

BROADCAST NEWS

July 1939
JUL 31 1939



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July 1939

FRANKLIN INSTITUTE
PHILADELPHIA

RCA MANUFACTURING COMPANY, INC., CAMDEN, N. J.

"I have in mind a plan of development which would make radio a 'household utility' in the same sense as the piano or phonograph. The idea is to bring music into the house by wireless . . .

"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 of a single button.

"The 'Radio Music Box' can be supplied with amplifying tubes and a loudspeaking telephone, all of which can be neatly mounted in one box. The box can be placed on a table in the parlor or living room, the switch set accordingly and the transmitted music received.

"The same principle can be extended to numerous other fields as, for example, receiving lectures at home; also events of national importance. Baseball scores can be transmitted in the air by the use of one set installed at the Polo Grounds. The same would be true of other cities. This proposition would be especially interesting to farmers and others living in outlying districts.

"By the purchase of a 'Radio Music Box' they could enjoy concerts, lectures, music, recitals, etc., which may be going on in the nearest city within their radius. While I have indicated a few of the most probable fields of usefulness of such a device, yet there are numerous other fields to which the principle can be extended."

(Excerpts from a letter written in 1916 by David Sarnoff.)

Published in the Interest of the Radio Broadcasting Industry
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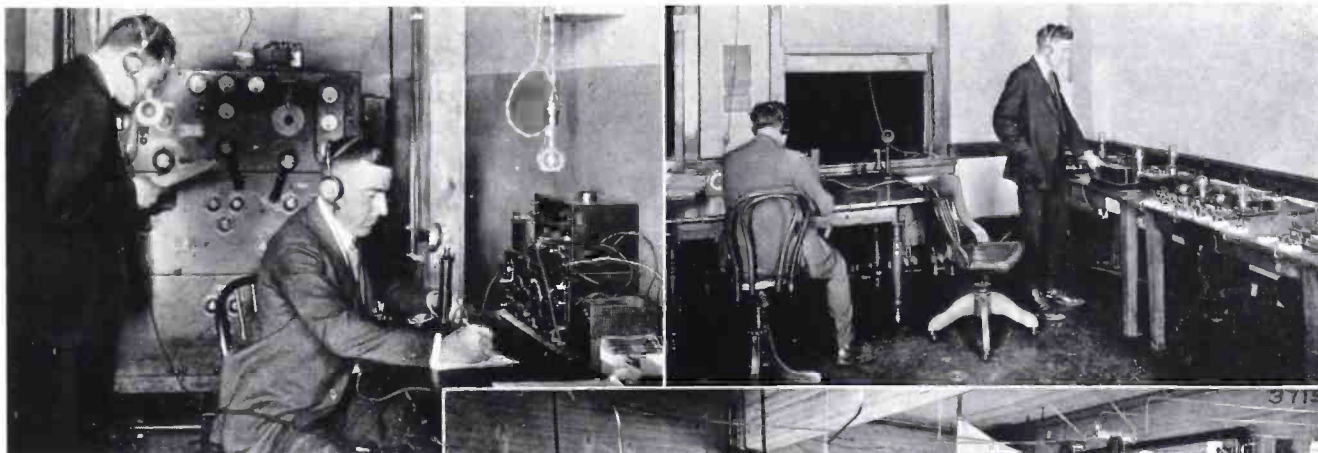
RCA MANUFACTURING COMPANY, INC.

CAMDEN, NEW JERSEY, U. S. A.

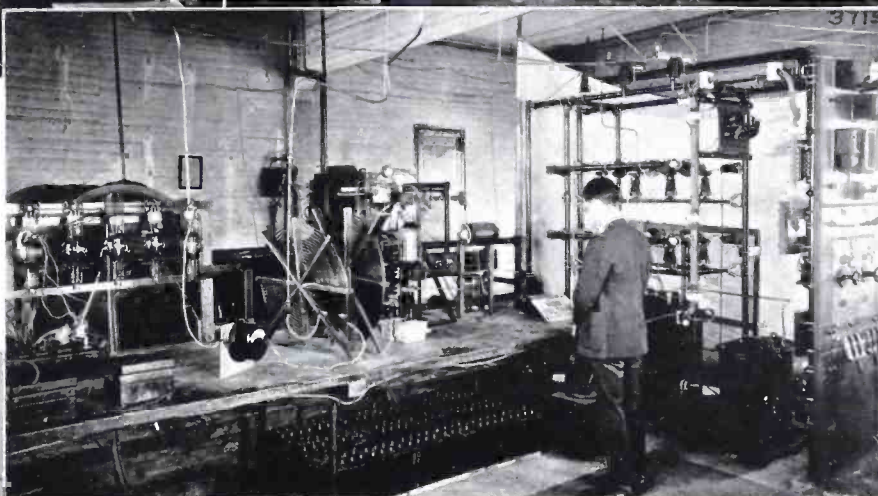
STATION BROADCAST
AIR MAIL

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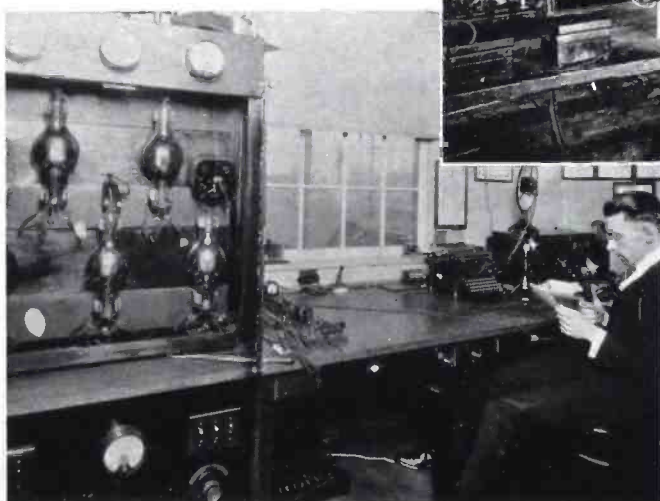
EARLY TRANSMITTER INSTALLATIONS



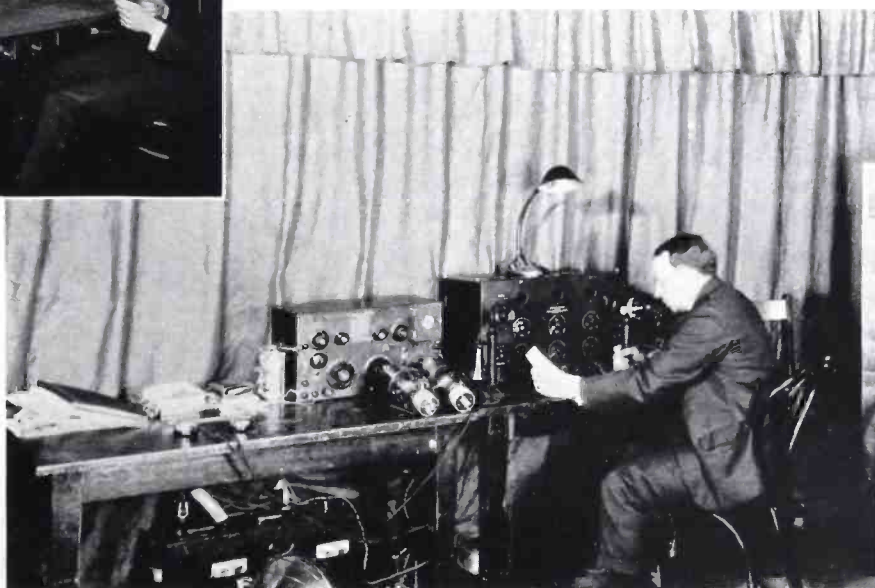
(Above) Tubes, circuits and switches were spread over a wide area.



