

EIGHTEENTH ANNUAL REPORT OF  
RADIO CORPORATION OF AMERICA  
YEAR ENDED DECEMBER 31, 1937





**EIGHTEENTH**  
**ANNUAL REPORT**  
*of*  
**RADIO CORPORATION**  
**OF AMERICA**

*Year Ended*  
*December 31, 1937*



**RADIO CORPORATION OF AMERICA**  
**RCA Building • 30 Rockefeller Plaza • New York, N. Y.**

# RADIO CORPORATION OF AMERICA

---

## BOARD OF DIRECTORS

JAMES G. HARBORD, *Chairman*

CORNELIUS N. BLISS	JOHN HAYS HAMMOND, JR.
ARTHUR E. BRAUN	EDWARD W. HARDEN
BERTRAM CUTLER	DE WITT MILLHAUSER
CHARLES G. DAWES	EDWARD J. NALLY
GANO DUNN	DAVID SARNOFF

JAMES R. SHEFFIELD

## OFFICERS

DAVID SARNOFF, *President*

MANTON DAVIS <i>Vice-President and General Counsel</i>	OTTO S. SCHAIERER <i>Vice-President in Charge of Patent Department</i>
GEORGE S. DE SOUSA <i>Treasurer</i>	FRANK W. WOZENCRAFT <i>General Solicitor</i>
LUNSFORD P. YANDELL <i>Assistant Treasurer</i>	HENRY A. SULLIVAN <i>Comptroller</i>
LEWIS MACCONNACH <i>Secretary</i>	ROBERT C. PROPPE <i>Assistant Secretary</i>

### TRANSFER AGENT:

The Corporation Trust Company, New York, N. Y.

### REGISTRARS:

Preferred Stocks, The Chase National Bank of the City of  
New York, New York, N. Y.

Common Stock, New York Trust Company, New York, N. Y.

TO THE STOCKHOLDERS OF  
**RADIO CORPORATION OF AMERICA**

**T**HE Annual Report of the Radio Corporation of America for the year 1937—the eighteenth of these reports—is submitted herewith. Among the highlights of the year's operations were:

Improvement in all fields of the Corporation's operations with increases of 11% in gross income and 46% in net profits over the previous year.

Payment of all dividends on the Preferred Stocks and payment of a dividend of 20¢ a share on the Common Stock.

Increases in fixed assets, working capital, cash on hand and in banks.

Establishment of new high standards in musical and cultural programs; creation of the first full size symphony orchestra established for and by radio in the United States, with a series of weekly radio concerts under the direction of Maestro Arturo Toscanini.

Advances in the field of research, including television and radio facsimile equipment adapted to use in homes, for printing news, pictures and similar material.

**Comparative Earnings for the Last Five Years:**

The earnings of Radio Corporation of America for 1937 reflect a consistent improvement in its gross income and net profit during the five year period 1933 through 1937, as shown in the following table:

<i>Year</i>	<i>Gross Income</i>	<i>Net Profit</i>	<i>Net Loss</i>
1933 . . . .	\$62,333,496	.....	\$582,003
1934 . . . .	78,756,993	\$4,249,263	
1935 . . . .	89,228,898	5,126,872	
1936 . . . .	101,186,310	6,155,936	
1937 . . . .	112,638,498	9,024,858	

The financial report and operating review for 1937 follow:

## FINANCIAL REPORT

### **Gross Income:**

The total gross income of the Corporation, from all sources, amounted to \$112,639,498 in 1937, compared with \$101,186,310 in 1936—an increase of 11.3 per cent.

### **Cost of Operations:**

The total cost of operations for the year was \$97,217,722, compared with \$89,722,151 in 1936, an increase of 8.4 per cent.

Under this heading are included the cost of goods sold, the cost of operating the broadcasting and communications services, and the cost of research, development, advertising, selling and administration.

These figures reflect the increased cost resulting from the larger volume of business, as well as higher wage rates paid to labor, and increased taxes.

### **Net Income:**

The net income for 1937, before deductions for interest, depreciation, amortization of patents and goodwill, and Federal income taxes, was \$15,421,776.

This is an increase of \$3,957,617, or 34.5 per cent over 1936.

### **Deductions from Net Income:**

Deductions from net income are for interest, depreciation, amortization of patents and goodwill, and Federal income taxes.

The total of these deductions was \$6,396,918 for 1937, an increase of \$1,088,695 over 1936.

This is accounted for almost wholly by the increase in the provision for Federal income taxes from \$1,137,100 for 1936 to \$2,117,300 for 1937.

### **Taxes:**

In addition to Federal income taxes, referred to above, the Corporation also paid Social Security, State, local and other taxes which for the year amounted to \$2,180,200.

The total of taxes paid or accrued by the Corporation during 1937 amounted to \$4,297,500, equivalent to 31¢ per share on the outstanding Common stock. This amount is exclusive of Federal excise taxes paid on radio products sold and on radio messages transmitted.

**Net Profit:**

The consolidated net profit of the Corporation for the year 1937 amounted to \$9,024,858, an increase of \$2,868,921, or 46.6 per cent over the previous year.

After deducting \$3,230,000—the annual dividend requirements on the Preferred stock—the earnings applicable to the Common stock were equivalent to 41.7¢ per share, compared with 20.5¢ per share for the previous year.

