

Christensen Orchestra Leads Contest

Radio Digest

Illustrated

FEBRUARY, 1928

TWENTY-FIVE CENTS



MARCELINE DAY—WHN

Official Call Book^{and} Log
Complete This Issue

Mike in Congress; Hawaii Calling; Pictures; KFWB Traps Fox; Four Legionaires; Champ Staller; Getting-up Exercises; Home Television; Radio Personalities; Tube Trust Decision

The radio leadership of 1928

NOW
\$90

180 volts on the output tube plate!
Gigantic UNDISTORTED volume from the Bandbox!

Power! Power! POWER! A feature of the Crosley AC Bandbox that lifts it head and shoulders above competition!

170 to 185 volts on the plate of the power output tube!

Comparative checkings of competitive radios show interesting figures. Under identical testing conditions the Bandbox shows a full 170 to 185 volts on the plate of the 171 power output tube. Other radios show from 100 to 110 and 130 to 140 volts on the plate of the output tube. The 171 power tube should have around 180 volts. This better than 40% superiority in one case and 25% in the other is the difference between today's radio and yesterday's.



MUSICONE — Type D
\$15

Crosley Musicones are famous for their value. This new style is no exception. Its low price of \$15 is in keeping with Crosley traditions. It instantly demonstrated its soundness by immediate and enormous sales.



602 Double Unit AC BANDBOX Single Unit 704

The Bandboxes are genuine Neutrodyne receivers. Totally and completely shielded, their acute sensitivity and sharp selectivity is amazing.

It has a single illuminated dial. Contributing much to the success of this 1928 wonder radio is the Mershon Condenser in the power element of the set. Not being paper, the danger of its blowing out is entirely removed so that the desired heavy voltage can be used to produce the acoustic and volume results so greatly desired. IT IS SELF HEALING. It does not have to be replaced as is the case with paper condensers.

The capacity of smoothing condensers in Crosley power units is 30 mfd. Other sets use only a fraction of that condenser capacity. Undersize condensers, transformers, etc., are used in order to build down to a price. Crosley builds up to a standard.

The AC Bandbox is purposely made in two models—the 602 in a double unit—the 704 self contained. This is to provide maximum adaptability in all sorts of surroundings and uses.

The 602 double unit provides console cabinet installation in ALL kinds of consoles.

The 704 is for those who want the entire set in one cabinet. The two sets are identical in elements, design and performance. The physical difference is solely to meet human differences of taste, necessity and price! The size of the 704 is 17⁵/₈ inches long by 12³/₄ inches wide and is 6¹/₈ inches high.

Battery Type Bandbox - \$55

This celebrated model needs no picture for in appearance it is identical to the 602 receiver pictured above. Its amazing performance has won the radio world this season and its value is as outstanding NOW as the day it was first presented!

SELF CONTAINED
\$95



Approved Console Cabinets manufactured by Showers Brothers Co., of Bloomington, Ind., and Wolf Mfg. Industries, Kokomo, Ind., are sold to Crosley dealers by H. T. Roberts Co., 1340 S. Michigan Ave., Chicago, Sales Representatives.



Crosley is licensed only for Radio Amateur, Experimental and Broadcast Reception.

THE CROSLEY RADIO CORPORATION
Powell Crosley, Jr. Cincinnati, Ohio

Montana, Wyoming, Colorado, New Mexico and West, prices slightly higher.

Write Dept. 49 for descriptive literature.

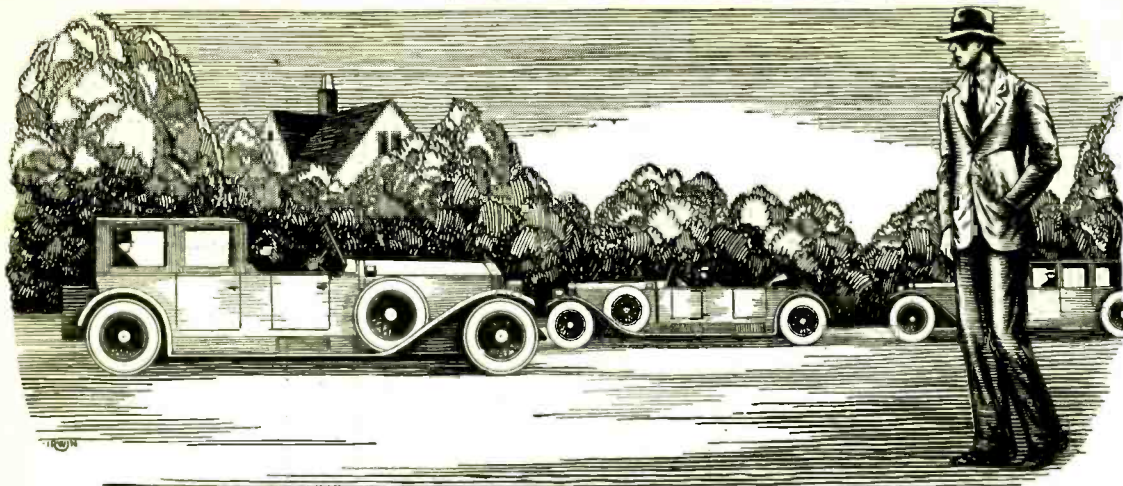
New
401 Dry Cell Type
BANDBOX
JUNIOR

A new dry cell receiver with all the features of the Bandbox—selectivity, sensitivity, volume and appearance. For places where AC current or storage battery service is not available or desired. Costs about 2¹/₂¢ per hour to operate.

\$35

"You're there with a Crosley"

CROSLEY RADIO



Many times in the old days, while I trudged home after work to save carfare, I used to gaze enviously at the shining cars gliding by me, the prosperous men and women within. Little did I think that inside of a year, I, too, should have my own car, a decent bank account, the good things of life that make it worth living.

I Thought Success Was For Others

Believe It or Not, Just Twelve Months Ago I Was Next Thing to "Down-and-Out"

TODAY I'm sole owner of the fastest growing Radio store in town. And I'm on good terms with my banker, too—not like the old days only a year ago, when often I didn't have one dollar to knock against another in my pocket. My wife and I live in the snuggest little home you ever saw, right in one of the best neighborhoods. And to think that a year ago I used to lodge the landlady when she came to collect the rent for the little bedroom I called "home"!

It all seems like a dream now, as I look back over the past twelve short months, and think how discouraged I was then, at the "end of a blind alley." I thought I never had had a good chance in my life, and I thought I never would have one. But it was waking up that I needed, and here's the story of how I got it.

I WAS a clerk, working at the usual miserable salary such jobs pay. Somehow I'd never found any way to get into a line where I could make good money.

Other fellows seemed to find opportunities. But—much as I wanted the good things that go with success and a decent income—all the really well-paid vacancies I ever heard of seemed to be out of my line—to call for some kind of knowledge I didn't have.

And I wanted to get married. A fine situation, wasn't it? Mary would have agreed to try it—but it wouldn't have been fair to her.

Mary had told me, "You can't get ahead where you are. Why don't you get into another line of work, somewhere that you can advance?"

"That's fine, Mary," I replied, "but *what* line? I've always got my eyes open for a better job, but I never seem to hear of a really good job that I can handle." Mary didn't seem to be satisfied with the answer, but I didn't know what else to tell her.

It was on the way home that night that I stopped off in the neighborhood drug store, where I overheard a scrap of conversation about myself. A few burning words that were the cause of the turning point in my life!

With a hot flush of shame I turned and left the store, and walked rapidly home. So that was what my neighbors—the people who knew me best—really thought of me!

"Bargain counter sheik—look how that suit fits," one fellow had said in a low voice. "Bet he hasn't a dollar in those pockets." "Oh, it's just 'Useless' Anderson," said another. "He's got a wish-bone where his back-bone ought to be."

As I thought over the words in deep humiliation, a sudden thought made me catch my breath. Why had Mary been so dissatisfied with my answer that "I hadn't had a chance?" *Did Mary secretly think that, too?* And after all, wasn't it true that I had a "wish-bone" where my back-bone ought to be? Wasn't that why I never had a "chance" to get ahead? It was true, only too true—and it had taken this cruel blow to my self-esteem to make me see it.

With a new determination I thumbed the pages of a magazine on the table, searching for an advertisement that I'd seen many times but passed up without thinking, an advertisement telling of big opportunities for trained men to succeed in the great new Radio field. With the advertisement was a coupon offering a big free book full of information. I sent the coupon in, and in a few days received a handsome 64-page book, printed in two colors, telling all about the opportunities in the Radio field and how a man can prepare quickly and easily at home to take advantage of these opportunities. I read the book carefully, and when I finished it I made my decision.

WHAT'S happened in the twelve months since that day, as I've already told you, seems almost like a dream to me now. For ten of those twelve months, *I've had a Radio business of my own!* At first, of course, I started it as a little proposition on the side, under the guidance of the National Radio Institute, the outfit that gave me my Radio training. It wasn't long before I was getting so much to do in the Radio line that I quit my measly little clerical job, and devoted my full time to my Radio business.

Since that time I've gone right on up, always under the watchful guidance of my friends at the National Radio Institute. They would have given me just as much help, too, if I had wanted to follow some other line of Radio besides building my own retail business—such as broadcasting, manufacturing, experimenting, sea oper-

ating, or any one of the score of lines, they prepare you for. And to think that until that day I sent for their eye-opening book, I'd been waiting "I never had a chance!"

NOW I'm making real money. I drive a good-looking car of my own. Mary and I don't own the house in full yet, but I've made a substantial down payment, and I'm not straining myself any to meet the installments.

Here's a real tip. You may not be as bad off as I was. But, think it over—are you satisfied? Are you making enough money, at work that you like? Would you sign a contract to stay where you are now for the next ten years, making the same money? If not, you'd better be *doing* something about it instead of drifting.

This new Radio game is a live-wire field of golden rewards. The work, in any of the 20 different lines of Radio, is fascinating, absorbing, well paid. The National Radio Institute—oldest and largest Radio home-study school in the world—will train you inexpensively in your own home to know Radio from A to Z and to increase your earnings in the Radio field.

Take another tip—No matter what your plans are, no matter how much or how little you know about Radio—clip the coupon below and look their free book over. It is filled with interesting facts, figures, and photos, and the information it will give you is worth a few minutes of anybody's time. You will place yourself under no obligation—the book is free, and is gladly sent to anyone who wants to know about Radio. Just address J. E. Smith, President, National Radio Institute, Dept. 2P, Washington, D. C.

J. E. SMITH, President,
National Radio Institute,
Dept. 2P, Washington, D. C.

Dear Mr. Smith:

Please send me your 64-page free book, printed in two colors, giving all information about the opportunities in Radio and how I can learn quickly and easily at home to take advantage of them. I understand this request places me under no obligation, and that no salesmen will call on me.

Name

Address

Town..... State.....

Occupation

Foil Tube Trust in Court Answer

Delaware Judge Finds DeForest Used Langmuir Idea Long Before Patents Were Issued

DR. LEE DeFOREST has been described as the typical genius, evolving great ideas that produce fortunes for others but little profit to the originator. Through lack of good business acumen he lost control of the three element Radio tube which he invented. His company fell into the hands of the receiver, and lately he has been sued by the General Electric company for infringement of their so-called "Langmuir high vacuum patents."

But the decision in the suit just rendered by Judge Hugh M. Morris in the Delaware United States District court is described as a sweeping victory for Dr. DeForest by Arthur D. Lord, receiver for the company.

Mr. Lord has analyzed the decision as follows:

"The principal patent of this group, which it has been asserted by the Radio Corporation, the General Electric company, and their associated companies, to completely blanket the vacuum tube art, specifically including Radio tubes, had all its claims declared invalid for a number of reasons. This patent—No. 1,558,436—was granted on October 20th, 1925. Irving Langmuir, research engineer of the General Electric company was the patentee.

"If the patent had been sustained it would have run for seventeen years from the date of its issuance and hence would not have expired until October 20th, 1942. The patent was asserted to cover any vacuum tube which had a high enough vacuum in it to permit a plate voltage of 40 volts to be employed without appreciable ionization effects. This in effect covered every vacuum tube used today. The court held the patent to be invalid for each of the following reasons:

Reasons for Decision

"Because Langmuir was not the first inventor of the subject matter, in other words other and prior investigators had done the same thing.

"Because Dr. Lee DeForest had had previous knowledge of the invention and had actually used the alleged invention in California in 1912, a year before Langmuir had ever seen a vacuum tube of the three electrode type.

"Because Dr. Harold DeForest Arnold of the Western Electric company had conceived and utilized the vacuum tubes operating on the pure electronic flow theory, as distinguished from gas ionization theory, before Langmuir had any conception of the alleged invention of the patent. Arnold and Langmuir fought through an interference proceeding in the patent office each claiming to have been the inventor of the subject matter of the patent.

"The examiner of interferences and the board of examiners-in-chief in the patent office both held in favor of Langmuir, but the commissioner of patents held in favor of Arnold. The Court of Appeals of the District of Columbia, to which court appeal was taken by Langmuir, held in favor of Langmuir.

"Judge Morris in this case disagreed with the Court of Appeals of the District of Columbia and adopted the opinion of the commissioner of patents, holding that if any invention had been made Arnold made it.

"The determination of this point, however, is of no practical effect because the court concluded that no invention had been made by anyone and went into this subject to show that Langmuir, the patentee, had wrongfully obtained a patent, as even if it were conceded that an invention had been made Langmuir was not the first inventor.

Second Patent Invalid

"With respect to the companion Langmuir high vacuum patent involved in the litigation, the court in its opinion concluded that the second patent—No. 1,244,216—granted October 23rd, 1917, directed to the use of a thoriated tungsten filament in a high vacuum for Radio tubes was invalid as being the mere adoption and use of a filament standard in incandescent lamp practice in vacuum tube practice.

"The court pointed out that with the advent of carbon filament in incandescent lamps carbon filaments were adopted for carbon tubes and that, therefore, as rapidly as a filament was developed for incandescent lamp work it was adopted for vacuum tube work. Hence when thoriated tungsten filament was adopted for incandescent lamp work it was the most natural and logical thing to do to use it with filament for vacuum tubes. Consequently, anyone who did it made no invention in doing it.

"The third of the associated patents—No. 1,529,597, granted March 10, 1925, and known as the magnesium flash patent, was likewise declared to be invalid. This patent is directed to employing magnesium as a vaporizable agent for 'getting' and 'keeping' a high vacuum chemically.

"The court found that this patent disclosed no invention in view of the knowl-

MARCELINE SHINES ON SCREEN AND AIR

MOTION pictures and Radio seem to be drawing nearer and nearer together as the common and most available means of entertainment for the great majority of the people. The stars of one often step across the stage to be stars of the other and soon, it is believed, motion pictures will come by Radio into every home where there is a Radio receiving set.

And that, as well as the beauty of her face, accounts largely for the appearance of Miss Marceline Day on our cover this issue. Miss Day is one of the newer stars of the Metro-Goldwyn-Mayer aggregation. You know they have fifty of the most popular screen stars of the day under the M-G-M colors. Miss Marceline is one of the beauties whose stellar brilliance is growing brighter every day. The picture shows her in the very latest pose by the photoplay portrait artist and just as she appears glancing back from the M-G-M microphone at WHN.

Fourth Patent O. K.

"The fourth patent of the group—No. 1,244,217—granted October 23rd, 1917, was held to be valid by the court and claims 1 and 4 to be infringed by the defendant. This patent is known as the 'potassium getter and keeper patent.' This material is used for assisting the getting of a vacuum and maintaining the vacuum after it has been obtained.

edge many years before it of the employment of flash material for the same purpose, specifically including magnesium, the subject of the patent, in vacuum tubes, specifically including Radio tubes.

RADIO PARROT DIES WHILE HOUSE BURNS

Children Mourn Static, Famous Pet of WLS Lullaby Boys

STATIC, the famous parrot of Ford and Glenn, whose voice was familiar to all listeners of WLS, the Sears Roebuck station, is no more.

In spite of heroic efforts on the part of the Oak Park fire chief he succumbed to fumes at a fire which caused havoc in the home of Glenn Rowell, the Glenn of the famous harmony team.

Glenn, and children who had gathered about the scene of the fire, were frantic when it was discovered that Static remained among the missing. Fire Chief Waters dashed into the flaming building, groped his way through the smoke, and up the blazing stairway to the second floor where the parrot was kept in a room of his own. By this time the entire upper floor was a swirling mass of flames. But the chief persevered breaking through a window and getting a slash of broken glass that half severed his left thumb from his hand. Static lay in a singed and crumpled heap beneath his perch. The chief picked him up and finally succeeded in getting to the open air, the parrot in one hand and the other spurting blood. His face also was seared by the flames. Static was dead.

Static had been in retirement for about a year, while Ford and Glenn appeared at various stations and in theatrical engagements. Previous to that time he probably enjoyed more fame than any other parrot that ever lived.

Ivan Jones has been introduced as a new announcer at KYW, Chicago.

SHORT WAVES

By Marcella

Coon-Sanders Orchestra Discovered; Bob and Bobby Unearth Two Romances; KFRC Ad Brings Results; WIP Announcer's Terrible Past.

MARCELLA has so many things to tell you this month I doubt if they will confine themselves to one column. We have had so many visitors and each visitor brings a little news of someone else until really, as I say, where can you put it all? So if your questions are not answered at once, don't be discouraged, Marcella is working on them.

Jimmy, I enjoyed your letter so much and I wanted to answer it at once, but how could I? The Night Hawks were lost somewhere. At last they have come up to the ether again. Haven't you heard them over WBBM or WJBT? This orchestra is one of long standing. It was organized shortly after the war and has been playing ever since. Six of the men are ex-service and all but one are married. Don't ask me which one is not. He keeps it secret as a means of protection. Both Joe Sanders and Carleton Coon are very good looking.

Joe is dark with luscious brown eyes and Carleton is tall with blue eyes and light hair. You can identify Joe by the piano and Carleton by the drums. Please write me again soon, Jinny darling.

Bob and Bobby, by asking me about John Brown you unearthed two romances which I might otherwise never have heard of. John Brown of WLS is engaged to June of the team of May and June formerly at WLS, now at WCFL. June is Juanita Rae, a sweet little girl. And I guess she finds plenty to like in John. He is over six feet tall, slim and blond with those lovely blue eyes. I have it on good authority that he has a pleasant personality. He says his hobby is playing the piano at all times. But we can think of a better one for him, can't we?

But here is what you did, Bob and Bobby, you uncovered a marriage and that of the lovely May to the WLS violinist, Koby Sivinsky. He isn't as tall as the stately May, but he has real talent as a violinist and is now playing with Paul Ash's gang.

You remember the December issue about the bachelor staff of KFRC and how skeptical I was? Here is Mr. Harrison Holliday's reply to that. "Marcella, your ad for the unleashed announcers and bachelor girl of KFRC at San Francisco has already shown results. Immediately following receipt of Radio Digest and the complete digestion of its contents, particularly the ad, Harold G. Peery, chief technician of the station, announced his intention of embarking upon the possibly turbulent sea of matrimony—so he is definitely 'hooked.'"

Then came the next shock—having thoroughly absorbed your column, wearing an expression indicative of far-away thoughts and frequently mispronouncing announcements, Munroe Upton, known to Western radioists as 'Simpleton Fitts' has weakened and finally given in to some sweet young thing whose details, both heart and Radio, have been heretofore tuned permanently to Simpy's charming voice. The bachelor-girl, "Peggy O'Neil, boys, is still loose. (Officer, hold that crowd back!) I should think he should, isn't she cute?"

You ask me about Edward A. Davies, that pioneer announcer of WIP, Philadelphia, Evangeline. My goodness, is there a place that man has not announced something or other? He says he has broadcast from the bottom of the ocean, from 6,000 feet in the air, from every conceivable place on land, including the Eastern State Penitentiary, Philadelphia, football games, zoological gardens, grand opera and almost any other place that it was possible to get a microphone. Sounds like a terrible record, doesn't it? Yes, Evie dear, he is married and his wife is a concert and operatic singer. He's about thirty-five and terribly goodlooking as you can see. Ain't it the truth, they are always married? Oh yes, he has a hobby for going to Europe, which hobby was satisfied last summer.

(Continued on page 23)

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Looking Ahead

Special Galaxy of Pictures will characterize the next issue of Radio Digest. As many stations as can possibly be represented will have photo personalities in the March Radio Digest Picture Album. Don't miss it for a keepsake.

New Ideas in Broadcasting will be discussed in an interesting manner by a forward looking director who has made a success of his station.

A Brand New Circuit will be shown from the workshop of one of the Radio Digest's technical experts. It's a WOW, they say.

Final Instalment of the Simple Explanation of Broadcasting will be published in the March issue of Radio Digest.

Special articles about broadcasting stations and artists, with photographs, are desired. No manuscripts accepted unless typewritten and prepaid, or returned without return postage being inclosed. All manuscripts are sent at owner's risk.

Newsstands Don't Always Have One Left

Every Month New Wave Changes in the Official

Radio Digest

Call Book and Log

BE SURE OF YOUR REGULAR COPY BY SUBSCRIBING NOW

SEND IN THE BLANK TODAY

Publisher Radio Digest, 510 N. Dearborn St., Chicago, Illinois.

Please find enclosed check M. O. for Three Dollars (Four, Foreign), for One Year's Subscription to Radio Digest, Illustrated.

Name

Address

City

2-28



Harry C. Browne—Alias, Captain Kidd



SEVERAL months ago when a certain advertiser desired something unique in the way of a Radio broadcast program, the Columbia Broadcasting System called upon Harry C. Browne for his best idea of a unique feature. After a few minutes' thought, Mr. Browne gave voice to a brief outline which later became the Cap'n Kidd Program. Inasmuch as it was his idea, Mr. Browne was given complete charge of the production and cast himself in the role of the jolly buccaneer, Cap'n Kidd.

Looking back over the life of Harry C. Browne we find ample reasons for his ability along this line. He has devoted twenty-five years of his life to theatrical work. Mr. Browne received his early dramatic training in stock and repertoire, later playing leading parts with such well-known artists as Lillian Russell, Frances Starr and Irene Bordoni. His experience has not been limited to the stage, however, having ventured into the motion picture field and been

starred in important roles with Mary Pickford, Hazel Dawn, Constance Talmadge, Mae Murray and Corinne Griffith.

In addition to all this, Harry C. Browne has made some 50 phonograph records of old minstrel songs. The playing of the banjo is his pet hobby and most of these phonograph records are made with his own accompaniment on his favorite instrument. An idea of Mr. Browne's position in the theatrical world is gained from the fact that for many years he has been on the Board of Directors of the Actors' Theatre, the American Theatre Association, and since 1919 has been counsel for the Actors' Equity Association. He came to the Columbia Broadcasting System as a production director and also to lend his playwriting experience on special continuities. Prior to joining the Columbia organization, Mr. Browne was the station director of WGHP.

The Cap'n Kidd Program, which was conceived

entirely by Mr. Browne, has proven to be one of the most popular features on the air. The broadcast is built on the fantastical supposition that Cap'n Kidd has returned to earth and, remembering that through his raids of centuries ago he deprived many people of their fortunes, in his second life he is endeavoring to restore to them, through excellent Radio programs, what he took away from them in his pirate days. Supporting Cap'n Kidd are members of the pirate crew known as One-Eyed McGee, John, Gypsy, Grumpy, Swede, and Stump McKenna, all of whom have vocal and instrumental talents not generally found among a buccaneer band. In addition, Cap'n Kidd has mustered his own orchestra, and to assist himself and his artists in giving entertainment, each week Cap'n Kidd captures some particular group as feature attractions. One week he sent his crew to bring a firemen's band to the studio and next week he captured a minstrel show,

FANS' LETTERS AID RADIO COMMISSION

THOUSANDS GIVE PLANS FOR IMPROVEMENT

Many Radicals Propose Measures of No Value—Commission Sums up Own Conclusions

SOME of the proposals of the Radio fans of the United States were acknowledged as very helpful to the federal Radio commission when it first came into being, while others were considered fanatical and impractical, says the first annual report of the commission made to congress. For the guidance of the commission some 3,000 letters and telegrams were read of which the following is a brief digest:

1. Whatever plan is followed, every station must remain exactly on its assigned wave length. A crystal or other control should be required to accomplish this purpose.

2. Stations logically should be classified into the big and the little, or the high power and the low power—the local and the national—the general and the special. The higher-grade stations should have greater range and signal strength and more desirable frequencies upon which to operate. They should be subjected to the minimum of regulation by the government. The other class should take what is left. They should be purely secondary in everything but regulation.

3. Pirates should be given no consideration. Fundamentally they are persona non grata with the rank and file of Radio listeners. They simply interfere with good programs.

4. Directly advertising wares must be either entirely prohibited or greatly restricted. It has been suggested daylight hours only be used for advertising directly.

5. All transmitters should be located outside of cities and congested areas, particularly outside of residential districts.

6. Telegraphic interference is either ruining or seriously jeopardizing broadcast reception in many specific localities. Foreign ships and wandering amateurs are charged with this high misdemeanor.

7. Chain broadcasting is either the greatest blessing or curse of broadcasting. The conclusion is dependent entirely upon either the location of the listener or his particular taste. It is noteworthy that but few suggest the elimination of chain broadcasting. Hours of operation and power limitations and specific frequencies come in for appropriate attention when discussing this subject.

In connection with the beginning of its work the commission in its report, which covers the time of its first meeting to June 30, says in part:

Channels Were Cleared

The work of the federal Radio commission from its first meeting, on March 15, 1927, up to June 30, was devoted almost exclusively to clearing up the broadcasting situation. With the physical capacity of the available channels, or wave lengths, already far exceeded by the number of stations actually in operation, and with no provision in the law for the federal acquisition or condemnation of broadcasting stations in order to reduce the total number, the commission found it necessary to evolve some plan whereby, without any unconstitutional exercise of arbitrary authority, the listening public could receive more dependable broadcasting service, and whereby a gradual and orderly development could be counted on to bring about a progressive reduction in radio interference.

The following record, taken largely from the orders and bulletins of the commission, outlines the steps whereby this plan was evolved and put into execution. These steps were, in brief, four: First, the determination of the best scientific opinion through a series of public hearings; second, the internal organization of the commission, handicapped as it was by lack of funds, to handle the enormous amount of documentary material which was required; third, the protection of the broadcasters against liability for unlicensed broadcasting until a suitable basis for the new licenses could be worked out; and, fourth, a complete new allocation of frequencies, power, and hours of operation for all the existing 732 broadcasting stations to provide adequate local separation and a basis for the gradual elimination of distant interference.

Signal Mars by Beam

WASHINGTON.—Dr. A. N. Goldsmith, chief broadcast engineer of the Radio Corporation of America, is planning an extended experimental effort to communicate with Mars. If there are intelligent inhabitants on the planet he believes they will be able to comprehend a dot and dash code if there is sufficient repetition. The plan of attempted communication would involve the use of a huge beam transmitter or a bank of searchlights.

CONDITIONS BETTER SAYS O. H. CALDWELL

JUDGE CALDWELL, commissioner from the South, declares Radio conditions are much better in his district. He says:

"I did considerable listening in white at my home in Jackson, Miss., which is approximately 250 miles north of New Orleans and 280 miles south of Memphis. Among the stations that are now coming in well down there are WEAJ and WJZ, New York; KDKA, Pittsburgh; many of the Chicago stations; WCCO at Minneapolis and KFI at Los Angeles. Also I was able to pick up Mexico City and Cuba."

Leader Warns Against Corporation Monopoly

Edward H. Nockels of Chicago in behalf of the American Federation of Labor made a sensational attack at the short wave hearing in Washington by charging that Radio Corporation of America and the American Telephone and Telegraph company are scheming to assume control of the air on the American continent.

"I think it is perfectly obvious," said Mr. Nockels, "on the very face of the arguments they present, that the United States should begin at once to take notice and retain a few rights for the good of the majority of the people."

BEAUTY DISCOVERED VOICE BY CHANCE



MARIE BRONARZYK, the pensive young beauty above, very nearly became a devotee of the test tube. She specialized in chemistry in high school and was preparing to go on studying along these lines in college. Her music teacher, her Radio audience and the music critics persuaded her to continue with her voice training. They all felt that here was a voice of uncommon beauty and of big register.

Salisbury from Wisconsin Appointed Radio Chief in Agricultural Bureau

Not a Particularly Remunerative Job But Proved Good Stepping Stone For Sam Pickard on His Way to Post as Member of Federal Radio Commission

THEY have a new chief for the Radio division of the department of agriculture at Washington. The salary connected with the job is nothing to worry the income tax taker, which may account somewhat for the long delay in finding someone to seek it.

However, the job has great possibilities. It was held less than a year ago by Sam Pickard, who really organized the division. When a guiding hand was needed for the new federal Radio commission Mr. Pickard kissed the department of agriculture goodbye and became secretary of the commission. Salary inducement was not negligible.

A few months as secretary of the commission and Mr. Pickard was promoted again, this time by Presidential appointment to fill one of the \$10,000 chairs of the commission itself. The impetus he had given the office of chief of Radio division of the department of agriculture carried the work forward without a new incumbent being installed.

Now Mr. Morse Salisbury has been formally appointed. To be sure the an-

nouncement plainly states that the appointment is "temporary," intimating nobody can ever tell what might happen as the result of the formal civil service examinations for other applicants. But it is generally understood that Mr. Salisbury is not throwing up his job as editor of the press bureau of the University of Wisconsin and moving down to D. C. just to fill in for a few weeks while the department slashes around for another candidate to fill the civil service requirements.

Mr. Salisbury was trained by Mr. Pickard when the latter was director of Station KSAC at the Kansas State Agricultural college. He obtained his bachelor's degree at K. S. A. and has since devoted himself to the same line of work that made Mr. Pickard so successful. As an agriculturist he certainly knows his *Allium Lilinone*, he is an ex-journalist and broadcast announcer. Besides his bachelor's degree he will receive a master's degree from the University of Wisconsin. What more could one ask for the job? Young man, go West and then to Washington!

DAVENTRY STATION WILL HELP SCIENCE

LATTICE ANTENNA LOOKS LIKE HALF-SIZE

Engineers Observe Scheme Connecting High-Tension Direct Current to Power Tube Anodes

THE first programs of 5GB, the new Daventry experimental station, England, are being heard very successfully throughout the country. The object of the station is to provide an alternative program to that of 5XX (Daventry) and 2LO (London).

Beside the nearby 5XX, both the building and twin aerials of the new station are dwarfed, yet the newcomer is by far the more powerful of the two! When the new aerial, 325 feet high, replaces the temporary one at present in use (only 110 feet high) 5GB should be heard at even greater strength. This new aerial, which is being brought from Poldhu, is already in process of erection.

The most striking contrast between the two stations is between the colossal lattice masts of 5XX (towering 500 feet high, and the comparatively insignificant aerial system of the new station. Again, whereas the aerial of 5XX consists of a single wire, each of those of 5GB comprises four parallel wires.

Employs Two Aerials

The object of using two aerials for 5GB is because the original one had a distinct directional effect towards London, whereas Birmingham was left out in the cold. The use of a second aerial overcame the difficulty.

The engineers put the aerial power of 5GB at 20 kilowatts, though the maximum input is about 65 kilowatts. Eventually the input will be raised and the aerial power will be about 30 kilowatts.

The actual transmitter works on a different principle from that used in other British stations. Modulation takes place at a low power, and the modulated carrier wave is magnified by a power amplifier using water-cooled tubes. Using this particular method, the engineers claim they have eliminated harmonics. Airplanes flying over the station have failed to detect any. A constant wave-length is maintained by the master oscillator, which is isolated from influences which might tend to vary its frequency. The Geneva wave meter is in position. This meter was designed to a standard pattern, and one was sent to each of the stations in Europe subscribing to the scheme, in order that they might keep a close check on frequency and avoid wandering from their particular wave-length.

Interesting Experiment

The supply to the anodes of the power tubes is carried out partly by a high-tension direct current motor generator giving 10,000 volts, and partly by a bank of six water-cooled rectifying tubes working direct from the supply mains and giving the same direct current voltage. This is an experimental arrangement. Another interesting feature is the supply of filament current under special test conditions.

NAA Spanish Airls Please Republics

Pan-Americans Appreciate Uncle Sam's Courtesy Programs—Factor in International Peace

THE ether wave is no respecter of national borders. It may pulse from the heart of one country and vibrate in the heart of a dozen others at the same time. Music is the universal language. It stirs the same emotions in the human breast everywhere.

However, there are those who believe international peace would be on a surer footing if the individual listener in the home could understand the words spoken by the speaker or singer across the boundary. In England the British broadcasting company is teaching the subjects of King George to understand the programs across the channel by language courses over the air. This has proved a great boon to the English DX hound, who is just as passionately interested in getting distance as his American cousin.