(Above) Transmitters were operated at a great risk of personnel injury.



(Above) Tube changes were easy, even way back in 1922.



(Right) Operators needed several pairs of eyes to handle equipment.

In a day when skirts were getting shorter and eyebrows were being raised over the "flaming youth" generation, radio broadcasting made its modest bow. Greeted with mixed emotions by the press, buffeted by criticisms not

unlike those directed at television today . . . radio nevertheless gained a foothold in public favor. Soon, like "Avalon," it was the rage . . . and building home receivers became the nation's number one hobby.

LOOKING AT EARLY RECEIVERS

(Right) Scenes like this were heralded by the trade as "Radio Keeps the Family Together."

(Below) A new world of interest and entertainment was opened to those who had been forced to live on memories.



(Above) A great advance was made when trailing wires, leaking batteries and other paraphernalia were hidden from view.

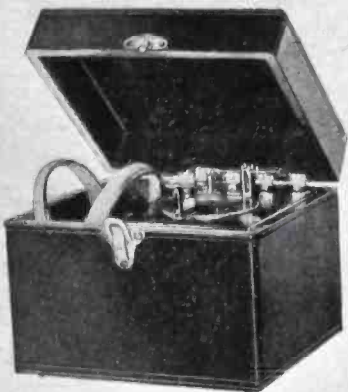
(Left) Receivers had not yet escaped the "music box" stage.

Few now long for the "good old days" in radio, or mourn the passing of receivers like these. Yet, in their day, they did their job well and taught America the listening habit which persists as the basis of the radio industry.

The first chain broadcasts . . . the first political convention broadcasts . . . and the radio debuts of stage and screen stars made history for listeners who were the proud owners of these instruments.

EARLY RECEIVERS WERE CRUDE BUT AWE INSPIRING

"AERIOLA Jr." COMPLETE RADIO RECEIVER (For the Radio Novice) STYLE NO. 307421



The entire design provides a degree of selectivity not usually found in this type of receiver.

"AERIOLA JR." (Style No. 307421)
Size: 7 in. x 8 1/4 in. x 7 1/4 in. Weights: Net wt.

"AERIOLA JR." is the latest development in unit radio receivers. It is a complete radio receiving outfit, and is so compact that it may be carried with ease as its weight is only five pounds. When the cover is closed, the receiver is entirely protected by an attractive walnut-finished case.

To use "AERIOLA JR." it is only necessary to connect it to a single-wire aerial and a ground. No additional equipment is needed, for the receiver includes all the essentials—a variable tuner, a fixed condenser, a supersensitive crystal detector, and a high-grade set of head telephones. The simplicity of "AERIOLA JR." makes it easy to understand and operate.

This outfit is a single circuit receiver involving a variometer tuner with fixed series condenser. The detector is sensitive at all points, assuring easy and dependable operation. An extra set of crystals is supplied. A single indicating arm operating over a graduated dial assures quick and accurate tuning for telegraph or telephone stations within its range of 190 to 500 meters. The head telephones are connected to the usual stopping condenser. A special compartment is provided in the case for the head telephones, so that the unit is always complete and ready for instant use.

(Left) One set of ear phones created a family problem. Everyone usually wanted to listen at the same time.

(Below) Equipment such as this delighted the early radio fan's heart. One touched with the spark of genius could operate it.

RECEIVER, IP-501

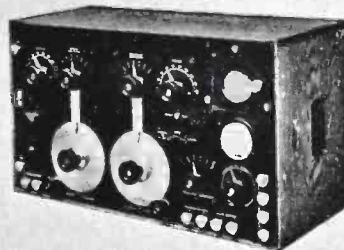
THE IP-501 Receiver shown in the accompanying illustration is a compact unit containing the radio frequency and detecting circuits in a single case.

Normal wave length range: 300 to 7,500 meters. This receiver is equipped with six binding posts (normally short-circuited for 300 to 7,500 meter reception) to which loading coils may be attached for the reception of wave lengths up to 21,000 meters. The proper loading coils are: Primary, 50; Secondary, 100; Ticker, 30 millihenries.

The receiver is similar in mechanical design to the IP-500, with the untuned circuit omitted. The capacity coupling between primary and secondary circuits is eliminated in this type by heavy sheet copper boxes separately enclosing the two circuits.

The panel is of Bakelite-dilecto. The coils are bank-wound inductances, of high frequency cable wound on threaded Bakelite-dilecto tubes, impregnated and baked.

The condensers are of the self-balanced plate type. The wiring is of rigid copper enclosed in varnished cambric tubing. All switch points are located beneath the panel. The detector is mounted on a shock-proof support. The feature of condenser dial pointer control by inductance switch is included in the design.



RECEIVER, IP-501, INCLUDING HIGH GRADE CRYSTAL DETECTOR \$550.00

Overall dimensions: 20 in. x 11 in. x 9 in.

Shipping weight: 55 lbs.



(Left) Much simpler in design but still creating a family problem since only person could listen.

A lusty, fast growing infant . . . nursed on successes such as the Dempsey-Carpentier Fight Broadcast . . . radio soon became "big" business. And, the day of

the home set builder began to fade as vastly superior commercial receivers appeared on the market backed by advertising that packed plenty of power in its time.

EARLY RADIO INTERESTED MILLIONS

RCA OPENS DIRECT OCEANIC SERVICE

Boston Now in Direct Touch by Radio With European Countries, South America and Asia

By W. H. ...
The Radio Corporation of America today announced that it has opened a direct oceanic radio service between Boston and various parts of the world.

The service, which is operated by the RCA Radio Ship, will provide direct communication between Boston and London, Paris, and other European cities, as well as South America and Asia.

The service is available to all RCA subscribers and is operated on a 24-hour basis.

The RCA Radio Ship is a specially equipped vessel that carries a powerful radio transmitter and receiver, enabling it to maintain direct communication with other parts of the world.

The service is a significant step in the development of radio communication and will provide a more direct and efficient means of communication between the United States and other parts of the world.

The RCA Radio Ship is a specially equipped vessel that carries a powerful radio transmitter and receiver, enabling it to maintain direct communication with other parts of the world.

Trawling for Fish With the Aid of Modern Radio

A story telling how a large New York deep sea fishing company spreads its business and saves money on every trip of its vessels by maintaining communications with their captains at sea by radio installation aboard its fishing boats.

