications' San Francisco office.

pictures, blueprints, legal documents and other material not readily convertible to telegraph message form.

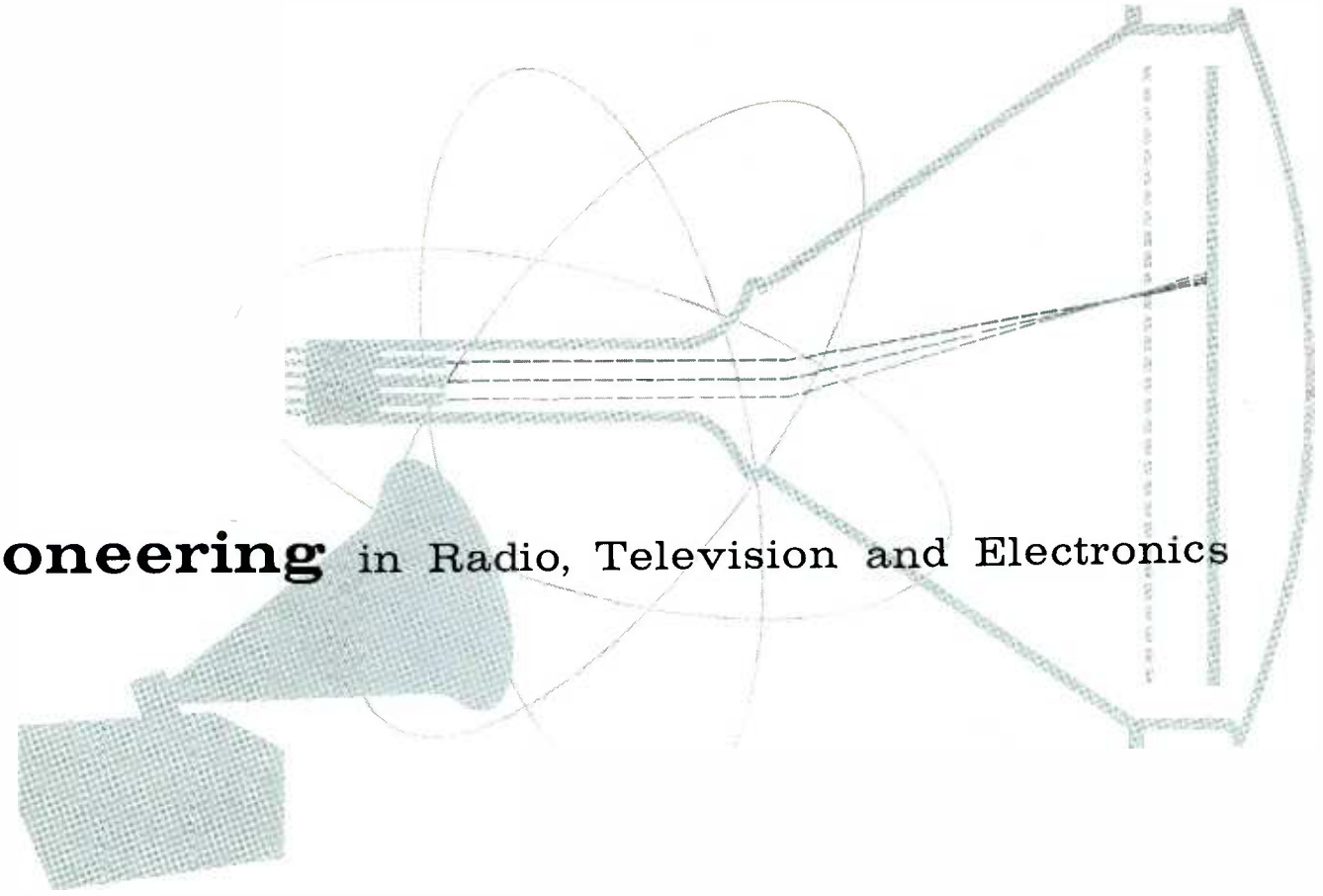
RCA's Program Transmission Service facilitates the international exchange of news commentary and broadcast studio programs. Over 75 per cent of the programs of foreign origin heard by the American radio audience are received from abroad by RCA. Similarly, American programs are transmitted overseas to foreign broadcasting agencies.