Uncle Sam has been carrying on the good work in the western hemisphere under slightly different circumstances. Here the problem is not so intricate, as we have but one dominating language besides English, and that is Spanish. The government has not made a point of teaching North Americans Spanish, but has been sponsoring good will programs by artists from Spanish speaking countries to the south over the naval station NAA at Washington, D. C., augmented by private programs.

WHO ORCHESTRA TAKES BIG LEAD

TELEVISION SHOWN IN HOME RECEIVER

ALEXANDERSON DEVICE TO SOLVE OLD PROBLEM

Photo-Electric Ray Through Revolving Shutter Makes Image by Radio Like Moving Pictures

TELEVISION in the home is a reality. All the cumbersome and costly apparatus that characterized the transmission of Secretary Hoover's face by telephone from Washington to New York has been reduced to a cabinet about the size of the average receiver or phonograph console.

The first one was shown the middle of the month just past at the home of E. W. Allen, vice president of the General Electric company, in Schenectady, N. Y. Mr. Allen had as his guests a number of well known scientists and a company of newspaper men. They were assembled in the large parlor of the home, the receiver was set up in the usual way. Lights were dimmed and a scene from the General Electric WGY studio was tuned in on two separate waves. For the ear the regular WGY broadcast wave of 379.5 meters was used, and for the eye the WGY short wave, 37.8 meters.

Voices emanated from the usual loud-speaker but over a small screen within the cabinet, illuminated from the rear, came the faces and features of the persons in the studio. They were quite as brilliant and clear as the average motion picture, except for the comparably miniature size of the screen. Every change of expression was clearly discernable, the flicker of the eye and the drift of smoke from a cigarette. Every guest present had the feeling that the moment was tremendously potent as a new mile post in the history of the world. Through brick walls and miles of space a man and woman chatted in a room by themselves. Every word that they said and every move that they made was clearly reproduced in this distant room. Not only was being reproduced here but in several other homes in Schenectady, for several of these sets had been prepared for the experimental tests of simultaneous broadcasting.

Many of the very keenest minds have been concentrated on the problem of television for years. Korn, Belin, Baird, and even the great Marconi have been working on the other side of the Atlantic to produce practical television. Practically all of the leading Radio inventors have been experimenting in America. The device described above was developed by Dr. E. F. W. Alexanderson, whose inventions have made modern Radio transmission possible. Dr. Alexanderson is consulting engineer of the General Electric company and the Radio Corporation of America.

The receiver which he used for television differs from the ordinary short wave receiver in that it converts the electro-magnetic wave into light instead of sound, and the light becomes an image corresponding in movement and shade modulation to the action of the artist at the transmitting end.

The fact that these images have been transmitted is hailed not so much as an accomplished fact in that regard as that the apparatus for receiving has been simplified into a receiver capable of being placed in any home for everyday use. A vast amount of laboratory experimental work has brought forth this development.

It is not yet a marketable product although a number of laboratory models are to be placed at central and strategically located points where they will be operated by technical observers who will report deficiencies for correction. Then will come the manufactured product and television for all who wish to buy.

(Continued on page 23)

SENATE MAY INSTALL MIKES ON EACH DESK

Senator Dill Submits Resolution to Arrange Broadcasts

ALTHOUGH army and navy engineers have declared impractical the proposal to establish a microphone on the desk of each United States senator there persists the hope that some way will be found to accomplish this end. (See military report on the project on page 15.)

A second resolution on the subject was introduced during the early part of January by Senator C. C. Dill of Washington.

The resolution provides that "the sergeant of arms of the senate is hereby directed at as early a date as practicable, to equip the desk of each individual senator with the proper electrical connections to which a microphone for Radio broadcasting may be attached, and also to install a microphone control switch-board to enable connections of each microphone with the broadcasting stations as may be desired during the senate proceedings, and the necessary expense for such installation of electrical connections and equipment is hereby authorized to be paid out of the contingent fund of the senate." The Dill resolution continues:

"The committee on rules of the senate is hereby authorized to make arrangements for the broadcasting of such proceedings of the senate as the committee may determine through such Radio broadcasting stations, as it may be possible to arrange for broadcasting without expense to the senate or the government." The resolution has been referred to the senate committee on audit and control.

CHRISTENSEN'S MEN SWING INTO ACTION TO WIN PLAQUE

San Francisco Produces New Live Wire Contender in Krausgrill, KFRC-WLS Leads Midwest District, CNRW Heads Dominion

Turn to Official Wave Table for Corrections

ALTHOUGH Radio Digest maintains a correspondent in Washington to keep in daily contact with the Radio commission, it sometimes happens that announcements of proposed wave length changes are withheld until after this magazine has gone to press. Such was the case last December, when presses were stopped and a new corrected page plate was made for the Official Wave Length Table. Contracts made it impossible to hold the issue up to make other changes throughout the book. The same situation seems in prospect for this February issue. Last minute changes will be found on the page carrying the Official Wave Length Table.

Radio Digest has maintained a long record for carrying the most accurate information on calls and wave lengths of any national publication.

WORLD'S MOST POPULAR RADIO ORCHESTRAS

Leading America	
Middle West	
Paul Christensen, WHO.....	19,993
Sun., 7-8 p. m.; Wed., 6:30-7; Mon., Fri., 12:30-1	
By Districts	
No. 1 East, Vincent Lopez, WEA.....	2,194
Mondays, 11-12 p. m.	
No. 2 South, Chas. Dornberger, KTHS.....	1,094
No. 3 Midwest, Maurie Sherman, WLS.....	3,388
Daily 6:35-6:55; Wed., Fri., 11-12 p. m.	
No. 4 West, Seven Aces, WBAP.....	8,148
Daily 6-6:30 p. m.; Sun. 9:15 p. m. on.	
No. 5 Far West, Walter Krausgrill, KFRC.....	5,665
Thur., 11-12 p. m.; Sat., 9-10; Sun., 8:30-11	
No. 6 Canada, Irvin Plumm, CNRW.....	4,185
Sundays 9 p. m.	

ZOOM! Zowie! Up they go! Will you look at the Christensen orchestra of WHO! They have called the rally again for Iowa. When the cornhuskers set out for Radio glory they climb all obstacles, and there's no stopping of them.

PAUL CHRISTENSEN AND HIS WHO CONQUERORS



HERE is Paul and his boys of the whirlwind Paul Christensen orchestra at WHO, Hotel Fort Des Moines, Des Moines, Iowa. They made a sensational climb to international leadership in the Radio Digest contest for the world's most popular orchestra. Everybody has a seat here but Paul. The names from the left are: Max Groves, Lyle Glazier, George Strobel, Richard Christensen, Bob Warner, Harold Pratt, Cecil Huntzinger and Ernest Anderson. But don't be too sure—there a big stir going around in other musical circles!

Two Radio cups have already been awarded to Iowa broadcasters, and now the boys of the Hotel Fort Des Moines seem to have shoved the stick clear over for a sharp rise clear above all competition for the beautiful gold plaque to be awarded to the most popular Radio orchestra in the United States or Canada.

Of course the trophy is not yet cinched. There's a loud voice—and growing louder—over on the Pacific coast. Walter Krausgrill of the Balconades Ballroom and broadcasting over KFRC took a sudden rise just before Radio Digest signed off for copy for this issue. A letter states that this is only a starter, that

gold plaques belong in the Golden West where the first gold came from, and they're going to bring the plaque to San Francisco. Swinging 2,500 votes at one swoop the KFRC airmen hopped into the five thousand class with a score of 5,665.

Reckon With Aces
But do not forget to reckon with those world beating Seven Aces of WBAP, Fort Worth, Texas. And Maurie Sherman's squadron at the Hotel Sherman hangar, skimming out on the WLS wave, are coming strong. The East is still going slow—maybe saving ballots for the bonus, or perhaps a little too blasé to get into a red blooded match with their more virile western contemporaries.

The Seven (come Ten) Aces underestimated, the Christensen cohorts of the North, but now that they have the range another month may tell a different story.

Tom Brannon, manager of the orchestra writes from the Texas hotel as follows:

"The Seven Aces, all eleven of 'em, claim to be the second orchestra in America to become a regular feature from any station, the other being the Detroit News orchestra. We began with the Atlanta Constitution, Station WGM, in 1922 and continued there until the station passed into the hands of the Georgia School of Technology in Atlanta. Then we went to WSB until we left Atlanta in October, 1925, and broadcast from WMC and WREC in Memphis at the Hotel Peabody. Leaving Memphis in August, 1927, we came with the Baker Hotel company and resumed our broadcasting over WFAA.

(Continued on page 18)

NUMBER 4 COUPON BALLOT

World's Most Popular Orchestra Contest

POPULAR ORCHESTRA Editor, Radio Digest, 510 North Dearborn Street, Chicago, Ill.

Please credit this ballot to:

..... of Station.....
 (Orchestra's Name) (Call Letters)
 Signed
 Address
 City..... State.....

2-28

RADIO PERSONALITIES AND EVENTS



DO NOT sink the set when all seems lost in the raging sea of Radio waves. Remember that WFMC, Berrien Springs, Mich., is the Radio Light House. Turn your helm until you catch the voice of Wm. A. Wentworth and you'll make the harbor safely.



MANY a romance has been quickened over a demi-tasse, and when Sophie Braslau's soft contralto comes over the air during the Maxwell hour He just naturally hitches his chair closer to the table to be a little nearer.



THERE are many interesting features to be heard any day of the week from WNBO, but nothing quite takes the cake so well as this Fa-Lo-Ben Hawaiian troupe. Their fame spread out from Washington, Pa., to such an extent there was no other way around for them but to make a tour of broadcasting stations throughout the country. Now their admirers have increased a thousandfold, and that Pennsylvania has a Washington has become a well known fact.



AFTER seeing America over the orchestra pits from the vaudeville stage Eva de Vol decided to tarry at San Francisco where she now sings over KPO for Californians.



HOMES are homes in New England. Kitchenette and hotel rooms are fewer in proportion to the population than in any other section of the country, it is said. Station WTIC, at Hartford, has recognized this fact and arranged its order of entertainment accordingly. Walter Dawley, organist at the Capitol theater, is a regular Monday night favorite with his Melodies for the Folks at Home. He fills many requests, especially for old time songs that have been almost forgotten.



BESIDES your receiver there are other home comforts and Home Comforts is the subject of many a wise discourse by Miss Anita Pam over WPAP. Housewives deluge Miss Pam with notes of appreciation. Men also write sometimes.



JUST about now Norman Brokenshire and his bride of a month are setting foot on European shores for their round-the-world honeymoon trip. They were married at Washington, D. C., December 10 and sailed on the Transsylvania January 25, 11 p. m. What a lot of aching sighs have been spent by his great host of feminine admirers! The bride was formerly Mrs. Eunice McCabe, whom Brokenshire met when they were both at WJZ, New York. She was then secretary to the publicity manager. The above picture was taken at the WPG studio, just before the wedding.



"IT'S very easy to fly—if you know how. Now I'm going to tell how. As I sit here in my ship I have before me—" Radio listeners who tuned in KFRC, San Francisco, have been able to get an air knowledge of the art of flying in a series of lessons broadcast by Lieut. Blaine Stubblefield of the U. S. mail service. But all were warned to make their first flights in company with an experienced pilot.

PICTURING BROADCAST ACTIVITIES



LUCKY little Cincinnatians not only hear the elaborate programs prepared for them at the Powel Crosley, Jr., station, WLW, but often are invited to attend brilliantly costumed affairs in their honor. Above is shown one of the groups from a living doll performance. They are the Fairy, Red Riding Hood, Spanish Doll, Dolly Dimple and Uncle Sammy Doll. Sixty dolls were in the ballet, which was directed by Paul Bachelor, opera ballet master.



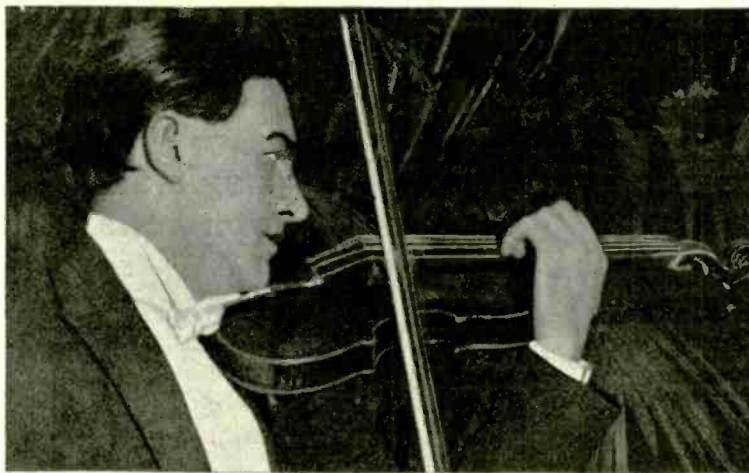
ROUND about 8 of any Monday evening you'll hear things begin to snap and pop at WSM, Nashville. It's the regular weekly frolic. Sprightliest of the flock to be heard gambling over the lea is Miss Christine Lamb, popular songstress.



NOT much trouble with static right now where Fred Carleton is announcing. His voice carries far from the CFAC and CNRC stations located at Calgary, Alberta.



"I" fairly glows out of the eyes of this pretty miss, chosen queen of the Oklahoma A. and M. college. She is Cynthalice Diggs, heard frequently over KVOO.



WITH the proud distinction of being the first broadcasting station in Chicago KYW has jealously maintained its leadership, both as to character of entertainment and quality of transmission. When Joska De Babary, the distinguished violin virtuoso, is on the air in the KYW studio it seems to the listener he has stepped from the receiver in person to play his violin as a special courtesy. De Babary is well known on the concert stage of America.



CHIEF TECUMSEH, Cherokee from the Yakima Indian reservation, whose native horn war whoop was detoured through the Chicago Musical college. He is singing his way on a Radio tour to Cuba.



THERE are no women in the Roxy Theater Symphony orchestra—but there is a woman, and perhaps Florence Wightman, with her golden harp, makes up for any other questionable feminine deficiencies. Miss Wightman lends her own personality to her instrument as she plays and whether the harp is in the ensemble or in solo it seems to vibrate a living rhythm, the breathing spirit of the rendition.



"HUH. HUH!" Norm's gone and got married. Sure. Yes, girls, no use to write any more mash notes now. The missus will answer them for him. Want to see the bride? Look right across from this corner on the opposite page. Lucky boy!" You can imagine these WPG Playground Revelers saying something like that in the microphone. They make up rather a new feature; from the left—"Chick" Lambden, tenor; Marie Higby, soprano, and pianist; Ted Shivers, baritone.

MANY ASK FOR LOW WAVES AT HEARING

COMMISSIONERS SURPRISED AT VARIOUS NEEDS

Railroads and Motion Picture Concerns Present Claims for Allocations on High Frequencies

WE are just coming into the short wave era of Radio. Practically all of the leading authorities are now bending their concentrated attention on devising methods for the greatest possible utilization of the infinite expansion believed to be ultimately possible for this phase of Radio transmission and reception—the strip now in the hands of amateurs and experimenters below 200 meters.

A few days ago the Radio commission began public hearings concerning the disturbance of short waves to interests which it had listed, as follows:

- Newspaper services.
- Communication companies, domestic and trans-oceanic.
- Airplane operating companies.
- Navigation companies.
- Railroads.
- Department store chains.
- Electric railways.
- Interurban bus systems.
- Electric power transmission systems.
- Mining and oil companies.
- Lumber companies.
- Farm cooperative organizations.
- Motion picture producers.
- Police and fire alarm systems.
- Forest and watershed patrols.
- Ranch owners.
- Operators of facsimile transmission.
- Television inventors.
- Radio broadcasters.
- Packers and shippers.
- Geologists.

It may be of interest to study over the above list and consider the significance of the various wants. Representatives of the army, navy and other branches of the government were present to submit their claims and defend rights to the channels already under their control.

Representatives of each class of service applied for were particularly invited to discuss:

- (1) The dependence of such service upon short-wave Radio rather than wire or other means.
- (2) The humane, social and economic importance of their proposals.
- (3) The number and position of channels believed available for such service.
- (4) Power required and interference likely to be caused to other services and other countries.
- (5) The probable total number of applications which will be made for such service within the next five years by all applicants in their class.

A national conference to consider readjustments made necessary by the rulings of the recent international conference will probably be held some time this year.

EVERYBODY SMILES AT PIGGLY WIGGLY STATION



a waiting Radio audience.

Below we have Mr. Albert Deses himself and none other. He is the clarinet soloist of the Piggly Wiggly orchestra. One of his favorite stunts is to play along with a

singer, give the singer a rest for a long breath, and the Radio listener never knows that she has stopped singing.

Mr. Hal G. Nichols is the announcer at this station.



L UCKY they who live where soft breezes blow these mid-winter days, and doubtless these smiling entertainers of Radio Station KFON, Long Beach, California, are thinking how much better it is to be there than sloshing through the sleet and snow like those of us who live north of Dixie. KFON is known as the Piggly Wiggly Radio station—help yourself and pay as you leave—only at KFON somebody else pays the bills and all you have to do is tune in and help yourself to a fine evening's entertainment.

For instance, behold the charming Dare sisters at the left—all fluffy ruffles, picture hats and sheer beauty with only one bit of ankle showing for the two of them. Harmony is the keynote for these two singers, in voice and disposition.

Just to look at the Bluebird Hawaiian Trio, at the right, is sufficient to incite a spirit of happiness. But you simply long for Long Beach when you hear them in those alluring Hawaiian melodies, which they understand so well how to present to

Four Legionnaires "Sing It Out" for Championship at Paris Convention

Brought Together in France During World War, Chicago Quartet Keeps Alive Old Camaraderie—Admiral Bill Signs Them to Help Man Radio Showboat on Jolly Cruises

WHEN President Wilson stood up, and said it was time for all good Americans to buckle on their belts and go to France to make the world safe for Democrats, he brought together the famous Four Legionnaires. Saul B. Kramer, bass; A. C. Osborne, baritone; H. H. Blocker, second tenor and A. E. Price, first tenor, started out from their respective homes in Chicago to see the sergeant. Uncle Sam measured them for new suits, gave them guns and they sailed for France.

They found plenty to do when they got over there, but there were times now and then when the four of them managed to get their chins together and hawl out a few majors and an occasional minor. (Musical, not military terms.) Their popularity spread.

In fact all the A. E. F. seemed to be needing their services as they were called from one canteen to another to do their stuff. The sergeant said they were so good there was some talk of taking them to No-Man's-Land to sing a hole through the line of the music loving Germans. There was a chance they might lasso the Kaiser himself with a few well chosen chords.

Germans Give Up

But while this project was under consideration the Germans decided it was no use. They surrendered. Whatever the peace terms may have signified to the rest of the world, and the Democrats, mattered little to Kramer, Osborne, Blocker and Price. They were signed up for life as the singing corps of the A. E. F. They went around to the various state and ward gatherings where men met and talked of the times Over There.

It was about three years ago that Edgar Bill of WLS discovered them as The Four Legionnaires. He marshaled them into the WLS barracks in the Hotel Sherman and put them in command of a microphone nest. The first crack out of the box was a volley of hits.

About that time the WLS Showboat was launched. Admiral Bill drafted the four soldiers into his merry crew. They have been sailing the ship over its jolly course on every trip since. Their success was so marked that other Legion quartets sprang into public notice. It was discovered that the expeditionary forces unwittingly had been unusually blessed with a great deal of first class talent.

Sing to the Finish

Various Legion posts scattered about the country began to claim their fours were the real plus fours—unus plus ultra—until it began to assume the proportions of a national debate. The only way a decision could be rendered was to call all the legions together in one place and let the several quartets sing it out to the finish. The Committee looked over Chicago, New York and San Francisco but decided that inasmuch as local interests would be apt to influence the decision of the judges in the interests of the local fours it would be better to go abroad.

After a great deal of discussion it was decided to go to Paris for the singing. So last summer they held a convention of the American Legion in Paris where all of the leading quartets marched up to the front line of the auditorium and sang as ne'er sang Legionnaires before.

It was wonderful. Never had there been such ringing hallalauhahs in France. But nobody anywhere was able to sing down the only and original Four Legionnaires from Chicago. The WLS Showboat deck hands, Papa Joffre, kissed each one of the four twice on each cheek and pinned on each breast a Medaille de Hallalauhahaire.

But, no foolin', The Four Legionnaires were declared the national champions of all American Legion quartets. Now they are back at WLS and greater favorites among the listeners than ever.

—H. P. B.

"BARKING TOM" DRIVES DOGS DAFFY

AT the right is barking Tom Corwin, whose imitation dogfight over WLS drove eight listening house dogs to hydrophobia two weeks ago. One dog came down to the Hotel Sherman but got lost hunting for the secret elevator to the studio. He ran across the street frothing at the mouth and dashed into the county building where he bit two women standing at a counter saying nothing and entirely innocent of Corwin's exhibition. A policeman, not knowing what it was all about, slew the dog. Tom imitates other animals and extra precautions are being taken at the bull pens in the stockyards. Below are The Four Legionnaires of WLS.



STARS BEAM AT KFVB STATION IN HOLLYWOOD



All of the Warner Brothers stars are not monopolized by the movie camera. Here are a few known to thousands through their broadcasts over KFVB, Hollywood. Their names are given below.

NEW stations on the Pacific Coast, or anywhere else in the United States have progressed with such enterprise and gained such prestige as KFVB of Warner Brothers at Hollywood. There seems to be a spirit of aggressiveness about the institution—that you are going to miss something if you miss tuning them in at least once during the twenty-four hour period. Elsewhere in this Radio Digest you will read of the remarkable work done by KFVB in hunting down the murderer of little Marion Parker.

Here is just a flash of the unusual staff artists to be heard over KFVB. At the

left is that especially popular Sullivan Trio with Louise Sullivan, the leader at the left, Georgia Booth, pianist and Florence Sullivan, mistress of the cornet, which may be seen half hidden by the picture of Florence Israel, who arranges the KFVB programs and presents Uncle Sam's Aunt Sammy bulletins from the bureau of home economics. That merry ha ha coming from the upper right is produced by Russell Colombo, left, and Leon Belasky, violinists extraordinary.

Checkers Revived by CJRM Broadcasting

Bridge a la Radio may be very fascinating for some people but you will have to hand the fur lined hand embroidered microphone to D. R. P. Coats, director of Radio Station CJRM, Moose Jaw, Saskatchewan, for thinking of Radio checkers.

He has brought checkers back to where it used to be fifty years ago, according to folks who write from both sides of the Maple Leaf border. Radio checkers is much easier to understand over the air, and it doesn't make a whiff of difference whether you sit facing east, west, north or south. The main thing is to watch your checkers and move them where the crack players in the CJRM studio tell you to move them. You learn a lot of fine and fancy checkering.

It got so good that sporting stores along the border towns made up special checker boards, hung them in the windows with the black squares numbered and fixed with little hooks on which to hang the checkers as the directions came over the air through the loud speaker. The operator would move for Tom, make it look as though Jack was hopelessly mired and then Jack would almost sweep his opponent's men clean off the board.

STORK LEAVES NEW BABE AT CROSLY'S

ICYBALL TWINS WILL KEEP ICE CHESTS COLD

New Refrigeration Unit Manufactured in Cincinnati Plant Operates at Two Cents a Day

ONCE more the stork has visited the Crosley Radio family. The new little stranger might almost be mistaken for a changeling except for a few of the well known Crosley characteristics. It has been christened Icyball and Ieyball it is. No, it is not a new receiver but the relation between Radio coils and tubes to refrigeration coils and bulbs is not hard to trace in a great institution like the Crosley plant in Cincinnati.

And young Mr. Ieyball bids fair to become an individual of some consequence before the hot days arrive when many folks will be more interested in iced diversissements than in Radio programs.

Ieyball is described as a new portable refrigeration unit, procurable at small initial cost and maintained at a refrigeration cost of two cents a day. Its availability and economy indicate that there will be a lot of good ice houses on the small lakes converted to summer cottages this season.

Speaking of babies, Ieyball is really twins. The Crosley announcement reads:

"Ieyball unit consists of two spheres, approximately ten inches in diameter, connected by a U-shaped tube. Once a day you heat one sphere on your stove; then, placed in the icebox with the heated end projecting, the refrigerator is kept cool all day. A volatile liquefied gas is compressed within the spheres. When the outside sphere is heated the liquid is gasified and forced into the refrigerator sphere which has been placed in cold water; here it condenses into liquid again. It is this ball which chills the icebox. When sufficient heat has been generated, a small whistle gives a signal that the operation is complete.

"Ieyball will freeze ice cubes within three or four hours and as the temperature of the cabinet remains at a low degree, food generally classed as perishable, may be kept pure and usable at all times.

"While Ieyball is primarily designed for the pleasure of the housewife in the city as well as the country, it will serve a similar purpose anywhere that ice is needed. The unit is not heavy and may be moved from one place to another very easily.

"Ieyball unit includes an ice tray and a galvanized cooling tub. The cabinet is finished in white enamel and carefully insulated. It has two wire shelves for food and a capacity of more than four cubic feet of food space."

Charles Gabriel Considers Pacific Coast Stations Superior in Quality

Compares Programs There With Broadcasts He Has Known in Chicago and New York—Los Angeles Is Jazzy but San Francisco Dallies in Classics

By Charles Gabriel, Jr.

Assistant Program Director, Pacific Division, National Broadcasting Company

WHEN I made my sixteenth heira to the west, intent on recreation, I unwittingly had purchased a surprise coupon in addition to the usual yardage of railroad ticket. This was not divulged until I became program director of KLN at Oakland, Calif.

To be explicit, I had left WGN, Chicago, nearly three years ago when entertainers were either free of charge to the stations or were paid as staff members who "doubled in brass," the hirings of carpet companies, music publishers or what have you. We had just begun to think about setting aside less than \$200 a week for the then rather startling purpose of paying "talent" for its efforts!

When I arrived at the edge of the Pacific Ocean, I found that "free" musicians all came from the ranks of amateurs, and very rank at that. Any musician worthy the title not only received from \$5 to \$25 for a contribution to an hour's program but, as a usual thing, had affixed an illegible signature to a printed paragraph or two which meant an exclusive contract with the leading stations.

Frankly, Radio entertainment on the Pacific Coast at that early dawn was in some aspects much better in quality, if not in quantity, than it was in the Middle West. It didn't quite compare with the wave agitation along the Atlantic Seaboard but this partial belittling should be ascribed solely to the fact that good entertainers were not and are not now as plentiful out here as back there. It is a matter of percentages. With as many people in

and about New York City as in all California it is not astounding that the number of "strolling players" per thousand of peaceful householders is less by the Golden Gate than within hailing distance of Bedloe Island.

However, I soon found that even professional talent varied by district. In the City of the Lost Angeles, home of the disillusioned winners of beauty pageants, haven of the jazz babies and bourne of theatrical talent bent on picking "easy money" from the celluloid, good entertainers are a drug on the market. In the midriff neighborhood—centering in the San Francisco bay section—entertainers are to

be sought with a microscope while venders of the "classical" compositions are legion. No one, or no organization sidles up to the microphone without clutching an agreement to accept emolument, save it be Elks Club minstrels, Shrine chanters, Native Sons' brass bands, police orchestras, music school graduates, Chamber of Commerce rallies, church choirs and the like. I cringe when discussing pay checks but I may say that outstanding talent now commands a fair living wage from Radio dates alone. But, note the word "outstanding."

Up North—that is Oregon and Washington—conditions are again different. Good and professional entertainers are so few in number that most of the leading broadcasters get out iron-studded contracts and point to the dotted line. This applies to orchestras as well as soloists.

All of this means that the Radio audience of the west gets the best obtainable when the loud speaker—pardon! the reproducer—is turned on at any hour of the evening. Whether this presentation, viewed

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"DEACON" AND JOHN WRR STAND-BYS



IT'S been a long time since Radio Digest has printed a picture of the celebrated dignitary of WRR, Dallas, known to Radio listeners as "The Deacon." Try to pick him out from the two faces pictured above. Yes, that's right. You couldn't miss him. His real name is George Perfect (make your own mind, he's used to it).

Naturally, the other is John Thorwald, director-announcer. John wrote us he was starting December 1 by airplane to broadcast from the leading cities throughout the country and would call on Radio Digest in Chicago. Which is John? Oh, he's the one with the letter we sent urging him to call. Guess he hasn't read it.

SPREADING JOY IS BOB EMERY'S WORK

MEN, BOYS AND LITTLE FOLK HELP BROTHER

WEEI Feature Unites Great Boston Community Into Kindly Service for Mutual Betterment

*"The world will be brighter,
Your cares all seem lighter
By spreading joy all the while."*

AND that is Big Brother Bob Emery's philosophy of broadcasting at WEEI, Boston. Those who dwell within Big Brother Bob's realm of broadcasting say that he has made a success of that principle. He is spreading joy all the while, and very happy to be alive.

Being a BIG brother he obviously must have little brothers. He has thousands of them. They help him make life what he tries to make it by assisting in the programs at the WEEI studio. For example he has a boy's band that is considered a marvel. It's a boy's band in spirit but a man's band in ability. The boys know their fiddle strings and sound valves.

But they do not take their work too seriously. They have heaps of fun out of it. They do all the clowning you will see in any of the traveling jazz jazz orchestras. They imitate famous personages and make the audience guess the names of the victims of the take-off. In fact these boys of Brother Bob's were so good they signed up with B. F. Keith for a short term during the summer vacation last year.

Spelling Bees Popular

Another one of Brother Bob's big successes has been the spelling bees. He has developed these old fashioned matches into an organization that extends far beyond the confines of Boston. It operates much the same as a fall schedule of football games between the various high schools. Districts and groups carry on the preliminaries in their own localities. Each room produces its champion. Eliminations continue until various section champions are declared. Then come the twenty-five winners of all the wide spread districts. These vie for championship before the microphone in the WEEI studio.

"And you would be surprised at the simple words that sometimes put down a boy or girl who is capable of spelling most of the long and complicated words in the dictionary," said Bob.

It is considered a great honor to win one of Brother Bob's championships.

Every normal boy has a desire to tinker and experiment with mystery devices. To satisfy this craving in the youthful system Brother Bob has acquired the aid of J. R. Lunt who seems to possess a bottomless bag of tricks to be performed according to instruction given over the air.

He gives the boys the low-down on how to put an egg into a bottle, how a microphone performs, stunts with iron filings and a magnet, producing smoke from an empty glass, changing the color of a flower and other phenomena of a scientific nature.

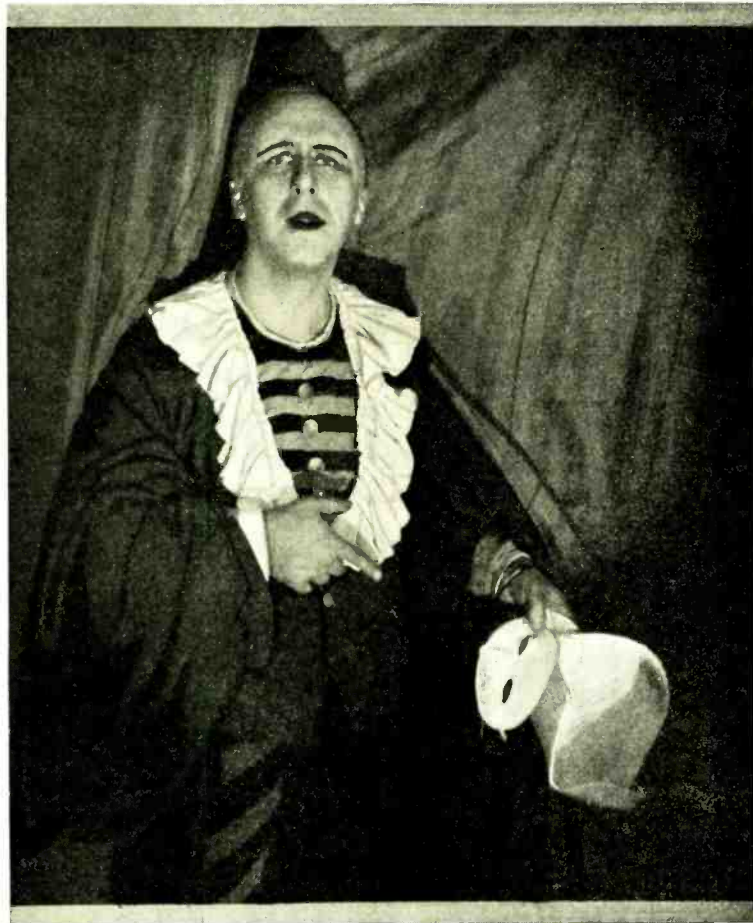
Some of Big Brother Bob's brothers are as big and older than he is. They may be found in the navy and marine hospital for whom a special program is broadcast every Wednesday night. The boys know that

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THIS is the famous Big Brother Bob Emery of WEEI whose activities of brothing thousands of boys and girls, disabled veterans and lighthouse keepers keeps him busy. He is called to cities in all parts of the country to advise on how to solve the problems of growing youngsters. His band of Joy Spreaders is the embodiment of the reason for his success.