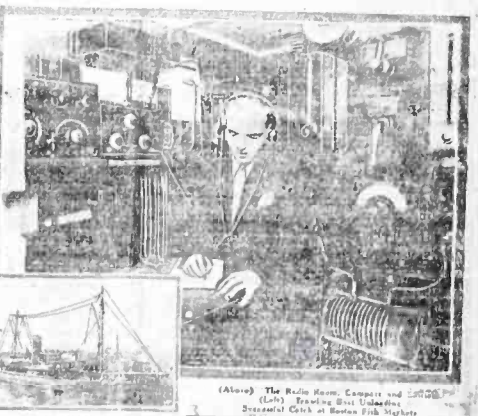
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(Above) The Radio Room, Complete and Successful Catch at Boston Fish Market

The Radio Room, Complete and Successful Catch at Boston Fish Market. The room is equipped with the latest radio technology, allowing for direct communication between the fishing boats and the shore.

PRINCE TO GET WELCOME FROM RADIO IN SKY

Army Aviator's Greeting to Wales to Be Broadcast From Airplane

The Prince of Wales is expected to receive a warm welcome from the radio in the sky as he travels through the air.

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Voices from the Skies



BROADCAST voices from the skies are becoming more and more prominent as the use of radio communication continues to expand.

The use of radio communication has revolutionized the way we communicate, providing a faster and more reliable means of contact.

Developing Radio

In commenting on the rapid development of radio and prospective improvements for the benefit of radio users, David Barnoff, Vice-President-General Manager of the Radio Corporation of America, says that one of the next greatest contributions that will be given the public is a "Current Supply Device" operated from the regular house lighting circuit.

RADIO AND SOUTH AMERICA

A plan to promote radio broadcasting in Latin America has been announced by Maj. Gen. J. G. Harbord, president of the Radio Corporation of America, who said that the United States will have an unrestricted opportunity to utilize its resources in developing radio in South America.

Worldwide Communication

The connecting link between London and Boston by radio communication has been established and messages of goodwill with Europe have been exchanged.

Radio-Central

On the north shore of Long Island, the Radio Corporation of America has constructed a Radio-Central super-power radio system that simultaneously can send and receive messages from the great nations of the world across the ocean.

Who'll Pay for Broadcasting?
The Radio Corporation of America is currently engaged in a legal battle over the issue of who should pay for the cost of broadcasting.

Dividends Declared
The Radio Corporation of America has declared dividends for its shareholders.

Opening New Boston Radio Service
The Radio Corporation of America is opening a new radio service in Boston.

Stories on radio were featured in every newspaper. Although dramatic stories of rescues at sea had been read by the public for a number of years this new form of the art brought an intense new interest. Fantastic

STUDIOS OF ANOTHER DAY



(Left) Performers in that far-off day kept eager listeners up through the long hours of the night. Note the microphone which hadn't yet decided whether it was a mechanical gadget or a musical instrument.



(Above) A few short years ago this was perfection as studios went. Heavy drapes were used for sound insulation.



(Above) Ready to go on the air! Equipment in studios, other than microphones, at that time was the usual thing.

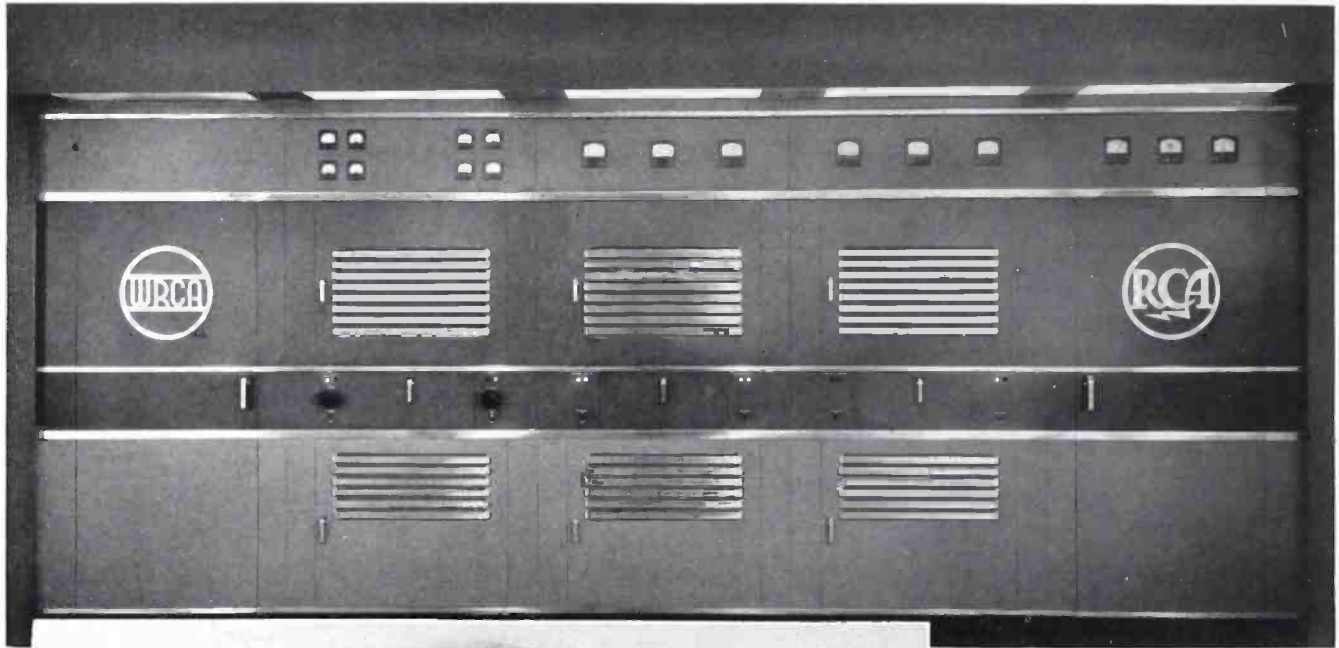
(Right) Performers were dressed in the height of fashion and if you think this is funny look at hats anywhere today.