One of RCA's fastest growing services is the leasing of private radio channels to the military and large commercial firms. Leased on a monthly basis, these facilities enable subscribers to maintain 24-hour-a-day, two-way communication with their overseas offices.

How has RCA improved its international communications services in recent years?

As a result of a plan instituted by RCA ten years ago to modernize its radio communications systems, both the speed and scope of service have been improved and new services developed to meet the ever-growing requirements.

To achieve greater speed and efficiency in handling increased volumes of traffic, RCA has perfected a system for mechanically processing messages, and has coupled it with a world-girdling network of automatic radio relays. This advanced system employs time-and-motion-saving tape relay operation which eliminates letter-by-letter manual processing except at the point where a message is prepared for original transmission. At the ultimate destination, a teletypewriter is substituted for tape reception and the message is received in printed form, ready for delivery.



Pioneering in Radio, Television and Electronics

RCA's pioneering in research and engineering has laid the foundation for many historic advances in the field of radio, television and electronics. The highlights are set out in the following chronology:

1920 World-wide communication inaugurated by RCA in 1920, and greatly extended the following year with the opening of "Radio Central" at Rocky Point, N.Y., featuring 200-kilowatt Alexanderson alternators.

1921 Dempsey-Carpentier fight in Jersey City on July 2 presented by RCA as its first broadcast program. It was also the first radio broadcast to a mass audience, and the first heavyweight championship bout on the air.

1923 Dr. V. K. Zworykin, now Honorary Vice President of RCA, applied for patent December 29 on the iconoscope, television's first electronic "eye."

1924 First transatlantic radiophoto transmitted by RCA from New York to London on July 6, and instantly radioed back and recorded in New York.

1925 First rebroadcast from London heard on February 14, through RCA stations WJZ, New York, and WRC, Washington, D.C.

RCA broadcasting transmitters used in 24-station hook-up for President Calvin Coolidge's inaugural, first event of its kind on the air.

1926 World Series baseball games broadcast for the first time by WJZ in October.

1928 RCA successfully demonstrated motion pictures with sound on 16mm film.

1929 An all-electronic television receiver, using the kinescope as the picture tube, demonstrated on November 18 by Dr. Zworykin who developed the tube.

1930 Television on a 6-by-8-foot screen shown by RCA January 16 at RKO-Proctor's 58th Street Theatre, New York.

1931 RCA perfected velocity microphone, which became the standard of broadcasting stations.

1932 Automatic very-short-wave radio station, designed to relay television pictures and forms of radio communication from city to city, shown by RCA.

NBC began television experiments with live talent from W2XBS, New York, on February 6.

1934 RCA introduced unidirectional microphone, used in film and phonograph recording, broadcasting and TV.

1937 First full-size symphony orchestra organized exclusively for broadcasting introduced by NBC with Maestro Arturo Toscanini as conductor.

1938 Scenes from Broadway play, "Susan and God," starring Gertrude Lawrence, telecast from NBC studios in Radio City, New York on June 7.

1939 RCA and NBC introduced television as a service to the public on April 30 at opening ceremonies of New York World's Fair, featuring President Franklin Roosevelt as first Chief Executive to be seen on TV.

RCA receiver in plane over Washington on October 17 picked up telecast from NBC station in New York, 200 miles away.

Dr. Zworykin of RCA announced in December that he and his associates were working on the development of an electron microscope; in April 1940 the instrument was completed. It has attained magnifications of some 300,000 diameters.

1940 RCA demonstrated to the FCC on February 6, at Camden, N.J., a TV receiver producing images in color by electronic and optical means.

Coaxial cable used for first time in TV program service by NBC on June 21 in bringing scenes at Republican National Convention in Philadelphia to transmitter in New York.

1941 Demonstrating television progress to the FCC, RCA exhibited on January 24 a projection-type home receiver featuring a screen 13½ by 18 inches . . . Television pictures including a prize fight from Madison Square Garden and a baseball game at Ebbets Field, Brooklyn, were projected on a 15-by-20-foot screen in the New Yorker Theatre . . . Scenes at Camp Upton, Long Island, were automatically relayed by radio to New York establishing a record as the first remote pickups handled by radio-relay stations.

Ground broken on August 8 for RCA Laboratories at Princeton, N.J., to be one of the foremost centers of radio and electronic research; cornerstone laid on November 15. Out of the RCA Laboratories came many developments which aided the U.S. effort in World War II.