RUSSIAN BARITONE JOINS NBC OPERA



Columbia Honors Foster's Memory

Famous Artists Review Old Southern Songs in Special Program Over New York Chain

WHO wrote Old Black Joe? Did you ever wonder who originated My Old Kentucky Home? And what about Massa's in de Cold, Cold Ground?

Listeners over the Columbia chain were entertainingly informed on these and other kindred songs on January 11 when a special memorial program was held for Stephen Collins Foster, the great American composer of Southern melodies. He died January 13, 1864.

Some of the other songs from the pen of Stephen Foster were: O, Susanna! The Camptown Races, Stay, Summer Breath, Doley Jones, Lilly Ray, Jeanie with the Light Brown Hair, De Glendy Burke, Dolly Day, Open Thy Lattice, Love and Old Folks at Home.

Many of the old composer's songs were new to Radio. One of the sensations was the Tloga Waltz which Foster wrote at the age of 13, and which was performed by him and three fellow students for the first time at the Athens academy, Athens, Pa. Foster received the largest simultaneous recognition ever accorded him through this special program devoted to his honor, and enjoyed by millions of listeners throughout the country.

Dies at Bedtime Hour

Mother's sweetest dreams are of the days gone when grown-up sons and daughters were toddling at her heels. A song, a bit of verse as she sits in reverie brings back tender memories. The heart overflows. It is not hard to imagine the little home scene pictured in this extract of a letter received at WCFM, Chicago, by Little Joe Warner, the children's singer:

"On the twentieth of last October my mother came to visit me. In the evening we were sitting around the Radio listening to your station. The Red Peppers sang our favorite, 'When Baby's Feet Go Pitter Patter.' Then mother said, 'If Little Joe Warner would sing his Up in the Air song I would be entirely happy.' Almost immediately he did sing it, as though he had heard her request. When he had finished we started to laugh at the strange coincidence. Somebody spoke to mother but she was silent. She had passed to her eternal sleep."

Hushed for her were the sounds of baby feet, and softly she passed on the wings of a song to a land where love is forever young.

To Stall on Air Takes Gift o' Gab

Eugene Konecky Holds WOW Audience an Hour Killing Time Between Delayed Fight Bulletins

WITH time on the air rating as high as \$1,000 a minute one can hardly conceive of a situation where one simply gabs and stalls to keep the microphone open. Yet this sometimes happens, even with the best of stations.

Take the case of a recent opera broadcast where an enormous sum was paid to put on an act of the Chicago Civic opera. There was delay in getting the stage set. Golden minutes were ticking away, but a smooth tongued young announcer kept the great NBC audience interested by his chatter concerning details of this particular opera. In fact he sold the listeners so strong with his personal observations, and chat with Miss Mary Garden, the prima donna, that the arrival of the conductor in the orchestra pit, and the swell of voices from the ensemble brought on a veritable climax.

In the midst of it the hour struck ten. One great Chicago newspaper station irritated its audience unspeakably by cutting the broadcast off short and putting on its own propaganda. The other stations, however, continued and the work of the stalling announcer made the entire program even better than it would otherwise have been.



Eugene Konecky

Grand Champion Staller

But the Grand Champion Staller is a title that has been claimed for Eugene Konecky who stalled successfully for one hour and seventeen minutes during the Ace Hudkins-Joe Dundee fight on the Pacific coast.

The fight was scheduled for 10:00 p. m., Pacific time, or midnight central standard time. The World-Herald, an Omaha newspaper, which has its own studio connected to Radio Station WOW, had promised Nebraska Radio fans a blow-by-blow description of the fight, and interest in the broadcast was intense, as Hudkins is a very popular Cornhusker product. Eugene Konecky, one of WOW's announcers, was selected by the World-Herald management to broadcast the fight. Promptly at midnight, Konecky took the mike and proceeded to recite the usual introductory material, statistics of the bout, each fighter's past record and present rating. Still no bulletins were available. Konecky gives his own version of subsequent developments as follows:

"At the end of fifteen minutes I had run out of my prepared 'dope' and in all that time, we had had only a few bulletins of general statistical character. I knew something was wrong—something unusual. Finally, a tell-tale 'bulletin' trickled through. It gave the results of the first

(Continued on page 20)

AIDAN REDMOND KEEPS STAFF BUSY WITH VARIETY PROGRAMS ON WBZ-A



form he delegates part of them to the three whose pictures appear here. At the left is Miss Emilie Sturtevant while George H. Jaspert, front and center, speaks for the new WBZA studio on the Statler and W. Gordon Swan, at right, is the evening program director.

AIDAN REDMOND, chief announcer of the Westinghouse stations WBZ-WBZA, Springfield and Boston, Mass., has a great many duties to perform guiding the output of these two important broadcasters; besides he is soloist for the very popular Bert Love orchestra at the Hotel Statler which takes the air five nights a week. With so many duties to per-

KFWB Spreads Net That Captures Fox

Two Oregon Deputies Recognize Fugitive Killer by Description Broadcast from Hollywood by King and Ray

By Harold P. Brown

IT was Radio Station KFWB whom the mayor and the chief of detectives of Los Angeles thanked for the capture of the bloody Fox, Edward Hickman.

Written tributes to that fact will be forever treasured among the mementoes of the Warner Brothers studio in Hollywood. The episode stands now as the most amazing story of Radio service in appeal and response on record.

Through the brilliant team work of Station Manager Gerald King and Announcer Bill Ray in less than a day a reward fund of \$50,000 was pledged by listeners, a posse of automobiles and horse riders numbering thousands was organized, and the direct information furnished that resulted in the capture of the fugitive.

Tom Gurdane and Buck Llevation told that part of the story themselves as they later came to see the men who had broadcast bulletins and made appeals throughout that terrible Saturday night and Sunday.

Air Description Traps Fox

The two Oregon constables had little expectation that the wily Fox would cross their trail as they rambled out along the highway from Pendleton. But they carried a scrap of paper on which they had scribbled the words of Bill Ray who had warned all citizens, and especially peace officers, to be on the alert. They had heard Bill tell just how the man looked, the kind of a car he had and the numbers that were on the new \$20 bills extorted from the distracted father of the murdered child.

So Tom and Buck were looking sharp at everybody and checking up on the scrap of paper when the car that came their way seemed to tally.

"Looks like the car," said Tom as Hickman's car drew near.

"And it looks like the man," answered Buck with one last quick glance at the notations.

As for the Fox those infinite invisible ether waves turned out to be the fine wires of a steel net that probably will end in a hempen loop about the neck.

He was trapped, just as the Gorilla strangler had been trapped by the same means through CKY in Manitoba a few months ago, and who paid the death penalty January 13th, as told in the last Radio Digest.

Cline Pays Tribute

"You can say for me," said Chief Cline after the Fox had been securely caged at Los Angeles, "that this has turned out to be the most remarkable achievement of instantaneous organization and coordination between the citizens of a city and the officers of the law that I, in all my thirty years of service as a police official, have ever seen."

Chief Cline said all that could be said by anybody. It was the most remarkable mobilization of an untrained army ever known. Radio broadcasting had been put to an unusual test and made good. It made good not only for the police but for the listeners who had been aroused as never before by any broadcast. They concentrated on the little point on Sunset boulevard from seven states as bees swarm to the branch of a tree. It was a terrific strain, but the morale stood true and triumphant.

All broadcasting stations in the area were of course entitled to a share of Chief Cline's praise. They all helped. The big thing about KFWB was that it dropped everything at once and gave undivided attention to the chase. During those hours of unaccustomed broadcasting the outraged citizens knew that they could tune in KFWB at any moment and hear the latest information about the developments of the chase.

Readers will recall the dreadful tragedy on that December day when little Marion Parker was decoyed away from her schoolmates because she thought her father was hurt and was calling for her, how she found herself in the hands of a merciless fiend, and how her mutilated body was dumped by the roadside after her father had paid a ransom of \$1,500 to the masked kidnaper.

Police Ask Radio Aid

Hardly had the speeding Fox disappeared from sight before Chief Cline heard the news. He immediately electrified the whole department. Telephone bells jangled from one end of the town to the other. Off-duty men hustled into their clothes, bolting to lay hands on the red-handed slayer. Airplanes zoomed over highways and motor squads criss-crossed every street but the Fox seemed to have been swallowed up. The chief became desperate. He called all the broadcasting stations.

Now a broadcasting station performs with a certain amount of routine. It operates strictly according to schedule. And the holiest thing about a broadcasting station is the sponsored program. Program



Three Tired Boys—They spent 18 hours at KFWB microphone chasing Hickman and raising reward fund in greatest Radio man hunt in history. Left to right: Gerald King, manager; Frank Murphy, chief engineer and Bill Ray, announcer.

THAT there is no escaping Detective Radio was again demonstrated within the past few days with the capture of Michigan's child butcher, Adolph Hotelling. A farmer residing near the scene of the crime described a blue sedan and its driver he had helped from a mudhole shortly after the murder. The description was broadcast by the police. Hotelling was recognized by a fellow worker from this description. Subsequent remarks caused him to be reported to the police and sent to prison for life.

sponsors are the ones who put up the gold to give the listener free entertainment. The sponsor does not do it because he so loves the listener but because it is business. It is a very profitable form of advertising. He generally pays well for the privilege of sponsoring a program, and he signs articles of agreement, commonly known as contracts.

Just forty-five minutes after the mutilated body of little Marion Parker had been gathered into the arms of her broken hearted father Gerald King, manager of KFWB, was in the midst of a sponsored program. He was keenly watching that the sponsored program was being broadcast according to contract—and then he answered a telephone call from Chief Cline. As he listened his face paled and his hand clinched. He sat down and made notes. It was like old reporter days on the daily. He shot sharp inquiring questions into the phone and jotted down the answers.

"Count on us, Chief," he concluded. "KFWB is yours until you say when. And every man here is at your service. We drop everything else to chase this fiend."

Sponsored Program Chucked

The sponsored program for KFWB went bloney. In five minutes the station was in a drastic process of reorganization. Bill Ray, announcer and assistant manager, sat down to the microphone not to leave it again for a full thirteen hours. The greatest man hunt California has ever known was on.

King has long bushy hair. Ordinarily it is carefully combed and is the envy of all the Hollywood baldheads. But in a few minutes from this telephone conversation that hair was standing on end like the mane of an infuriated lion. Bulletins began coming from the police station, were put into broadcast language by King and relayed to the listeners by Ray. The other stations were continuing with their sponsored programs. Soon the telephone calls clogged the wires and it was necessary to hold one line constantly in touch with Chief Cline's office.

"Tell us what this guy looks like?" "What kind of a car did he have?" "Which way did you say he was going?" Thousands of questions came to the studio.

At 10 o'clock the whole area was up in arms. The police bulletins continued to flow from KFWB. At 11 o'clock the first of the other stations went on the air. Soon all the Los Angeles broadcasting stations were baying and trailing after the Fox like a pack of excited bloodhounds.

Start of Reward Fund

Then King decided it was time to inaugurate some more effective effort on the part of the public. Everybody was anxious to help, but how could they put their energies into action? This was a job for experts—skuths who knew how to detect and track criminals—not for amateurs. Sleuthing is a profession.

Persons who follow a profession depend upon it for their bread and butter. All this time the Fox was getting farther and farther away.

"Get out every man Jack who knows how to chase a crook," said King to Bill Ray.

"Well, these fellows can't give up their time for nothing," Ray rejoined.

"Then let's get the money to make it worth while."

"Great idea," answered Ray.

So King drafted the first appeal for a mammoth reward fund. Bill snatched the paper and commenced to put it on the air with amplifications of his own conception. Before the last words of the first announcement were uttered a dry crackling voice rasped over the phone.

"Now you're talkin', put me down for the first \$25 and I wish to God I could make it more. I'm sending a boy over with the money right now."

"Got the first \$25 . . ." Bill shouted to the Radio audience.

"Say you," another voice answered back over the phone. "Make it \$500 for me. And I'm going to see some friends who'll raise that ante. My check's coming right over." And sure enough, along came a check signed by Jack Gilbert, the moving picture star, for \$500. Then came a flow of more money.

Calls Out 40,000 Autos

The names came so fast that Bill didn't get a minute's rest. A string of names, a bulletin, names, more news and names—on through the night until daylight began to streak the eastern sky.

"Chief Cline wants everybody to get out and patrol. This fellow seems to have slipped through," said Bill about the time folks were getting ready for church. "We've got to hunt through the country and those who have automobiles can be of great service by covering the roads that lead out to Beverly Hills."

That second call to arms brought out forty thousand automobiles bristling with shotguns, rifles and revolvers. They patrolled every road over a fifty mile front.

"Take every horse we have—there are forty of them if you can get men to ride them," came the offer from a riding academy. Bill read that message to the listeners. It brought a whoop from Harry Carey's ranch and a hundred cowboys came by motor coach from the studios to fight for the forty horses to patrol through areas not accessible to automobiles.

"I'm going to read the numbers on those \$20 bills again," said Bill. "The police want every store keeper to paste that list up beside the cash register. If any of you folks think your corner merchant might miss this you had better take the numbers down for him."

Monday morning found a flood of number lists ready for service for every person who might possibly have occasion to

change a \$20 bill. This occurred not only throughout California, but down into Mexico and north over the Canadian border toward which the Fox was making his way. As far east as Denver merchants were watching for new \$20 bills.

All this time contributions were pouring in to raise the reward fund. The big switchboard of the Warner Brothers studios was thrown open to full capacity and manned by volunteer operators. In fifteen minutes after it had been opened it was overfilled. Then a newspaper opened its board to take the calls, then a great department store with sixty trunk lines, and the Western Electric company. As fast as new posts for handling calls were announced they were promptly swamped with more calls than they could handle.

Bill did not give up his seat at the microphone until Sunday noon. By that time the commercial superintendent of the telephone company called at the studio to inform the management that if they handled nothing but long distance calls the board would be unable to take care of them; that the big Hollywood exchange had booked the station solid for ten hours. There had never been such a test of Los Angeles telephone equipment. The effect was felt even in San Diego and San Francisco where it seemed all the people in California were trying to reach one small spot in Hollywood.

Contributors Block Streets

People formed in line outside of the studio in order to bring their contributions to the reward fund. The street became so choked with citizens anxious to help that the bus lines passing the corner on Sunset boulevard had to be detoured and volunteer traffic officers attempted to straighten out the jam.

An author, his name known the world over, marveled at Bill's eloquence. Said he had never heard anything like it—wanted to see the man himself. He left a check for \$250. Many simply emptied their pockets on the table for the six tellers who had come from one of the leading Los Angeles banks to handle the money. People without cash offered property. One offered a house and lot to be sold at auction. A woman offered a prize bulldog to be auctioned. The 110 piece Los Angeles Philharmonic orchestra offered its services to the station. An offer came from the musicians' union submitting the services of every member of its organization.

Mothers, fathers and children struggled for a position within the KFWB studio to see Bill Ray at the microphone. Many were shaken with emotion—some with grief, others with anger that seethed for revenge against the monster who had committed the horrible crime.

A red eyed man put down a one dollar bill and said he was the milkman who delivered milk to the Parker home. The dollar was all he had with him, but he wanted to give that if it would help capture the Fox. Listeners heard his sobers over the microphone.

Eddie Baker of the Christie Comedies looked in at the all but swamped Warner staff and volunteered such services as might be desired. The Christie folks handled the crowds within the studio and tried to make it possible for everyone to get to the front with contributions and also to get a glimpse of the announcer who had stirred the whole Pacific coast over the tragedy.

Sign Off at Five

It was five o'clock Sunday evening when reports came back from all sections of the seven surrounding states that the law forces and citizens were alert and on the lookout for the fugitive that King decided to call it a "day." The reports of the bank tellers indicated that KFWB listeners had pledged or already contributed to the sum of \$50,000 as a reward for the capture of the Fox. Had operations continued until midnight the bank tellers estimated that at least \$100,000 would have been contributed through this one source. But already everything had been done that could be done. Others had taken up the cause and KFWB signed off for the night.

Out through the hills and mountains, up and down the coast, the net had been spread. Again and again the numbers of the \$20 bills had been read over the microphone. The fugitive could scarcely hope to turn in any direction without being recognized. Cities, towns and farmhouses in every direction were on edge, observing every stranger—and especially ones who had new \$20 bills to spend. The result was inevitable.

Radio is proving its worth every day as an entertainer but as an instrument for reaching and putting on guard the great masses of the people it has proved on three recent occasions to be unsurpassed, and the opinion of Chief of Detectives Herman Cline is doubtless now the opinion of millions of others.

COWBOY'S BAND SURRENDERS TO WELCOME "CHARLOTTE AND MARY"



When Charlotte and Mary entered the studio of WLW, Otto Gray and his McGinty Cowboy band laid down their weapons in the shape of guitars and fiddles so that the girls would not be frightened. Then the announcer introduced them to the Oklahoma gang. Tommy Reynolds and Herschel Lenckle, left, were also there

Forget Your Trials and Worries by Tuning in Contented Studio at WLW

Miss Natalie Says Charlotte and Mary Have Given Trouble the Air—Broadcast Cheer to All Who Choose to Listen to Crosley Station at Cincinnati

By Natalie Giddings

"HAVE you been to see Charlotte and Mary yet?" asked the tall and bespectacled genius who supervises the Radio presentations at WLW of the Crosley Radio corporation, Cincinnati. "I have not," I replied, "they seem to be attracting a lot of attention." "You might cut the strings on those bundles the boy just left on your desk from the mail clerk," he rejoined. "I think you'll admit they are attracting some attention. I'd advise you to run over and take a look at their Contented Studio." The bundles were letters, and the letters were mostly about Charlotte and Mary. Who were they? Were they married? What color of eyes? Were they as sweet to look at as they sounded over the air? Where did they come from? What did the Contented Studio look like? There must have been a million questions like that. Being somewhat of a privileged character, I arranged to make my call at noon in time for the 12:15 broadcast. The air was rather misty and cold—not so inspiring for a study in contentment. But some of this feeling slipped away as I stood in front of the door of their studio.

There was something dainty and quaint about the place. I touched the old-fashioned brass knocker dubious as to its practical utility. It knocked once. Instantly the door popped open, a dimpled roguish girl in blue smilingly held out both hands to me. Back of her was a slender little miss, pretty and almost shy. Meeting Contentment Maids "I'm Charlotte, and this is Mary—just plain Charlotte and Mary," said the more mature girl with the same wholesome spirit that this announcement is made regularly to the Radio audience. "We were so anxious for you to come in time for the 12:15 Contentment club. And now you are really here!" I glanced at my watch. It was almost at the dot. Both girls peeked at the ruby eye near their piano which I recognized as the director's signal. It would wink brightly in a minute. "Sit down, please," Charlotte hovered for a moment, and Mary, she seemed very young and not yet quite grown, skipped over to the piano bench. The red eye blinked. Both girls were leaning over the microphone, the soft glow of a floor lamp reflecting the burnished copper of Charlotte's hair. All the blase dross of a hundred world seemed to melt away from my shoulders as I sat there in a smother of silken pillows listening to their voices. The whole spirit of the room was full of charm. I thought of their voices fitting out like a happy pair of blue birds over the chimney tops, beyond the great Ohio river visible below, over the hills and valleys and tree tops into the little homes by the wayside, the big mansion on the hill and everywhere permeating into human hearts with a message of comfort and tranquility against the tide of strife and combat that must come with each day of living for all. No wonder afflicted folks, the sick and the aged and those suffering bereavement and other forms of distress found these voices of contentment coming like a spray of rose scented water into a murky cheerless room. They were singing, "Look at the World and Smile." You couldn't help smiling. I couldn't, and somehow it seemed that there were so many more things to be pleased about than otherwise that why bother about the worries? Charlotte and Mary have a mission. They never think of it as a mission—that would be too serious for them. They just live it themselves and because some wise soul put a microphone in the room they impart these uplifting moments to thousands of others. The very fact that they realize the good of it makes them feel inspired to go joyously on with increasing ardor. Their little apartment studio is part of (Continued on page 36)

Women Organize Club to Study Government

The Government Club, Inc., is a patriotic organization, national in scope, formed to promote among women a better understanding of the principles of government, and to uphold in every respect the Constitution of the United States. Matters pertaining to the welfare of our country are studied and discussed at the regular meetings. The speakers are always persons of note, statesmen and laymen, each an authority on his subject. The meetings are broadcast at 2:30 p. m. over WGN the second Monday of the month.

This broadcasting of programs has brought to the Government Club many out-of-town members, some living as far away as Los Angeles and San Antonio. One member in Watseka, Ill., has opened her home on many occasions to interested friends who gather to hear the meetings. "The Star-Spangled Banner" is sung, the prayer for our country is read in accordance with the procedure of the Government Club, and at 2:30 they "tune in" on the speaker of the day. The Government Club acts as a clearing-house for accurate information on persons and propaganda that find a way to club programs. Every bit of information coming from this organization is absolutely accurate and has been checked and re-checked by persons of unquestioned integrity, according to sponsors, who will fight corruption.

THREE MUSKETEERS AND LADY, WMAK



HOSTESS, pianist and accompanist are three of the titles given to Gertrude Willet, left, of WMAK. Marcella should see the three handsome men above. She would immediately find out whether they were married. The Three Musketeers are George F. McGarret, Robert Strigt and William Fay. In their hands lies the destiny of WMAK.

Arrives at Century Milestone and Broadcasts Greetings to Neighbors

Mrs. Mary E. Bowen of Denver Declares She Is Ready to Start Another Hundred Years—Doctor Says She'll Get Ten More at Very Least

By Gertrude Bower

"RADIO FRIENDS, I will be 100 years old Tuesday. I have lived so long because I take care of today and let God take care of tomorrow. I will be with you next year because my doctor says I am good for 10 years more. Goodbye, Radio Friends."

Clear, if a wee bit tremulous, this message came over KFXF, Denver, the night of October 11. The voice was that of Mrs. Marie A. Bowen of Denver on the eve of her 100th birthday.

"I enjoy the programs so much," said Mrs. Bowen as she sat erectly in her wheel chair which she manipulates easily through the home of her daughter, Mrs. Jennie V. Dixon. "Especially do I enjoy the sermons."

Because of her inability to hear clearly in a church or hall, for 20 years Mrs. Bowen could not enjoy an address of any kind. Recently a league has been organized in Denver for the benefit of the shut-ins by Rev. S. H. Patterson, who has distributed some 125 Radios. Rev. Patterson and Grandma Bowen are the best of friends.

Enjoys Radio Programs

"And I enjoy music too," Mrs. Bowen commented.

The first night, after the Radio had been installed, Grandma deftly edged her chair close to the cabinet which her family hoped might bring the outside world in to her.

First a shrill squeak—another dial ad-

justment—a roar—one more turn—then clear and distinct, through the loud speaker came in an old time tune. But could Grandma get it?

Her face lighted up. She was smiling. "Why," turning to her daughter, "that's the very same piece your daddy used to play, 'Turkey in the Straw.'"

Ever since she has been a devotee of the Radio—and wonderful old lady that she is—was glad to greet her friends on her centennial anniversary from her wheel chair. From it she talked into her home telephone direct to KFXF, whose phone was connected to their set and in this way her message of cheer and hope was given to a world of listeners—not one of whom probably was her senior.

No Lightning Insurance

An interpretation of insurance as applied to Radio receivers was disclosed a few days ago when a lightning bolt destroyed a set in the home of Louis F. Zvedelik, Lombard, Ill. The insurance adjuster said that electrical instruments were not covered by the policy but that if the set had been destroyed by a fire that consumed the rest of the furniture the owner would have been paid.

This situation, according to Zvedelik, calls for a new brand of insurance especially for Radio receivers. Every set owner will want his set insured and agents would only have to drop a hint on the air to reap a harvest of orders.

LEADERS OF SECOND DISTRICT TRY A LITTLE "POOSH" TO WIN PLAQUE

Charles Dornberger Ready for Drive



"I POOSH, I POOSH" might well be the title of this picture which proves that the life of a member of one of the nation's most popular Radio orchestras is not all toot and fiddle. Here is an "out o' studio" glimpse of Charles Dornberger and his Victor recording orchestra of KTHS, Hot Springs. Charlie's boys are a merry tribe of troubadours now leading the South and the camera men caught them all smiles as Charlie Dornberger at the right is directing an attempt to push over the huge boulder that stands in the middle of the plaza across from the Arlington Hotel.

Tune in KGU and Hear Hawaii Calling

Siren Voice of Waikiki Heard on American Shores and Lures DX Hunters to Seek Eternal Spring in Pacific

THESE are the days when a young man's fancy lightly turns to Hawaii. If he feels that it would be too difficult to sail, fly or swim there he might try

to tune in KGU of the Honolulu Advertiser. There are plenty of Californians who have heard this station, and just to realize that a voice is calling you from Waikiki should excite some sort of a thrill.

The pictures on this page were furnished by H. N. Tyson, director of KGU, who bids all of the Radio Digest readers especially welcome to the "Paradise of the Pacific, where eternal springtime reigns supreme."

Lucky Mr. Tyson. You see his picture just below the two Hawaiian girls at the right of this column. The average temperature during the month of January, as Mr. Tyson will broadcast to you if you happen to pick him up on 270.1 meter wave, is just 70—meaning perfect. That's mid-winter, but take it in summer, well then the average temperature is 77. So no young man is to be blamed if his fancy lightly turns to Hawaii at any time of the year.

The Honolulu Advertiser has an enviable record. At the top of the letter head appears this legend: "Hawaii's Morning Newspaper—365 mornings each year since 1856." With such traditions and such firm standing it is not to be wondered that KGU is a steady going broadcaster, and the 500 watts at its disposal serves excellently for the whole Hawaiian group.

No Lack of Entertainment

And do not imagine that Hawaii lacks anything for entertainment. Honolulu is one of the most beautiful cities in the world. The hotels are modern. It is a haven for artists from all parts of the globe, and you may trust Homer Tyson or Marion A. Mulrony to see that distinguished guests—especially those with musical talents—are eventually introduced to the entire island population through the KGU microphone.

Native musicians always are in demand. As a rule they are happy to broadcast, for

BETTY MAKES RADIO ADS SNAPPY STORIES



NEW ideas in broadcasting are always observed with great interest by the fraternity. Now comes the Supplee studios of Buffalo, broadcasting over WMAK. Betty D. Supplee (above) supplies the name to the company, although there are several members to the staff. She began broadcasting as Dorothy.



Homer N. Tyson (left) never lacks for a good Hawaiian. He directs KGU at Honolulu. Above are two of the local favorites.

Miss Alice Cowart and her surfboat typify the spirit of Waikiki. Wouldn't you like to be there now? Below is Mrs. Mabel Walters, pianiste.

in this way their voices sometimes are heard by influential persons who may lead them to theatrical engagements in the United States. Take for example the two girls in the group picture, Miss Winona Love and Rose Tribe. They not only sing but Miss Love (left) is recognized as an exceptional Hula dancer. They visited the United States last spring and were feted everywhere, making a particularly brilliant hit with the Ad Club convention at Portland, Ore. In the lower right hand corner of the page is another successful Hawaiian star

now touring the United States, and well known to many Radio audiences. She is announced as Princess Lei Lehua. She writes to Radio Digest as follows:

"I have noticed many times photographs of Radio artists printed in your lovely magazine. I see faces from all over the world, but never have I seen a real Hawaiian girl there. Maybe you do not get such pictures, so I am sending you mine, if I may be so bold and you so desire.

"If it is of interest I would say that I was happy to broadcast many times from

WJAX, Jacksonville, Fla. The people were very kind to me and wrote such nice things when I said I wanted to go back to my beautiful islands in the Pacific. So I did go, but now I am back again in the States to entertain you and make you love our wonderful Hawaii. I danced cues for the Clara Bow Hula picture. In our company are Willie Kaiama, Honolulu's King of the Steel; Lani Kamika, who knows so well his little ukulele, and how to tell audiences about our beautiful islands, and Ernest Kamiki, Hawaiian boy tenor."

The fact that the true sons and daughters of Hawaii are imitated so widely by capable artists proves that they have a charm that is more than fancy. In the program popularity contest conducted by Radio Digest a few months ago thousands of writers included Hawaiian music as indispensable for the ideal program.

Going back to pictures at the top of the page we have in the center Miss Alice Cowart. Unfortunately it was impossible to reproduce it in the original colors as had been hoped by the KGU director, because, as he stated, "The scene as she stands there against her surfboard seems to typify the spirit of eternal springtime as it actually exists here at Waikiki. Eventually all America will think of this place as a little Paradise, the place to come and leave all troubles behind—to be care-free and enjoy life at its best."

Mrs. Mabel Walters at the right is concert pianist regularly attached to the KGU staff. Visitors who come to the islands for a few weeks of pleasure comment on her technique and peculiar ability to translate into music the distinctive character of the island atmosphere. A letter from an Oregon fan said that he had heard Mrs. Walters announced, and when she played it seemed as though he was at Waikiki instead of Waikiki in Oregon.

Perhaps one of these days KGU, by authority of the federal Radio commission, will be able to harness its power plant to fiery Kilauea, generate 50 or 100 kw., and we will all listen in, and catch a little of this romance that finds such blithe expression for the comparatively few who now hear it in California.

Radio Control May Go to Standing Committee on All Communications

New York Representative Visions Time Soon at Hand When Broadcasting Will Reach Gigantic Power—One Body Should Govern Entire System

CREATION by the House of Representatives of a standing committee on communications. Radio and broadcasting is provided for in a resolution introduced in the House by Representative Sol Bloom, of New York, one of the members of Congress who has made a special study of Radio and its possibilities. Mr. Bloom is convinced the latter are so great that legislation dealing with Radio should be passed upon by a regular committee, and not be dealt with in a more or less haphazard way by a committee which has other matters to consume its time.

Resolution to House

"My resolution provides for creation by the House of a standing committee on communications, Radio and broadcasting, to be constituted of fifteen members to be designated in the usual way," said Mr. Bloom. "I am doing this because I believe the time has come for Congress to realize the importance of Radio, not merely as a means of communication or for the entertainment it affords, but because of its commercial possibilities. Radio, as a means of communication, has already belted the globe and has obliterated time and distance. Yet its possibilities have hardly begun to be developed. I foresee the time when heat, power and energy will be transmitted by Radio.

"It has already been demonstrated that ships on and submarines under the sea as well as trains and automobiles on the highways can be guided by energy transmitted by Radio. If we can transmit sufficient power to steer a ship or a motor-car, it will be but a short while until we will be transmitting in the same way enough power to propel the ships and drive the automobiles. It is the beginning that

is always most difficult. Once the first air flight was made, developments came with startling rapidity until men were soon flying across the continent and now we have seen the oceans conquered in non-stop flights. Radio development will come with equal rapidity and feats we look upon today as verging on the miraculous will soon be commonplace occurrences.

Means Great Development

"All this means the development of a great commerce and a great industry. There will be many important problems, all of which will have to be dealt with in one way or another by Congress. Already the Radio and broadcasting business is one of the leading industries of the country. I feel, and many other members of the House agree with me, that the importance of this industry, what it means internationally as well as nationally and to the individual citizen, merits the attention of an exclusive committee of the house, to which would be referred all bills and resolutions relating not only to Radio, but to all lines of communication. The committee I am urging to be created would handle all legislation relating to Radio, wireless telegraph and telegraph and telephone lines. Some of these matters are now handled by the Interstate and foreign commerce committee and others by the committee on merchant marine and fisheries. These are important and busy committees, and have plenty of work to do to consider legislation relating to matters appropriately referred to them. My resolution would relieve these committees of work they may not have the time to do properly, and would assure full and mature consideration of Radio problems by a committee which would properly devote its energies exclusively to these problems."



PRINCESS LEI LEHUA of Waikiki thinks Radio Digest should publish pictures of real Hawaiian girls as well as imitators. So here is Lei herself. She is known to many Radio audiences and recently appeared at WJAX, Jacksonville. Now she has just returned from a brief trip home to her beloved islands, and is boasting Hawaii as the future playground of all Americans.

Broadcasting of Interest to Home Makers



Natalie Giddings, WLW

WLW Home Maker Feels Listeners Are Friends

"Fair, fat and forty" is the impression Natalie Giddings, director of the WLW woman's hour program makes on her audience. "You give the cooking chats with such complete assurance and you always seem so certain of everything you say that I was sure that you must have had a great deal of experience," was the surprised statement of a visitor to the station.

Although Miss Giddings graduated from college only two years ago, she is an experienced Radio woman. Her first year out of college was spent at WBBM, Chicago, where voice tests had shown that she was "one out of 112" women with a perfect speaking voice. Hundreds of letters from her listeners since then have insisted that her voice is pleasing and that her personality also has a Radio value.

Decorations, Games, Colorful Menu For Washington's Birthday Party

Contributed by Aunt Jane of WOC

AUNT JANE who has given household talks from WOC for three years contributes suggestions for a Washington Birthday party for the younger Radio fan. Some of the games would tax the brains of grownups, but promise a lot of fun for children who have studied United States history.