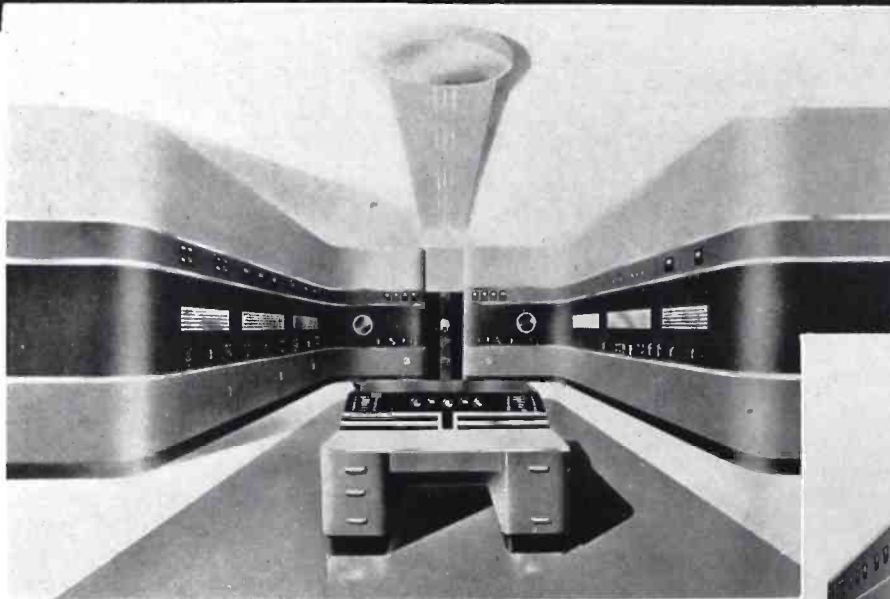
America's first president to speak on the radio addressed his remarks through equipment such as this. Hot "jazz" picked up by these microphones electrified some listeners, shocked others. Broadcasts of symphonies and educational features began to convince many that radio

was potentially a great cultural force. Called upon to originate many new types of programs this equipment carried on with stout heart and a rather surprising freedom from breakdown. The American Way of Broadcasting was just beginning to find itself.

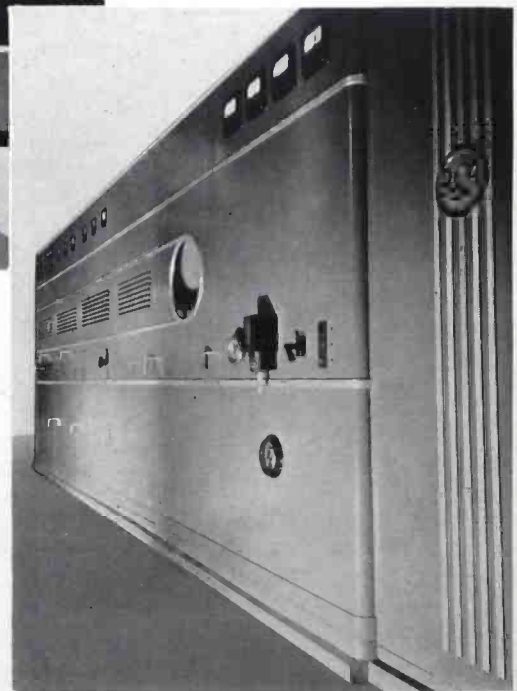
DESIGNS HAVE BEEN REVOLUTIONIZED



(Above) The RCA 5-DX Transmitter in which all equipment is housed behind a unified front.



(Above) The U-shaped RCA 50-D and control desk which gives the operator full view and "finger-tip" control.

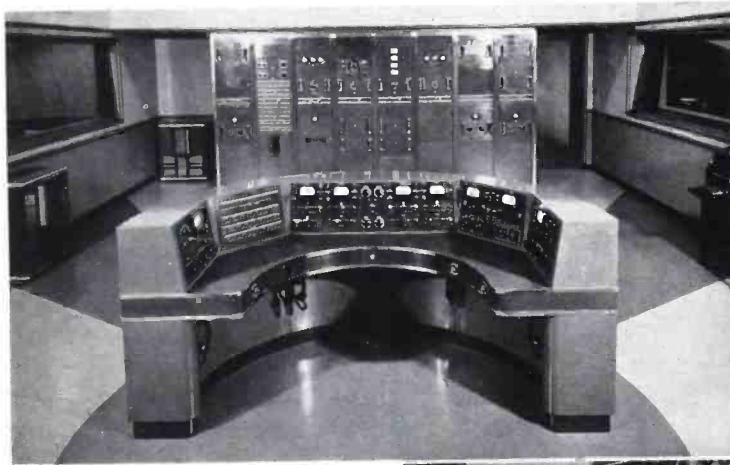


(Right) A section of the RCA straight line type 50-D, showing the streamline construction of this modern transmitter.

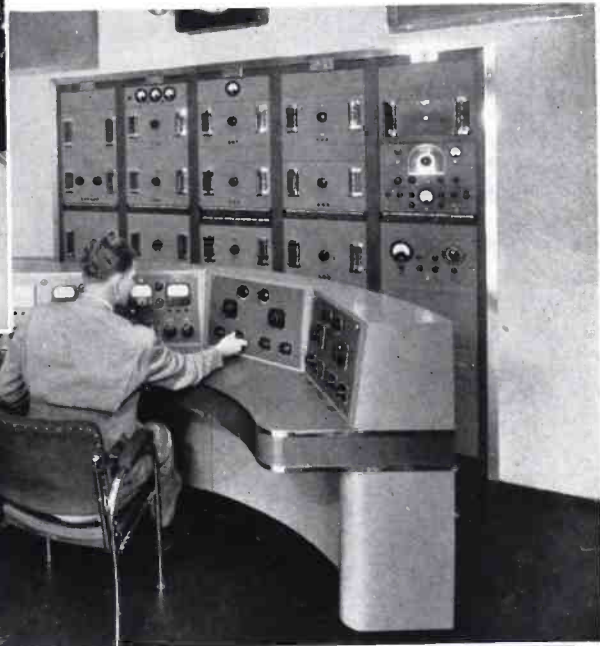
Not only were stations banding together to give better service . . . but they were also replacing old equipment with new. Radio engineering was moving ahead with 7-league strides. And the willingness of station owners to discard usable equipment in favor of new and better equipment acted as a constant spur to the ingenuity of

manufacturers. The tonic of competition kept the industry on its toes, kept it in mood for progress. These were the prime movers that led to the development of broadcasting equipment such as this magnificent modern RCA equipment. Showmanship in equipment was demanded by the American Way of Broadcasting.

MODERN STATIONS OF TODAY



(Left) Speech Input Master Control Desk and Racks at WFBR.



(Right) Speech Input Master Control Desk and Racks at the Golden Gate Exposition.



(Above) Master Control Desk at WWNC.



(Above) A Studio Control Console and Rack built for WFBR.

(Left) Master Control Console at WHBC.



Back when broadcasters never quite knew whether or not they had a listening audience . . . and before sponsors had appeared to furnish free tickets for studio audiences . . . stations wore their working clothes. This homespun character vanished when studios found it necessary to dress up for visitors. Bright, stream-lined mod-

ern stations discover that it is easy to surpass their pioneer ancestors in design, equipment, programs, and in everything else except in transmitting the overpowering thrill which was wrapped up in every program in the early days. New equipment marched abreast in the advance.

NEW WORLDS FOR EVERYONE



(Left) The NBC Symphony Orchestra, one of the finest in the country, with Toscanini conducting, is available to millions.



(Below) America can listen in as experts discuss leading questions of the day at the University of Chicago Round Table Conference.



(Above) When Byrd went to the Antarctic he was "just around the corner" for untold millions. John Dyer, of CBS, was the newscaster.



(Right) Town Meeting of the Air gives voice to American thought and opinion.



(Below) Another famous orchestra, the Philadelphia, has been heard by millions who would never have enjoyed it without radio.