1944 Radio-frequency equipment for bulk dehydration of penicillin developed by RCA, and installed May 5 at the E.R. Squibb & Sons plant, New Brunswick, N.J.

1945 Supersensitive RCA Image Orthicon tube for television studio and outdoor pickups introduced on October 25.

Improved black-and-white television pictures and color television in three dimensions demonstrated by RCA on December 13. Color system was mechanical; the black-and-white, all-electronic.

1946 Shoran, a precision-radar system developed by RCA as an aid to blind bombing in the war, revealed on January 22.

Air-borne television, as developed during the war by RCA and NBC in cooperation with the Government, demonstrated on March 21 at U. S. Naval Air Station, Anacostia, D.C.

RCA introduced post-war television sets on September 17.

Color television pictures on 15-by-20-inch screen, produced by all-electronic means, demonstrated publicly for the first time on October 30 by RCA.

1947 Philadelphia audience saw color TV pictures produced on 10-foot theatre screen by RCA all-electronic system on April 30.

Development of a revolutionary system of high-speed communications, capable of transmitting and receiving written or printed messages and documents at the rate of a million words a minute, disclosed by RCA-NBC on June 23. Known as "Ultrafax," the system was developed by RCA and Eastman Kodak Company.

Televised pictures of surgical operations transmitted for the first time by RCA September 7-12 from operating room in New York hospital and viewed by American College of Surgeons.

1948 Republican and Democratic National Conventions in Philadelphia telecast by NBC during June and July.

1949 An entirely new system for the reproduction of recorded music in the home, based on a vinylite record 6⅞ inches in diameter and a fast-changing record player operating at 45-rpm, announced on January 11 by RCA.

Scenes at inaugural of President Harry Truman, on January 20, transmitted from Washington, D.C. over the 15-station NBC television network from Boston to St. Louis.

New all-electronic, high-definition, fully-compatible color television system announced by RCA on August 25 to the Federal Communications Commission.

NBC's experimental Ultra-High-Frequency television broadcasting station, KC2XAK, near Bridgeport, Conn., began operation December 30.

1950 Development by RCA of a new transmitting tube capable of delivering 500 kilowatts of radio-frequency power announced February 1.

New system of industrial television demonstrated by RCA on March 7. The system incorporated a small pickup tube, the Vidicon.

Color kinescopes (direct-view type) demonstrated by RCA on March 23 to members of FCC at Washington, D.C.; one tube used a single electron gun; the other, three guns—one for each primary color.

RCA-NBC engineers designed, developed and tested a multiple antenna system, first of its kind, to permit five TV stations and three FM stations to operate from atop the Empire State Building in New York.

1951 Transmission of compatible color television programs field-tested over coaxial line and radio-relay facilities between New York and Washington, D.C. on September 20.

1952 Development of point-contact transistors which oscillated at frequencies up to 200 megacycles,

was announced by RCA on June 26.

Utilizing RCA equipment, the nation's first commercial UHF station went on the air October 1 with regular programs in Portland, Ore. using call letters of KPTV.

Demonstrations showing the progress made in applications of the transistor to radio, television and industry were held on November 17, at the David Sarnoff Research Center, Princeton, N.J.

1953 A color television camera equipped with a single tri-color tube, instead of three color pick-up tubes, demonstrated by RCA on April 14 to the House Committee on Interstate and Foreign Commerce and the FCC.

Development of experimental point-contact transistors which oscillated at more than 400 megacycles disclosed by RCA on July 7.

NBC presented the opera "Carmen" in color October 31, marking the first time an opera had been telecast in color and the first production of a full-hour program in compatible color television.

A live show from the NBC Colonial Theatre and a color film were transmitted by RCA compatible color television via radio relay from New York to Burbank, Calif., in the first transcontinental color television demonstration on November 3.

The most powerful military radio transmitter in the world, built by RCA in cooperation with the U.S. Navy, was put into operation at Jim Creek Valley, Washington, on November 18. The 1,200,000-watt transmitter provided world-wide communication with naval units on land, on sea and in the air.

Magnetic tape recording of both color and black-and-white television programs shown by RCA on December 1 at its Princeton laboratories.

FCC approved on December 17 standards for commercial color television broadcasting based on compatible signal specifications presented by RCA-NBC and others.