She suggests that the little hostess as a colonial lady may invite her friends to help her celebrate the birthday of our first president. Her invitations, written on red hatchets tied with tri-colored ribbon, will request her guests to appear in colonial costume representing a great person of Washington's day.

Of course, the decorations will be red, white and blue. Crepe paper comes in various widths, in patriotic colors, and can be used unsparingly because it is inexpensive. At one end of the room hang a picture of George Washington surrounded by flags. Old-fashioned candelabras holding red, white and blue candles complete the effect.

As soon as the last guest has arrived, play Yankee Doodle and have the children march around the room. Each child receives a red, white and blue booklet with pencil attached, which is to be used in connection with the games.

Guess Who

The first game to be played after the grand march is a guessing contest as to

Miss Giddings' attitude toward her work insures her success. "After you have had letters from your Radio audience you just can't help liking every one of them as much as if they were each your personal friends," said the young woman's hour director when interviewed. "They are always so quick to rush to your defense if you suggest that some one has criticized you, that you feel as if they were all your champions. That is what makes broadcasting, especially to women, such an interesting business. When we realize that all of the women who write to us are busy women and that they must stop their work to write—as most of their letters indicate—then we feel that nothing we do to entertain or instruct our invisible audience is too much trouble."

whom each child represents. This may be difficult, but conversation in character will help. Prizes could be awarded to either the child who identifies the most costumes or to the most representative and easily recognized dress.

Test Game

The test game is to select words containing the letters in the name Washington. The prize goes to the child with the greatest number of words at the end of ten minutes.

Sewing Contest

On the next sheet of the booklet, each guest having been supplied with a needle threaded with red thread, outlines the profile of Washington. This game may be a little hard for the young gentlemen present, but should remind the girls of the samplers their great grandmothers made. A miniature picture of Washington would make a good favor.

National Heroes

As the hostess reads the questions of this game, the answers are recorded on the next sheet of the booklet.

1. What national hero beat the British? (Washington.)
2. What national hero wrote the Declaration of Independence? (Jefferson.)
3. Who was the first to sign the Declaration? (Hancock.)
4. Who wrote "Give me freedom or give me death"? (Patrick Henry.)
5. What national hero was famed for his horseback ride? (Paul Revere.)
6. What other president was born this same month? (Lincoln.)
7. What Civil War General became president? (Grant.)
8. What great soldier said, "War is Hell"? (Sherman.)
9. What president led a charge up San Juan hill? (Roosevelt.)
10. What national hero of today invaded Europe by air? (Lindbergh.)

Chopping Down the Cherry Tree

This game is a variation of pinning the tail on the donkey. Each guest is blind-



Aunt Jane, WOC

folded and given a hatchet to place on a marked place on the tree trunk. To keep the hatchets straight each is given a number to correspond with the number given the child. The hatchet pinned nearest the trunk receives a little hatchet candy box filled with candies.

Table Decorations

The table may be decorated to represent Valley Forge. A toy fort occupies the center of the table surrounded by toy cannons filled with candy cherry balls. Small flags may be used as place cards. A lead or paper soldier stands sentinel at each place.

Menu

The color scheme may even be carried out in the food. Creamed chicken on toast garnished with pimento may be served on blue plates. Vanilla ice cream, each slice bearing a bunch of candied cherries again served on blue plates makes an attractive but simple dessert. A real birthday cake with red, white and blue candles may be brought in after the guests are seated. This will give the finishing touch to the party.

WOMAN'S PROGRAM INDEX (Daily Unless Indicated)

Household Economics, Women's Hour, Etc.				Gardening			
Eastern	Central	Mountain	Pacific	Eastern	Central	Mountain	Pacific
9:30 a. m.	8:30	7:30	6:30	10:40	9:40	8:40	8:40
WWJ (352.7m-850kc), Tonight's dinner.				WEMC (483.6m-620kc), Thurs.			
10	9	7		1:20 p. m.	12:20	11:20	10:20
WBAR (270.1m-1110kc), Modern Housekeeping hour, less work in the American home.				KFI (468.5m-640kc), "How and What to Plant."			
WCSB (365.6m-820kc), ex. Sat.				9:15	8:15	7:15	6:15
WHT (305.9m-980kc), Home hour.				WIP (348.6m-860kc), Home Gardening, Mon.			
WIP (348.6m-860kc), Tues., Thurs., Sat. menu.				5	4	3	2
WLW (428.3m-700kc), Woman's hour.				KHJ (416.4m-740kc), Garden talk.			
10:10	9:10	8:10	7:10				
WEMC (483.6m-620kc), Fri., Prof. Chaney.							
10:15	9:15	8:15	7:15				
WLW (428.3m-700kc), Cooking chats.							
10:30	9:30	8:30	7:30				
KDKA (315.6m-950kc)							
WFI (405.2m-740kc), Homekeeper's hour.							
12:45	11:45	10:45	9:45				
WNAC (461.3m-650kc), Woman's club.							
WRC (468.5m-640kc), Mon.							
WTAG (516.9m-580kc), Wed. Fri.							
10:45	9:45	8:45	7:45				
WHZ (333.1m-900kc), Radio Chef.							
WIO (535.4m-560kc)							
WLS (344.6m-870kc)							
WTT (535.4m-560kc), Wed. Fri.							
11	10	9	8				
KDKA (315.6m-950kc), Cooking school.							
WAA (267.7m-1120kc), Cooking, Tues. Fri.							
WEAF (491.5m-610kc), Wed. Fri., Betty Crocker.							
W (416.4m-720kc)							
WOI (265.3m-1130kc), Tues., Thurs., homemakers' hour.							
WBS (475.9m-630kc)							
11:10	10:10	9:10	8:10				
WEMC (483.6m-620kc), Fri., Prof. Chaney.							
11:45	10:45	9:45	8:45				
WREN (254.1m-180kc)							
12	11	10	9				
WFBH (365.6m-820kc), Prudence Penny.							
WQJ (447.5m-670kc), Calumet hour.							
WFM (293.9m-1020kc), Household hints.							
12:30 p. m.	11:30	10:30	9:30				
KYA (309.1m-970kc), Shopping service, Mon. Fri.							
WBBH (365.6m-820kc), Prudence Penny.							
WMAK (545.1m-550kc), Tues. Sat.							
WMAQ (447.5m-670kc), Calumet hour.							
12:45	11:45	10:45	9:45				
WLAC (225.4m-1330kc)							
WSM (336.9m-800kc)							
12	11	10	9				
KGAW (491.5m-610kc), Household helps.							
FLX (509m-590kc), Martha Lee.							
KPO (422.8m-710kc)							
1:30	12:30	11:30	10:30				
KXN (336.9m-890kc), ex. Fri. Sat., Kate Brew.							
KOMO (305.9m-980kc), Totem cooking school.							
WGY (379.5m-790kc), Economics talk.							
1:45	12:45	11:45	10:45				
KFIW (545.5m-550kc), Wed., Homemakers' hour.							
12	11	10	9				
KRC (454m-660kc), Mon. Wed. Fri.							
ROIN (319m-940kc), Housewives' hour.							
WGHP (277.6m-1080kc), Home hour.							
2:05	1:05	12:05	11:05				
WTZ (454.2m-660kc), Daily menus.							
2:15	1:15	12:15	11:15				
KOIL (319m-940kc), Shoppers' aid.							

Experts Vote Down Voice of Congress

Broadcasting of Senatorial Debates by Aid of Microphone on Each Desk Declared Not Feasible by Army Engineers

By Mike Krofus

“GOOD morning, dear constituents of the Radio audience—the Voice of Congress speaking from WASH., D. C. Senator Petrel from Guam will lead the morning’s debate from the Senate floor. The question: Our New Mexican Policy—Beans, Bullets or Oil? Operating by authority of the federal Radio commission on more or less frequency—”

That’s the way it might have been for the good housewives who have a flair for parliamentary discussion, and who are the only ones to have access to the family Radio during the average man’s business hours.

But alas, dear constituents of the Radio audience, it is not to be, this year at least. The Voice of Congress will continue to expend itself within the limits to which it has been accustomed during the last hundred and fifty years or so. The joint committee working under the direction of the secretaries of the navy and of war have found the project unfeasible, and so reported to the honorable Congress.

That great conflux of golden eloquence assembled beneath the dome of the national capitol must continue to seethe within its narrow confines as it has done from generation to generation, surging and dashing itself against the classic walls of those revered chambers, and no further.

Historic Voices

Voices there have sent millions of your compatriots to war and death, have shaped the destinies of other great nations, built castles, shattered dreams. Great men have come and gone—some are there today, more will come tomorrow. The printed word of the supreme highlights is all that the nation sees or hears. Someone thought as long as two years ago that inasmuch as Radio broadcasting had become so popular, the Voice of Congress might be put on the air for all who wished to hear.

The plan was first broached by Senator Dill of Washington, interested in Radio affairs from the beginning. Discussion finally evolved into Senate Resolution No. 197. It called attention to the fact that even within the Congressional halls the voices of speakers from widely separated points on the floor were not always clearly audible. Why not put a microphone and amplifier on each desk?

Boon to Schools

Why not let the people at home know what is being said and done in Washington while history was in the making—actually hear it in process of evolution? What a boon it might be to public schools, studying the organization and functions of government! What a spur to the ambitious statesman to prove to the voters back home that he was in earnest and an important factor as their representative in the affairs of national diplomacy.

Anyway the matter was worth considering. The navy had been busy with wireless since its discovery nearly a quarter

RADIO LOOMS HIGH AS ELECTION VOICE

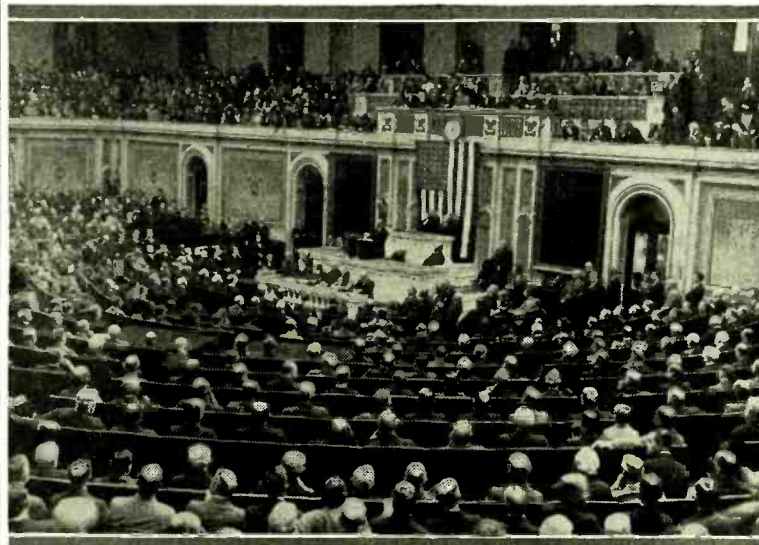
WILL the next President of the United States be nominated and elected by Radio? Soon the air will reverberate from coast to coast with impassioned pleas of the party leaders. Political planks will be hammered into platforms on which will be built the history of the nation during the next administration. Not since the signing of the Declaration of Independence will the people be in such close touch with the political developments of the day. The move to install microphones on each senatorial desk may be halted—but Washington will be heard.

contemplated. They figured costs and compensations. And finally they simmered it all down into a concise but very thorough report. They said in effect:

First. The project of equipping senatorial desks with microphones and receivers is impracticable in the present stage of Radio development.

Second. Additional equipment that would be required to broadcast the proceedings of the Senate through war and navy department facilities would cost approximately \$3,000,000 and require an annual appropriation of \$1,188,400 for upkeep. The report is thoroughly done and voluminous in detail.

Broadcast Scene at Opening of Congress President Coolidge Delivering Message



Army-Navy Report

IN explanation of the reasons why the plan is not feasible it might be more satisfactory to refer to the words of the report itself, which says:

1. It may be stated that there are two principal reasons why a public-address system could not be employed successfully in the Senate Chamber, assuming that individual microphones are desired on each Senator’s desk so as to obviate the necessity of talking from any given point in the Chamber.

2. The first of these is the singing effect which results when the sounds emitted from the projectors or loud speakers reach the sensitive microphone with a sufficient degree of loudness to operate it. For successful operation of any loud-speaking system, the projectors or loud speakers must be so arranged as to direct the sound away from the microphone, thus preventing coupling between the loud speaker and the microphone and the resultant singing effect. Under ordinary conditions where only a single microphone mounted on the speaker’s stand is employed, the foregoing condition can be met very readily, i. e., the loud speaker can be suspended above the microphone in such a manner as to direct the sound away from the microphone. Obviously this requirement could not be met in the Senate Chamber where nearly 100 would be needed and these distributed over the entire floor.

3. The second impracticable feature is that of providing a satisfactory switching arrangement for energizing and deenergizing the various microphones at the proper instant. The noises and confusion which would result if more than one microphone were connected with the loud speaker at any given time renders such an arrange-

ment imperative. This problem would be a comparatively simple one if the loud speaker were only to be used while speeches were being made by the various Members. It could readily be solved with the aid of a microphone control switch-board operated by an attendant who would connect the loud speaker to any one of the microphones as required. In debate, however, where brief remarks are exchanged by several different Members in rapid succession, it would be extremely difficult, if not physically impossible, to energize and deenergize the various microphones with sufficient dispatch to extend the facilities of the loud speaker at the proper instant to each individual who wished to talk or who obtained the floor.

4. From the foregoing it will be seen that the present development of the art is such that the employment of the public-address system in the Senate Chamber possessing the features outlined in Senate Resolution No. 197 is impracticable at this time.

Need New Apparatus

That the use of existing stations of the War and Navy Departments would require that certain apparatus and antennae supports be added to equipment now provided. In the past five years the widespread interest in broadcasting has forced the Army and Navy out of the frequency band normally used for broadcasting of speech and music. Consequently, the Army and Navy have no apparatus in this particular band worthy of mention. The frequencies used by broadcasting stations determine the frequency band of all existing broadcast receivers, and in order to reach the listening public all broadcasting must be within the required band. As a natural result, the Army and Navy would be required to pur-

RADIO listeners throughout the nation and even across the seas are familiar with the voice of President Coolidge who often has addressed the nation from his desk in the White House or from the speaker’s desk in the Senate. A slight nasal tone distinguishes his voice but his words are clear and distinct.

chase suitable broadcasting transmitters for installation at their various stations. The number of such transmitters and the power determines the cost of purchase and, later, maintenance and upkeep of the installation.

It is unfortunate that the proceedings of the Senate are carried on during daylight hours, since the daylight distances of transmitters in the broadcast band are considerably less than night distances. It is estimated that the distance of a 5-kilowatt output transmitter in daylight, using the average receiver now employed by listeners, is approximately 100 miles; the distance of a 10-kilowatt about 175 miles; the distance of a 20-kilowatt about 250 miles; and of a 50-kilowatt about 350 miles.

Super Power Required

Utilizing land already in use by the Army or Navy, your committee finds that the greater part of the country might best be covered by the installation of:

(a) 10—50 kilowatt transmitters located at—

- (1) Selfridge Field, Mich.
- (2) Fort McPherson, Ga.
- (3) Key West, Fla.
- (4) Fort Omaha, Nebr.
- (5) Fort Sam Houston, Tex.
- (6) Fort Bliss, Tex.
- (7) Fort Douglas, Utah.
- (8) Naval Radio station, Astoria, Ore.
- (9) Presidio of San Francisco, Calif.
- (10) Fort Snelling, Minn.

(b) 8—10 kilowatt transmitters located at—

- (1) New Orleans naval Radio station.
- (2) Fort Sill, Okla.
- (3) Fort D. A. Russell, Wyo.
- (4) Rockwell Field, Calif.
- (5) Fort Lincoln, N. Dak.
- (6) Camp Pike, Ark.
- (7) Fort Wingate, N. Mex.
- (8) Fort William H. Harrison, Mont.

(c) 5—5 kilowatt transmitters located at—

- (1) Washington Navy Yard.
- (2) West Point, N. Y.
- (3) Fort Williams, Me.
- (4) Scott Field, Ill.
- (5) Whipple Barracks, Ariz.

Assuming average costs, excluding unusually favorable or unfavorable conditions, the initial cost of such a system would approximate:

10—50 kilowatts, at \$250,000.....	\$2,500,000
8—10 kilowatts, at \$75,000.....	600,000
5—5 kilowatts, at \$40,000.....	200,000
	\$3,300,000

In order to transmit the desired broadcast to each station it would be necessary to cut in leased wires of the special balanced type used for broadcast transmission. These lines are rented at an annual rental of \$50 per mile. Where such lines already exist but would require in-

(Continued on page 20)



SENATOR JAMES A. REED is shown here as one of the most logical candidates for the Democratic party. His keen insight into national problems, his general acceptability by all factions earned him the Missouri state endorsement at Sedalia.

of a century ago. The army had carried on the work extensively—especially since the World War. Both branches have large Radio facilities and access to the best minds on the subject.

A committee was delegated to make a thorough study of the possibilities. Commander S. C. Hooper of the navy and Lieut. Colonel J. O. Mauborgne mobilized their best engineers and experts. They struggled with giant problems never before

NATIONS UNITED IN RADIO AGREEMENTS

EIGHTY COUNTRIES SHOW GOOD OF ARBITRATION

Kindly Spirit Prevailing at World Conference Reflects Credit to Air Communications

THE International Radiotelegraph Conference sitting in Washington, D. C., for a period of seven weeks and participated in by representatives of 80 different governments reached an unanimous agreement on November 25 which is to become effective January 1, 1929.

The Conference will next convene at Madrid, Spain, in 1932. The agreement reached at the present conference will have to be approved by the legislatures of the various countries, but inasmuch as the question is so technical it is not believed that any trouble will be experienced in having it approved. Secretary Hoover is now having a summary prepared to be sent to the Senate at an early date.

It is of interest to the general listener in the United States to know of the provisions of the convention as to spark sets, whose interference is so fatal to the broadcast listener. It provides that twelve months after adoption, no more spark sets are to be installed in the world, and that existing sets, within a definite period of years, shall be replaced by continuous wave sets, or other more modern equipment, and in that way interference will be greatly minimized.

For the first time also, the conference recognized the amateur as an important element in Radio communication and conferred on him, by international treaty, certain definite wave lengths. The effects of these arrangements for the amateurs were agreed by their representatives as increasing and assuring opportunities to make contacts with correspondents overseas.

Owing to the lack of precision of the term "wave length," the conference

WAR torn China surrendered General and Mrs. Ti-Ching Wu to the Peaceful Overtures of the Washington Radio Conference.



adopted as a major designation the word "kilocycle." In these terms the conference set apart from 10 to 100 kilocycles chiefly for long distance transoceanic service, the channels from 100 to 500 kilocycles primarily for ship to shore and aircraft service; from 500 to 1500 kilocycles for broadcasting; the very great number of channels from 1500 to 5000 kilocycles were apportioned into 40 different bands and divided between four or five varieties of service, including the amateurs.

RADIO BREAKS INTO LONG ARCTIC NIGHT

SPECIAL programs and messages to peoples buried in the night of the Arctic were scheduled to go from WBZ-WBZA on 333 meters January 7 and February 4; from KDKA January 14 and February 18; from KYW January 1, January 28 and February 11. This service on the part of the Westinghouse stations has been carried out in other years with great success although no word could be received as to whether the messages had reached their destinations until six months later.

The conference established regulations for each of the different bands assigned to specific purposes. In the mobile service band—mostly ship communications—it clarified and strengthened the regulations in such fashion as will result in greater safety of life and property at sea. These regulations set forth detailed and stringent rules of practice for communication between ships and shore. They facilitate the making of contacts between ships. They give full place to the Radio compass. They place distress communications in priority over all other communications.

The broadcasting band has been clarified and defined for the whole world in such a fashion that there will be less conflict and interference—a direct contribution to every owner of a receiving set.

The area of the higher kilocycles—that is the shorter wave lengths—was so divided as to give stimulation to the many applications which are now tentatively before the world.

In a large sense many of the problems of the conference could be expressed as a reduction of interference. Aside from the broad provisions for the orderly arrangement of traffic, detailed regulations to this end were developed through the requirements as to technical operation of stations, which will result in lessening the amount of present interference, and above all, assure development of the art itself.

At the final session, presided over by Secretary Hoover, as President of the Conference he said that "it is a great honor to be able to congratulate the delegations and in fact the peoples of their countries on the successful issue of this Conference. That the representatives of 80 different governments, the largest in-

WLAC FEATURES CRYSTAL QUARTET



ABOVE is the famous Crystal Quartette which of late has attracted so much Attention to WLAC, Nashville Thrift Station. Left to right, Mesdames: Herman Pride, Jake Petway, Henry Hoover and Rupert Cartwright. Below is Miss Nell Moran, soprano, director of the Voice Department of the Ward-Belmont Conservatory of Music.



M. P. Presents Billy Ward with Digest Cup

Canadian Announcer Hears Why He Won Popularity Honors

BILLY WARD, winner of the Canadian Silver cup in the Radio Digest popularity contest, received his trophy with words of praise from a member of parliament.

Not being able to attend the other presentation ceremonies at the Chicago Radio show Billy was not to be outdone for lack of a function—not so long as D. R. P. Coats, manager of the station CJRM, Moose Jaw, was able to be about, and up and doing.

J. Gordon Ross, M.P., agreed to see that Billy should receive the cup with befitting words of praise. George M. Ross, president of the Young Men's Section of the Moose Jaw Board of Trade, took the responsibility of making the arrangements. When the time came all western Canada listened in to the Moose Jaw station. Billy blushed his appreciation.

NATIONAL RADIO AUTHORITIES ATTEND PARLEY



DELEGATES to the International Radio Conference are Shown Assembled at the RCA Banquet in their Honor in New York. Commandant Paul Brenot, Chief of French Delegation, Lower Right.

THE problems which confront both broadcasting and commercial Radio were pointed out in no uncertain manner by the Radio Corporation of America when it took all of the members of the International Radio Conference to Long Island to see its receiving and sending stations, later taking them to broadcasting power stations and studios.

This was of especial interest to the delegates in view of the fact that the American delegates have been making an effort all during the conference to have the foreign delegates segregate the governmental control from private ownership in their discussions.

Before returning to this city the corporation gave the delegates a banquet in New York where there was a demonstra-

tion of the marine work of the Radio and also of the transmission of pictures from London direct to the banquet hall. At the dinner Senator Marconi was the principal speaker and the guest of honor.

All of the interested nations sent their most able representatives to attend the conference. Just as Marconi and Eckersley represented England, Commandant Paul Brenot headed the delegation from France. Brenot is president of the Syndicate Professionnel of the Industries Radio Electriques, manager of the General Wireless company, manager Societe Francalaise Radio Electricque, director in several leading Radio companies, lecturer and battalion chief. General Ti-Ching Wu was the best Radio informed man in China.



Old Director Reviews Air Personalities

Radio Artists Must Have Real Ability as Well as Charm to Win Applause of Discriminating Listeners

By Gilson Vander Veer Willets

THE successful Radio artist must have unquestioned ability as well as a winning, magnetic "Radio personality," for it must be remembered that radiopublic opinion recognizes no nationality, creed nor social standing when it tosses its bouquets.

IN 1921 when broadcasting gripped the nation in its first whirling onslaught, I was appointed Radio engineer for the State of Missouri, in charge of Station WOS, which is located in Jefferson City and still entertains a vast mid-western audience with nightly programs, a large majority of which are furnished by inmates of the Missouri State Penitentiary. When we first opened WOS, our only activity was reading market reports throughout the day, occasionally broadcasting phonograph music evenings, a novelty in those days. One evening while Governor Hyde was in-



Gilson V. Willets

specting our studio, he inquired if we expected to continue to reproduce phonograph records when we had such a well equipped station. This was true, but Jefferson City, a typically small capitol town with a large transient population, boasted but little, if any, local talent and it was impracticable to import it from St. Louis or Kansas City. The Governor expressed a desire for us to either close the station evenings or secure some talent. I meditated on this until the inspiration came one afternoon as I observed from my lofty office in the capitol dome, the "Peaceful Village Band," rehearsing in the penitentiary yard. A hasty visit to Governor Hyde, and then the prison commissioner secured the necessary permit to visit the penitentiary, where I not only selected a wonderful brass band, but an orchestra and some very promising musicians for solo work.

Prison Band Scores

The first Radio appearance of the Missouri State Prison Concert Band assured its popularity with the Radio audience for all time. They went over big and thousands of letters came to us complimenting the members. Gifts of appreciation arrived daily in the form of tobacco, cigarettes, candy, and the like. The band leader's popularity started from the first night his name was mentioned before the microphone and continued to grow as time went by. A petition started out in the state for his pardon and contributions



"Sunflower Girl" of WBAP left her home in Kansas to visit relatives in Ft. Worth, Texas. "I think you would go over big with our Radio audience," said the Hired Hand of WBAP. Concealing her own name, she was introduced as the "Sunflower Girl" and proved that she had that indefinable something that makes those who have it especially popular with the Radio audience.



MME. HANA SHIMOZUMI IKI, Japanese grand opera star, is frequently heard on the programs from KGO, the General Electric Pacific Coast broadcaster, at Oakland, Calif.

Mme. Iki was the first Japanese woman to sing in "The Mikado" and to appear in any operatic role other than Japanese

in character. When she recently married Dr. G. Iki, a University of California graduate, Mme. Iki gave up a promising operatic career. For two years she toured with the Gallo Opera company throughout the United States and Canada, and was a star with the San Carlos Opera company and the Gallo English Comic Opera.

to finance it were received by its sponsors from all over the United States, Canada, Mexico and the West Indies. The young leader's following was at that time as great as the famous Lambdin Kay of WSB, Atlanta, Ga., who several times sent him telegrams complimenting the band and his solo work with it. It was not sympathy that inspired the public, it was his ability. Within two years he was pardoned and, with his commendable Radio reputation, immediately obtained a position as a mid-western municipal band leader. Today he is a noted musician, respected and loved by all who meet him. Had it not been for the Radio, which brought his talent before the Radio public, he would still be wasting away his life behind those grim prison walls.

Discovers Piano Artist

Another parallel case was that of "The King of the Ivories," who is to-day well known to the patrons of vaudeville. He was a pianist of unusual skill and originality, who played with the Missouri State Prison Concert Orchestra. His clever manipulation of the ivories soon won him nation-wide popularity, and shortly before he was released, he was awarded a gold medal by a national vote conducted by an eastern Radio publication, for being the most popular Radio artist in the country. On the day he left he was presented with an automobile by his admiring audience and given a lucrative long-term contract with a leading vaudeville circuit. His announcer, a crippled war veteran, shared his honors and the two have been commanding good box office receipts ever since.

Early in 1923, while I was at WOC Davenport, Iowa, I received a visit from a young fellow who called himself "The Red Headed Music Maker." He claimed to be a song writer and I booked him as his story sounded good. He claimed to have received 5,000 letters the week before

when he had appeared at my old station WOS. "We'll beat that," I assured him, and we certainly did! He took his little ukulele and for a half hour crooned his songs, including the famous "It Ain't Gonna Rain No More."

Within forty-eight hours we had 15,000 letters and cards for him from the Radio audience, not to mention thousands of telegrams and telephone calls. This was the largest Radio applause I have ever witnessed for any individual artist after a single performance, over a single station. (They did not have chain broadcasting in those days).

Wendell Hall Has Personality

Wendell Hall, for that is who it was, often visited us when later he was employed by a famous battery manufacturing company who paid him a handsome salary and his expenses for traveling the rounds of Radio stations, and entertaining the Radio audience with their compliments. It was not pull, nor anything else but ability that won him his fame. His success was even greater, for two years later, when I was opening the station in the Hotel Roosevelt in New York City, I sent him an invitation to appear on our opening concert to which his manager replied that Mr. Hall now received forty dollars for a ten-minute appearance.

However, he did come and we had a happy reunion with the usual flock of mail to follow. The radiopublic will never forget the night that Wendell Hall was married at station WEAF, linked with a long chain of stations scattered over the East and Mid-West. The happy couple was honored with an ovation of telegrams and applause from hundreds of thousands of friends they had never seen. So, from a struggling song writer, Wendell Hall's talent and winning "Radio Personality," won him fame, fortune and happiness through radiopublic opinion.

There are also many instances where great misery and poverty have been avoided by the response of radiopublic opinion to talented artists. One day a young woman called at my office in the Hotel Roosevelt and announced that she had recently arrived from Des Moines, Iowa, where she had been a prominent singing teacher and entertainer. She had expected to find fame and fortune in heartless New York, but had found nothing but misery and discouragement at every turn. Would the Radio help her obtain work? If she had talent, most assuredly it would. That afternoon she sang four songs over the air after which we announced that her services would be available for theatricals and private entertainments.

Voice Wins Contract

No sooner had the station signed-off than several telephone calls were received from interested parties requesting an interview. She connected with the first one she answered and secured a position that has advanced her in a little over two years to that of a Broadway favorite. She was talented and the radiopublic knew it, because only last week her picture graced the cover of a current musical journal.

Another incident of this kind concerns the "Volga Trio." The father, mother, brothers and sisters emigrated from terror stricken Russia. After arrival in New York, although they were all talented musicians, the father was only able to secure menial work which scarcely brought money enough for food for his family. Ivan, a boy of eleven, was an accomplished cellist; Natacha played the violin beautifully and Thamar was an expert pianist.

These three, comprising the "Volga Trio," came to my office in the Hotel Roosevelt asking for a trial on the air. They looked like three kids who should have been in school, but I gave them an audition, as they claimed that they had been very popular over the Russian Station at Moscow and also from 2LO in London. They had astonishing ability, and when they had broadcast "on the air" they became popular at once.

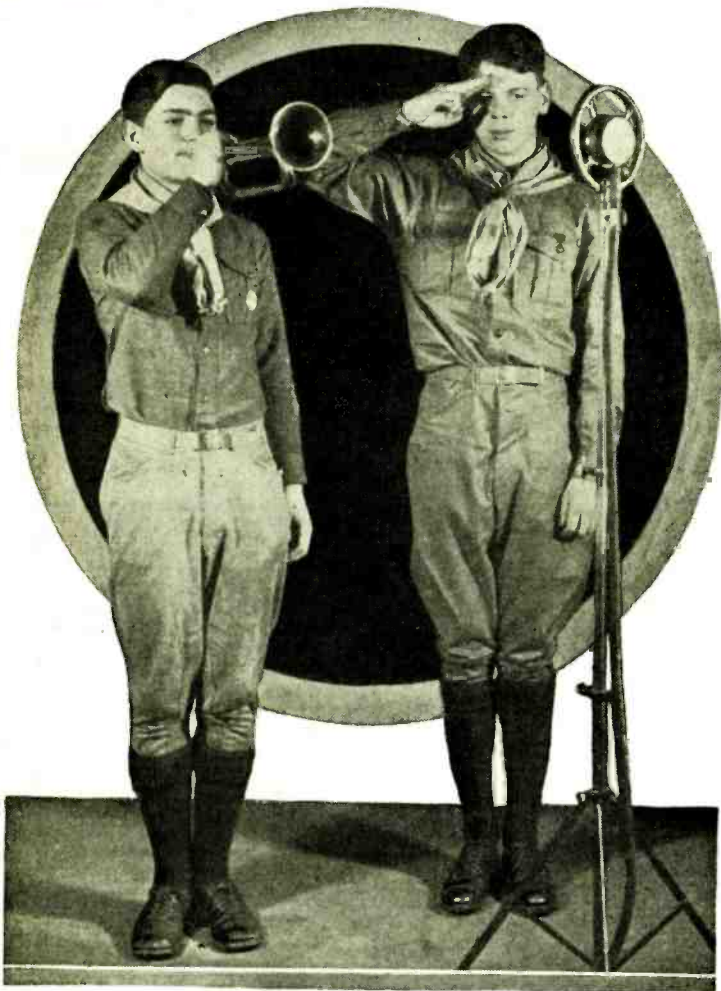
The radiopublic never fails to reward ability, and they soon secured positions for commercial broadcasting and for private affairs. Society took them up and they were soon the rage. Success has smiled upon the whole family and now they live in a beautiful home in the upper Bronx ever thankful to Radio for giving them a chance to show their talents.

It is therefore proven that the Radio listener hears with his own ears and can not be influenced by newspaper publicity or other propaganda, because he hears a free show and is quick to respond to real art. Radiopublic opinion, as expressed in hundreds of thousands of letters daily to broadcasting stations, is the barometer that makes or breaks the Radio "Stars," just as the audience "out front" makes the stage star.



RADIO Listeners, far and wide, have enjoyed the merry musical programs broadcast by the National Broadcasting Company. Little Miss Jessica Dragouette (above) is one of the scintillating stars of the troupe. She has also been pronounced one of the Radio personality types who win distant audiences. She has a manner and voice that seem to stimulate the listener's imagination.