**Dividends:**

Regular dividends were paid to holders of 900,749 shares of First Preferred stock, and the holders of the 15,393 remaining shares of “B” Preferred stock received all dividends in arrears and due.

A dividend of 20 cents a share, amounting to \$2,770,683 was paid to holders of 13,853,415 shares of Common stock outstanding.

The total dividend payments to stockholders during 1937 amounted to \$6,409,226, compared with \$3,222,387 paid in 1936.

**Surplus:**

Earned surplus as of December 31, 1937 amounted to \$16,528,905, compared with \$15,334,649 at the end of 1936, an increase of \$1,194,256.

**Working Capital:**

At the end of 1937 working capital—the excess of current assets over current liabilities—stood at \$28,639,436, an increase of \$1,654,186 over working capital at the end of 1936.

Cash on hand and in banks at the year-end amounted to \$15,103,296, compared with \$14,657,407 at the end of 1936, an increase of \$445,889.

The total current assets at the end of 1937 amounted to \$39,358,710, compared with \$38,709,772 at the end of the previous year, an increase of \$648,938.

The total current liabilities were \$10,719,273, compared with \$11,724,522 for 1936, a decrease of \$1,005,249.

The ratio of current assets to current liabilities was increased from 3.3 to 1 at the end of 1936 to 3.7 to 1 at the end of 1937.

**Inventories:**

Inventories at the year-end stood at \$11,818,756 compared with \$11,526,975 at the end of 1936. This inventory is normal for the requirements of the Corporation's business.

**Investments:**

References were made in previous annual reports to an option held by Atlas Corporation and associates to purchase RCA's remaining holdings in Radio-Keith-Orpheum Corporation for the sum of \$6,000,000 cash.

In view of the fact that the R-K-O plan of reorganization is still pending before the court, this option has been extended to June 30, 1938.

In consideration of the extension of the option Atlas Corporation and associates purchased on January 3, 1938, one-twelfth of RCA's remaining holdings in Radio-Keith-Orpheum Corporation for \$500,000 in cash.

The agreement provides that upon purchase by June 30, 1938, of an additional one-twelfth for \$500,000 the option to purchase the remainder for \$5,000,000 will be extended to December 31, 1938.

Under this new agreement RCA is also relieved of a maximum of \$1,300,000 of contingent liabilities in respect of R-K-O noted on the balance sheet in the RCA annual report for 1936.

**Fixed Assets:**

Capital expenditures during the year for additions and improvements in plant facilities and equipment for manufacturing, broadcasting and communication, including additions to the patent capital account, amounted to \$5,721,511.

After allowing for the year's normal depreciation and capital additions, total fixed assets were \$39,146,234, compared with \$37,784,957 for the previous year, an increase of \$1,361,277 for the year.

---

The Consolidated Statement of Income and Earned Surplus and the Consolidated Balance Sheet of the Corporation at December 31, 1937, appear on the following pages:



**RADIO CORPORATION OF AMERICA  
AND SUBSIDIARY COMPANIES**

**CONSOLIDATED STATEMENT OF INCOME AND EARNED SURPLUS  
FOR THE YEAR ENDED DECEMBER 31, 1937**

<b>GROSS INCOME:</b>	
From Operations .....	\$111,852,875.83
Other Income, including Interest and Dividends from Investments .....	786,621.95
<b>TOTAL GROSS INCOME FROM ALL SOURCES.....</b>	<b>\$112,639,497.78</b>
<i>Less:</i> Cost of Goods Sold, General Operating, Development, Sell- ing and Administrative Expenses.....	97,217,721.45
<b>NET INCOME FOR THE YEAR (before Interest, Depreciation, Amorti- zation of Patents, Goodwill and Federal Income Taxes).....</b>	<b>\$ 15,421,776.33</b>
<i>Deduct:</i>	
Interest .....	\$ 301,829.63
Depreciation (Note 1).....	3,067,788.57
Amortization of Patents (Note 2).....	600,000.00
Amortization of Goodwill.....	310,000.00
Provision for Federal Income Taxes—	
Normal Income and Excess	
Profits Taxes .....	\$2,071,300.00
Surtax on Undistributed	
Profits .....	46,000.00
<b>TOTAL DEDUCTIONS .....</b>	<b>2,117,300.00</b>
<b>NET PROFIT FOR THE YEAR, TRANSFERRED TO EARNED SURPLUS.....</b>	<b>\$ 9,024,858.13</b>
<b>EARNED SURPLUS AT DECEMBER 31, 1936.....</b>	<b>15,334,648.92</b>
	<b>\$ 24,359,507.05</b>
<i>Deduct:</i>	
Dividends—	
On Convertible First Preferred.....	\$ 3,157,512.05
On "B" Preferred (including cumulative arrears to December 31, 1936 of \$26.25 per share on 15,393 shares—\$404,066.25)	481,031.25
On Common .....	2,770,683.00
<b>TOTAL DIVIDENDS .....</b>	<b>\$ 6,409,226.30</b>
Other Charges—	
Excess of Cost over Stated Value of 800 shares of "B" Preferred purchased and retired .....	\$ 63,016.00
Credit to General Reserve (to charge to Earned Surplus amount previously charged to General Reserve).....	1,358,359.73
	<b>\$ 1,421,375.73</b>
<b>TOTAL DEDUCTIONS .....</b>	<b>7,830,602.03</b>
<b>EARNED SURPLUS AT DECEMBER 31, 1937.....</b>	<b>\$ 16,528,905.02</b>

**Note:**

1. Depreciation charged against operations in respect of manufacturing plants is based on the activity of each unit.
2. This covers proper amortization of all patents acquired since December 31, 1928, all acquired previously having been reserved for out of Surplus prior to that date.  
Operations of Foreign Subsidiary Companies are converted into dollars at the prevailing monthly exchange export rates.