Since its inception, the radio industry has been conscious of its obligations as a public servant. Adopting a completely non-partisan policy, broadcasters have kept Americans vastly better informed about their government and the issues at stake in making democracy function better. The Radio Corporation of America has

played an important role in rendering this vital service. In addition, RCA helps make radio of utmost service to farmers, educators, government agencies, and to religion. The cultural efforts of RCA are exemplified by the famous NBC Symphony Orchestra. Every American has a box seat in the world's theatre of the air.

TWO DECADES LATER

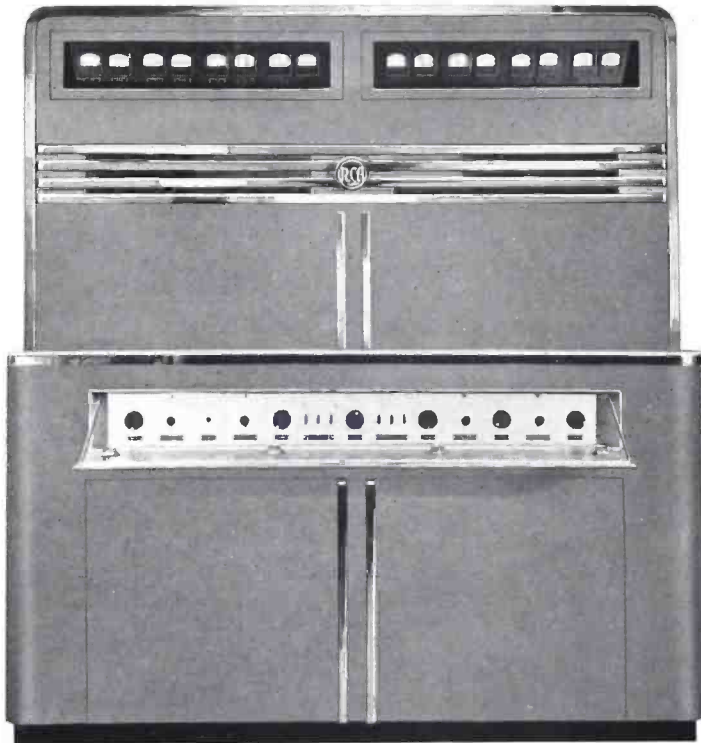
“THE RICHEST MAN
CANNOT BUY FOR
HIMSELF WHAT THE
POOREST MAN GETS
FREE BY RADIO”

DAVID SARNOFF

Incredible as it seems scarcely more than 20 years elapsed between the time Mr. Sarnoff foresaw the wireless “Music Box” as a means of making radio useful in

the home and the day when he penned the above statement of fact. Jack’s Beanstalk grew at a pedestrian rate in comparison with the American Radio Industry.

TELEVISION IS HERE



(Left) The RCA 1 KW. Television Transmitter—the first to be announced for general sale. Styled in the modern manner it is a unit as up-to-date as the new science it symbolizes.

(Below) The RCA Television Camera. The seeing eye of this new art represents years of tireless research.



(Left) Groups of this sort are intrigued by television and its future possibilities.

In RCA Television, recently introduced in the New York Metropolitan Area, are the seeds of another giant industry. In developing television the radio industry shouldered the staggering costs of research and testing. The public was not asked to pay for an experiment.

Backed by a 7-year \$2,000,000 Field Test, RCA Television is a hit at both Fairs where thousands are having their first opportunity to see and hear the wedding of sight with sound. In Television, as in radio, the American Way will prevail.

TELEVISION HISTORY IN THE MAKING



(Left) Getting ready to watch one of the first big events in television's debut—the Baer-Nova fight.



(Above) A group so fascinated by this new outgrowth of radio that even the photographer could not steal their attention.



(Above) Eager-eyed crowds like this one stormed every television receiver to see a great event in early television history. Remember the Dempsey-Carpentier fight and its place in radio history?



(Right) Dealers were forced to admit customers to private showings of television so keen has interest been in New York and vicinity.

The service the radio industry has rendered in pioneering television has not gone without recognition both on the part of the public and of the government. Encour-

aged by favorable comment, the industry is bending every effort and investing more millions so that television will give maximum service as quickly as possible.

TELEVISION RECEIVERS ARE HERE



(Left) The RCA Victor Television Attachment is designed to bring the wonders of modern Television to radio owners at a minimum cost. Sound is heard over your present radio; pictures are viewed on the RCA Victor Television Attachment.

(Below) The RCA Victor Television Console Model TRK-5 provides complete picture and sound reception of Television programs, plus all the entertainment of an 8-tube, 3 band RCA Victor Radio.



(Below) The RCA Victor Television Console Model TRK-12 is designed for those who demand the best in television.



(Above) For those who want an excellent Television receiver plus the finest in radio, the RCA Victor Model TRK-9 will be found to be the logical choice. It is housed in an attractive modern-type console-type cabinet.

One has but to compare the first RCA Victor Television Receivers with the first radio receivers to appreciate what RCA's 7-year, \$2,000,000 field test means to the consumer. No one can now foresee the future of tele-

vision . . . but, with such a beginning, it seems safe to predict television will go hand in hand with radio as one of the nation's greatest public servants. Its services will be common tomorrow.

FACSIMILE—JOURNALISM ON THE AIR



immediately. Everybody liked the new style, liked the additional news it brought them and liked the opportunity it gave them to sit at their breakfast table in the morning and hastily skim through the cream of the news in ultra-condensed form. You must remember, of course, that facsimile today is a tabloid with a vengeance. Stories MUST be short. There are no runovers or jumps—a story has to stay on one page. And with present space limitations, there isn't much room if a variety of news is to be included in the day's transmission. Little space can be devoted to backgrounds and rehash." . . .

"In the first place, let me say that I am firmly convinced facsimile broadcasting is here to stay. I believe that most of us here will live to see the time when the newspaper of the air will be an accepted institution. Just when this will come about, I am not prepared to say. Facsimile is a logical development of radio, just as television is a logical development. All the bugs will be ironed out of it some day and when that day comes, it behooves every newspaper man to be on his toes with respect to this new form of competition."

(Excerpts from an address by Guy C. Hamilton, Vice-president and General Manager, McClatchy Newspapers of California.)

(Left) RCA Facsimile Transmitter.

"When it came to actual broadcasting we, like newspapermen naturally would, prepare our copy along the lines of traditional newspaper, style, that is with banners, heads on each story, etc. But after we had been broadcasting two or three weeks, we began to realize that even in this phase of our experiment we were on entirely new ground, that the old tried and true methods perhaps were not just what we were after. So, after some discussion and experimentation, we decided that in order to save space and to make for greater readability, and greater volume of news, we would cut out the banners and heads and prepare our news in brief, running commenatry paragraph form." . . .

"We made the change in form about the first of March, and public reaction was felt

(Right) An RCA Facsimile Receiver.



Another development, promising to extend the limits of the services radio renders, is facsimile. Equipment designed and built by RCA is now in operation in various

sections of the country. Radio may soon revolutionize the newspaper business. The day's news at your finger tips is no longer a dream.