RADIO STATIONS HELP BOY SCOUTS CELEBRATE BIRTHDAY ANNIVERSARY



POPULAR ORCHESTRAS

(Continued from page 5)

"We are now at the Texas hotel, another of the Baker chain, and broadcast every afternoon from six until six-thirty, and every Sunday evening from nine-fifteen until midnight from WBAP. We also have been making Columbia records for the past three years. On last New Year's day we received long distance phone and cable messages from Bangor, Me., Vancouver, B. C., Balboa, Panama Canal Zone, and a cable from Havana, Cuba.

"Don't forget, WE ARE GOING TO WIN THIS CONTEST!"

Challenge All Corners

There's a challenge for you, you Christensen voters. Iowa is doubtless one of the strongest Radio voting states in the country, but these Texas Aces seem to have cultivated a long line of friends throughout the Southland. Votes are coming in from Georgia, Tennessee and Texas areas.

This may account for the less active voting for the Southern District candidates. While Texas is really a part of the South it has been classed in the West District for the geographical division of the contest.

Charles Dornberger writes in from the Arlington Hotel at Hot Springs, Ark., that he expects to win one of the plaques even if he does not capture the international trophy. He says:

"I have had lots of people who have heard us on the air write in to tell me they have sent coupons to your magazine voting for me and I hope I am lucky enough to win a plaque."

The Dornberger orchestra is listed under KTHS at Hot Springs.

Owing to Christensen's swift climb to the upper strata Maurie Sherman gets into the box of leaders again to represent WLS for the Midwest.

Thousands of letters have been received from fans from all parts of the country. Canada is pulling strong for its favorite candidate and when it comes down to the last drive remember the tremendous determination displayed by Canadians during the World War when they held the whole Allied front from caving in. The Canadian sector is O. K. and while they may be short of the masses that determine big votes they may yet take a dominating lead in this topsy turvy contest. Irvin Plann, you will observe, still holds gallantly to first place on CNRW of the Sixth District.

Here is how the rest of them stand:

THIS is the month the Boy Scouts will be heard on the air. The eighteenth birthday of the organization will be celebrated throughout the country from February 6 to 12. On February 6 the Scouts celebrate Home Day, and on February 7 School Day. After the Anniversary Celebration on Wednesday, February 8, other days of celebration include Citizens' Day on February 9, Camp Day on February 10. On February 11 the boys will themselves demonstrate Scouting activities in the open. The week will close with special religious services on Sunday, February 12.

DISTRICT No. 1—EAST

Comprising: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and District of Columbia.

Vincent Lopez's orchestra, WEAJ.....	2,194
Crosley Moscow Art orchestra, WEAJ.....	1,830
Freddie Rich's orchestra, WJZ.....	1,672
Palais D'Or orchestra, WEAJ.....	1,316
Ipana Troubadours, WEAJ.....	1,007
Roxy's symphony, WJZ.....	997
Al Steele's Musical Vagabonds, WMCA.....	927
A. and P. Gypsies, WEAJ.....	829
KDKA Little Symphony, KDKA.....	815
Club Worthy Hills orchestra, WTIC.....	796
Jack Albins, WEAJ.....	759
Century orchestra, WMAK.....	659
Ed. Carpenter's Hotel Statler orchestra, WGR.....	630
Ben Bernie's orchestra, WEAJ.....	623
Red Nichol's Charleston Chasers, Columbia chain.....	607
Paul Whiteman's orchestra, WEAJ.....	573
Cliquot Club Eskimos, WEAJ.....	517
Waldorf-Astoria, WTIC.....	516
Meyer Davis' La Paradis orchestra, WBEI.....	508
Meyer Davis' Swanee syncopators, WRC.....	507
Hotel Pennsylvania orchestra, WJZ.....	504
WOO orchestra (Robert E. Golden, Director), WOO.....	503
Charlie Woodward's Gondoliers, WNAC.....	500
Meyer Davis' Hotel Biltmore orchestra, WLSI.....	500
Maxwell House orchestra, WJZ.....	500
Savoy Plaza concert orchestra, WJZ.....	497
Whittal Anglo-Perseans, WEAJ.....	490
Jack Morey's Singing orch., WBZ.....	488
Jack Meyer's Musical Architects, WFAN.....	482
Joe Armstrong's orchestra, WMAK.....	481
Klein's Serenading Shoemakers, WJZ.....	477
Art Coogan and his Dance orchestra, WIP.....	477

(Continued on page 20)

WLAC Maintains Policy of Class and Dignity Outlined at First Birthday

Public Service, School of the Air, and Many Other Commendable Features Earn High Praise from Governor and Noted Guests

ON November 24, 1926, the Life and Casualty insurance company of Nashville dedicated its new Radio station, WLAC. In delivering the opening address, A. M. Burton, President of the company, expressed the wish that the Thrift Station be dedicated to the new South, and to an unending service to the public at large.



W. N. Campbell

The inaugural program presented many well-known artists of the South. WLAC has now been operating fourteen months, and has maintained at all times during this period the high standard demanded by Mr. Burton at the beginning. True to its slogan, "Thrift Station," a message on thrift has been broadcast practically every evening, written by leading business and professional men from all over the South.

School of the Air

One of the regular features to be established by WLAC was the Nashville "School of the Air" program. These periods have been under the direct supervision of H. C. Weber, superintendent of the city schools, and W. C. Dodson, superintendent of Davidson county schools. Three periods each week were devoted to this service, at which time many of the leading figures in the city and county educational systems appeared before the microphone acquainting the public more fully with the problems which confront the education of our youth.

During the disastrous flood which visited Nashville in the Christmas season of 1926, the staff of WLAC broadcast appeals day and night for funds and facilities for housing, feeding and clothing the refugees. Citizens of Nashville and Davidson county responded with more than \$20,000 in cash in less than two weeks, and abundant food and clothing, all of which was turned over to the United Charities to be distributed.

While WLAC is owned and operated by the Life and Casualty insurance company, it is serving as a medium to promote community interest. Programs are frequently arranged and sponsored by civic organizations from various cities and communities throughout the South. These programs bring to the Crystal studio artists and speakers of national reputation.

In fulfilling his promise to promote the new South, President Burton has delivered a series of addresses setting forth the possibilities and resources of each southern state. During the preceding summer WLAC broadcast Sunday night band concerts by the Nashville Municipal band. This is one of the leading organizations of its kind in the South.

On November 23, 1927, which marked the first milestone in the life of the Thrift Station, a program was broadcast which lasted from 6 p. m. to 6 a. m. The principal address was made by Governor Henry H. Horton. During the evening many of the leading business and professional men of the South spoke. Several visiting announcers were present on this occasion, including Johnnie Frenkel of WCOA, the "Breezy Boy of the Gulf," and Hal Fifer of WFIW, Hopkinsville.

Recently WLAC broadcast an exceptional concert by Sonia Yergin, leading soprano of the Hanover Opera Company, Hanover, Germany.

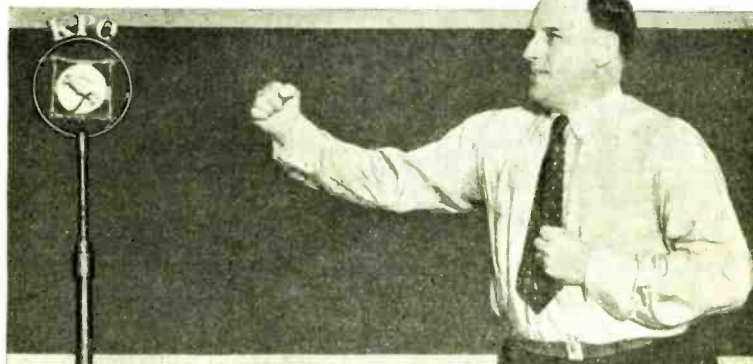
During the year 1928, WLAC has arranged to broadcast bi-monthly programs sponsored by the Nashville Junior and Senior Chambers of Commerce. In doing this, the Chamber of Commerce and WLAC desire to acquaint the outside world with the advantages of Greater Nashville.

Campbell Directs Station

WLAC is under the direct supervision of Walter N. Campbell, Director-Announcer, and Mrs. Clyde Walters, Program Director. Mr. Campbell is a college graduate, an orator of ability, and has had varied experience in drama. His past activities in the field of athletics make it possible for him to broadcast the details of the different sports in a manner most pleasing to his Radio audience.

Mrs. Walters is not only a most charming hostess, but is a finished pianist and accompanist. She possesses a beautiful soprano voice which is well adapted to Radio work.

GETTING-UP EXERCISES CONDUCTED BY HUGH DOBBS STARTS DAY RIGHT



"APPLESAUCE and Exercise," is the very popular feature of KPO, San Francisco, of which Hugh Barrett Dobbs (right) is the drill master. Dr. W. H. Walker, an ardent fan, calls the stunt "Getting-Up Exercises." Dr. Walker lives in Willows, California, about 70 miles distant.

"I get up at Dobbs' command," said the doctor. "I think as an all around arouser he has them all beat. He is a good humored dictator, and has his listeners with him every minute. He will be in the midst of a drill and seem suddenly to discover that someone is getting in late. Then he thinks another fellow is still dozing—and what a razz he gives the late comers. You take the getting-up exercises as conducted by Dobbs and you are in good humor for the rest of the day."

In the KPO studio a chronometer is mounted upon a heavy pedestal, and each morning before Hugh Dobbs starts his daily classes he wheels it carefully over beside the microphone. Then, baton in hand, his eye fixed upon the second hand as it approaches the appointed second, he stands poised. Click! The instant arrives! Dong! He strikes a musical gong. The world leaps forward with a new day and Dobbs prods the sluggish slugs into steaming action.

Japanese Happy Under Radio Monopoly

Six Big Broadcasting Stations Operated by One Company Supply All Needs of Listeners—American Sets Used



ABOVE is typical scene in studio of JOAK, Tokyo. Note King Mike doing his harmony girl feature. Broadcasting ball game (left) and scene from Radio drama (right). Broadcast for community singing is shown below.

RADIO has been having somewhat of a topsy-turvy career in far-away Japan. For a while it went forward with a great rush. Then came a faltering slow-up, but now, according to the Radio Digest correspondent at JOAK, Tokyo, everybody is enthusiastic and broadcasting is more popular than ever.

Mr. K. Yutani, secretary at the Japanese consulate in Chicago, furnished Radio Digest with the following statement concerning the situation in his native country:

"Radio today is very widespread throughout Japan.

"The receiving sets have been imported in large numbers from manufacturers in the United States and from Germany.

"The Japanese prefer simple sets which they can work easily and without too much mechanical adjustment for the Japanese are essentially a people devoted to reading and scholarly pursuits for recreation, rather than to mechanics. This is particularly true in the country districts where the simpler the set the more popular it is.

Manufacture in Japan

"Some factories in Japan, under Japanese ownership and supervision, are manufacturing Radio sets. They make the parts and the sets and cabinets. Some parts are imported from America, but this is because the Japanese admit the superiority of American-made parts of these types to the kind they produce themselves.

"There has been a tremendous demand for literature on Radio and many magazines on Radio have been started and are being published to meet the demand. Copies of these magazines may be obtained by writing to the Chamber of Commerce, Tokyo, sending 50 cents American money for each copy desired. Translations of short articles requiring not more than 15 or 20 minutes to translate will be made free of charge by the Japanese consulates here; longer translations are charged for.

"There are only six or seven large broadcasting stations in Japan situated in the principal cities like Tokyo, Osaka, Kobe, Nagasaki, Yokohama, and these stations are operated by one big Japanese Radio company."

See the Pictures

The pictures on this page tell the actual story of broadcasting in Japan much better than any words. They came directly from JOAK. The ladies in the upper picture appear to be group-d to offer up their gladsome sounds to the new god of the Western hemisphere. He sits enthroned in majesty, but the same homely face seems to dominate in about the same manner as it does in the average American studio.

Baseball has become a very popular sport in Japan, and the wideawake director has his mike installed ready to convey the whole story, play by play, just as it is done in America at a world's series.



The right-hand photo shows a Nipponese Radio drama. Oh, yes, indeed, there is nothing slow about the little brown brother across the Pacific. Radio drama is said to be especially well done over there. Public interest in this particular phase is said to be greater than it is in the United States. The Japanese are ingenious in producing sound effects to go with the drama.

The lower scene shows an assembly at a place described as "community singing," written on the back of the original picture. These community singers appear to lead the great Radio audience in popular and national airs.

It's a 5,000-mile jaunt across the Pacific, and JOAK in its new studio only shoots a 1,000-watt wave. But the station has been heard as far west as Ohio, according to reports in the consul's office. William McDonald of Chula Vista counts on getting Japan about the same as the Chicago DX hunter counts on getting KFI in January. Other Californians have also tuned in this Oriental station. See page 17 for picture of Mme. Hana Shimozum Iki, famous artist.



Macdonald DX Success Makes Fans Inquisitive

SCORES of letters have been received from interested DX fans who read of the success of William Macdonald at Chula Vista who has now logged over 650 Radio stations in 40 different countries.

"I have about 150 letters from stations in the United States stating mine was the first report they had on reception at the Pacific coast. These are low watt stations," said Mr. Macdonald, "and include KGDJ, 7 1/2 watts, Cresco, Iowa; WFBQ, 10 watts, Harrisburg, Ill.; WDEL, 100 watts, Wilmington, Del.; WBBZ, 85 watts, Columbus, S. C.; and CHML, 50 watts, Hamilton, Ont.

"Among the foreign stations I have verifications from Siberia, Australia, Japan, India, Russia, Poland, Norway, Sweden, and just this week I received verification of reception from LOO, Buenos Aires, for the broadcast of a chess game, the station playing music between the moves." Macdonald is a true sportsman—amateur and not professional. He became

interested in the DX game because of ill health that caused insomnia. He developed his own set and accessory devices. He has nothing to sell and advertises no brand of any sort. He thanks the celebrated California atmospheric conditions in a modest way for his excellent record. He says:

"To tune in broadcast stations over great distances, one's Radio set must be in a good location; that is, one must live in a district where signals come in clear and strong. I believe location has 90 per cent to do with bringing 'n programs from foreign countries, and that equipment counts for only 10 per cent."

The receiver Macdonald uses was especially constructed on the infradyne principle. Eleven tubes are used. The amplifying tubes are shielded in a single compartment. Macdonald himself constructed the set, but he disclaims any technical departures, and in this is substantiated by the several Radio engineers whose investigations of the records in reception he has facilitated in every way.

The set is "loaded down with variometers," to use Macdonald's exact expression. This is to cut down the volume of all United States and the most powerful foreign stations, in order to minimize interference and the crowding out of the small transmitters in obscure and far-off corners of the world, the picking up of which is so dear to the heart of this broadcast listener.

Most Radio fans pay too little heed to the aerial and ground, Macdonald said, and continued:

"My aerial is a box-cross affair, without impeding insulators. It is about three feet by six over all. It has a large capacity spread over a small area, making for sharp tuning, less static and quick delivery of the impulses to the set. I have tried dozens of kinds of aerials and masts. There is a discarded pile of them in my back yard which I call an 'aerial morgue.'"

STALLING TAKES GAB

(Continued from page 10)

preliminary, and stated that the ringside was buried beneath an avalanche of flying rumors that the fight was not to be fought. At this point I made a rapid survey of the situation. If I fell back upon the program director for musical entertainment, I incurred three possible perils: first, of killing the Radio fan's interest. He wanted to hear about the fight. Music he could get anywhere by a turn of the dial; second, it would benefit a rival station which was also broadcasting the fight—for in the event of an important bulletin, we would be compelled to wait until the conclusion of the musical selection. In this case, we would be scooped. Third, we could 'cut-in' on the music, in which case we might as well not have the music.

"My judgment was to play a 'one hand' and take my chances. So then and there, I vowed before the 'mike' to stick with it until my voice gave out, and that's just exactly what I did. I asked the fans if they were with me. That one inquiry destroyed an entire morning edition of the paper, for it put all 'phones under the siege of thousands of fans who kept calling until I signed off; and with the 'phone service blocked, the morning's news was slim indeed. The night edition came up and begged me to ask the fans to stop calling.

"As for the fight itself, it was a fiasco; and as the bulletins trickled in, it grew into a mighty farce. I signed off at 1:17 1/2 a. m., c. s. t. In those 77 1/2 minutes, I had received exactly 12 bulletins around which I built my broadcast. In other words, allowing 1 1/2 minutes for the reading of the 12 bulletins, I figured I had 'stalled' exactly one hour. I believe this is a world's record for individual stalling 'at the mike.'"

"Undoubtedly, there is a 'science of stalling' and Konecky knows his science! 'Stalling isn't just a matter of words,' he says, 'for you must find the right words. In addition to saying something, you must say something of interest.'"

The mood of the listener must be considered whether he is interested in an opera program or a prize fight. The stalling announcer must stick to the theme for which the listener has tuned his dials, and that is where the announcer who cut off the opera in the midst of a chorus made a serious blunder.

SINGS IN THEATER FANS APPLAUD HER



THIS is dainty Josephine Borio, who entertained patrons of the Balaban & Katz theaters in Chicago recently and received her applause by mail from thousands of her Radio listeners who heard her over WMAQ, WEBH and WJJD.

Table listing various radio stations and their frequencies, including Parker House orchestra, WEEL, 466; Granadas, WJZ, 461; Jacques Renard and his Coconut Grove orchestra, WNAC, 459; Bay State Aces, WOR, 458; Eden Symphony orchestra, WFAN, 458; Bancroft Hotel dance orch., WTAG, 455; Seville Troubadours, WOR, 454; Strand Ball Room orchestra, WFAN, 452; Al Friedman's orchestra, WJZ, 452; Continentals, WJZ, 452; Mayflower Dance orchestra, WHN, 451; Leo Reisman and his Hotel Brunswick orchestra, WNAC, 451; Villa Venice orchestra, WOR, 450; Jeddo Highlanders, WJZ, 450; Elwood Anderson and his orchestra, WFI, 450; Goodrich Zipper orchestra, WFAF, 436; Hotel Ten Eyck orchestra, WGY, 415; Henderson's Roseland orchestra, WOR, 413; La France orchestra, WFAF, 412; Tennesseans, WJZ, 407; Hotel Chelsea Concert orchestra, WPG, 399; Jardin Royale orchestra, WOR, 387; Bernice Gulch Rainbow orchestra, WKBO, 385; Hotel Burlington orchestra, WRC, 385; Atlantic City Casino dance orchestra, WPG, 385; Will Oakland's Chateau, WHN, 384; 20th Century orchestra, WCGU, 382; Lucky Roberts and his Society entertainers, WGBS, 382; Wardman Park Hotel orchestra, WRC, 380; Club Madrid orchestra, WFAN, 379; Cathay orchestra, WCAU, 378; Jimmie Gallagher and his orchestra, WNAC, 370; Johnny Johnson and his Pennsylvanians, WTIC, 368; Hotel Ambassador concert orchestra, WPG, 367; Bob Fallon's orchestra, WFAF, 355; Adelphia Whispering orchestra, WFI, 354; Peter Vitton Heart of the Berkshires orchestra, WHAZ, 347; Morcy Pearl and his orchestra, WNAC, 334; Newman orchestra, WLWL, 333; Sunrise Srenaders, WAAT, 327; Dok and his Sinfonians, WNAC, 326; Club Madrid orchestra, WCAU, 325; Van Surdam's Statler orchestra, WGR, 325; Capitol theater orchestra, WTAG, 325; Sorey's orchestra, WFAF, 325; Polar Bears, WNAC, 319; Arcadia dance orchestra, WLSL, 313; Hotel Bond orchestra, WTIC, 312; Dick Newcomb's orchestra, WBZ, 308; Tom Timothy's Frivolity Club orchestra, WHN, 307; Delwood Ballroom orchestra, WMAK, 303; Jerry Falvey and his orchestra, WBZ, 303; Seville Troubadours, WHN, 302; WBAL Ensemble, WBAL, 300; Joe Rines and his Elks hotel orchestra, WEEL, 300; Hotel Statler orchestra, WBZ, 300; Bert Dolan's orchestra, WBZ, 300; Henry Kalis and his Lido Venice orchestra, WEEL, 198; McEnelly's orchestra, WBZ, 192; Bernard Levitov's Commodore ensemble, WOR, 188; Riviera Ramblers, WGBS, 187; Capt. Warmack Buffalonians, WMAK, 187; Piccadilly orchestra, WCAU, 183; Chic Frost's Bostonions, WBZ, 180; Royal Peacock orchestra, WHAS, 179; Hotel Bridgway orchestra, WTIC, 174; Champion Sparkers, WFAF, 174; Foot Peppers orchestra, WNAC, 172; Armand Vecsey and Hotel Vanderbilt string orchestra, WGBS, 168; New York Philharmonic orchestra, WOR, 168; Parody Club orchestra, WOR, 165; Club St. Marks orchestra, WR, 163; Kenner's El Patio dance orchestra, WIP, 163; WTAG Little symphony, WTAG, 163; Snellenburg Salon orchestra, WCAU, 153; Cotton Club Dance orchestra, WHN, 152; Perley Stevens orchestra, WNAC, 151; Roman Gardens orchestra, WNAC, 151; Harbrecht's orchestra, WHAZ, 151; Benjamin Franklin orchestra, WIP, 150; Hotel Manger orchestra, WJZ, 150; Hotel Mayflower orchestra, WRC, 150; Fletcher Henderson's Roseland Dance orchestra, WHN, 150; Arcadia Ballroom orchestra, WMAK, 150; Emerson Gill's orchestra, WTAM, 150; Lou Klayman and his orchestra, WNAC, 69; Stalder's Pennsylvanians, WFAF, 65; Jacques Jacobs' Hotel Shelton ensemble, WOR, 64; Campus Srenaders, WHAZ, 63; Silver Slipper Supper club dance orchestra, WPG, 61; Jannsen's Hofbrau orchestra, WFAF, 53; Carborundum Band, WMAK, 52; Orientals, WCAU, 51; Pepper Pot orchestra, WOR, 49; Iceland Dance orchestra, WHN, 48; U. S. Army Band orchestra, WRC, 26; Remington Band, WMAK, 19; Happy Lewis and his Tunemsmiths, WSYR, 18; Masonic Band, WPG, 18; Shepard Colonial Luncheon concert orchestra, WNAC, 18; WBAL Dance orchestra, WBAL, 16; Vanderbilt hotel string ensemble, WGBS, 15; Sidney and his Hotel Mayflower orchestra, WRC, 15; Calvary Philharmonic orchestra, WNAC, 15; WBAL Salon orchestra, WBAL, 14; George Hall's orchestra, WJZ, 14; Quackenbush orchestra, WHAZ, 14; Richardo Soder's Little Symphony, WPAP, 14; Mediterraneans, WJZ, 11; Loew's New York theater orchestra, WHN, 8; Cities Service orchestra, WFAF, 7; Rensselaer Polytechnic Institute Students Band, WHAZ, 7; New Departure orchestra, WTIC, 7; Bolton's Band, WMAK, 7; Jimmie Hooley's orchestra, WNAC, 7; Philharmonic symphony orchestra, WGY, 7; Durham Radiollers, WCAU, 7; WBAL Dinner orchestra, WBAL, 6; Virginia Vetter's entertainers, WHAS, 6; Blue Hill's Plantation orch., WFAF, 6; Cathay concert orchestra, WFAN, 6; Sylvania Foresters, WJZ, 5; Hotel Van Curler orchestra, WGY, 5; Rensselaer Polytechnic Institute Students Symphony orchestra, WHAZ, 4; Hotel Traymore concert orchestra, WPG, 4; Loew's 86th Street theatre orchestra, WHN, 4; Irving Spector's Rhode Islanders, WEAN, 4; Premier dance orchestra, WOR, 4; Eastman orchestra, WMAK, 4; Andy Orefice and orchestra, WCGU, 4; Hotel Astor orchestra, WJZ, 4; Metropolitan Grand orchestra, WNAC, 4; Tommy Gott's Silver Slipper orchestra, WHN, 3; Venetian Gondoliers, WJZ, 3; Fox Theater Symphony orchestra, WRC, 3; Golden Dragon Restaurant orchestra, WCAU, 3; South Sea Islanders, WBRL, 3; Geo. Maddens Delawareans, WDEL, 3; Homesteaders, WHAM, 2; Municipal Band of Baltimore, WBAL, 2; Trojan Ice Cream Health Crusaders, WHAZ, 2; La Touraine Coffee concert orchestra, WEEL, 1; Strawbridge & Clothier Tea Room Ensemble, WFI, 1; Ganger's Buffalonians, WGR, 1; Super-Oil Heater orchestra, WTIC, 1; Maid-Rite orchestra, WOR, 1; Bentollers Belvedere orch., WGBS, 1; Tangaerd's Bluebirds, WBS, 1; Hickok Buckollers, WHAM, 1; DISTRICT NO. 2—SOUTH: Virginia, West Virginia, North and South Carolina, Georgia, Florida, Louisiana, Mississippi, Alabama, Tennessee, Arkansas and Kentucky. Chas. Dornberger's orchestra, KTHS, 1,040; Andrew Jackson Hotel orch., WSM, 1,016; Kentucky Hotel orchestra, WHAS, 901; Tennessee Collegians, WLAC, 770; Ruby Brown and his orchestra, WSB, 752; Nick Rose and his Revellers, WLAC, 632; Dixola Novelty orchestra, WSM, 566; Cook-a-Dooley-Do orchestra, KTHS, 507; Majestic Club orchestra, WIVA, 503; Hotel Richmond orchestra, WRVA, 394; Bob Stark's Tennesseans, WSM, 335; Hal Kemp and his Recording orchestra, WHAS, 329; Florida Footwarmers' orch., WCOA, 328; Mack Davis' orchestra, WSB, 325; Orin Gaston and his orch., WLAC, 332; Joe Clutz' Cavalier Hotel orch., WSEA, 167; Virginians orchestra, WRVA, 151; Rainbow orchestra, WCOA, 150; WDAG Radio orchestra, WDAG, 53; Enrico Leide's orchestra, WSB, 52; Arlington orchestra, KTHS, 49; Rocco Grella and his Clearwater Scarlet Guards, WFLA, 35; Kentworth orchestra, WWNC, 29; Texaco Salon orchestra, WDOI, 23; Banker's Band company orch., WHAS, 23; Ray Miller and his orchestra, KTHS, 14; Miami Bltmore orchestra, WQAM, 10; Hardy Brothers orchestra, WRVA, 9; Municipal Pier Casino orch., WFLA, 7; Bedouins orchestra, WIVA, 7; U. of Arkansas orchestra, KUOA, 4; WDAG Symphony orchestra, WDAG, 3; Sears-Roebuck instrumentalists, WSP, 1; Dreamland, WMC, 1; Maynard Balrd's Southland Srenaders, WNOX, 1; DISTRICT NO. 3—MIDDLE WEST: Comprising: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa and Missouri. Paul Christensen's orchestra, WHO, 19,093; Maurie Sherman's orchestra, WLS, 3,388; Chief Razzberry's orchestra, KOIL, 1,238; Crosby Cossacks, WLW, 1,015; WENR Studio orchestra, WENR, 956; Fred Hamm's Victor orch., WLIP, 883; Kansas City Nighthawks, WDAF, 840; Dell Lampe, WOK, 751; Ted Florito and his orchestra, WSAI, 549; Kentucky Srenaders, KYW, 561; Paul Ash's Merry Mad Musical Gang, WGN, 537; Emerson Gill's orchestra, 505; McKinney's Cotton Pickers, WJR, 501; Verne Buck's Fifteen Piece orchestra, WIBO, 499; Fred Murrell's orchestra, KFEQ, 485; Ied Peppers, WCFL, 457; Hotel Winton concert orch, WHK, 451; Stevens Hotel orchestra, WMAQ, 450; Bandbox Boys, WLW, 374; Bobby Meeker's Drake Hotel orchestra, WLIB, 347; Gerald Marks orchestra, WGHF, 330; Jean Goldkette's Blue Room orchestra, WJR, 328; Jean Hammond's Elks Club Tune Tinkers, WTMJ, 326; Sammy Watkins' Claremont Tent orchestra, WHK, 325; Ben Pollack's orchestra, WBBM, 316; Jesse Boone, KWTC, 293; Dan Russo's orchestra, WWJ, 267; Jack Chapman's LaSalle Hotel orchestra, WMAQ, 230; Sweeney syncopators, WHB, 224; Earl Hoffman's Chez Pierre orchestra, WCFL, 201; Ray Miller and his Brunswick Recording orchestra, WSAI, 199; Trianon orchestra, WMBB, 190; Ed Day's Bedford Glens orch, WHK, 167; Dick Long's orchestra, WCCO, 165; Edgewater Beach hotel orch., WEBH, 158; Wesley Barlow's orchestra, WCCO, 152; Crystal Slipper Ballroom orch., WHK, 150; Paul How-ll and his Playboys, WADC, 150; The Ramblers, WOS, 150; Hotel Cleveland orchestra, WTAM, 150; Charles Fitz-Gerald's Rhythm Kings, WJB, 150; Mel Doherty's French Bauer orchestra, WLW, 150; Hotel Lowry orchestra, WCCO, 150; Edison Symphony orchestra, WENR, 98; Joe Constantineau and his Buckeye State Srenaders, WHK, 87; Hotel Davis orchestra, WIBO, 84; Crosby Ensemble, WLW, 72; Walk-Over Cavaliers, WDAF, 71; Joe Kemp's string band, WOS, 63; Wisconsin Roof C. orchestra, WTMJ, 63; Minneapolis Symphony orch, WCCO, 63; Cincinnati Symphony orch, WLW, 59; Guy Lombardo and his Royal Canadians, WBBM, 50; Troutdale orchestra, KPAB, 56; Jack Johnstone's Studio orch., WBBM, 49; Neapolitans, WTAM, 49; Formica Concert orchestra, WLW, 47; The Victorians, WHO, 43; Lincoln Solon orchestra, KFAB, 42; Al Handler's orchestra, WIBO, 39; Ambassador's orchestra, KOIL, 37; Mona Motor Oil Little Symphony, KOIL, 30; Deshler-Wallock orchestra, WAIU, 28; Emmet Long's orchestra, WCCO, 27; Hoodlums, WLIB, 23; Pete Kuhl and his Seven Aces, KOIL, 22; Ambassadors, WHO, 22; Henry Thier's orchestra, WLW, 21; Dave Scholer's Playboys, WTMJ, 18; Panco Panic orchestra, WGES, 17; Palmer House Symphony, WJJD, 16; Eagles Club orchestra, WTMJ, 15; Chicago Woman's Symphony orchestra, WMAQ, 14; Buick Studio orchestra, KFAB, 14; State Restaurant orchestra, WAIU, 10; Bush Conservatory orchestra, WMAQ, 10; Barlow orchestra, WCCO, 10; Freddie Rich's orchestra, WJZ, 10; Central College orchestra, WOS, 9; Little Symphony orchestra, WLS, 9; Alexander's Virginians, WSB, 9; Ted Weem's orchestra, WDAF, 7; Bert Brown's Victorians, WHO, 7; York Symphony orchestra, KGBZ, 7; Eddie Kuhn's Kansas City Athletic Club orchestra, WDAF, 7; Art Krueger's Wisconsin Hotel Badger Room orchestra, WTMJ, 7; Elbon theater orchestra, WHB, 7; Joe Huml's Astor Hotel orch., WTMJ, 7; Jack Crawford's orchestra, KTHS, 6; Waddy Wadsworth's Terrace Garden orchestra, WJBT, 6; Coon Sanders orchestra, WBBM, 3; Dad Haskins' Hicktown string band, WADC, 3; (Continued on page 33)

OPPOSE SENATE RADIO

(Continued from page 15)

stallation in some of the more isolated localities, approximately 9,500 miles of leased wire would be required if the most direct routes could be covered. It is considered probable, however, that at least 2,500 miles would be added by utilizing wires now in existence rather than installing new ones. This total of 12,000 miles covers the major maintenance expenditure of \$600,000 annually. This expenditure it is impracticable to obviate at the present stage of the art, as the stations would be too far apart to allow of a sufficiently strong signal to be received at the next station. Also, for rebroadcasting the necessary number of channels could not be obtained in the present broadcast band without paralyzing existing broadcasting programs.

The power for these 23 stations aggregating 605 kilowatts output requires 2,420 kilowatts from commercial lines, or a total (at 4 cents per kilowatt-hour) would cost \$96.80 per hour of broadcasting, as broadcast transmitters are at the most 25 per cent efficient. With an average session of 5 hours daily 100 days per year, the annual power bill would approximate \$48,400.

Tubes used have a life expectancy of 1,000 hours. The 23 transmitters would require a total of 6,000 tubes at an average cost of \$300. Each year would see the replacement of one-half the number of tubes at a cost of \$90,000.

Each station would require the services of two qualified engineers, or a total of 50 (discounting supervising personnel). The lowest possible salary for such men would be \$2,400 per year, or a total of \$120,000 per year for the system.