# RADIO CORPORATION OF AMERICA

## CONSOLIDATED BALANCE SHEET

### A S S E T S

#### CURRENT ASSETS:

Cash in Banks and on Hand.....	\$15,103,295.91	
U. S. Government and Other Marketable Securities (at the lower of Cost or Market).....	106,845.06	
Notes and Accounts Receivable (less Reserves of \$1,783,305.75) .....	12,329,812.94	
Inventories (at the lower of Cost or Market).....	<u>11,818,755.65</u>	
<b>TOTAL CURRENT ASSETS.....</b>		<b>\$39,358,709.56</b>

NOTES AND ACCOUNTS RECEIVABLE MATURING AFTER 1938..... 473,027.73

#### INVESTMENTS:

Radio-Keith-Orpheum Corporation  
(In proceedings under Section 77B, Act of June 7, 1934) Represented by 605,731 <sup>3</sup>/<sub>4</sub> shares of Common Stock (23 <sup>1</sup>/<sub>2</sub>%) and \$4,983,327.50 of Ten-Year Debentures (42%), at Cost..... \$7,215,747.00

An option, effective until June 30, 1938, has been granted for the purchase of these holdings for the sum of \$6,000,000. This agreement provides for the exercise of the option to the extent of one-twelfth thereof on January 3, 1938 (for which cash of \$500,000 has been received) and for an extension of the option on the remainder until December 31, 1938 if a further payment of \$500,000 for another one-twelfth is made prior to June 30, 1938.

Sundry Investments in and Advances to Associated and Other Companies, at Cost (less Reserve of \$3,825,254.62) .....

	<u>1,585,596.67</u>	
--	---------------------	--

**TOTAL INVESTMENTS .....** 8,801,343.67

#### FIXED ASSETS:

Factories, Radio Communication and Broadcasting Stations, Warehouses, Service Shops, Offices, etc.—  
Land, Buildings and Equipment, at Cost..... \$82,123,191.91

Less: Reserve for Depreciation and write-down of Fixed Assets.....

	51,156,061.94	
	<u>\$30,967,129.97</u>	

Patents, Contracts and Goodwill.... \$16,148,210.73  
Less: Reserve for Patents..... 7,969,106.48

	<u>8,179,104.25</u>	
--	---------------------	--

**TOTAL FIXED ASSETS.....** 39,146,234.22

#### DEFERRED CHARGES:

Development—Television Field Test (the amount expended in 1937, and included herein was \$347,714.70) .....

	\$ 943,704.53	
--	---------------	--

Taxes, Insurance—Paid in Advance, etc.....

	<u>650,328.54</u>	
--	-------------------	--

**TOTAL DEFERRED CHARGES.....** 1,594,033.07

**TOTAL ASSETS .....** \$89,373,348.25

Net Current Assets of Foreign Subsidiary Companies are converted into dollars at the prevailing exchange export rates at December 31, 1937.

AND SUBSIDIARY COMPANIES  
AT DECEMBER 31, 1937

LIABILITIES AND CAPITAL

CURRENT LIABILITIES:

Accounts Payable and Accruals..... \$10,719,273.46

OTHER LIABILITIES:

Notes Payable to Banks—

Due April 8, 1941..... \$10,000,000.00

Due January 26, 1939..... 400,000.00 \$10,400,000.00

Notes Payable to Others (Serial Notes Payable in  
ten annual installments)..... 456,526.34

TOTAL OTHER LIABILITIES..... 10,856,526.34

RESERVE FOR CONTINGENCIES (after net charges of  
\$256,275.33 during the year, which include provi-  
sion for an additional reserve of \$464,778.39  
against Sundry Investments)..... 2,493,471.55

GENERAL RESERVE (after an addition of \$1,358,359.73  
by transfer from Earned Surplus)..... 6,109,067.10

CAPITAL STOCK:

\$3.50 Cumulative Convertible First Preferred

No Par Value, Redemption Value

\$100 per share—

Authorized— 920,300 shares

Issued — 900,844.8 shares

at a stated value of..... \$14,574,441.45

“B” Preferred Cumulative \$5 Dividend

No Par Value, Redemption Value

\$100 per share—

Authorized and Issued—15,393 shares

at a stated value of..... 329,631.33

Common, No Par Value—

Authorized—18,500,000 shares

Issued —13,881,016 shares

at a stated value of..... 27,762,032.00

TOTAL CAPITAL STOCK..... 42,666,104.78

EARNED SURPLUS ..... 16,528,905.02

TOTAL LIABILITIES AND CAPITAL..... \$89,373,348.25

The common shares shown above as issued include 27,559 shares reserved for issue to stockholders of predecessor company. Funds were deposited in 1936 to provide for the redemption of the “A” Preferred Stock, including such stock previously reserved for issue to stockholders of predecessor company.