1954 The Tournament of Roses Parade at Pasadena, Calif. was telecast in color by 21 stations of NBC's coast-to-coast network on January 1. This was the first West-to-East transcontinental transmission of color TV, the first West Coast origination of a color program under compatible color standards, and the first broadcast of a network color program by a coast-to-coast series of stations.

An experimental atomic battery, which converted atomic energy into small but usable quantities of electrical energy, demonstrated by RCA on January 26.

First compatible color TV cameras and associated equipment to leave production lines were shipped from RCA plant in Camden, N.J. on March 4.

First network colorcast of a sports event, a boxing match from Madison Square Garden, was presented by NBC on March 19.

Production of RCA's first commercial color TV sets began on March 25 at Bloomington, Ind.

Use of television in military combat demonstrated for the first time by RCA-NBC, in cooperation with the Army Signal Corps, at Fort Meade, Md., on August 11.

NBC presented the first of its 90-minute color TV "Spectaculars," on September 12.

A new large-size RCA color picture tube and a simplified color TV receiver were demonstrated at the David Sarnoff Research Center on September 15. Production of the tube and of TV sets incorporating it was started later in the year.

1955 Color television of Government-approved standards was used for the first time on January 19 as a means of inter-city consultation and diagnosis by pathologists in combating disease. The closed-circuit telecast, presented by the Armed Forces Institute of Pathology in cooperation with RCA, linked Philadelphia, Baltimore and Washington.

Four new major developments—an electronic music synthesizer, an electronic cooling system, an electronic light amplifier and a TV magnetic tape recorder—were disclosed by General Sarnoff on January 31 in New York.

NBC's Color City in Burbank, Calif., first TV studio ever constructed specifically for colorcasting, was dedicated on March 27.

A color TV program recorded on magnetic tape was transmitted over commercial network facilities for the first time—New York to St. Paul—by RCA and NBC, May 12.

First coverage of the World Series by color television was conducted by NBC, starting September 28 in the series between the Brooklyn Dodgers and the New York Yankees.

Network television's first full-hour daily dramatic show in color—NBC's Matinee Theatre—held its premiere October 31.

NBC announced November 3 that TV station WNBQ in Chicago would be the first in the nation to switch to an all-color television programming schedule. NBC also announced it would expand color TV facilities in New York and Hollywood, as well as in Chicago, at a total cost of $12,000,000.

1956 RCA's Bloomington, Ind. plant in February became the first in the television industry to be completely converted for and geared to the mass production of color television receivers. The plant is capable of turning out color sets at the rate of one-a-minute on each of its five assembly lines.

Largest audience ever to see a daytime television entertainment program—about 46,000,000 persons—watched all or part of the American premiere of Sir Laurence Olivier's film production of the Shakespearean play, "Richard III," on NBC. The three-hour colorcast on March 11 was TV's longest theatrical presentation.

Finances at a Glance

WHERE THE MONEY CAME FROM

A SUMMARY OF PRODUCTS AND SERVICES SOLD DURING THE YEAR	1955 AMOUNT	1955 %	1954 AMOUNT	1954 %
MANUFACTURING-SERVICE—Includes operations of RCA divisions and domestic subsidiaries other than those shown separately:				
Sales to Commercial Customers	$ 558 277 000	52.9	$500 394 000	53.2
Sales to U. S. Government	228 604 000	21.7	220 646 000	23.5
BROADCASTING—Television and radio operations of National Broadcasting Company, Inc.	246 173 000	23.3	200 423 000	21.3
COMMUNICATIONS—Radiotelegraph operations of RCA Communications, Inc.	20 808 000	2.0	18 183 000	1.9
TRAINING—RCA Institutes, Inc.	1 404 000	.1	1 304 000	.1
TOTALS	$1 055 266 000	100.0	$940 950 000	100.0

WHERE THE MONEY WENT

HOW THE SALES DOLLAR WAS APPLIED DURING THE YEAR	1955 AMOUNT	1955 %	1954 AMOUNT	1954 %
Materials and services bought from others	$ 557 323 000	52.8	$512 236 000	54.4
Wages and salaries	345 473 000	32.7	298 289 000	31.7
Pensions, social security, insurance and other employee benefits	21 913 000	2.1	19 938 000	2.1
Depreciation and patent amortization	19 878 000	1.9	17 314 000	1.9
Interest on long-term debt	5 110 000	.5	4 875 000	.5
Taxes on income and property	58 043 000	5.5	47 772 000	5.1
Dividends declared for year	24 069 000	2.3	22 052 000	2.3
First quarter dividends declared for subsequent year	4 269 000	.4	4 284 000	.5
First quarter dividends declared in prior year	*4 284 000*	*.4*	*4 290 000*	*.5*
Reinvested in the business	23 472 000	2.2	18 480 000	2.0
TOTALS	$1 055 266 000	100.0	$940 950 000	100.0