THE NEWSPAPER OF TOMORROW

Late City Edition of the

3 Cents

Gist

of Today's News

Vol. 96 No. 32,780

Copyright 1939
Columbia School of Journalism, Columbia University

Wednesday, March 3, 1939

Lewis Wins U. S. Steel Recognition, 40-Hour Week and \$5 Minimum Pay

Labor

Organized labor has won formal recognition from the chief unit of the United States Steel Corporation. This special step was quickly announced in Pittsburgh last night by Philip Murray, chairman of the Steel Workers Organizing Committee and chief lieutenant of John L. Lewis in the Committee for Industrial Organization. The agreement also provides minimum pay of \$5 a day and a forty-hour week, both to take effect March 16. Eight other steel companies signed similar agreements, thereby probably preventing the major strike in the steel industry which many had thought inevitable this spring.

News of the agreement related President Roosevelt and other Administration leaders in Washington. Officials of the Navy Department said it cleared the way for construction contracts which had been seriously threatened by the labor restrictions of the Walsh-Healy Act.

Unofficial opinion in New York steel circles held that the agreement will necessitate employment of 80,000 to 100,000 more workers in the steel industry at a cost of \$100,000,000 a year. Prices of finished steel products are expected to increase from \$2 to \$6 a ton to compensate for the increase. On the other hand, yesterday U. S. Steel announced a \$1 a share to \$1.12 and Bethlehem \$3 to \$3 1/4.

A recent one-hour salary increase was announced in Los Angeles yesterday by the Douglas Aircraft plant, some of a sit-down strike which ended Monday with nearly 150 workers under federal orders. The pay rise was one-third that asked by the strikers. Page 3.

A reportedly conducted strike "does not constitute a strike," Justice Cotello ruled in a New York County Supreme Court case yesterday, not does the fact that a union contract has been signed as the result of a strike make his contract void. Page 2.

Today's Headlines

- Roosevelt comes out for new wage-and-hour laws this session; sends Congress N.R.A. post-mortem urging new regulation of business to more flexible. *Labor, page 3*
- Steel's 40-hour week hailed in Washington by Administration leaders; Navy Department holds it clears way for immediate ship construction. *Labor, page 2*
- Stinson strikes close two major Paris plants in Detroit serving Ford Motor Co., which is revealed as early C.I.O. objective. One strike settled. *Labor, page 3*
- Vandenberg backs Wheeler-Deane Amendment in radio speech attacking Roosevelt's court plan. Summers implores justices to quit. *National News, page 3*
- James Roosevelt may attend coronation of George VI as secretary of American delegation; President says idea is new to him. *Foreign News, page 3*
- Niagara Falls Power Co. defies order of state commission; cut use of river water to one-fourth. *Niagara, page 3*
- Mysterious death of four-year-old Queens girl caused attack in "most brutal murder in 27 years." *Crim, page 3*
- S. E. C. charges Germany has secret debt of 2 billion; shall caution investors in new bond issue. *Foreign News, page 3*

National News

Senator Arthur H. Vandenberg of Michigan introduced the Wheeler-Deane amendment as a substitute for the President's Supreme Court plan in a nationally broadcast radio speech last night. The amendment would permit Congress to override by a two-thirds vote after an intervening session, Supreme Court decisions holding laws unconstitutional in enforcing it and in making the Borah amendment to enlarge state powers on actual legislation. Senator Vandenberg became the first Republican to speak up on the court plan. Republicans are in his opinion an important indication that conservatives and liberals could join in a workable opposition to the President's proposal.

In the Senate and House debate on the court revision, Senator Hiram Johnson, California Republican, declared that any justice who withdrew under the new re-organized bill would lose his self-respect. Representative Hiram W. Summers, Texas Democrat, in reply pled with the justices to do so, saying that thereby they would settle the whole case. Page 3.

The Navy appropriation bill for the fiscal year 1937-1938, totaling \$2,215,555,426, was reported in the House of Representatives yesterday, as the first of the national defense measures. The money is to be spent for forty-seven new vessels in building two battle lines of 80,000-ton each for armored cruisers, and for an increase in Navy personnel to 105,000. Page 3.

The Treasury Department requested yesterday for the eight months of the fiscal year ended February 28 a deficit of \$2,048,000,000, or \$348,280,000 less than that for the same period last year. Receipts increased \$248,175,542 and expenditures \$4,024,110. Page 3.

Five members of the Black Legion, including a former Mayor of Detroit suburb and a Detroit Board of Health inspector, were found guilty of a murder conspiracy yesterday. They joined more than twenty convicted in Michigan since the Black Legion murder of a WPA worker last May. The state's principal witness was Dalton Dean, confessed "overturner" of the terror band. Page 5.

Foreign News

The Securities and Exchange Commission in Washington yesterday in effect charged the German Government with maintaining a secret debt of about \$200 million. It permitted registration of a \$69 million sale of 2 1/2 dollar bonds as the only practical means by which American holders of German securities might obtain something of value on their maturing interest claims, but publicly called attention to what it called deficiencies in the German registration statement. Page 6.

James Roosevelt, the President's son and new member of his secretariat, may attend the coronation of King George VI in London as a member of the United States delegation. One post is still vacant and it would not surprise the State Department to see him go. The President said this was a happy thought, but save to him and his son. Page 6.

The Fascist Grand Council plunged Italy further into the world armament race at a meeting in Rome lasting until 3 A.M. yesterday. After listening to Premier Benito Mussolini's speech a resolution providing five lines of action toward further increase in Italian armament forces and economic self-sufficiency, in London a reasonable report said Germany had tripled her air force in the last year to more than 2000 planes, with comparable increases in mechanizing its army of 600,000 men. In Tokyo Vice Admiral Soshiki Toyama, speaking for the government, said an increase in the proposed \$342 million five-year naval program was needed because of recently announced British and American naval building plans. Page 6.

Foreign Secretary Anthony Eden recalled German demands for colonies by stating, in a speech in the House of Commons last night, that the Government was



THEY NEGOTIATED the steel agreements. John L. Lewis (left), head of the Committee for Industrial Organization, and Philip C. Taylor, chairman of the board, U. S. Steel Corporation.

New York City

This year's summer city hall will be Chatham Manor in College Point Park, Queens. Mayor LaGuardia announced yesterday. Page 9.

Embodiment, although financial conditions, and a political spoils system in the Kings County Sheriff's office under previous administrations were reported to the Mayor yesterday by Paul Blumenthal, Commissioner of Accounts. Page 8.

At least 1500 more beds are needed immediately in the city's hospitals to care for tubercular patients. Dr. Hiram Emerson declared yesterday. Page 9.

Sports

Tennis: George Swenson upset J. Gilbert Hall 6-2, 2-6, 10-8 in the national indoor singles championships here yesterday. Herbert Bowman and Frank Parker also advanced. Page 15.

Hockey: Max Schmeling arrived in the Doregaria last night with the intention of either fighting James Broadbent in June for the heavyweight title or of suing for breach of contract. Page 16.