**ARTHUR YOUNG & COMPANY**  
ACCOUNTANTS AND AUDITORS

RADIO AND CABLE ADDRESS  
"ARTHYOUNG"

1 CEDAR STREET  
NEW YORK

NEW YORK  
CHICAGO  
PITTSBURGH  
KANSAS CITY  
MILWAUKEE  
LOS ANGELES  
DALLAS  
TULSA  
LONDON, ENGLAND  
PARIS, FRANCE

*To the Stockholders of  
Radio Corporation of America:*

We have made an examination of the Consolidated Balance Sheet of RADIO CORPORATION OF AMERICA AND SUBSIDIARY COMPANIES as at December 31, 1937, and of the Consolidated Statement of Income and Earned Surplus for the year 1937. In connection therewith, we examined or tested accounting records of the Corporation and its Subsidiaries and other supporting evidence to the extent we considered sufficient and obtained all information and explanations requested by us from officers and employees of the Companies. We also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions. For certain foreign subsidiaries, whose assets amount to 3.3% of the total assets, we have accepted and incorporated in the consolidated statement, after a scrutiny and review sufficient to satisfy ourselves as to the accounting principles followed, the audited accounts prepared by their public accountants as at either October 31st, or November 30th, 1937.

In our opinion, based upon such examination, the accompanying Consolidated Balance Sheet and related Consolidated Statement of Income and Earned Surplus, together with the notes thereon, fairly present, in accordance with accepted principles of accounting which have been consistently maintained by the Corporation, its financial position at December 31, 1937, and the results of its operations for the year ended that date.

New York, N. Y.  
February 18, 1938.



## REVIEW OF OPERATIONS

Founded in 1919, the Radio Corporation of America has completed eighteen years of pioneering effort to develop and improve the uses of radio. Starting "from scratch," RCA has created a world-wide communications system with direct circuits between the United States and forty-three foreign countries, and with ships at sea. It has created a nationwide broadcasting system of endless cultural possibilities, now rapidly expanding its services by short-waves to all the world. It has created essential instruments for radio transmission and reception of sound, of code messages, of facsimile reproductions, and for recording and reproducing sound on records and on motion picture film. It has created countless radio devices indispensable to modern science, industry, medicine, and public safety. It has created the basis for a system of electronic television, forecasting the day when radio sight, added to sound, will perform a useful public service. These achievements of the past eighteen years stand as a tribute to the American tradition of service in the public interest through private initiative and ownership.

The year 1937 showed increased profits in all branches of the Corporation's business, due to the increase in business enjoyed by the nation in the first three quarters of the year, and to further economy and efficiency in operations coupled with an effective promotional program.

### **Relations with Employees:**

While the Corporation operates in sharply competitive fields, it maintains the policy of paying its workers the highest wages consistent with sound business.

To maintain and further the good relations which exist with its workers throughout the organization, the post of Director of Labor Relations was established. It has been ably filled since last September by Edward F. McGrady, who during the preceding four years was Assistant Secretary of Labor. Mr. McGrady's outstanding record of public service in this

important field has won for him nationwide recognition and confidence.

The Directors and Officers thank all the employees of the Corporation for their loyal and efficient service through the year. Their able assistance in carrying out the 1937 program is reflected in the figures of this report.

### **Organization and Man Power:**

The success of any industry or company depends not so much on machines as on men and women. The RCA organization is made up largely of pioneers in radio, including scientists, research workers, technicians, engineers and executive personnel whose experience and training have been gained in the creation of a new enterprise. The present-day stature of RCA is emphasized by the caliber of men, eminent in other fields, who joined its ranks during the year. In addition to Mr. McGrady, Dr. James Rowland Angell, lately President of Yale University, became Educational Counselor of the National Broadcasting Company and assumed his new duties on September 8th. Maestro Arturo Toscanini, world-famous orchestra conductor, commenced on December 25th a series of eleven concerts with the new NBC Symphony Orchestra for the benefit of radio listeners. Radio's service to the public is enhanced in value and distinction by such personalities.

### **RCA Research Laboratories:**

RCA has led continuously in technical development of the radio art and industry, thereby creating new business and increasing the use of resulting products and services. Research expenditure, a substantial item in the cost of operations each year, is a fundamentally necessary expense which has resulted in numerous radio devices now in everyday use. Research has contributed vitally to present-day communication and broadcast services enjoyed by countless millions throughout the world. RCA's program of research and development advanced on many fronts during the year.

*Television:* Foremost, perhaps, in public interest was the continued technical development of television. Improvements in the RCA system of television in 1937 took place both in the laboratory and in field tests under actual operating conditions.

Engineering studies and investigations of the requirements of a practical television system have already led to a ten to twelve-fold increase in sensitivity of the Iconoscope—the electric eye or pick-up tube—and its associated equipment. This improvement makes possible the reception of clearer and larger images and extends the possibilities of television programs.