Consolidated Financial Position

ASSETS	Dec. 31, 1955	Dec. 31, 1954
CURRENT ASSETS		
Cash	$ 58 877 348	$ 65 271 117
U. S. Government and other marketable securities, at cost	85 615 186	57 624 567
Receivables, less reserves	184 849 452	145 456 250
Inventories, at lower of cost or market	129 632 548	109 641 218
Prepaid expenses	20 940 104	8 529 369
TOTAL CURRENT ASSETS	479 914 638	386 522 521
INVESTMENTS		
Whirlpool-Seeger Corporation Common Stock, 1,158,563 shares, at cost	21 600 000	——
Wholly-Owned Foreign Subsidiaries	4 463 346	4 573 294
Other Security Investments, at cost (less reserve 1955 — $2,228,484; 1954 — $2,253,484)	1 984 237	1 893 392
RCA Common Stock held in treasury, at cost 1955 — 89,540 shares; 1954 — 29,800 shares	3 861 143	1 055 298
TOTAL INVESTMENTS	31 908 726	7 521 984
PLANT AND EQUIPMENT, AT COST	265 616 635	251 412 936
Less: Accumulated depreciation	107 622 927	99 953 872
	157 993 708	151 459 064
PATENTS AND PATENT RIGHTS, AT COST	9 022 483	8 602 350
Less: Accumulated amortization	6 040 916	6 423 448
	2 981 567	2 178 902
DEFERRED CHARGES	3 707 548	1 698 071
TOTAL ASSETS	$676 506 187	$549 380 542

LIABILITIES AND STOCKHOLDERS' EQUITY	Dec. 31, 1955	Dec. 31, 1954
CURRENT LIABILITIES		
Accounts payable and accruals	$126 327 001	$134 562 259
Federal taxes on income less U. S. Government securities, 1955 $48,449,000, 1954 $42,976,000	14 395 512	7 129 273
Dividends payable on Preferred Stock	1 576 474	1 576 474
Dividends payable on Common Stock	10 441 106	8 389 411
TOTAL CURRENT LIABILITIES	152 740 093	151 657 417
LONG TERM DEBT		
3% Promissory notes, due 1970-1974	100 000 000	100 000 000
3¾% Promissory notes, due 1973-1977	50 000 000	50 000 000
3½% Convertible Subordinated Debentures, due December 1, 1980, convertible into Common Stock at $50 per share	99 999 700	——
TOTAL LONG TERM DEBT	249 999 700	150 000 000
INCENTIVE PLAN		
Awards payable	4 120 347	1 852 296
Incentive reserve—unawarded balance	2 284 448	1 140 302
DEFERRED INCOME ON INSTALLMENT CONTRACTS RECEIVABLE	9 679 783	10 531 338
STOCKHOLDERS' EQUITY		
$3.50 Cumulative First Preferred Stock, no par, shares authorized 920,300, outstanding 900,824 (preference on involuntary liquidation $100 per share or a total of $90,082,400) at a stated value of	14 574 441	14 574 441
Common Stock, no par, authorized 18,500,000 shares; reserved for conversion of Debentures 1,999,994 shares; issued 14,031,022 shares 1955, 14,031,016 shares 1954, at a stated value of	28 062 044	28 062 032
Capital surplus	9 025 433	9 014 203
Reinvested earnings	206 019 898	182 548 513
TOTAL STOCKHOLDERS' EQUITY	257 681 816	234 199 189
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$676 506 187	$549 380 542

RADIO CORPORATION OF AMERICA

PRODUCTS AND SERVICES

RCA CONSUMER PRODUCTS:

ROBERT A. SEIDEL, Executive Vice-President

RCA VICTOR TELEVISION DIVISION
CHARLES P. BAXTER, Vice-President and General Manager

RCA VICTOR RADIO and "VICTROLA" DIVISION
JAMES M. TONEY, Vice-President and General Manager
Radios, Record Playing Equipment, High Fidelity Instruments, and Tape Recorders.