An annual depreciation of 10 per cent must be expected for radio stations, and will in some cases exceed that figure. At 10 per cent the annual depreciation which covers upkeep and appearance of buildings and towers and replacement of faulty or failing equipment would be approximately \$330,000.

Thus to supply a complete system your committee estimates an initial expenditure of \$3,300,000. For upkeep and maintenance the annual cost would approximate \$1,188,400.

ORCHESTRA STANDINGS

(Continued from page 18)

Table listing various radio stations and their frequencies, including Markel's orchestra, WJZ, 477; Ernie Andrew's troubadours, WBZ, 475; Leo Dreyer and his New York orchestra, WNAC, 471; Golden Dragon orchestra, WFAN, 471; Joe Rines and his Elks Hotel orchestra, WNAC, 470; Waldorf-Astoria orchestra, WEEL, 468; Bamberger's Little symphony, WOR, 468; Cnderella orchestra, WLS, 467; New York symphony orchestra, WJZ, 467;

Simple Explanation of Broadcasting

Part III—Very Little Has Been Learned as to What a Radio Wave Is But Much Has Been Observed on What It Does

By Marvin W. Thompson

IN last month's article we took up the generation of Radio waves by banks of large tubes, controlled as to the length of the wave generated by very small ones, and on whose wave we impressed voice or music by means of another bank of tubes called "modulators." Which brings us to the point where the waves of one station are hurled off into space to bring entertainment to hundreds of thousands—even millions—of people.

Where do they go? What finally becomes of them? How are they propagated through space? What are they, in fact? That is something that you know almost as much about as the most learned scientist. Considering the tremendous use to which we put these Radio waves every day, the vast sums of money spent for Radio sets and accessories every year, and the amount paid for advertising carried on these waves, our ignorance as to the Radio wave itself is indeed surprising.

Radio Energy Mysterions

We have learned quite a good deal as to the operation of apparatus for sending out Radio waves, and we have on the market some really wonderful equipment with which anyone can listen-in, but as to what happens to Radio energy in the interval between the transmitting antenna and reception on your aerial, practically nothing is known. During the past twenty years or so, engineers have, naturally, accumulated quite a fund of knowledge on how to handle these waves, and much data has been gathered, which, in turn, has given rise to many theories on Radio waves—some very sound and plausible, others not so good and later proven impossible in the light of new discoveries. That which is definitely known is most interesting and will be presented here.

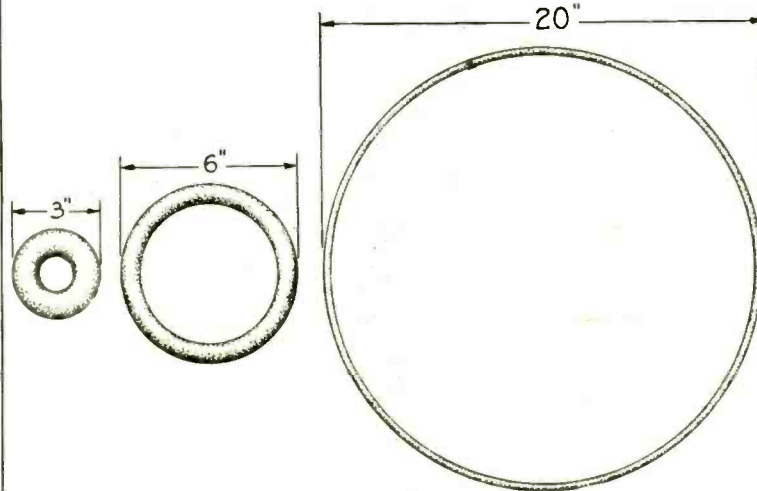
We know, first of all, that Radio waves get weaker as they get away from the station transmitting them. The doughnut, with which we are all familiar, makes a good item on which to show why this is. The doughnut is, we'll say, three inches across the outside and the thickness of the ring at any point is, perhaps, one inch (see Figure 9). Using the same amount of material, imagine that we can increase the total outside diameter to six inches. The thickness of our ring will now have to be considerably less than one inch. Still using but the same amount of mate-

for Radio energy, and all conductors that stick up in the air would weaken the wave.

Waves Pass Through Us

There is much data to show that a Radio wave is composed of characteristics of both types, hence almost anything it pass-

man-made contrivances, and you'll still have static. Storms thousands of miles away will give you clicks and crashes with each lightning flash; that is about the only nature-made source of which we can be sure. There are many more and the



es over or through would weaken it. So far there is nothing to prove that it does not go on forever. It is most interesting to stop and consider that right at this moment you have the waves of American "jazz," a talk on English politics, a South American speech in Spanish and a Chinese love song passing through you (see figure 10). If your body were but a detector what a riot of music and languages you'd turn out to be! Practically all the waves of all the stations on earth are passing through you—unnoticed, unseen, unheard and unfelt. Since it has been practically proven that we ourselves are vibrations, and since we know that Radio waves are vibrations, it seems strange that we do not respond in some

aurora borealis is suspected as one very likely source.

The question is invariably asked, "Well, cannot someone invent a way of getting rid of static?" Thousands of someones are seeking the solution all the time because a fortune, both immediate and enormous, awaits the man who finds it. The difficulty can best be shown by citing a machine gun and a shotgun. Let us say that we have three machine guns, each shooting a steady stream of bullets in the same direction but about five feet apart. Our target is movable and, if we do not wish to have it in the stream of gun number one, we move it into the stream of number two or number three. We can have the stream of bullets from any one of the three guns going through our target.

Static Like a Shotgun

If now, just above the center gun, there is someone firing a shotgun every few minutes, slugs from nearly every shell are going to hit our target. We've got to keep within a limited area to be in the stream of one of the machine guns and so cannot avoid the scattering shot of the shotgun (see figure 11).

Getting back to Radio, the machine guns are our broadcast stations, our receiver is the target and static is the shotgun. We can move our receiver-target into any stream of wave-bullets we wish but cannot lose the scattering volleys of static. For static knows no wavelength. It doesn't occur in a steady stream, like machine gun bullets; there are waves, but on many wave lengths, and one cannot tune it out. Static is found on the lowest of low wave lengths used by the amateurs, on the long waves for transoceanic press and message services, and on everything in between.

Like the shotgun slugs, static has a limited range. That is why you do not get all the static generated all over the world. Waves of static, being Radio in character, die out, and with a given amount of energy at the start, do not carry as far as does a pure broadcast wave of the same initial energy. That is most fortunate. That is why, when you have a powerful station coming in, and you can cut down your sensitivity, you get very little static. The broadcast wave is coming in so strong

that you can cut down the range over which you receive energy of a given starting value and hence eliminate all the static not started from very close at hand.

Fading Is Yet Unsolved

Another phenomena which the listener soon finds is called "fading." This is another characteristic of Radio which many years of observation and tests has failed to solve. You have a station, usually a distant one nicely tuned in, when it either gradually or suddenly dies away only to come back if the dials are let alone. This it may do quite regularly in cycles of a few minutes or perhaps half an hour. Then again this fading out may not be even.

Two receivers may be installed within a few hundred feet of each other exactly alike as to every feature, and including sensitivity, then tuned to the same station—and they may not record the same fading. Yes, there is much to be learned about Radio. Recent tests by the Bureau of Standards and a number of co-operating laboratories and observers have brought to light several facts relative to fading but not much as to its cause or cure. A station between 60 and 125 miles away is apt to show more fading than are others. A special type of highly regular fading makes itself noticed between 15 and 45 minutes after sunset.

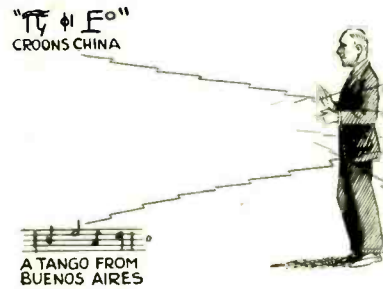
There is, about 60 miles above the earth's surface, a layer of atmosphere which is different in its make-up from that closer to us, which we have chosen to call the Kennelly-Heavyside layer—these being the names of the two men who have made the most important discoveries regarding it. That there is both reflection from it, and absorption by it, of Radio waves is just about proven. Investigations seem to show that when a Radio wave is broadcast, part of it travels parallel to the earth's surface and part of it travels upward at a slant and is reflected from this Heavyside layer. That fading which occurs on reception from stations less than 125 miles away, and swings in and out every few seconds, is considered due to interference between the ground following wave and the reflected wave. That fading which occurs in cycles of several minutes is credited to absorption by this layer. As to why it reflects or absorbs in varying cycles or at varying distances, you know as much as anyone, but those are the facts observed by our greatest laboratories.

The speed of Radio waves is the same as that of light waves, which have been measured and found to travel at about 187,000 miles per second. That is 7½ times around the earth between ticks of the clock—difficult to comprehend because of man's inability, so far, to do better than 300 miles an hour, but fact just the same. One must remember that it is wave motion, which was explained in the first article, that travels through space and not solid substance as we know it. There is no friction or air resistance, no gravity pull or other obstacles to man-travel to be overcome.

What Is Receiving Range?

Now as to why you can and cannot receive certain stations either regularly or not at all. On an average night, we'll say the range (?) of a station is 500 miles. If your range (?) is 500 miles and you are about that distance from the station, you'll get it. If your range is less than that, you won't. Now range is a relative proposition. Perhaps you, with your five-tube set, cannot hear that broadcaster, yet another chap with an eight-tube set, living next door, gets him fine. You'd say that station's range was not 500 miles; your neighbor would say it was. It becomes evident at once that a station's range must be said to be 500 miles for receivers of a given sensitivity. And as yet no unit of measurement of sensitivity has been devised.

(Continued on page 36)



rial, we increase the diameter to twenty inches; the thickness of our ring will be pretty small—just about the size of a heavy piece of string.

Wave Like Doughnut

Just so with Radio energy. When first started traveling in all directions from the broadcasting antenna and ground system, it is strong; there may be enough, in the case of large stations, to light a large building. As this energy moves outward, it must be spread around a larger and larger circle and the amount at any one point gets smaller and smaller. By the time a wave has passed half way around the earth it is in the form of a ring 25,000 miles around. It would seem at first thought that all this energy would come together at a point on the opposite side of the globe and be very powerful there.

This does not happen, however, and what happens to the waves is still a mystery. Presumably, much of the radiated energy does not follow the curvature of the earth's surface but goes off at a tangent. Presumably, also, much of it is absorbed by certain formations in the earth which it goes over or through. There are many who believe it has qualities similar to the magnetism around a horseshoe magnet with which we've all played as youngsters, in which case our Radio wave would be weakened by fields of iron ore, steel buildings, and the field and poles of the earth. Others contend that its properties are those of a condenser, and a condenser need consist only of two metal plates separated ever so slightly and to which we connect wires from a source of current. If this contention is correct, our Radio wave would lose energy passing over forests and jungles where great masses of damp leaves offer millions of leakage paths

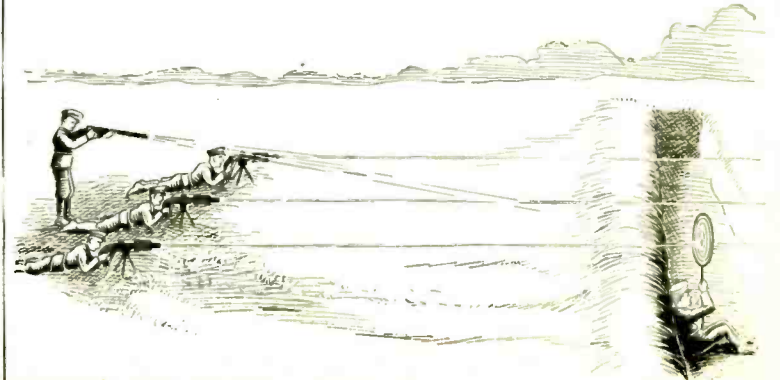
way to these thousands and thousands of waves going through us all the time.

We have, in connection with Radio reception, the undesirable phenomena known as "static." The source of some of it is known, since some of it is man-made, but the cause and source of a great deal of static is still a mystery. Static is that irregular crackling or series of intermittent crashes that mar long distance reception but which is not particularly noticeable on local reception. Man-made static is the result of defective or poorly designed electrical equipment of practically every type made. We design our electrical equipment to be as efficient as possible, to use every bit of electrical energy generated except that necessary to overcome the resistance of the wires carrying it.

Electrical Trouble Means Static

Sometimes, however, things go a little wrong and almost invariably, in addition to the loss of energy, there is Radio interference set up which we bunch in with the other crackling and clicks under the name of static. If the contacts on a sign flasher get old or corroded, a Radio wave is started on every opening and closing of the circuit. The brushes on the motor of an elevator get old or dirty and it is more Radio interference. The insulation on a street lighting circuit is worn off and everyone for miles gets a noticeable increase in static. Your vacuum cleaner, your violet ray, your heating pad, some types of battery chargers, your telephone, the ignition system on your car—all these and many more may help to add to the background of noises that are not entertainment in your set's reproduction.

The greater portion of static is not man-made. You can go far out in the mountains or on the plains, away from all



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Get Ready Another Doorn

OUT of Russia into free America has come a curse. There sits in the city by the sea a man, suddenly exalted, dreaming dreams of conquest, of bags of gold—and power. Power behind the throne. Power that controls all. Power of the invisible forces that pulsate over webs of wire and through the free air, setting the expressions of governments and men. Thus, Honorable Senators of the United States, you have a picture of what is wrong with Radio and broadcasting.

The Radio Corporation of America hiding behind the stars and stripes has killed the Federal Trade Commission investigation of Radio monopoly. It has hand picked the Radio commission and through this control monopolizes, with its associates, practically all the choice broadcasting bands. It is blocking now the attempt of other commercial interests and the press to use the lower waves for overland communication. It owns fifty per cent of the National Broadcasting company stock and controls this camouflage corporation, by thirty and twenty per cent with General Electric and Westinghouse—thus monopolizing the only nationwide forum for public utterance.

By a campaign of sabotage against independent Radio receiver manufacturers and distributors, this octopus has secured a death hold on the sale of sets through alleged ownership of patents. It is sucking the life blood of the independents with prohibitive royalties and with the notorious and nauseous tube rider of its royalty contracts.

If the Radio industry and broadcasting are to be free for the American people, senatorial action is immediately imperative. The situation demands a complete and exhaustive investigation of the Radio Corporation of America by the United States Senate.

WHAT is an artist?

When is an artist not an artist? The questions arise because charming Miss Natalie Giddings of the Crosley organization informs us that Mr. Powell Crosley, Jr., has expressed an opinion and issued certain instructions concerning the matter. Quoting Mr. Crosley she writes to the editor:

"What makes you all think that everyone who does any broadcasting is an artist? Please be more careful in the indiscriminate use of the word. Call them Radio entertainers, Radio comedians, soloists, organists, pianist, performers, or anything you want to except 'artist'—when they cannot by any stretch of the imagination be that."

Turning to our old friend Noah Webster in his latest unabridged we find the following five definitions for the word artist:

1. A master of liberal arts; a learned man, also a man of science, whether student or practitioner.
2. One who practices some mechanic art or craft; an artisan.
3. One who professes and practices an art in which imagination and taste preside over the execution, especially a fine art; a person skilled in one of the fine arts.
4. One who shows trained skill or rare taste in any manual art or occupation.
5. An artful person, a schemer.

Dodge, Brothers, dodge. The king ('s fool) can do no wrong. However, he'd better get acquainted with Al Smith.

"As sung by the Columbia Phonograph company, New York and Paris." It is still "identifying" itself.

Free speech—by courtesy of the National Broadcasting company.

Leaving the heir: "My boy, honesty is truth ad infinitum."

THE READER'S VIEW

Disabled Soldier Doubts

IN YOUR column in Radio Digest for January I notice that you are rather pulling for the chain programs on one wave band. Do you honestly believe that putting all the chain stations on one wave band would work? I don't; not any more than has already been shown that a bunch of stations can broadcast on the same wave without interference. There might be some places in the United States where the federal Radio commission has cleared up the air so people can enjoy good reception, but if any one will come to my home I will show that there are only three points where I can get reception clear from interference. I am only a disabled soldier lying here in bed who uses a Radio seven days and seven nights a week. My technical knowledge of Radio is slight, but if it is true that twenty to fifty stations can be put on one wave, why hasn't it been demonstrated?

Probably some favoritism has been shown and a lot of power given to some stations at the expense of others. It makes little difference to us. We seldom hear WGY, WJZ and WEAF, anyway. Those who have high priced selective sets may profit from it, but personally I haven't one and can't get one, and it is we with the older sets who are limited to a very few of the nearest stations. One broadcaster says members of the commission listen to the money stations because they want to hold their \$10,000 a year jobs—just show me the guy who wouldn't, he or anyone else. This same broadcaster recommends a farm labor man, a labor union man and repressed public man to be on the Radio commission. All right, suppose this station is a farm station, then the farm labor commissioner will see that he gets 10,000 watts. Or suppose it is the labor station, then the labor union commissioner will see that he gets 10,000 watts, and some of the other stations eliminated from its vicinity. Of course, that wouldn't be favoritism. Then we will come to the station representing the repressed public. What will it get? It will get it in the neck. I have seen all that worked out before. OSCAR DUNCAN,
811 Woodard St., Dennison, Tex.

Troubles of Missoula

I HAVE been reading with interest the different articles written and published in the Digest about the Radio commission and its faults, and having troubles of my own feel that, if for no other purpose than to get this off my mind, I should at least air the trouble we have in Missoula, Mont.

We are not as lucky as the average fan in that we have no local stations other than KUOM at the State University at Missoula and must go a long way for our entertainment, and in doing so must have long range receivers; that is, as long range as we can afford. Results are: Squeals and whistles and two stations at once, one trying to talk and one trying to sing or do some other form of comedy until we push the switch and go to bed with a grouch that won't wear off, and all because we have too many stations on the air at one time.

It is useless to make allowance for power, a 200-watt station will come in as strong as a 2,000-watt when it is hitting right and the 2,000-watt is coming weak, so that idea is all wrong. As an example, on December 3 at 7:10 P. M. I was getting WNBA at Forest Park, Ill., when I could not get KJR in Seattle, the former listed as a 200-watt station and the latter 2,500, the weak station coming 1,500 miles and the strong station coming 500 miles. So from my personal observations I am satisfied in my own mind the theory is wrong and that the 200-watt station would have caused a squeal on the same wave length with the 2,500-watt station, and three times the distance away. How then will the commission clear the air and leave all the stations on at the same time? It cannot be done.

Following is a list of good stations that come in here that are of no use to the listener under the present conditions:

KMTR-KYW, KFI-WOS, KPO-WSUI, KHJ-WCCO, KWKH-KMA-KTW, WMMJ-WGY, WEW-WOC, KJR-KVOO, WPSN-KDKA, KFAB-KYA, KFWO-KOWW-KMOX, KOIL-KTCL, not mentioning the stations I used to get that I cannot get now, such as WENR, WOK, WORD, KYW, WEAF, and I could mention many more from old logs that are never heard now. The Radio commission cannot clear the air with the number of stations on the air now and could not do so if they cut them all to 50-watt stations, so why continue the agony. Personally I use a crystal set for coast stations and then get some central station for dessert or sandwiched into the program somewhere.

Fading has become general, not on account of natural causes, but from one station crowding the other out of the air. A station will be coming strong and clear and in a second will fade out and you may hear faintly another station on the same wave length that has overcome the former station and soon the other will come back, they alternate and you get a little of both.

I do not think that such arguments as the Cranse-Mott confab will clear the air, but they should help, and if it takes a real fight between fans and broadcasters to settle the problem, I am for the fight, and let the best man win. I will not scrap my set and will still listen to the squeals and whistles as long as they will make them, and all of the time will bear in mind that it is not costing me a cent to broadcast and that the men that are paying for it should be heard first. They in turn should bear in mind that without the listener their stations would not be heard and act accordingly.

C. M. SAMPSON, Missoula, Mont.

IT HAS been a great surprise to me to see my favorite authority in Radio broadcast, and a magazine which I use almost exclusively for authentic information, allowing a man of real socialistic Radio views like L. S. J. Cranse to attack one of our best loved broadcasters and a pioneer in the field of Radio as he has done Major Mott in the December issue of your magazine. In the October issue Mr. Cranse took a hot whack at the federal Radio commission, and our peppery Major Mott replied to him in a nice way although he said some things that, in my opinion, Mr. C. had come to him.

CHET. G. WOOD,

"We Did It!"



RADIO INDI-GEST

Go On, Brother

By Alex. C. D. Noe

Health all gone and wealth all gone,
But what is that to a fighter?
Turn your big guns loose, put your war paint on
And screw up your courage tighter.

Wealth all gone and health all gone,
But we're betting on you still,
Shoot the engine juice, give a whoop, drive on
And your wagon will climb the hill.

Health all gone and wealth all gone,
But a man isn't down till he's dead,
Face the waves mile high, clamp the hatches on
And shout, "Full speed ahead!"

Stand at the bat, do your level best,
Till the last great game and inning,
Get a grip on the stick, knock the ball out West
And come in home for the winning.

Oh, the GRAND STAND cheers and the BIG BANDS
play
When you've fought to the finish, Pard,
And we'll all greet you with a HIP HURRAH !!!
If you buck up and buck up hard.

Veryl Wins Royal Bean

HO! Ho! Ah-yah! Ah-yah! Come hither Roscoe, Suh! Take you this key of gold and descend into the subterranean treasury where repose the crown jelly beans of the realm. Call the most faithful of the guards and penetrate to the innermost chamber. Out of the Royal vault see to it that you choose the bluest of translucent jelly beans, sheathe it in eiderdown and send in a jeweled casket to Veryl L. Dunbar, the Young Bear reporter of Fairfield, Ia. For verily he wins the Royal Word Steeplechase this day.

The course over which many stumbled and failed was as follows:

Circuit
Unit
Eliminator
Ampere
Static

I read with interest your column in Radio Digest, and decided to participate in the 50th Word Steeplechase, so here it is:

"Sir, cut off about 3 lbs. of your best wool yarn, as I must do some knitting," said I to the shopkeeper. "Do you knit?" inquired the shopkeeper. "Do I? Well, I'll say, I won the First Annual long distance Radio Knitting Contest, held over the Radio station in Podunkus Ridge last week," I told him. "Old lady Doolittle was my nearest competitor, but it only took me 78 minutes and 29 seconds to eliminate her from the contest."

"The prizes were sure nice; for first prize I received a box of dried prunes, an' pair of shoes, which were donated by the business men of Podunkus Ridge."

"The best part of the whole affair was the fact that each entry was supposed to pay an entrance fee of \$5.00, and as I had no money I told them to just put it 'on tick' till I got the cash, which they agreed to do, but since they sent me the prize anyway, and since I don't have the money either, the entrance fee can stay 'tick' as far as I'm concerned!"

Of course, that "an' pair" may not be considered generally good for "ampere" but who knows but what it is perfectly good—lowcase and usage governs style.

All set for the next course: Are you ready? Shoot! Trickle, Cabinet, Phone and Coil.

Radio Itch has been diagnosed as the strange malady afflicting residents near Chicago steel mills. Maybe so. But bathing has been a nuisance in that vicinity because of tainted water.

—INDI

MAC, MARATHON SINGER OF KFRC AND PIANIST AID



WHEN microphones were phonograph horns working backward, Hazel McDaniels, above, began broadcasting at KFRC. She knows her Radio audience. Another entertainer at KFRC is Mac, who, tiring of his nomadic life and seeking new adventures unhampered by means of transportation, took to roaming the ether lanes. In one evening he can make the Atlantic coast if weather conditions are right and yet be back in time to go to bed in San Francisco.

A STATISTICALLY inclined member of the staff of KFRC has figured that Mac has used a total of a half mile of guitar strings in his time and has sung 12,615 times. On this basis KFRC is said to claim a "vocal chord durability" record for Mac. Not many months ago Mac decided to be in vogue at the time non-stop flights were popular. He sang steadily for over two hours during which he broadcast more than 75 songs, from memory.

Hazel McDaniels, staff pianist of KFRC, stayed with Mac in his contest, thereby showing that being a veteran of the air means something.

Sometime soon Mac is going to have another contest because he claims to have stored away in his brain 300 songs which he can bring forth intact at any time. These songs he has collected during his nomadic career.

Leaving home to carry water for elephants, Mac enlisted in the Spanish-American war, joined the gold-hungry trek to Klondike, where he was a buddy of Rex Beach; stoked his way from the Philippines to England to see the coronation ceremonies of King Edward, and tried being a brakeman on most of the railroads west of the Mississippi.

Two and a half years ago he joined the KFRC staff, where he entertains the children, incidentally grownups, with his stories and songs.

**MARINE MAIL LADY
KOMO ENTERTAINER**

HOODS Canal, a jagged arm of Puget Sound, is dotted with tiny settlements whose mail delivery depends upon this lovely KOMO singer, Alice Emel. Operating from Coyle, Washington, near the center of the canal, she has a contract for delivering mail at these various points each day, rain or shine, storm or calm, in her tiny motor boat. She carries along a portable Radio set for company.

This little portable lead her into Radio work. Her letter of appreciation for KOMO's programs came to the attention of Mr. Lynch who recognized her as one of the participants in the "Wayfarer," the musical pageant which he had directed in the University of Washington stadium. He immediately invited her to visit the station and try out before KOMO's microphone. Her Radio appearance was a success, but she refused to give up her mail route. However, a compromise was effected and Miss Emel has agreed to broadcast during weekends.

L. S. J. Cranse, Summit, N. J. reports that he logged 72 DX stations from 5:04 p. m. the night of November 25, to 2:27 a. m. The grand average for distance was 1,000 miles. The log shows the precise moment he heard the call letters of each station.

Eddie and Fannie Cavanaugh, KYW Gaelic Twlms, have introduced a "Song Cycle" which goes on the air at 10 every Friday evening.

SHORT WAVES

By Marcella

(Continued from page 2)

Mary dear, you certainly got me in Dutch with Adams Colhoun asking me to find out all about him. He calls me "Ether Impressario, Queen of the Inquisitive Where English is Unspeakable" etc. Now what do you think of that? Here's what he writes: "You have been kind enough to say that somebody is sufficiently concerned about me to ask what church I go to. The answer is "I—O." (I Bar None. But I did not fail to put the bar low.) My religious and philosophic creed contains five words in two sentences from the Bible—"God is Love"; "Jesus Wept." To me, these mean "Love is everything and comes only with suffering." Lest this seem gloomy, let me hasten to add that I judge that suffering is not the penalty of love, but that love is the wonderful fruit of suffering. No church creed in its entirety appeals to me. All have much that I believe and much more that I do not accept. I am a member of the Presbyterian Church in the United States. Now, may I ask, with apologies to The Two Black Crows, why bring that up? Men and women are not worth while for what they believe but for what they do with it. Idle is built of four initials, I Do Little Enough. And that is the sorriest word on our tongue. My religion, if any, is to be busy; usefully, if possible." Thanks, Adams dear, I am sure Mary should be satisfied. And this ought to uplift the column.

Dear Mr. Rathdrum, Idaho, I think it was lovely of you to write me and I did everything possible to find out where our old friend, Harry Snodgrass, is but with no success. I called the Orpheum Circuit and discovered his tour ended last spring. They gave me a Kansas address but my letter came back. Let's hope Harry sees this paragraph and lets us know where he is. I'd like to know what happened to Mr. Witten, too, wouldn't you?

Oscar Heather is a dear, Mrs. Danbury, Conn., and at the present time he is taking care of the microphone of WBCN. He is tall and jolly looking and has such a pleasant voice and such a nice way with him. He is not married that I know of. But I won't commit myself on these men any more.

(Continued on page 34)

GABRIEL'S CHOICE

(Continued from page 9)

From the angle of showmanship, is as ambitious or successful as it is in the Middle West and the East at this date, is a matter for speculation. Certainly, a program that costs \$1,250 the hour for talent alone—as is being presented weekly hereabouts—not to mention many and many an "hour" that pays \$250 to \$750 an hour to those taking part, cannot be far behind eastern programs in caliber.

In casting a more or less astigmatic eye over the broadcasting activities across the nation, I cannot refrain from setting down an insignificant truism I conceive, to the effect that the Radio audience here and in the East is not the same, reckon it how you will. Again we arrive at statistics, reminding me, in passing of the observations of the manager of a huge bachelor hotel in Chicago who had formerly conducted a similar enterprise in New York. Among other interesting datum, he declared, the Western man was almost certain to raise the deuce of a row if he

(Continued on page 35)



THE only seagoing lady mail carrier in the United States, if not in the world, is Alice Emel, above. She also has the distinction of being one of KOMO's popular songsters.

HOME TELEVISION

(Continued from page 5)

"Television will supplement and not replace the modern Radio receiver," said one of the officials of the R. C. A. "Broadcasting of television will develop along lines of the present audible broadcasting. Visual broadcasting will mean a vast expansion of the Radio field, a larger growth and adaptation of the theatrical productions. It will bring the speaking movies to the home and thereby evolve a new art."

New High Speed Lamp

D. McFarlan Moore, engineer at the Edison Lamp works, developed the new Moore neon gas lamp used in the Alexander television receiver. The light has a pinkish tinge and is capable of flicking on and off in the millionth part of a second. The signal, or electro-magnetic wave from the television transmitter, is received in equipment designed to receive modulations as high as 40,000 cycles. The current is delivered to the Moore lamp which responds with the pulsating light intensities in the same manner as a loud speaker diaphragm reproduces sound waves.

The human eye and ear function at approximately the same ratio. We have a low continuity of sound at 16 beats a second. Images changing on a screen at the rate of 16 per second have a continuity of action—the passing image remains in the conscious eye while the approaching image is already on the screen. There is a disk used in television which is 24 inches in diameter and is punctured by 48 holes—each hole 25 mils in diameter. The holes are arranged in a spiral. The disk is revolved by motor at 18 revolutions per second. At this speed by the light of the sensitive Moore lamp a beam passes through a photo electric cell which converts the light to electric waves. These waves are picked up by the receiver and released through the same kind of a disk and lamp, reproducing the original scene on a three inch screen in the front of the receiver.

BROTHER BOB

(Continued from page 10)

they are not forgotten at WEEI, and incidentally by the many thousands of listeners who keep that station regularly in tune.

Nor are the lighthouse keepers forgotten as they keep their lonely vigils out on lonely points amid the moody waves of the sea. There was little for them to see or hear in the way of entertainment until Radio receivers and broadcasting became available. Now they not only have their own special program at the behest of Brother Bob but they write a weekly letter to all their twenty-seven comrades in the string along the coast. These letters are all broadcast and thus each station is kept in intimate touch with all that is going on so far as the lighthouse service is concerned.

Yes, Brother Bob has a lot of work brothing all the people he has brought into his WEEI family but he seems to manage it very well. If he should decide to run for President of the United States he would get the junior vote one hundred per cent.

DR. HERMAN N. BUNDESEN, for five years head of the Chicago health department, has been engaged by the Chicago Daily News to carry on his health program by broadcasts over WMAQ. Dr. Bundesen reduced the Chicago death rate to the lowest of any large American city. Not long ago in recognition of his remarkable record he was elected head of the American Public Health association. His growing influence and broad recognition as an efficient administrator alarmed the new Thompson political regime in Chicago and Dr. Bundesen was removed without notice to private life. He was immediately engaged as health editor for the Daily News, and advisor for the sanitary District of Chicago. This board governs the sanitary area of Chicago and forty-nine other incorporated cities and villages.

NASHVILLE NIGHT FEATURE OF WLAC

KVOO Tulsa, Okla. (348.6m-800kc) 6 p. m. instrumental and voice; 7: WEAF; 9:30, organ.

KYW Chicago, Ill. (526m-570kc) 7 p. m. N. B. C.; 9:05, Al and Pete; 9:30, music; 10:30, Serenaders.

WBAP Fort Worth, Tex. (499.7m-600kc) 6 p. m. orchestra; 8: WEAF; 10, music; 11, organ.

WBBM Chicago, Ill. (389.4m-770kc) 7-11 p. m. program; Hank and His Gang.

WBCN Chicago, Ill. (288.3m-1040kc) 7 p. m. program.

WCBZ Zion, Ill. (344.6m-870kc) 8 p. m. Cornet quartet; vocal solos; 9:30, program.

WCCO Minneapolis-St. Paul, Minn. (405.2m-740kc) 7-30 p. m. WEAF; 9: WEAF.

WCFL Chicago, Ill. (483.6m-620kc) 8-12 p. m. popular hour.

WDAF Kansas City, Mo. (370.2m-810kc) 6 p. m. School of the Air; 7: WEAF; 11:45-1, Nighthawk; 11:55-12, program.

WEBB Chicago, Ill. (365.6m-820kc) 7-10 p. m. N.B.C.; 10:15, orchestra.

WENR Chicago, Ill. (288.3m-1040kc) 8, orchestra; 9:30, popular program.