RCA developed mobile television units during 1937, for pick-up of outside scenes remote from the studios. NBC will use these units in the present year to augment its knowledge of television program technique gained through having staged about 130 studio demonstrations. Approximately 250 artists, musicians and personalities participated in these demonstrations.

Significant advances were made in 1937 toward determining the fundamental standards for an American television system to meet the requirements of our nation, with a territory of 3,000,000 square miles and a population of 130,000,000 people. Our experiments with television in the past 18 months improved the system by increasing its capabilities and efficiency, thus enabling it to move closer to the inauguration of a television service for the American home.

*Radio Facsimile:* The facsimile transmission by radio of type matter, pictures and other visual material is another achievement of laboratory research. Now there is active preparation for employing such a system for the transmission of news bulletins and pictorial information from established broadcasting stations to homes in their service areas. Plans are being developed for “field tests” of such a service, and the RCA is providing equipment specially designed for this use by broadcasting stations.

## **Broadcasting:**

*Sustaining and Sponsored Programs:* The programs transmitted over the National Broadcasting Company's networks are known as "sustaining" and "sponsored." The former is a service rendered at the expense of NBC to its listeners. The latter are paid for by advertisers who utilize the facilities of NBC and its associated stations.

An adequate service of sustaining programs could not be furnished without the financial support made possible by the sponsors of paid programs. On the other hand, a system of nationwide broadcasting which confined its operations solely to paid programs and excluded unpaid-for services now rendered to the public in the fields of culture, religion, education, government, discussion of public questions, etc., would not conform to the principles upon which the American system of broadcasting is founded.

The ratio between the volume of sponsored and sustaining programs varies with different stations and network systems. There is no definite yardstick for measuring this ratio. Nor is it practicable in the present state of radio development to foretell whether the listener will be more interested at a given time in a particular type of sustaining or sponsored program.

To meet its ideals of public interest, convenience and necessity, the National Broadcasting Company, the pioneer in establishing the American system of nationwide broadcasting, has since its inception provided the listener with a wide variety of sustaining programs of the highest order. It has thus obtained for its networks the largest audiences. This in turn has enabled the NBC to attract the largest volume of sponsored programs from advertising clients.

While the NBC handles more sponsored programs and takes in more revenue from advertisers than any other network system in the world, it renders at the same time the largest volume of sustaining program service. Of the total of nearly 20,000 program hours during which NBC was on the air last year,



70 per cent consisted of sustaining programs and 30 per cent were sponsored programs.

To mention but a few of the sustaining programs which NBC presents there are the Metropolitan Opera, Damrosch Music Appreciation Hour, and Town Meeting of the Air. Religious programs include the National Vespers, the Catholic Hour and the Message of Israel. In the field of science there are "The World Is Yours," "Science on the March" and "Science in the News."

Since its foundation eleven years ago NBC has been distinguished for leadership in music by radio, and has broadcast to its nationwide audience the world's greatest orchestras, the finest chamber music ensembles and the best known choral societies in the United States and abroad.

Through the Metropolitan Opera and Damrosch programs NBC has stimulated the love and understanding of good music among America's school children as well as adults; afforded tangible inspiration to young composers; taught and encouraged amateur musicians everywhere.

*NBC Symphony Orchestra:* In pursuance of its policy the National Broadcasting Company during the year 1937 augmented its regular house orchestra from 60 to 92 musicians, creating the first full size, full time symphony orchestra to be established by and for radio in the United States.

The new NBC Symphony Orchestra gave its first performance on the air on November 2nd, under the direction of Dr. Artur Rodzinski, Director of the Cleveland Symphony Orchestra, who was followed by M. Pierre Monteux, the noted French conductor. The world famous Maestro Arturo Toscanini returned to this country upon the invitation of the National Broadcasting Company, and on Christmas night began a series of eleven weekly Saturday night broadcasts, which have been acclaimed throughout the country and beyond its borders as Radio's greatest contribution to the cause of good music.

This undertaking on the part of NBC has brought forth commendation from countless listeners, laudatory editorials from many of the leading newspapers and journals and favorable reviews by practically all music critics of the nation. This event has focussed public attention upon the NBC and its programs to an unprecedented extent. It is contributing profoundly to the democratization of music culture in the United States.

From a business standpoint, these exceptional programs have not only increased the listening audiences of the NBC and its affiliated stations, but they also have stimulated the response of these listeners to radio's advertising appeal. Besides this, they increased the sale of finer radios, phonographs and records.

The NBC Symphony Orchestra, now ranking with the greatest orchestras in the world, is also available to network advertisers, who will pay the NBC for the use of its services.

*Expansion of Facilities:* During the year, 41 new stations were added to the National Broadcasting Company networks, bringing the total to 143 outlets. Technical improvements were made in the 10 stations managed and operated by NBC as well as in many of the 133 associated stations, independently owned, which constitute the complete system. Extensive improvements and additions were made to the company's studio and plant facilities in Hollywood, Washington, Cleveland and Philadelphia.

An important development in NBC's international relations was the expansion of short wave broadcasting to foreign countries. Programs in English, French, German, Italian, Spanish and Portuguese languages are sent to Europe and various parts of Latin America on a daily schedule of sixteen hours. In 1936 the total of such programs was 184; last year it was increased to 3,179. These programs are designed to promote American goodwill, and to increase foreign interest in American made goods and services.