RCA VICTOR RECORD DIVISION
LAWRENCE W. KANAGA, Vice-President and General Manager
New Orthophonic High Fidelity Recordings, Custom Records.

RCA ELECTRONIC COMPONENTS:

W. WALTER WATTS, Executive Vice-President

RCA TUBE DIVISION
DOUGLAS Y. SMITH, Vice-President and General Manager
Tubes; Tube Parts; Tube Making Machinery; Radio Batteries.

RCA SEMICONDUCTOR DIVISION
DR. ALAN M. GLOVER, General Manager
Transistors; Crystal Diode Rectifiers.

RADIOMARINE CORPORATION OF AMERICA
THOMAS P. WYNKOOP, President
Development, production, sale and service of marine communication equipment and electronic devices — Commercial shore-to-ship, ship-to-shore and ship-to-ship radiotelegraph and radiotelephone communications.

RCA DEFENSE ELECTRONIC PRODUCTS:

THEODORE A. SMITH, Vice-President and General Manager
Airborne and surface electronic equipment, weapons systems for the Armed Forces.

RCA COMMERCIAL ELECTRONIC PRODUCTS:

ARTHUR L. MALCARNEY, General Manager
Equipment for radio and television broadcasting, mobile and microwave communications, motion picture recording and reproduction, sound systems, industrial electronics and scientific equipment.

RCA SALES & SERVICES:

CHARLES M. ODORIZZI, Executive Vice-President

RCA INTERNATIONAL DIVISION
MEADE BRUNET, Vice-President and Managing Director
Distribution and sale of RCA products abroad; supervision of RCA-associated companies in foreign lands.

RCA COMMUNICATIONS, INC.
THOMPSON H. MITCHELL, President
International Radiotelegraph, Radiotelephone, Radiophoto, Program Transmission, Teleprinter Exchange, and Leased Channel Service.

RCA VICTOR DISTRIBUTING CORP.
WALTER M. NORTON, President
Supervises distribution of RCA products through dealers.

RCA SERVICE COMPANY, INC.
E. C. CAHILL, President
Provides installation and service on RCA Victor television receivers and other RCA products through branches in principal cities and television areas. Assigns technicians under contract with the U.S. Armed Services throughout the world.

RCA INSTITUTES, INC.
GEORGE F. MAEDEL, President
Technical instruction in radio, television and electronics.

RCA LABORATORIES:

DR. DOUGLAS H. EWING, Vice-President
Fundamental research in electronics including the physics and chemistry of electronically active solids — Applied research in radio, electronics, acoustics, sound recording and reproduction, television, tubes and transistors — Laboratory and Technical Service to RCA Licensees.

NATIONAL BROADCASTING COMPANY, INC.

SYLVESTER L. WEAVER, JR., Chairman of the Board
ROBERT W. SARNOFF, President
National Network and Local Television Broadcasting — National Network and Local Standard and FM Broadcasting — Television Film Distribution — National Spot Representation.

RADIO CORPORATION OF AMERICA

RCA MANUFACTURING PLANTS

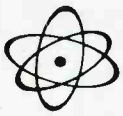
Bloomington, Ind.
Cambridge, Ohio
Camden, N. J.
Canonsburg, Pa.
Cincinnati, Ohio
Detroit, Mich.
Findlay, Ohio
Harrison, N. J.
Hollywood, Calif.
Indianapolis, Ind.
Lancaster, Pa.
Los Angeles, Calif.
Marion, Ind.
Monticello, Ind.
Moorestown, N. J.
New York, N. Y.
Rockaway, N. J.
Woodbridge, N. J.

NBC OWNED AND OPERATED STATIONS

RADIO
New York, N. Y. (WRCA & WRCA-FM)
Chicago, Ill. (WMAQ & WMAQ-FM)
San Francisco, Calif. (KNBC & KNBC-FM)
Washington, D. C. (WRC & WRC-FM)
Philadelphia, Pa. (WRCV)

TELEVISION
New York, N. Y. (WRCA-TV)
Chicago, Ill. (WNBQ)
Philadelphia, Pa. (WRCV-TV)
Los Angeles, Calif. (KRCA)
Washington, D. C. (WRC-TV)
Buffalo, N. Y. (WBUF-TV)

RCA LABORATORIES



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