Hockey: The Detroit Red Wings defeated the Montreal Maroons 7-4 in Montreal yesterday. The A.A.U. announced it would deny sanction to the Hershey Bears for their scheduled track meet, if their hockey team played the disbanded Baltimore Orioles today. Page 15.

Bicycle races: After a session of wild jockeying the team of Thomas and Rebell took undisputed leadership of the six-day race at Madison Square Garden last night. Page 16.

Baseball: Babe Phelps opened batting with a dis-

The State

HUGE CAGES of ice tumbled over Niagara Falls, stunning the river and

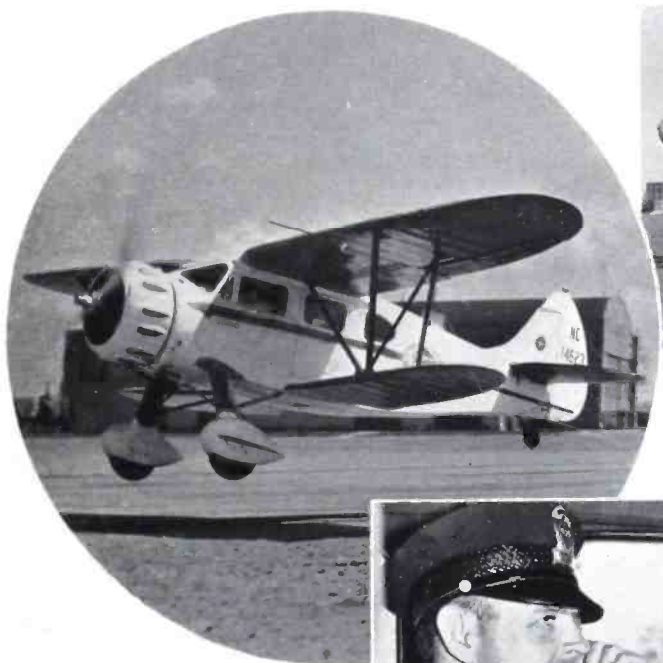


An interesting experiment in news writing can

Constantly extending its frontiers facsimile is developing a new pioneering element in journalism. Life speeds at a faster pace and the story must be terse. A suggested format for a "Newspaper of the Air" has been

proposed at the Columbia University School of Journalism. "Gist" may well be the type of newspaper a future generation reads. In the lower right a sample of facsimile reproduction is shown.

SAFETY IS SERVED BY RADIO



From the moment of taking off until the happy landing planes are in continuous contact with airports by means of radio. Without the factor of safety that radio provides aviation progress would have lagged greatly.



Law enforcement agencies turn more and more to radio. The press has long since ceased to dramatize police radio but the drama is still there. Millions of dollars worth of property have been protected, lives saved and criminals caught through the use of radio

At sea radio performed its first great work. Today the perils of the sea have been minimized. Even smaller ships carry radio as necessary equipment.

Today no one marvels at these services of radio. They are accepted as common-place. But picture for just one moment any of these fields without radio. A tenuous

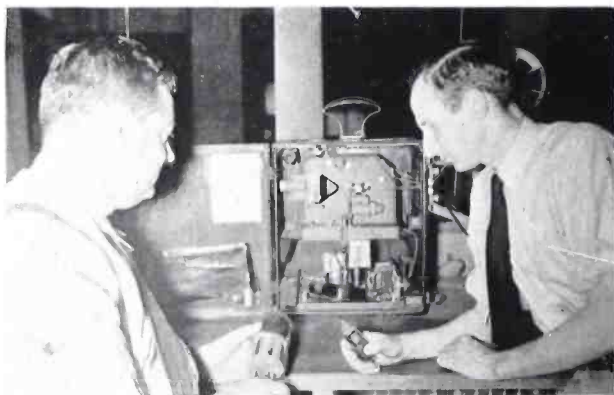
wave in the air has aided humanity and aided progress in every field. New fields of service open as radio advances.

RADIO ENTERS LIMITLESS FIELDS

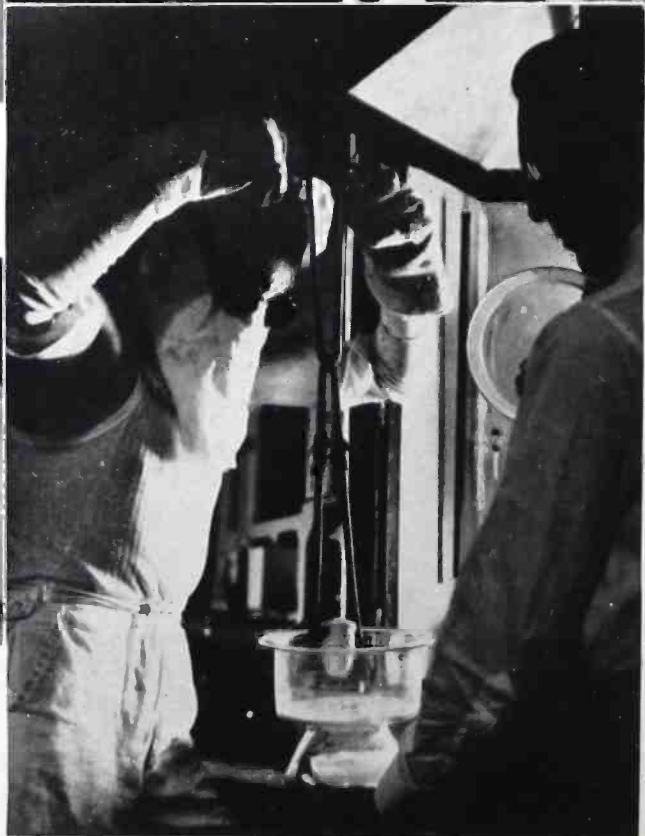


(Above) The Infra-red Telescope.

(Below) Dr. Zworykin and Point Microscope.



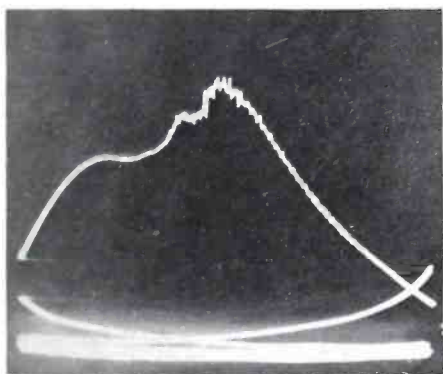
(Above and right) Research goes on unceasingly in the vast field opened by radio.