## **Manufacturing:**

*Receiving Sets and Tubes:* The RCA Manufacturing Company increased its business substantially in the domestic and export fields during 1937. Electric tuning, developed and introduced by the RCA Victor Division, was the outstanding contribution of the year to improvement of home radio receivers. Since its introduction with the slogan "Push a Button—There's Your Station," RCA Victor has led the field with home receivers incorporating an automatic, motorized, tuning feature. Important developments in metal tubes have added greatly to tube life and performance, and have resulted in lower costs.

*RCA Victor Records:* RCA Victor reports a 50 per cent increase in the sale of symphonic and operatic phonograph records and a 50 per cent increase in the sale of combination radio and phonograph instruments during 1937. The company directed special efforts to wider distribution of inexpensive record playing devices which, connected to home radio receivers, reproduce recorded music.

While the impact of radio broadcasting in its earlier years disturbed the sale of phonograph records, technical improvements in recording and reproducing processes, made possible through radio research, have now restored the phonograph and record to a firm position as vehicles of home entertainment. Appreciation of recordings has been further stimulated by broadcasting of standard as well as popular works. The home library of recorded music is slowly but surely finding a place in the household bookshelves.

*RCA Photophone:* This Division of the company substantially increased its volume of business with motion picture producers and exhibitors in 1937. The RCA "high fidelity" system of sound recording and reproduction is now widely used throughout the motion picture industry. The picture "Snow White and the Seven Dwarfs," produced by Walt Disney, is but one of a number of important productions in which the RCA Photophone system was employed. Technical

improvements in this field by RCA engineers brought recognition from the Academy of Motion Picture Arts and Sciences in an award of merit and two citations of honorable mention.

*Special Products:* The Manufacturing Company also made progress during the year in the fields of special engineering products, such as police and aircraft equipment and apparatus for special use in communication, testing and laboratory application. The usefulness of cathode ray tubes as accurate visual indicators in technical diagnosis and measurement was extended to fields other than radio.

RCA engineers developed powerful loudspeakers which project sound with remarkable fidelity over distances of a mile and more. The area of effectiveness may be controlled in much the same manner that the beam of a searchlight is directed. These devices find application in stadia, beach patrol, fire fighting, and marine service. A new, highly directional microphone works in reverse fashion, picking up distant sounds to the exclusion of nearby noises. This will be useful in broadcasting, for the pick-up of outdoor events, as well as in motion picture sound recording and sound pick-up in television studios.

### **International and Domestic Communications:**

During the year R. C. A. Communications, Inc., handled the largest volume of communications, both foreign and domestic, in the company's history. On New Year's Day, 1938, the inauguration of service with Iceland brought the number of countries with which RCA now maintains direct international radio communication service to a total of 43.

The RCA red-topped radio telegraph blank, long familiar to organizations engaged in foreign commerce, is now being used with increasing frequency in domestic telegraph service. With RCA radio telegraph stations and offices located at Baltimore, Boston, Chicago, Detroit, Los Angeles, New Orleans, New York, Philadelphia, San Francisco, Seattle and Washington, R. C. A. Communications is benefiting from the public use of domestic radio telegraph service, and its

international service has been made more readily available in these important centers.

Radiograms intended for transmission to foreign countries or to ships at sea may be filed not only at the offices of R. C. A. Communications but, when marked "Via RCA," may be filed at any office of the Western Union Telegraph Company.

R. C. A. Communications handles all the "radiophotos" printed in American newspapers. It carries into the United States the great majority of foreign broadcast programs heard in this country through American broadcasting stations.

A program of plant improvement which continues into the present year resulted in the installation of new and improved equipment in the stations of R. C. A. Communications, Inc. This program provides for the practical application in public service of the improvements and inventions created by the RCA research laboratories.

In 1937 the communication company dispensed with the use of wires to connect the central operating office in New York City with its radio transmitters in New Brunswick, N. J. Control is now effected by ultra-short radio waves. This new radio facility is an outgrowth of a previous RCA development which provided the first ultra-short wave circuit between New York and Philadelphia.

### **Marine Radio:**

The Radiomarine Corporation of America had an active year in 1937. It handled a greater volume of messages between ship and shore, and increased its equipment business. The RCA marine unit services more than a thousand vessels under contract and last year furnished major items of equipment to 1481 ships.

The Company developed an automatic radio alarm, which will receive an emergency signal from another ship at times when the radio operator is off duty, and call him to his post by bells and lights in his cabin, and on the bridge. During the few months that these devices have been in operation there have been several instances in which they rendered valuable

service. In one case, an automatic alarm received an emergency signal from a ship more than a thousand miles distant. The alarms on many other vessels much closer by also picked up the call. All passenger ships have a radio operator constantly on watch, but a passenger ship may not be close to the scene of an emergency.

The automatic radio alarm makes it possible for all ships in a given area—cargo as well as passenger—to become instantly aware of ships in distress that call for assistance.

In 1937 Radiomarine entered the field of marine radio telephony, and produced for shipboard use equipment adapted to the transmission of either telegraphic or voice signals. The first of several projected installations of this equipment was made on the Matson liner "Matsonia" in transpacific runs. Communication with places on land is accomplished through regular telephone facilities.