WFAA Dallas, Tex. (545.1m-550kc) 7 p. m. N.B.C.; 7:30, WEAF; 9, program.

WGN WLIF Chicago, Ill. (416.4m-720kc) 7 p. m., 12-30 a. m. program.

WHAS Louisville, Ky. (322.4m-830kc) 7-9 p. m. N. B. C.; 9, studio concert.

WHB Kansas City, Mo. (336.9m-890kc) 7 p. m. dinner hour organ; 8, evening concert; 9:30, dance music.

WHO Des Moines, Ia. (535.4m-560kc) 6:30 p. m. dinner concert; 7-9, N.B.C.; 9, music; 9:30-11:30, N.B.C.

WHT Chicago, Ill. (305.9m-980kc) 8:30-10 p. m. evening program; 11-12, your hour league.

WHIO Chicago, Ill. (305.9m-980kc) 7:10 p. m. music; 10, popular program.

WJAZ Chicago, Ill. (263m-1140kc) 9:30 p. m. studio program.

WJBT Chicago, Ill. (389.4m-770kc) 12 mid.-1 a. m. midnight frolic.

WJJD Chicago, Ill. (365.6m-820kc) 8-9 p. m. children's hour; 9:30, program; 12, program.

WLAC Nashville, Tenn. (226m-1330kc) 9 p. m. program; 10-11, orchestra.

WLS Chicago, Ill. (344.6m-870kc) 7:30 p. m. Super-tone hour.

WMAQ Chicago, Ill. (447.5m-670kc) 7:40 p. m. U. of Chicago lecture; 8, orchestra; 9, music; 10, Chicago theater; 11, Serenaders; 11:30, program.

WMBB Chicago, Ill. (252m-1190kc) 6 p. m. dinner concert; 7, Trioan ensemble; 8:30, Trioan orchestra.

WMBI Chicago, Ill. (263m-1140kc) 7 p. m. sacred music.

WMC Memphis, Tenn. (516.9m-580kc) 7-10 p. m. N. B. C.

WQAI San Antonio, Tex. (499.7m-600kc) 9 p. m. Keltinator hour.

WQD Davenport, Ia. (374.8m-800kc) 7:30 p. m. N. B. C.; 9:30, program.

WOW Omaha, Neb. (508.2m-590kc) 6 p. m. N. B. C.; 6:30, orchestra; 7-11, N. B. C.

WSB Atlanta, Ga. (475.9m-630kc) 8 p. m. WJZ; 10:45, 11:30, program.

WVBC Chicago, Ill. (232.4m-1290kc) 9-11 p. m. music; 12-1, popular artists.

WSM Nashville, Tenn. (336.9m-890kc) 7:30 WEAF; 8: WEAF; 9, studio program; 10, program.

WSMB New Orleans, La. (296.9m-1010kc) 8:30-10:30 p. m. program.

WTMJ Milwaukee, Wis. (293.9m-1020kc) 8, WJZ; 9, old favorites; 10, dance orchestra.

Mountain Time Stations

CNRA Calgary, Can. (434.8m-690kc) 9 p. m. CNR program.

Pacific Time Stations

KFI Los Angeles, Calif. (468.5m-640kc) 7 p. m. University of S. C.; 8, drama hour; 9, N. B. C.; 10, music; 11, program.

KFRC San Francisco, Calif. (454m-660kc) 6:20 p. m. beauty talk; 7, music; 9, studio program; 10, program.

KFWB Hollywood, Calif. (361.2m-830kc) 6-7 p. m. dinner concert; 7:50, news; 8:30, features; 9-10, program; 10-11, frolic; 11-12, orchestra.

KGO Oakland, Calif. (384.4m-780kc) 6:55 p. m. Stanislaus Bem's Little symphony; 8, music; 9-10, N. B. C.; 10, orchestra.

KCMV Portland, Ore. (491.5m-610kc) 6-7 p. m. dinner concert; 8, concert; 10, National Broadcasting company.

KHJ Los Angeles, Calif. (416.4m-720kc) 7 p. m. music; 8-11, program.

KPO San Francisco, Calif. (422.3m-710kc) 6:30-7 p. m. organ; 8-9, program; 9, N. B. C.; 10, dance orchestra.

Thursday silent night for: KFAB, KLX, KOA, WAU, WDD, WEAO, WEMC, WLIT, WOO, WWS.

FRIDAY, FEBRUARY 3

Headliners			
Eastern	Central	Mountain	Pacific
5 p. m.	5 p. m.	5 p. m.	5 p. m.
WMAQ (447.5m-670kc) Parent-Teacher association.			
6 p. m.	5 p. m.	5 p. m.	5 p. m.
WLAL (285.5m-1050kc) "Red Letter Day—Sidney Lanier."			
7 p. m.	6 p. m.	5 p. m.	5 p. m.
WOW (508.2m-590kc) Seventeenth U. S. Infantry band.			
7:30 p. m.	6:20	5:20	4:20
WBRR (256.3m-1170kc) Items on Health and Hygiene.			
7:30 p. m.	6:30	5:30	4:30
WHRH (256.3m-1170kc) Joseph Bonaccorso, violinist.			
8 p. m.	6:30	5:30	4:30
WVSH (365.6m-820kc) Wood-Gate.			
7:45 p. m.	6:45	5:45	4:45
WHAM (280.2m-1070kc) Syracuse University Program.			
8 p. m.	6 p. m.	5 p. m.	4 p. m.
WOW (508.2m-590kc) Randall's Royal Fontenelle orchestra.			
8:30 p. m.	7:30	6:30	5:30
WHRH (256.3m-1170kc) Lecture, "Signs of the Ending World." R. S. Emery.			
8:30 p. m.	7:30	6:30	5:30
WLS (344.6m-870kc) Oriental male quartet.			
WGO (348.6m-860kc) musical lecture, Isadore Freed, pianist.			
8:40 p. m.	7:40	6:40	5:40
WFPA (516.9m-580kc) Artists from Peace Memorial church.			
8:50 p. m.	7:50	6:50	5:50
WOI (265.3m-1130kc) Basketball, Kansas vs. Ames.			
9 p. m.	7 p. m.	6 p. m.	5 p. m.
KFDY (545.5m-550kc) basketball, South Dakota State.			
KVOO (348.6m-860kc) Princess Pakanli.			
WVOA (249.9m-1200kc) Second Anniversary program.			
8:15 p. m.	8:15	7:15	6:15
KFMX (236m-1270kc) Chemistry and Its Relation to Our Health.			
9:30 p. m.	8:30	7:30	6:30
KFI (468.5m-640kc) Clarice Russell, blues singer.			
KTHS (384.4m-780kc) Rorancho Negro Jubilee singers.			
WTC (535.4m-560kc) Ivanhoe Knights.			
10 p. m.	9 p. m.	8 p. m.	7 p. m.
KFKA (315.6m-950kc) R. V. B. trio.			
KMBC (270.1m-1110kc) Lois Swaney, soprano.			
KOA (325.9m-920kc) Denver Chamber De Molay band.			
10:05 p. m.	9:05	8:05	7:05
WBAI (285.5m-1050kc) "Moments with Musical Prodigious," S. Broughton Tall.			
10:10 p. m.	9:10	8:10	7:10
WFLA (516.9m-580kc) Special music.			
10:15 p. m.	9:15	8:15	7:15
WV (333.1m-900kc) Suffolk Theater symphony orchestra.			
10:30 p. m.	9:30	8:30	7:30
KYW (526m-570kc) Apollo quartet.			

FARMERS' PROGRAM INDEX

Special Farm Features

Weather

Local Time

KDKA, 10-10 a. m., 10 p. m.
 KFJ, 8:30 p. m.
 KFKA, 10:55 a. m., 11:55 p. m.
 KFNF, 7:30 a. m., 12:40 p. m.
 KFOA, 4:30 p. m.
 KFWI, 10:30 a. m.
 KGA, 6 p. m.
 KGO, 12:30 p. m., 7:03 p. m.
 KKW, 10 a. m., 7:30 p. m.
 KJR, 12 p. m.
 KMMJ, 9:30 a. m., 12:30 p. m.
 KMP, 1 p. m.
 KOA, 11:45 a. m.
 KOIL, 11:45 a. m., 5:45 p. m.
 KOMO, 12:15 p. m., 8 p. m.
 KPO, 12 p. m.
 WAA, 7:15 p. m.
 WABC, 11:55 a. m., 11 p. m.
 WBZ, 5:55 p. m., 11:30.
 WCAE, 3:40 p. m.
 WCSH, 7:10 p. m.
 WCCO, 9:45 a. m., 10 p. m.
 WDAF, 5:45 p. m.
 WDBO, 7:40 p. m.
 WEEI, 11:40 p. m.
 WFAA, 10:30 a. m., 9:30 p. m.
 WFLA, 8:30 p. m.
 WGA, 12:30 p. m., 10:45 p. m.
 WHAD, 10:30 a. m., 2 p. m.
 WHO, 10 a. m.
 WIP, 1:30 p. m.
 WJZ, 7 p. m.
 WLAC, 7:30 p. m.
 WLW, 11:15 p. m., 12 p. m., 2:30 p. m.
 WMA, 9:45 a. m., 12 p. m.
 WSM, 11:45 a. m.
 WTAG, 12:59 p. m.

Monday

Eastern	Central	Mountain	Pacific
9 a. m.	8	7	6
KMMJ (285.5m-1050kc), Poultry talks.			
10:05	10	9	8
WHK (265.3m-1130kc), Farm Flashes.			
12:05	11:05	10:05	9:05
WCAE (461.3m-650kc), Farm Flashes.			
WJAZ (340.7m-880kc), Farm Flashes.			
12:30	11:30	10:30	9:30
WJR-WCX (440.9m-680kc) U. S. Farm service.			
WMAK (545.1m-550kc), Farm Flashes.			
12:45	11:45	10:45	9:45
WGY (379.5m-790kc), Farm Flashes.			
WSM (336.9m-890kc), Farm Flashes.			
1 p. m.	12	11	10
WHB (340.7m-880kc), Farm Flashes.			
WKAR (277.6m-1080kc), Farm talks.			
WKBH (220.4m-1360kc), U. S. Farm talks.			
WRHM (260.7m-1180kc), U. S. Farm talks.			
1:10	12:10	11:10	10:10
WMAQ (447.5m-670kc), Prairie Farmer.			
1:15	12:15	11:15	10:15
WTAV (483.6m-620kc), Farm Flashes.			
1:20	12:20	11:20	10:20
WEAO (282.8m-1060kc), Timely hints to farmers.			
1:30	12:30	11:30	10:30
WFAA (545.1m-550kc), Farmers' hour.			
1:35	12:35	11:35	10:35
KSAC (333.1m-900kc), Farm talks.			
1:45	12:45	11:45	10:45
WOI (265.3m-1130kc), Animal Husbandry.			
2:05	1:05	12:05	11:05
WDAY (545.1m-550kc), U. S. Farm talks.			
2:20	1:20	12:20	11:20
WDHO (288.3m-1040kc), Farm Flashes.			
2:50	1:50	12:50	11:50
WSEA (263m-1140kc), U. S. Farm school.			
7:55	6:55	5:55	4:55
WAMID (222.1m-1350kc), U. S. Farm talks.			
8:10	7:10	6:10	5:10
KSAC (333.1m-900kc), Farm courses.			
WNSH (365.6m-820kc), Farm feature.			
8:20	7:20	6:20	5:20
KLGA (296.9m-1010kc), U. S. Farm school.			
8:30	7:30	6:30	5:30
WOS (422.3m-710kc), U. S. Farm school.			
8:40	7:40	6:40	5:40
WHB (340.7m-880kc), Poultry talk.			
9	8	7	6
WMC (516.9m-580kc), Farm talk.			
9:20	8:20	7:20	6:20
KQW (296.9m-1010kc), U. S. Farm talks.			
11:55	10:55	9:55	8:55
KVSC (394.5m-760kc), Farm Flashes.			

Tuesday

Eastern	Central	Mountain	Pacific
9 a. m.	8	7	6
KMMJ (285.5m-1050kc), Poultry talks.			
11:20	10:20	9:20	8:20
WNSH (365.6m-820kc), Farm features.			
12	11	10	9
WHK (265.3m-1130kc), Farm Flashes.			
12:05	11:05	10:05	9:05
WCAE (461.3m-650kc), Farm Flashes.			
WJAZ (340.7m-880kc), Farm Flashes.			
12:30 p. m.	11:30	10:30	9:30
WJR-WCX (440.9m-680kc) U. S. Farm service.			
WMAK (545.1m-550kc), Farm Flashes.			
12:43	11:43	10:43	9:43
WGY (379.5m-790kc), Farm Flashes.			
12:45	11:45	10:45	9:45
WSM (336.9m-890kc), Farm Flashes.			
1	12	11	10
WGO (348.6m-860kc), Farm hour.			
1:35	12:35	11:35	10:35
KSAC (333.1m-900kc), Farm talks.			
1:40	12:40	11:40	10:40
KTFP (272.6m-1100kc), State farm talks.			
1:45	12:45	11:45	10:45
WOI (265.3m-1130kc), Plant pathology.			
2	1	12	11
KOMO (305.9m-980kc), Garden talk.			
6:20	5:20	4:20	3:20
WDBO (288.3m-1040kc), Farm talks.			

Wednesday

Eastern	Central	Mountain	Pacific
11:40 a. m.	10:40	9:40	8:40
WNSH (365.6m-820kc), Farm feature.			
12	11	10	9
WHK (265.3m-1130kc), Farm Flashes.			
12:05	11:05	10:05	9:05
WCAE (461.3m-650kc), Farm Flashes.			
WJAZ (340.7m-880kc), Farm Flashes.			
12:30	11:30	10:30	9:30
WJR-WCX (440.9m-680kc) U. S. Farm service.			
WMAK (545.1m-550kc), Farm Flashes.			
12:43	11:43	10:43	9:43
WGY (379.5m-790kc), Farm Flashes.			
12:45	11:45	10:45	9:45
WSM (336.9m-890kc), Farm Flashes.			
1:10	12:10	11:10	10:10
WMAQ (447.5m-670kc), Prairie Farmer.			
1:15	12:15	11:15	10:15
WTAV (483.6m-620kc), Farm program.			
1:30	12:30	11:30	10:30
WFAA (545.1m-550kc), Farmers' hour.			
1:35	12:35	11:35	10:35
KSAC (333.1m-900kc), Farm talks.			
1:45	12:45	11:45	10:45
WOI (265.3m-1130kc), Soils.			
5:30	4:30	3:30	2:30
WSEA (263m-1140kc), U. S. Farm school.			
7:55	6:55	5:55	4:55
WAMID (222.1m-1350kc), U. S. Farm talks.			
8:20	7:20	6:20	5:20
WOS (422.3m-710kc), U. S. Farm school.			
8:25	7:25	6:25	5:25
WHK (265.3m-1130kc), U. S. Farm talks.			
8:30	7:30	6:30	5:30
WJAZ (340.7m-880kc), Dinner bell program.			
1:30	12:30	11:30	10:30
WFAA (545.1m-550kc), Farmers' hour.			
1:35	12:35	11:35	10:35
KSAC (333.1m-900kc), Farm talks.			
1:40	12:40	11:40	10:40
KTFP (272.6m-1100kc), State farm talks.			
1:45	12:45	11:45	10:45
WOI (265.3m-1130kc), Plant pathology.			
2	1	12	11
KOMO (305.9m-980kc), Garden talk.			
6:20	5:20	4:20	3:20
WDBO (288.3m-1040kc), Farm talks.			

Table listing radio stations: Eastern, Central, Mountain, Pacific. Includes stations like WFL, WEAQ, WHB, etc.

Table listing radio stations: Eastern, Central, Mountain, Pacific. Includes stations like WLAC, WLJB, WLS, etc.

Table listing radio stations: Eastern, Central, Mountain, Pacific. Includes stations like KFVB, KGA, KGO, etc.

Table listing radio stations: Eastern, Central, Mountain, Pacific. Includes stations like Eastern 9:30 p. m., Central 7:30, etc.

Regular Tuesday Features

Table listing radio stations and their regular Tuesday features. Includes stations like CKCL, KDKA, WBZ, etc.

Mountain Standard Time Stations

Table listing Mountain Standard Time Stations: KOA, KEX, KFI, etc.

Pacific Standard Time Stations

Table listing Pacific Standard Time Stations: KEX, KFI, KFOA, etc.

WEDNESDAY, FEBRUARY 8 Headliners

Table listing Wednesday headliners: Eastern, Central, Mountain, Pacific. Includes stations like WEAQ, WJAM, etc.

THURSDAY, FEBRUARY 9 Headliners

Table listing Thursday headliners: Eastern, Central, Mountain, Pacific. Includes stations like WEAQ, WJAM, etc.



EARN \$75.00 a week in Your Spare Time

JOINING the Radio Association enables you to cash in on Radio now! Follow its success-proven plans and you can earn \$3 an hour, in your spare time, from the very first. Over \$600,000,000 is being spent yearly for sets, supplies, service. You can get your share of this business and, at the same time, fit yourself for the big-pay opportunities in Radio.

Founded on a New Idea Members of the Association do not wait for months before they make money out of Radio. Without quitting their jobs, our members are earning \$25 to \$75 a week spare time by building "tailored" radio sets, serving as "radio doctors," selling ready built sets and accessories, or following one of the many profit-making plans of the Association.

Earned \$500 in Spare Hours Hundreds earn \$3 an hour as "radio doctors." Lyle Follick, Lansing, Mich., has already made \$500 in spare time. Werner Eichler, Rochester, N. Y., is earning \$50 a week for spare time. F. J. Buckley, Sedalia, Mo., is earning as much in spare time as he receives from his employer.

- What a Membership Can Do for You
1—Enable you to earn \$3 an hour upwards in your spare time.
2—Train you to install, repair and build all kinds of sets.
3—Start you in business without capital, or finance an invention.
4—Train you for the \$3,000 to \$10,000 big-pay radio positions.
5—Help secure a better position at bigger pay for you.
6—Give you the backing of the Radio Association.

ACT NOW—if you wish Special Membership Plan To a limited number of ambitious men, we will give Special Memberships that may need not—cost you a cent. To secure one, write today. We will send you details and also our book "Your Opportunity in the Radio Industry." It will open your eyes to the money-making possibilities of Radio. Write today.

Central Time Stations

Table listing Central Time Stations: KFAB, KMA, KOIL, etc.

Central Time Stations

Table listing Central Time Stations: KFB, KMA, KOIL, etc.

Eastern	Central	Mountain	Pacific
7:15 p. m.	6:45	5:45	4:45
WBAO (282.8m-1060kc)	Travel in South America		
8 p. m.	7	6	5
WBAO (282.8m-1060kc)	WBAO string quartet		
9:05 p. m.	7:05	6:05	5:05
WGH (265.3m-1130kc)	WGH string quartet		
10 p. m.	7:10	6:10	5:10
WLS (344.6m-870kc)	WLS orchestra		
10:30 p. m.	7:15	6:15	5:15
WBAO (282.8m-1060kc)	WBAO orchestra		
11 p. m.	7:20	6:20	5:20
KRLD (230.6m-1300kc)	KRLD orchestra		
11:30 p. m.	7:30	6:30	5:30
KMBC (270.1m-1110kc)	KMBC orchestra		
12 p. m.	7:35	6:35	5:35
WGH (265.3m-1130kc)	WGH orchestra		
12:30 p. m.	7:40	6:40	5:40
WLS (344.6m-870kc)	WLS orchestra		
1 p. m.	7:45	6:45	5:45
WBAO (282.8m-1060kc)	WBAO orchestra		
1:30 p. m.	7:50	6:50	5:50
WLS (344.6m-870kc)	WLS orchestra		
2 p. m.	7:55	6:55	5:55
WBAO (282.8m-1060kc)	WBAO orchestra		
2:30 p. m.	8:00	7:00	6:00
WLS (344.6m-870kc)	WLS orchestra		
3 p. m.	8:05	7:05	6:05
WBAO (282.8m-1060kc)	WBAO orchestra		
3:30 p. m.	8:10	7:10	6:10
WLS (344.6m-870kc)	WLS orchestra		
4 p. m.	8:15	7:15	6:15
WBAO (282.8m-1060kc)	WBAO orchestra		
4:30 p. m.	8:20	7:20	6:20
WLS (344.6m-870kc)	WLS orchestra		
5 p. m.	8:25	7:25	6:25
WBAO (282.8m-1060kc)	WBAO orchestra		
5:30 p. m.	8:30	7:30	6:30
WLS (344.6m-870kc)	WLS orchestra		
6 p. m.	8:35	7:35	6:35
WBAO (282.8m-1060kc)	WBAO orchestra		
6:30 p. m.	8:40	7:40	6:40
WLS (344.6m-870kc)	WLS orchestra		
7 p. m.	8:45	7:45	6:45
WBAO (282.8m-1060kc)	WBAO orchestra		
7:30 p. m.	8:50	7:50	6:50
WLS (344.6m-870kc)	WLS orchestra		
8 p. m.	8:55	7:55	6:55
WBAO (282.8m-1060kc)	WBAO orchestra		
8:30 p. m.	9:00	8:00	7:00
WLS (344.6m-870kc)	WLS orchestra		
9 p. m.	9:05	8:05	7:05
WBAO (282.8m-1060kc)	WBAO orchestra		
9:30 p. m.	9:10	8:10	7:10
WLS (344.6m-870kc)	WLS orchestra		
10 p. m.	9:15	8:15	7:15
WBAO (282.8m-1060kc)	WBAO orchestra		
10:30 p. m.	9:20	8:20	7:20
WLS (344.6m-870kc)	WLS orchestra		
11 p. m.	9:25	8:25	7:25
WBAO (282.8m-1060kc)	WBAO orchestra		
11:30 p. m.	9:30	8:30	7:30
WLS (344.6m-870kc)	WLS orchestra		
12 p. m.	9:35	8:35	7:35
WBAO (282.8m-1060kc)	WBAO orchestra		
12:30 p. m.	9:40	8:40	7:40
WLS (344.6m-870kc)	WLS orchestra		
1 p. m.	9:45	8:45	7:45
WBAO (282.8m-1060kc)	WBAO orchestra		
1:30 p. m.	9:50	8:50	7:50
WLS (344.6m-870kc)	WLS orchestra		
2 p. m.	9:55	8:55	7:55
WBAO (282.8m-1060kc)	WBAO orchestra		
2:30 p. m.	10:00	9:00	8:00
WLS (344.6m-870kc)	WLS orchestra		
3 p. m.	10:05	9:05	8:05
WBAO (282.8m-1060kc)	WBAO orchestra		
3:30 p. m.	10:10	9:10	8:10
WLS (344.6m-870kc)	WLS orchestra		
4 p. m.	10:15	9:15	8:15
WBAO (282.8m-1060kc)	WBAO orchestra		
4:30 p. m.	10:20	9:20	8:20
WLS (344.6m-870kc)	WLS orchestra		
5 p. m.	10:25	9:25	8:25
WBAO (282.8m-1060kc)	WBAO orchestra		
5:30 p. m.	10:30	9:30	8:30
WLS (344.6m-870kc)	WLS orchestra		
6 p. m.	10:35	9:35	8:35
WBAO (282.8m-1060kc)	WBAO orchestra		
6:30 p. m.	10:40	9:40	8:40
WLS (344.6m-870kc)	WLS orchestra		
7 p. m.	10:45	9:45	8:45
WBAO (282.8m-1060kc)	WBAO orchestra		
7:30 p. m.	10:50	9:50	8:50
WLS (344.6m-870kc)	WLS orchestra		
8 p. m.	10:55	9:55	8:55
WBAO (282.8m-1060kc)	WBAO orchestra		
8:30 p. m.	11:00	10:00	9:00
WLS (344.6m-870kc)	WLS orchestra		
9 p. m.	11:05	10:05	9:05
WBAO (282.8m-1060kc)	WBAO orchestra		
9:30 p. m.	11:10	10:10	9:10
WLS (344.6m-870kc)	WLS orchestra		
10 p. m.	11:15	10:15	9:15
WBAO (282.8m-1060kc)	WBAO orchestra		
10:30 p. m.	11:20	10:20	9:20
WLS (344.6m-870kc)	WLS orchestra		
11 p. m.	11:25	10:25	9:25
WBAO (282.8m-1060kc)	WBAO orchestra		
11:30 p. m.	11:30	10:30	9:30
WLS (344.6m-870kc)	WLS orchestra		
12 p. m.	11:35	10:35	9:35
WBAO (282.8m-1060kc)	WBAO orchestra		
12:30 p. m.	11:40	10:40	9:40
WLS (344.6m-870kc)	WLS orchestra		
1 p. m.	11:45	10:45	9:45
WBAO (282.8m-1060kc)	WBAO orchestra		
1:30 p. m.	11:50	10:50	9:50
WLS (344.6m-870kc)	WLS orchestra		
2 p. m.	11:55	10:55	9:55
WBAO (282.8m-1060kc)	WBAO orchestra		
2:30 p. m.	12:00	11:00	10:00
WLS (344.6m-870kc)	WLS orchestra		
3 p. m.	12:05	11:05	10:05
WBAO (282.8m-1060kc)	WBAO orchestra		
3:30 p. m.	12:10	11:10	10:10
WLS (344.6m-870kc)	WLS orchestra		
4 p. m.	12:15	11:15	10:15
WBAO (282.8m-1060kc)	WBAO orchestra		
4:30 p. m.	12:20	11:20	10:20
WLS (344.6m-870kc)	WLS orchestra		
5 p. m.	12:25	11:25	10:25
WBAO (282.8m-1060kc)	WBAO orchestra		
5:30 p. m.	12:30	11:30	10:30
WLS (344.6m-870kc)	WLS orchestra		
6 p. m.	12:35	11:35	10:35
WBAO (282.8m-1060kc)	WBAO orchestra		
6:30 p. m.	12:40	11:40	10:40
WLS (344.6m-870kc)	WLS orchestra		
7 p. m.	12:45	11:45	10:45
WBAO (282.8m-1060kc)	WBAO orchestra		
7:30 p. m.	12:50	11:50	10:50
WLS (344.6m-870kc)	WLS orchestra		
8 p. m.	12:55	11:55	10:55
WBAO (282.8m-1060kc)	WBAO orchestra		
8:30 p. m.	1:00	12:00	11:00
WLS (344.6m-870kc)	WLS orchestra		
9 p. m.	1:05	12:05	11:05
WBAO (282.8m-1060kc)	WBAO orchestra		
9:30 p. m.	1:10	12:10	11:10
WLS (344.6m-870kc)	WLS orchestra		
10 p. m.	1:15	12:15	11:15
WBAO (282.8m-1060kc)	WBAO orchestra		
10:30 p. m.	1:20	12:20	11:20
WLS (344.6m-870kc)	WLS orchestra		
11 p. m.	1:25	12:25	11:25
WBAO (282.8m-1060kc)	WBAO orchestra		
11:30 p. m.	1:30	12:30	11:30
WLS (344.6m-870kc)	WLS orchestra		
12 p. m.	1:35	12:35	11:35
WBAO (282.8m-1060kc)	WBAO orchestra		
12:30 p. m.	1:40	12:40	11:40
WLS (344.6m-870kc)	WLS orchestra		
1 p. m.	1:45	12:45	11:45
WBAO (282.8m-1060kc)	WBAO orchestra		
1:30 p. m.	1:50	12:50	11:50
WLS (344.6m-870kc)	WLS orchestra		
2 p. m.	1:55	12:55	11:55
WBAO (282.8m-1060kc)	WBAO orchestra		
2:30 p. m.	2:00	1:00	12:00
WLS (344.6m-870kc)	WLS orchestra		
3 p. m.	2:05	1:05	12:05
WBAO (282.8m-1060kc)	WBAO orchestra		
3:30 p. m.	2:10	1:10	12:10
WLS (344.6m-870kc)	WLS orchestra		
4 p. m.	2:15	1:15	12:15
WBAO (282.8m-1060kc)	WBAO orchestra		
4:30 p. m.	2:20	1:20	12:20
WLS (344.6m-870kc)	WLS orchestra		
5 p. m.	2:25	1:25	12:25
WBAO (282.8m-1060kc)	WBAO orchestra		
5:30 p. m.	2:30	1:30	12:30
WLS (344.6m-870kc)	WLS orchestra		
6 p. m.	2:35	1:35	12:35
WBAO (282.8m-1060kc)	WBAO orchestra		
6:30 p. m.	2:40	1:40	12:40
WLS (344.6m-870kc)	WLS orchestra		
7 p. m.	2:45	1:45	12:45
WBAO (282.8m-1060kc)	WBAO orchestra		
7:30 p. m.	2:50	1:50	12:50
WLS (344.6m-870kc)	WLS orchestra		
8 p. m.	2:55	1:55	12:55
WBAO (282.8m-1060kc)	WBAO orchestra		
8:30 p. m.	3:00	2:00	1:00
WLS (344.6m-870kc)	WLS orchestra		
9 p. m.	3:05	2:05	1:05
WBAO (282.8m-1060kc)	WBAO orchestra		
9:30 p. m.	3:10	2:10	1:10
WLS (344.6m-870kc)	WLS orchestra		
10 p. m.	3:15	2:15	1:15
WBAO (282.8m-1060kc)	WBAO orchestra		
10:30 p. m.	3:20	2:20	1:20
WLS (344.6m-870kc)	WLS orchestra		
11 p. m.	3:25	2:25	1:25
WBAO (282.8m-1060kc)	WBAO orchestra		
11:30 p. m.	3:30	2:30	1:30
WLS (344.6m-870kc)	WLS orchestra		
12 p. m.	3:35	2:35	1:35
WBAO (282.8m-1060kc)	WBAO orchestra		
12:30 p. m.	3:40	2:40	1:40
WLS (344.6m-870kc)	WLS orchestra		
1 p. m.	3:45	2:45	1:45
WBAO (282.8m-1060kc)	WBAO orchestra		
1:30 p. m.	3:50	2:50	1:50
WLS (344.6m-870kc)	WLS orchestra		
2 p. m.	3:55	2:55	1:55
WBAO (282.8m-1060kc)	WBAO orchestra		
2:30 p. m.	4:00	3:00	2:00
WLS (344.6m-870kc)	WLS orchestra		
3 p. m.	4:05	3:05	2:05
WBAO (282.8m-1060kc)	WBAO orchestra		
3:30 p. m.	4:10	3:10	2:10
WLS (344.6m-870kc)	WLS orchestra		
4 p. m.	4:15	3:15	2:15
WBAO (282.8m-1060kc)	WBAO orchestra		
4:30 p. m.	4:20	3:20	2:20
WLS (344.6m-870kc)	WLS orchestra		
5 p. m.	4:25	3:25	2:25
WBAO (282.8m-1060kc)	WBAO orchestra		
5:30 p. m.	4:30	3:30	2:30
WLS (344.6m-870kc)	WLS orchestra		
6 p. m.	4:35	3:35	2:35
WBAO (282.8m-1060kc)	WBAO orchestra		
6:30 p. m.	4:40	3:40	2:40
WLS (344.6m-870kc)	WLS orchestra		
7 p. m.	4:45	3:45	2:45
WBAO (282.8m-1060kc)	WBAO orchestra		
7:30 p. m.	4:50	3:50	2:50
WLS (344.6m-870kc)	WLS orchestra		
8 p. m.	4:55	3:55	2:55
WBAO (282.8m-1060kc)	WBAO orchestra		
8:30 p. m.	5:00	4:00	3:00
WLS (344.6m-870kc)	WLS orchestra		
9 p. m.	5:05	4:05	3:05
WBAO (282.8m-1060kc)	WBAO orchestra		
9:30 p. m.	5:10	4:10	3:10
WLS (344.6m-870kc)	WLS orchestra		
10 p. m.	5:15	4:15	3:15
WBAO (282.8m-1060kc)	WBAO orchestra		
10:30 p. m.	5:20	4:20	3:20
WLS (344.6m-870kc)	WLS orchestra		
11 p. m.	5:25	4:25	3:25

Eastern	Central	Mountain	Pacific
CRIC (356.9m-840kc) Capitol theater program.			
KATH (270.1m-110kc) KATH string trio.			
KTHS (384.4m-780kc) St. Valentine's concert by Arlington ensemble.			
10:30	9:30	8:30	7:30
WCU (405.2m-740kc) Northwest Artists' concert.			
WLAC (225.4m-1330kc) Jernigan trio; string ensemble.			
W.M. (336.9m-890kc) Bob Stark's Tennesseans, orchestra.			
10:45	9:45	8:45	7:45
WMAQ (447.5m-670kc) Musicians' club of women.			
11:30	9:30		8:30
CRIC (336.9m-840kc) Red Tex orchestra.			
WSB (232.4m-1290kc) Big Boy Vasek.			