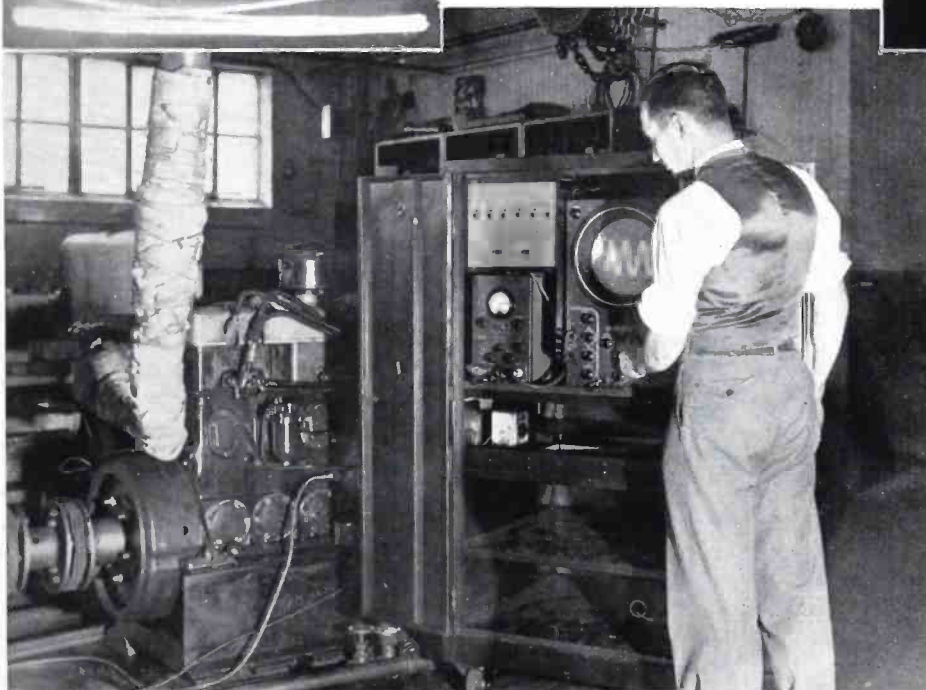
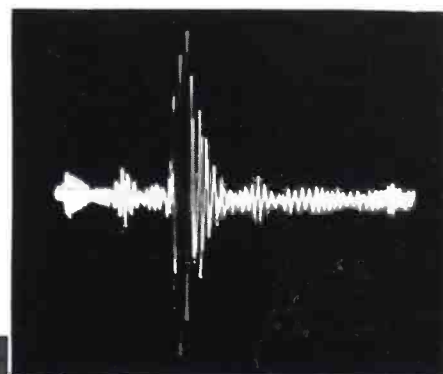
To the general public radio and television seem to mark a limit. But to the scientist they are merely steps in a vast field whose limits no one can know. Ultra-short

waves will be used in the future to an extent that even the vivid imagination of the romancer can not conceive. Tomorrow will bring new accomplishments.

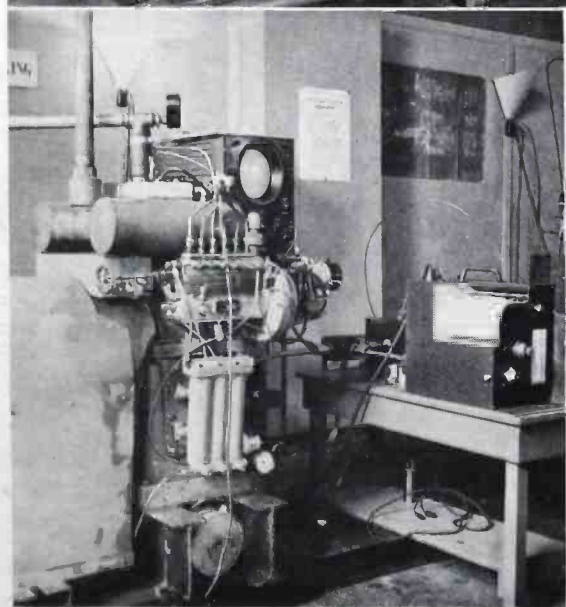
RADIO AIDS INDUSTRY



Wave forms in tests on modern industrial equipment.



New uses for equipment growing out of radio's development will lead to new standards in the factory of tomorrow.



In every phase of industry applications for electronic equipment will be found.

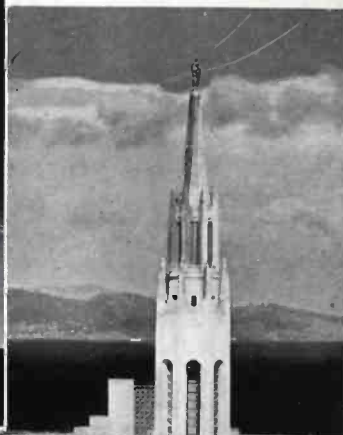
Not alone in the fields of entertainment and culture has radio been an important influence. Developments unforeseen at the time are now being applied in every phase of everyday life. Business, science, education —

all benefitted through the research that primarily began as an offshoot of radio. The world of tomorrow will be amazingly improved by the dream of the "music box" which would utilize wireless.

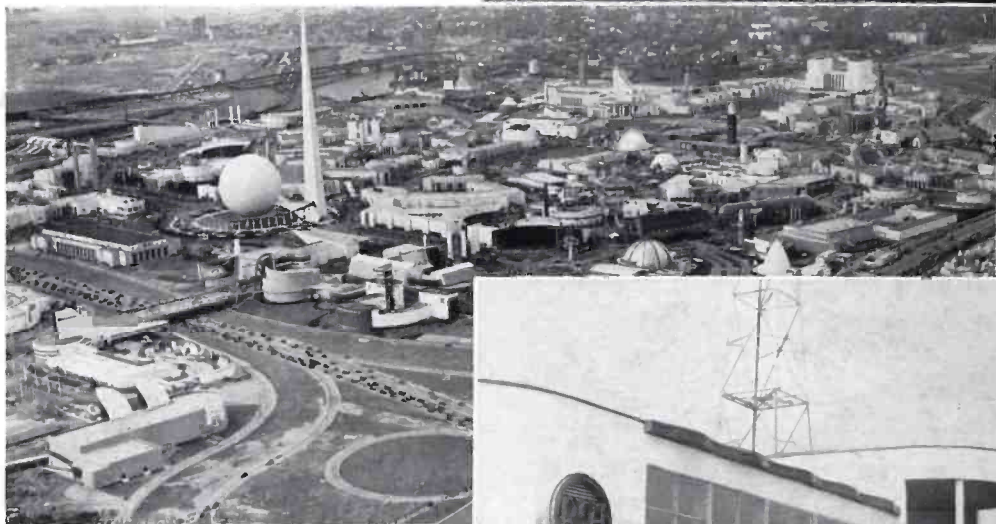
AT BOTH FAIRS—IT'S RCA



(Above) RCA's exhibit building at the Golden Gate Exposition.



(Right) RCA sound is employed on Treasure Island.



(Above) RCA sound is official equipment at the New York World's Fair.



(Right) Official opening of the RCA Building at the World's Fair.

Radio . . . television . . . facsimile are scoring major triumphs at the two Fairs. RCA Exhibits at both Fairs are focal points for thousands eager to see the latest scientific achievements in these fields. Yet . . . perhaps

only the surface of progress has been scratched . . . for future developments in the field of ultra-high frequencies may provide exhibits at some future Fair which will dwarf the accomplishments of today.