RCA's further expansion in the marine field last year included new, compact equipment for use on pleasure craft and other small boats where space is at a premium. A small radio direction finder was introduced, as well as radio telephone equipment. New receivers of various classes were developed, and many installations were made of specially designed radio telegraph transmitting equipment which operates with equal facility from the ship's electric service, or from a storage battery. The aid of such improvements in safeguarding life at sea is vitally important.

### **Technical Training in Radio:**

Not every young man who aspires to a technical career in radio can have the advantage of a college education. To help such persons toward a realization of their ambitions R.C.A. Institutes provides instruction in the theory and practice of radio and electronics. The school has been in continuous operation for many years.

Enrollment of students in 1937 exceeded all previous records, with a total of 904 students, notwithstanding a continued increase in entrance requirements and lengthened courses.

The faculty is currently preparing to teach the theory and practice of television in a new course which it is planned to institute in 1938. In this, as well as in other phases of instruction, the Institutes will have the benefit of technical advice from all RCA research and technical groups.

*Technical Press:* During the year the R.C.A. Institutes Technical Press, inaugurated in 1936, made further important contributions to technical literature of the radio art. The RCA REVIEW has already achieved a circulation considerably greater than many older journals of radio engineering. Other publications of the Technical Press have also found wide circulation.

### **Promotion of RCA's Products and Services:**

RCA pursues an aggressive policy in promoting its products and services in each field of operations, furthering the use of all radio products and services which extend the radio industry. It competes vigorously in all markets, to make the goods and services of RCA the first choice of the consumer.

Integration of RCA's advertising efforts have been productive in increasing the volume of sales of its various products and services. RCA sponsors a commercial program—The Magic Key of RCA—over its NBC nationwide network every Sunday afternoon, when radio listeners in this country and abroad hear about the RCA organization, its developments, its products and its services.

Other great media for advertising and promotion are also used. National magazines, newspapers, trade papers, direct-by-mail, etc., continuously call consumers' attention to RCA products and services. During the year a large electric sign was erected on the seventy story RCA Building to establish RCA as the symbol of radio in the minds of New York City's vast resident and transient population. Plans were made for effective representation of RCA at the New York World's Fair in 1939.

### **Changes in Directorate:**

It is with profound regret that we report the deaths, in 1937, of two Directors, Mr. Frederick Strauss, and

Mr. Newton D. Baker. These gentlemen served the Corporation ably and loyally for a number of years and their passing is deeply regretted by all their associates.

The vacancies in the Board have been filled by the election as Directors, of General Charles G. Dawes and Mr. Ganey Dunn. General Dawes, former Vice President of the United States, author of the Dawes Plan and Ambassador to the Court of St. James's, has a long and distinguished record of public service as a soldier, statesman, financier and administrator. He is a native of Marietta, Ohio, and is Chairman of the Board of the City National Bank and Trust Company of Chicago. He brings to RCA a wide experience and an understanding and appreciation of national and international affairs.

Mr. Dunn is a native of New York and holds engineering degrees from the College of the City of New York and Columbia University. He is the President of J. G. White Engineering Corporation and is also President of Cooper Union, and a Trustee of Barnard College. He is a member of Secretary Roper's Business Advisory Council and several years ago was appointed by President Roosevelt a member of the Science Advisory Board. Mr. Dunn has followed the developments of the radio art for many years and is thoroughly familiar with radio research and engineering. He is a past president of the American Institute of Electrical Engineers, from which he recently received the Thomas A. Edison medal "for distinguished contributions in extending the science and art of electrical engineering, in the development of great engineering works, and for inspiring leadership in the profession."

### **Cooperation with Government:**

The Radio Corporation of America has always cooperated with the various Departments of our Government in radio communications and research, as well as in the design and manufacture of radio equipment suited to its special purposes. Many members of RCA's executive staff and operating personnel are also Reserve Officers, and in the event of a national emergency or catastrophe the facilities of the Corporation can be made instantly available for the use of Federal agencies.



### **Stockholders:**

The stock of Radio Corporation of America is held by nearly a quarter of a million stockholders residing in every state of the Union. More than half of these stockholders own ten shares or less. No individual owns as much as one-half of one per cent of the total amount of stock outstanding. Communications from stockholders, containing their comments and suggestions on matters relating to the business of the Corporation are welcomed by the management. Distributed as they are throughout every state, RCA stockholders are an important source of information on local conditions, trends and opportunities. They are also customers, and can render valuable assistance to the Corporation in its promotion program by using and interesting their friends in RCA products and services.

### **Annual Meeting:**

The annual meeting of RCA Stockholders will be held on Tuesday, April 5th, at 11 a.m. in the RCA Building, New York City. The business of the meeting will include a review of the year's activities by the President, and the election of Directors.

All Stockholders who can be present are invited to attend the meeting. Due to the widespread holding of RCA stock, those Stockholders who do not plan to attend the meeting are urged to send in their proxies, regardless of the number of shares held by them, in order that the presence of a quorum may be assured.

For the Board of Directors:

JAMES G. HARBORD, *Chairman*  
DAVID SARNOFF, *President*

New York, N. Y., February 26, 1938.

*From the Minutes of the Board of Directors;  
Meeting of July 23, 1937*

THE President stated that he was grieved to announce to the Board the death of the *Marchese Guglielmo Marconi* on July twentieth, nineteen hundred and thirty-seven.

Thereupon the Board, by a rising vote, unanimously adopted the following resolutions:

RESOLVED, that the Directors of the Radio Corporation of America have learned with profound sorrow of the death of the

*Marchese Guglielmo Marconi*

that by his death the world has lost a distinguished and inspiring leader, the art of Radio, which he established, has lost a great genius and eminent scientist and the Directors and Officers of the Radio Corporation of America have lost a well beloved friend and associate.

RESOLVED, that a page of the minute book of this Corporation be set apart in honor of his memory and that these resolutions be spread thereon; and

RESOLVED FURTHER, that a copy of these resolutions be sent to his bereaved family as an expression of the deep sympathy of this Corporation's Directors and Officers.



**T**HE products and services of the Radio Corporation of America are provided by the following wholly owned companies which comprise the RCA Family:

**BROADCASTING:**

National Broadcasting Company, Inc.

**MANUFACTURING:**

RCA Manufacturing Company, Inc.

**COMMUNICATIONS:**

*International and Inter-city:*  
R.C.A. Communications, Inc.

*Marine:*

Radiomarine Corporation of America

**INSTRUCTION:**

R.C.A. Institutes, Inc.

**PRINCIPAL RCA PRODUCTS AND SERVICES**

RCA Victor Receiving Sets and Radio-Phonograph Combinations

RCA Victor and Blue Bird Phonograph Records

RCA Radio Tubes

NBC Broadcasting through Nationwide "Red" and "Blue" Networks

International and Inter-City Radio Telegraph Service

Marine Communication Service, between Ship and Shore

Training School in Radio and Electronic Subjects

RCA Equipment for Broadcasting and Communications

RCA Photophone Equipment for Motion Picture Studios and Theatres

RCA Public Address Systems

Police Radio Systems

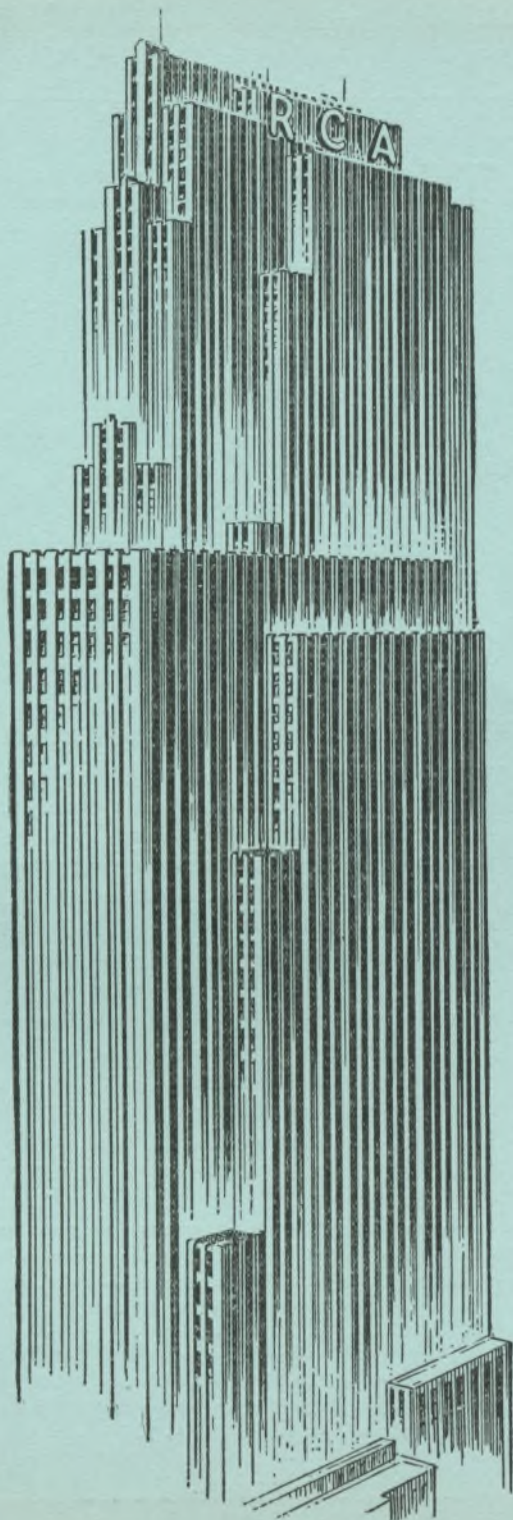
Aircraft and Airport Radio Equipment

Laboratory and Test Equipment

Radio Equipment for Amateur Use

To send a radiogram from any city in this country to a point outside the United States, between cities served by the RCA Inter-city service, or to a ship at sea, it is necessary only to mark the message "Via RCA," and to file it at any office of R. C. A. Communications or Western Union.

For information concerning RCA products, address the RCA Manufacturing Company, Inc., Camden, New Jersey. For information concerning RCA services, address the Department of Information, Radio Corporation of America, RCA Building, 30 Rockefeller Plaza, New York, N. Y.



**RCA BUILDING**  
**RADIO CITY • NEW YORK • N.Y.**