WEDNESDAY, FEBRUARY 15

Headliners

Eastern	Central	Mountain	Pacific
7:30 p. m.	6:30	5:30	4:30
WFLA (516.9m-890kc) Scarlet guards.			
7:45	6:45	5:45	4:45
WEO (282.8m-1060kc) Animal By-Products, J. W. Ashcraft.			
8	7	6	5
WFB (340.7m-880kc) Kansas City artist trio.			
8:15	7:15	6:15	5:15
WEO (282.8m-1060kc) Proper Planting for Shrubs, Victor Ries.			
8:30	7:30	6:30	5:30
WLS (344.6m-870kc) William O'Connor, tenor.			
8:30	7:30	6:30	5:30
KTHS (384.4m-780kc) Eastman orchestra.			
WHAM (280.2m-1070kc) "Musical Vista."			
WTC (535.4m-560kc) Air frolic.			
9	8	7	6
WCF (483.6m-620kc) Red Penitens, Joe Warner.			
WLAC (225.4m-1330kc) "Billy and Bob, the B Boys."			
9:30	8:30	7:30	6:30
KTHS (384.4m-780kc) Leona Latone, pianist.			
WCOA (249.9m-1200kc) A. Morley Darby, hariton.			
10	9	8	7
PWX (400m-750kc) Costa Rican hour.			
WCUA (249.9m-1200kc) Mrs. Benn's Young Ladies' chorus.			
WLS (344.6m-870kc) Choral music, University of Chicago choir.			
10:30	9:30	8:30	7:30
WCUA (249.9m-1200kc) Frances Keen Villar, melody girl.			
11:30	10:30	9:30	8:30
KMBC (270.1m-110kc) El Torreon features.			
WMAQ (447.5m-670kc) Bismarck serenaders.			
12:30 a. m.	11:30	10:30	9:30
WCU (405.2m-740kc) Eddie Junstedter, organist.			

For Regular Features. See Wednesday, February 1.

THURSDAY, FEBRUARY 16

Headliners

Eastern	Central	Mountain	Pacific
6:30 p. m.	5:30	4:30	3:30
WTC (535.4m-560kc) Hotel Bond trio.			
7:30	6:30	5:30	4:30
WBAF (285.5m-1050kc) Frederick D. Weaver, organist.			
WHAM (280.2m-1070kc) Union college speaker.			
7	6	5	4
WSUX (516.9m-890kc) Classic hour, Nella Erickson and Helen Ford.			
8:05	7:05	6:05	5:05
WGI (265.3m-1130kc) Swimming, Washington vs. Ames.			

Eastern	Central	Mountain	Pacific
8:15	7:15	6:15	5:15
WMAQ (447.5m-670kc) "Travel in South America," C. C. Huntington.			
8:30	7:30	6:30	5:30
KMBC (270.1m-110kc) Voice talk, Jessie Wilson-Townner.			
WGH (277m-1080kc) Hockey game, Olympia and London.			
WHAS (322.4m-920kc) Ten out door men.			
WTC (535.4m-560kc) Capitol theater presentation.			
8:30	7:30	6:30	5:30
WLSN (516.9m-890kc) McVale Jubilee singers.			
9	8	7	6
CKNC (356.9m-840kc) Auction bridge game—15th of series.			
KTHS (384.4m-780kc) Popular music, Jack Crawford's orchestra.			
WFL (483.6m-620kc) Chez Pierre orchestra.			
WFB (340.7m-880kc) Ray Ham and Fred Sommers.			
WLAC (225.4m-1330kc) Basket ball game, Burke Terrors vs. YMI.			
8:30	7:30	6:30	5:30
KFAB (319m-940kc) University of Nebraska.			
KTHS (384.4m-780kc) Dr. H. H. Kings, hariton.			
WGI (265.3m-1130kc) Federated Music club program.			
9:45	8:45	7:45	6:45
WMAQ (447.5m-670kc) Hatula "an Horne, pianist.			
WLC (225.4m-1330kc) Nashville Chamber of Commerce program.			
WSM (336.9m-890kc) Pupils of Miss Anclie Thurpe, teacher of piano.			
10:30	9:30	8:30	7:30
KVIO (348.6m-860kc) Marie M. Hine, organist.			
WCO (405.2m-740kc) Isaac Walton league.			

FRIDAY, FEBRUARY 17

Headliners

Eastern	Central	Mountain	Pacific
7 p. m.	6	5	4
WMAQ (447.5m-670kc) Chicago theater organ.			
8	7	6	5
WHAM (280.2m-1070kc) Allison MacKown, cellist; Marjorie T. MacKown, pianist.			
8:30	7:30	6:30	5:30
KMBC (270.1m-110kc) International Bible Students' association.			
8:35	7:35	6:35	5:35
WFLA (516.9m-890kc) Artists, Peace Memorial church.			
8:50	7:50	6:50	5:50
WGI (265.3m-1130kc) Wrestling, Nebraska vs. Ames.			
9	8	7	6
WCF (483.6m-620kc) Polish program, sponsored by Brunswick-Balke-Collender company.			
WCOA (249.9m-1200kc) Songs You Forget to Remember.			
9:30	8:30	7:30	6:30
WTC (535.4m-560kc) Ivanhoe Knights.			
WCUA (249.9m-1200kc) Imogene Jones, pianist.			
10	9	8	7
WRAL (285.5m-1050kc) Musical scenario.			
10:15	9:15	8:15	7:15
WCUA (249.9m-1200kc) Fiddler and the dude.			
10:30	9:30	8:30	7:30
WCU (405.2m-740kc) Wheaties' quartet.			
11	10	9	8
KOIN (319m-940kc) Raybestos hour.			
KVIO (348.6m-860kc) Leon Scherer, hariton.			
WGH (277m-1080kc) Joe Dayton's Arcadians.			

WMAQ (447.5m-670kc) WJQ Chamber Music play-ers. For Regular Features. See Friday, February 3.

SATURDAY, FEBRUARY 18

Headliners

Eastern	Central	Mountain	Pacific
3 p. m.	2	1	
WGI (265.3m-1130kc) State high school wrestling meet.			
6:45	5:45	4:45	3:45
WHAM (280.2m-1070kc) Onondaga Hotel orchestra.			
7:15	6:15	5:15	4:15
WCU (405.2m-740kc) Wesley Barlow's orchestra.			
7:30	6:30	5:30	4:30
WHAM (280.2m-1070kc) Major and Miner—two pianos.			
7	6	5	4
WLAC (225.4m-1330kc) Old time barn dance frolic.			
8:30	7:30	6:30	5:30
KVIO (348.6m-860kc) Metropolitan male quartet.			
8	7	6	5
KFAB (319m-940kc) Lincoln Solon orchestra.			
KTHS (384.4m-780kc) Popular tunes, Ted Weems' orchestra.			
8:30	7:30	6:30	5:30
WTH (340.7m-880kc) Ruth Young, pianist.			
9	8	7	6
KTHS (384.4m-780kc) Natalie Arno, violinist.			
10	9	8	7
KTHS (384.4m-780kc) Irish favorites, Arlington orchestra.			
PWX (400m-750kc) Bolivian hour.			
WHA (285.5m-1050kc) Marylanders.			
WHAM (280.2m-1070kc) Organ recital, Robert Herstein.			
W.M. (336.9m-890kc) Regular "Grand Old Op'ry" and barn dance.			
WLSN (516.9m-890kc) Vinoy Park orchestra.			
WTC (535.4m-560kc) Hotel Bond dance orchestra.			
10:15	9:15	8:15	7:15
WMAQ (447.5m-670kc) Chicago theater revue.			
10:30	9:30	8:30	7:30
KMBC (270.1m-110kc) Royal players.			
KTHS (384.4m-780kc) Ballet genes, Arlington orchestra.			
11	10	9	8
WGI (265.3m-1130kc) State high school wrestling meet.			
12 a. m.	11	10	9
KOIN (319m-940kc) Webfoot Merry-makers' frolic.			

For Regular Features. See Saturday, February 4.

SUNDAY, FEBRUARY 19

Headliners

Eastern	Central	Mountain	Pacific
2:30 p. m.	1:30	12:30	
WHAM (280.2m-1070kc) Eastman popular concert.			
3	2	1	
WHAM (280.2m-1070kc) Organ recital, Harold Osbourn Smith.			
3	2	1	
WMAQ (447.5m-670kc) Chicago string quartet from the Gordon club.			
5:45	4:45	3:45	
WMAQ (447.5m-670kc) Whitney trio.			

Eastern	Central	Mountain	Pacific
7:30	6:30	5:30	4:30
WMAQ (447.5m-670kc) Eastman theater hour.			
7:30	6:30	5:30	4:30
W.M. (336.9m-890kc) Sandy Meek.			
8	7	6	5
KTHS (384.4m-780kc) Recital, Arlington sextet.			
8:30	7:30	6:30	5:30
KPI (422.3m-710kc) Standler symphony orchestra.			
8:30	7:30	6:30	5:30
KPI (384.4m-780kc) Miss Margaret (Glas, organist.			
10	9	8	7
KTHS (384.4m-780kc) Music lovers' hour.			
10:45	9:45	8:45	7:45
WCU (405.2m-740kc) Hugo Philler Goodwin, organist.			
10	9	8	7
KFAB (319m-940kc) Union College symphony orchestra.			
KTHS (384.4m-780kc) Frolic with Cock a Doodle Do orchestra.			
WMAQ (447.5m-670kc) "The De Luxe Dreamers."			
11:45	10:45	9:45	8:45
WGI (265.3m-1130kc) Chimes concert.			
12 a. m.	11	10	9
WTH (340.7m-880kc) Natty club.			

For Regular Features. See Sunday, February 5.

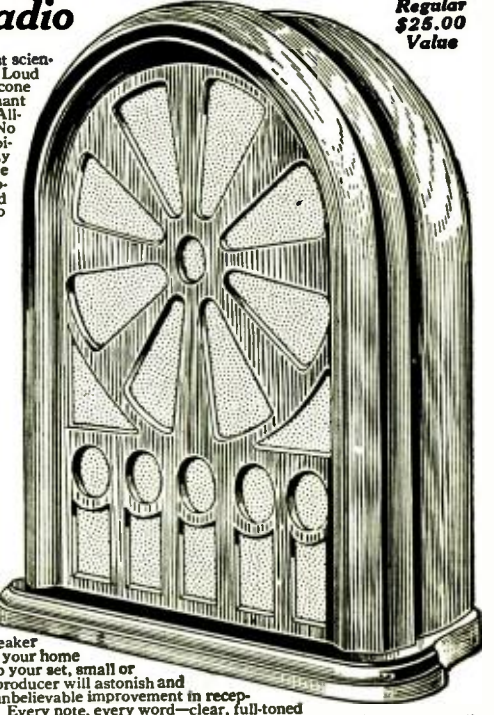
MONDAY, FEBRUARY 20

Headliners

Eastern	Central	Mountain	Pacific
6:45 p. m.	5:45	4:45	3:45
WHAM (280.2m-1070kc) Hughie Barrett's orchestra.			
7:30	6:30	5:30	4:30
WGI (265.3m-1130kc) Agricultural engineering talk.			
7	6	5	4
KKLI (230.6m-1300kc) Lecture on psychology, Dr. H. K. Taylor.			
WTH (340.7m-880kc) Heart of America Safety club talk.			
WGI (265.3m-1130kc) 4-H Girls' club program.			
WTC (535.4m-560kc) New Departure band.			
8:10	7:10	6:10	5:10
WMAQ (447.5m-670kc) George Simmons, tenor.			
8:30	7:30	6:30	5:30
KTHS (384.4m-780kc) Marion Stanley, soprano.			
W.M. (336.9m-890kc) Lawrence Hopkins and his orchestra.			
9	8	7	6
CKNC (356.9m-840kc) Eveready novelty orchestra; assisting artists.			
WGI (265.3m-1130kc) Iowa State College music faculty program.			
9:30	8:30	7:30	6:30
KFAB (319m-940kc) A C instrumental sextet.			
KTHS (384.4m-780kc) The Ozark philosopher.			
10	9	8	7
KTHS (384.4m-780kc) Russian music, Arlington orchestra.			
10:30	9:30	8:30	7:30
PWX (400m-750kc) Uruguay hour.			
WCOA (249.9m-1200kc) Okaloosa County program.			
10:30	9:30	8:30	7:30
WFLA (516.9m-890kc) Springtime serenaders.			
11	10	9	8
WCO (405.2m-740kc) Minneapolis symphony orchestra.			

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Eastern	Central	Mountain	Pacific
10:30	10:30	9:30	8:30
WTIC (535.4m-560kc) Walter Hawley, organist.			
12 mid.	11	10	9
KLA (509m-590kc) Weekly meeting of Lake Merritt Ducks.			

TUESDAY, FEBRUARY 21 Headliners

Eastern	Central	Mountain	Pacific
6 p. m.			
WWAC (296.9m-1010kc) Special birthday program.			
8:30	5:30	4:30	3:30
KOA (325.9m-920kc) Matinee, Boys' Industrial Training school band.			
7:30	6:30	5:30	4:30
WEAO (282.8m-1060kc) Philosophy of Religion, William Allison Shiner.			
WCSN (365.6m-820kc) Wood-Gate.			
7:45	6:45	5:45	4:45
WEAO (282.8m-1060kc) The Turkish Revolution, H. A. Miller.			
8:05	7:05	6:05	5:05
WOF (265.3m-1130kc) Swimming, Drake vs. Ames.			
8:15	7:15	6:15	5:15
WEAO (282.8m-1060kc) The Trend of Business, Seymour Bell.			
8:30	7:30	6:30	5:30
KLDS (270.1m-1110kc) Radio playlet, White Maye players.			
KTHS (384.4m-780kc) Popular concert, Ted For regular features.			
WHB (340.7m-880kc) Dr. James W. Fifield, travel talk.			
7:32	6:32	5:32	
WSN (516.9m-580kc) Soreno hotel ensemble.			
8:40	7:40	6:40	5:40
WMAQ (447.5m-670kc) "Stars and Atoms," University of Chicago lecture.			
9:05	8:05	7:05	6:05
WUN (516.9m-580kc) Carreno club musicale.			
9:30	8:30	7:30	6:30
KFAB (319m-940kc) Jackson County Democratic rally.			
WHB (340.7m-880kc) Jackson County Democratic rally.			
WTIC (535.4m-560kc) Goombs' bouquet.			
10:30	9:30	8:30	7:30
WTIC (535.4m-560kc) Dixie male quartet.			
10:45	9:45	8:45	7:45
WUN (516.9m-580kc) Northwest Artists' concert.			
11:15	10:15	9:15	8:15
WSM (336.9m-890kc) Program by Ward-Belmont Conservatory of Music.			
12 mid.	11	10	9
KRLD (230.6m-1300kc) Dance, David, tenor.			

WEDNESDAY, FEBRUARY 22 Headliners

Eastern	Central	Mountain	Pacific
4:15 p. m.	3:15	2:15	1:15
WMAQ (447.5m-670kc) Bridge game, Paul H. Seymour.			
5	4	3	2
WMAQ (447.5m-670kc) Mothers in council.			
7:15	6:15	5:15	4:15
WEAO (282.8m-1060kc) Getting the Tractor for Spring, W. W. Allen.			
WMAQ (447.5m-670kc) Chicago Theater organ recital.			
7:30	6:30	5:30	4:30
WEAO (282.8m-1060kc) "Philippines," Dean Alfred Vivian.			
8	7	6	5
WEAO (282.8m-1060kc) Ita-tek ball, Indiana-Olio State.			
WHB (340.7m-880kc) Kansas City Artists' trio.			
8:30	7:30	6:30	5:30
WTIC (535.4m-560kc) Air frolic.			
9:45	8:45	7:45	6:45
KRLD (230.6m-1300kc) Spelling contest, Dr. Taylor.			
9	8	7	6
WHAM (280.2m-1070kc) Bastianelli trio; Nicholas Talyara, tenor.			
9:30	8:30	7:30	6:30
KTHS (384.4m-780kc) Ross Graham, basso.			
WCOA (249.9m-1200kc) Washington's birthday, U. S. Naval Air Station band.			
WLAO (225.4m-1330kc) Bub Cason, the piano wizard.			
10	9	8	7
PWN (400m-750kc) Salvador hour.			
10:01	9:01	8:01	7:01
WFLA (516.9m-580kc) Springtime trio.			
10:30	9:30	8:30	7:30
WCOA (249.9m-1200kc) Hudson Brothers square dance frolic.			
11	10	9	8
KOA (325.9m-920kc) Washington's birthday program.			
12:30 a. m.	11:30	10:30	9:30
WFO (405.2m-740kc) Eddie Dunstetter, organist.			

THURSDAY, FEBRUARY 23 Headliners

Eastern	Central	Mountain	Pacific
6:30 p. m.	5:30	4:30	3:30
KOA (325.9m-920kc) Ethelbert Nevin, music.			
8:45 p. m.	7:45	6:45	5:45
WHAM (280.2m-1070kc) Hotel Kenmore Orchestra.			

Eastern	Central	Mountain	Pacific
7 p. m.			
KVAD (348.6m-860kc) Barney Breene, popular songs.			
8 p. m.	7	6	5
KMA (394.5m-760kc) Mays Madolin musicians.			
8:15	7:15	6:15	5:15
WIAL (285.5m-1070kc) WBAL string quartet.			
8:05	7:05	6:05	5:05
WOF (265.3m-1130kc) Track, Drake vs. Grinnel vs. Ames.			
7:30	6:30	5:30	4:30
WEAO (282.8m-1060kc) University of School music.			
8:25	7:25	6:25	5:25
KMA (394.5m-760kc) Health talk, Dr. Joseph Brennan.			
9 p. m.	8	7	6
CKN (356.9m-840kc) Auction Bridge game—17th series.			
9:15	8:15	7:15	6:15
WCCO (405.2m-740kc) Hamline university hour.			
9:15	8:15	7:15	6:15
WLAO (225.4m-1330kc) Basket-ball game—Nashville Major League Finals.			
9:30 p. m.	8:30	7:30	6:30
KTHS (384.4m-780kc) Mrs. Violet Belding, contralto.			
9:10	8:10	7:10	6:10
CKLC (356.9m-840kc) Wynant's Edonton Little symphony.			
KTHS (384.4m-780kc) Southern songs, Eastman ensemble.			
KVO (348.6m-860kc) Roy Cunningham, baritone.			
WUN (516.9m-580kc) Ed and Mamma.			
10:10	9:10	8:10	7:10
WFO (265.3m-1130kc) Club Worthy Hills dance orchestra.			
10:30	9:30	8:30	7:30
WLAO (225.4m-1330kc) Omar Perkins Playmates.			
11 p. m.	10	9	8
KFAB (319m-940kc) KFAB symphony orchestra.			
9:20	8:20	7:20	6:20
WMAQ (447.5m-670kc) Plaza theater frolic.			
11:30	10:30	9:30	8:30
WNR (232.4m-1290kc) Charley Weiss.			
WFO (265.3m-1130kc) F. Arthur Henkel, organist.			
12 mid.	11	10	9
KRLD (230.6m-1300kc) Ruth Muse, girl baritone.			

FRIDAY, FEBRUARY 24 Headliners

Eastern	Central	Mountain	Pacific
6 p. m.			
WMAQ (447.5m-670kc) Topsy Turvy Time.			
8:30	7:30	6:30	5:30
KOA (325.9m-920kc) Helen Olin Roberts, of Lamont School of Music.			
8:45	7:45	6:45	5:45
WIAL (285.5m-1070kc) WBAL Dinner orchestra.			
9:15	8:15	7:15	6:15
WHAM (280.2m-1070kc) Syracuse University program.			
7	6	5	4
KMA (394.5m-760kc) orchestra.			
8:15	7:15	6:15	5:15
WRM (272.6m-1100kc) Iowa at Illinois.			
9	8	7	6
KVO (348.6m-860kc) Princess Pakanili, soprano.			
WCOA (249.9m-1200kc) Howland, Binks and Howland.			
9:30	8:30	7:30	6:30
KTHS (384.4m-780kc) The Roanoke negro singers.			
10	9	8	7
WTIC (535.4m-560kc) Ivanhoe Knights.			
10:30	9:30	8:30	7:30
KRLD (230.6m-1300kc) KRLD string trio.			
10:45	9:45	8:45	7:45
KRLD (230.6m-1300kc) Katherine Frey, soprano.			
11:15	10:15	9:15	8:15
WFO (265.3m-1130kc) Joe Galie, Bobby Lee.			
10:30	9:30	8:30	7:30
WCCO (405.2m-740kc) Wheaties quartet.			
WCOA (249.9m-1200kc) L. L. Gerst, vocalist.			
WLAO (225.4m-1330kc) Southern Amusement serenades.			
11	10	9	8
KFAB (319m-940kc) Raybestos Hour.			
11:15	10:15	9:15	8:15
KOA (325.9m-920kc) Mrs. Wayne Hedges, harpist.			

SATURDAY, FEBRUARY 25 Headliners

Eastern	Central	Mountain	Pacific
7:15 p. m.	6:15	5:15	4:15
WCCO (405.2m-740kc) Wesley Barlow's orchestra.			
7:50	6:50	5:50	4:50
WVCO (282.8m-1060kc) Basketball, Minnesota-Olio State.			
8	7	6	5
KMA (394.5m-760kc) German Request songs.			
KTHS (384.4m-780kc) The Radio Chautauqua.			
WLAO (225.4m-1330kc) Old time Band Dance Frolic.			
8:50	7:50	6:50	5:50
WOF (265.3m-1130kc) Basketball, Missouri vs. Ames.			
9	8	7	6
KTHS (384.4m-780kc) Popular concert, Ted Woems orchestra.			
WMAQ (447.5m-670kc) Radio Photologue.			
9:45	8:45	7:45	6:45
KTHS (384.4m-780kc) Specialties.			
10	9	8	7
CKN (356.9m-840kc) Buddy and Ruddy.			
KRLD (230.6m-1300kc) Earl D. Behrends.			
PWN (400m-750kc) Chilean hour.			
WIAL (285.5m-1070kc) Marylanders.			
WHAM (280.2m-1070kc) Organ recital, Robert Berentsen.			
WHB (340.7m-880kc) Square dance music.			
WMAQ (447.5m-670kc) Popular song cycle, Pratt and Sherman.			
WNB (232.4m-1290kc) Ben Pollack.			
WUN (516.9m-580kc) Viney Park orchestra.			

Eastern	Central	Mountain	Pacific
10:45	9:45	8:45	7:45
WLN (344.6m-870kc) Hokey Game, Rangers vs. Blackhawks.			
11	10	9	8
KFAB (319m-940kc) Jr. Chamber of Commerce.			
KVO (348.6m-860kc) Theodore Fittenger, violinist.			
12:10 a. m.	11:10	10:10	9:10
WJBT (389.4m-770kc) Betty Griswold, Uke blues.			
11	10	9	8
KOIN (319m-940kc) Welford Merrymakers' frolic.			

SUNDAY, FEBRUARY 26 Headliners

Eastern	Central	Mountain	Pacific
4 p. m.			
WHAM (280.2m-1070kc) Organ recital, Harold Osburn Smith.			
8:15	7:15	6:15	5:15
WOF (265.3m-1130kc) Homespun Philosopher; Sacred recital.			
9	8	7	6
WMAQ (447.5m-670kc) Musical romances, Marx and Anne Oberdörfer.			
9:30	8:30	7:30	6:30
WMAQ (447.5m-670kc) Travelers' Symphonic ensemble.			
10	9	8	7
WMAQ (447.5m-670kc) Debate, Kent College of Law.			
10:30	9:30	8:30	7:30
WLN (344.6m-870kc) Little Brown Church in the West.			
10:45	9:45	8:45	7:45
WVCO (282.8m-1060kc) Willard Muse, tenor.			
11	10	9	8
WVCO (282.8m-1060kc) Music Lovers' Hour.			
11:30	10:30	9:30	8:30
KFL (422.3m-710kc) Uda Waldron, organist.			
WVCO (282.8m-1060kc) The Pastor and the Professor.			
11	10	9	8
KTHS (384.4m-780kc) Cack a Doodle Do frolic.			
11	10	9	8
WHBM (389.4m-770kc) Nutsy Club.			

MONDAY, FEBRUARY 27 Headliners

Eastern	Central	Mountain	Pacific
5	4	3	2
KFAB (319m-940kc) Buick studio orchestra.			
6	5	4	3
WMAQ (447.5m-670kc) Topsy Turvy Time.			
6:35	5:35	4:35	3:35
KRLD (230.6m-1300kc) Sadie Plateau, contralto.			
7	6	5	4
WHAM (280.2m-1070kc) Hughie Barrett's orchestra.			
8	7	6	5
WTIC (535.4m-560kc) New Departure dance orchestra.			
8:05	7:05	6:05	5:05
WOF (265.3m-1130kc) Basketball, Washington vs. Ames.			
8:10	7:10	6:10	5:10
WMAQ (447.5m-670kc) George Simmons, tenor.			
8:30	7:30	6:30	5:30
WCCO (405.2m-740kc) Valindolls.			
9	8	7	6
CKN (356.9m-840kc) Eveready male quartet.			
KMA (394.5m-760kc) Apple Sauce Twins.			
WCOA (249.9m-1200kc) 13th Coast Artillery band.			
WLAO (225.4m-1330kc) Lois Margaret Walters, Violinist.			
9:01	8:01	7:01	6:01
WFLA (516.9m-580kc) Kentucky Serenaders.			
9:30	8:30	7:30	6:30
KFAB (319m-940kc) A. C. Instrumental sextette.			
KVO (348.6m-860kc) KVO concert orchestra.			
WOF (265.3m-1130kc) Farm Boys 4-II Club program.			
9:40	8:40	7:40	6:40
KTHS (384.4m-780kc) W. C. Brown, baritone.			
10	9	8	7
CKN (356.9m-840kc) Variety program.			
PWN (400m-750kc) Paragona hour.			
WCOA (249.9m-1200kc) W. V. Fauria, bass.			

Eastern	Central	Mountain	Pacific
8:15 p. m.	9:15	6:15	5:15
WFAO (282.8m-1060kc) The American Indian in Literature, Sadie Annis Harburger.	7:30	6:30	
8:30			5:30
KLDS (270.1m-1110kc) Independence Chamber of Commerce Men's Glee club.			
KTHS (384.4m-780kc) Popular concert, Ted Weems orchestra.			
WIB (340.7m-880kc) Travel talk, Dr. James W. Field.			
8:40	7:40	6:40	5:40
WMAQ (447.5m-670kc) University of Chicago lecture.			
9	8	7	6
WFAO (282.8m-1060kc) Neil House orchestra.			
WSPN (516.9m-580kc) Carreno club musicale.			
9:30	8:30	7:30	6:30
KFAB (319m-940kc) Van Sickle four.			
KFO (422.3m-710kc) Eda Waldron organist.			
KTHS (384.4m-780kc) Heari songs, Alvin-ton sovietie.			
10	9	8	7
CKLA (356.9m-840kc) Capitol theater program, KMBC (270.1m-1110kc) KMBC string trio.			
KTHS (384.4m-780kc) The Old Maid's Jubilee.			
KRLD (230.6m-1340kc) Arthur A. Evers Diamond band.			
10:30	9:30	8:30	7:30
WCCO (405.2m-740kc) Northwest Artists' concert.			
11:05	10:05	9:05	8:05
WIAM (280.2m-1070kc) The Home-headers, orchestra.			
11:30	10:30	9:30	8:30
WSPN (516.9m-580kc) Bob Stark's Tennessee orchestra.			
12 mid	11	10	9
KRLD (230.6m-1340kc) Ernest Reeves, soloist.			
1 a. m.	12	11	10
WBT (389.4m-700kc) Guy Lombardo and his Royal Canadian.			
WABC (232.4m-1240kc) Virginians.			

WEDNESDAY, FEBRUARY 29

Headliners

Eastern	Central	Mountain	Pacific
4:15	3:15	2:15	1:15
WMAQ (447.5m-670kc) Bridge game, Paul H. Seymour.			
6:35	5:35	4:35	3:35
KRLD (230.6m-1340kc) Paul Wellbaum.			
7:30	6:30	5:30	4:30
WIAM (280.2m-1070kc) "Humanism in Archaeology," Prof. Robert MacLean.			
WFLA (516.9m-580kc) Clearwater Scouting Guards.			
8:15	7:15	6:15	5:15
WFAO (282.8m-1060kc) Save the Starving Shrubs, Victor Ries.			
8:30	7:30	6:30	5:30
WFAO (282.8m-1060kc) Edwin Stainbrook, pianist.			
WIAM (280.2m-1070kc) "Musical Vista."			
9	8	7	6
KFAB (319m-940kc) Car Department orchestra.			
WIAM (280.2m-1070kc) Bastianelli trio and Nicholas Palyara, tenor.			
9:30	8:30	7:30	6:30
WCCO (405.2m-740kc) Mt. Zion Jubilee singers.			
10	9	8	7
PVX (400m-750kc) Honduras hour.			
WVGA (249.9m-1260kc) Elizabeth Moreno, pianist.			
WIAM (280.2m-1070kc) Request organ recital, J. Gordon Baldwin.			
WLS (344.6m-870kc) Elmhurst Women's Choral club.			
10:01	9:01	8:01	7:01
WFLA (516.9m-580kc) Springtime trio.			
10:30	9:30	8:30	7:30
WVGA (249.9m-1260kc) Uncle Philip, dialectician.			
10:45	9:45	8:45	7:45
WVGA (249.9m-1260kc) Wheeler Doc Johnston.			
11	10	9	8
WFLA (516.9m-580kc) Springtime serenaders.			
11:15	10:15	9:15	8:15
KFA (325.9m-920kc) Leap Year party.			
WABC (232.4m-1240kc) New Song Special, Jerry Sullivan.			
11:30	10:30	9:30	8:30
WMAQ (447.5m-670kc) Bismarck Serenaders.			
WCCO (405.2m-740kc) Wallie Erickson's orchestra.			
12 mid.	11	10	9
KFO (422.3m-710kc) Alas string quartet.			

For Regular Features, See February 1.

ORCHESTRA STANDINGS

(Continued from page 20)

St. Paul Athletic Club orch., WCCO.	3
Danceonian orchestra, KGBZ.	2
Independent Musical Society orch., KLDS.	2
Northland Serenaders, WHO.	2

Car Department orchestra, KFAB.	2
Harry Lange's orchestra, KMOX.	1
Fitzgerald's Rhythm Kings, WJHR.	1
Philbrick's Younker Tea Room orchestra, WHO.	1
Allister Wylie's Coronadians, KMOX.	1

DISTRICT NO. 4—WEST

Comprising: North and South Dakota, Nebraska, Kansas, Oklahoma, Texas, Montana, Wyoming, Colorado and New Mexico.

Seven Aces, WBAP.	8,148
Raudall's Royal Fontenelle orchestra, WOW.	5,026
WNAX Radio orchestra.	3,113
Ernest Loomis' Victor Recording orchestra, KOA.	1,073
Joe Willrich's orchestra, KPRC.	1,011
Collegians, WFAA.	769
Henry Lange's Gunter Hotel orchestra, WOAI.	460
Chief Gonzales and his Arabian Room orchestra, KOA.	453
Crawford's Louisiana Syncopators, KOW.	450
Gunter Hotel Crystal Ball room, WOAI.	450
Scheurman's Colorado orch., KOA.	334
Bourdon orchestra, WFAA.	326
Kensington Hall dance orch., KPRC.	325
Parrino-Sparkman orchestra, WFAA.	181
Troutdale orchestra, KFAB.	169
Tracy-Brown's orchestra, WOW.	154
Brown Palace Hotel orchestra, KOA.	150
Dan's Musical Doms.	150
Howard Fordham's orchestra, KFH.	74
Arlington concert orchestra, KTHS.	49
La Mariquita and her Castilian orchestra, WFAA.	28
Houstonians' dance orchestra, KPRC.	28
KOA orchestra, KOA.	21
WFAA Symphony orchestra, WFAA.	17
Benjamin Symphony, KPDM.	16
Fullas Athletic club orchestra, KRLD.	15
State College Symphony orch., KFDY.	14
Baker Hotel orchestra, WFAA.	8
Dick Richardson's Dallas Country Club orchestra, WFAA.	8
Red Peppers, KVOO.	7
University Symphony, KUOM.	7
Gebhardt Mexican players, WOAI.	4
Kansas State Agri. College orchestra, KSAC.	3
Father Flanagan's Boys' Home band, WOW.	1

DISTRICT NO. 5—FAR WEST

Comprising: Idaho, Arizona, Utah, Nevada, California and Washington.

Walter Krausgrill's Balconades Ballroom orchestra, KPRC.	3,165
Max Dohn's studio orchestra, Pacific Coast Network.	2,566
Vic Meyer's orchestra, KJR.	2,281
Andy Wallace and his band, KFPL.	1,291
Majestic Ballroom orchestra, KPON.	938
Joe Mendel and his Pop band, KPRC.	925
Silver King Revelers, KGW.	911
Benson Hotel orchestra, KOIN.	758
Hal Chasnov's orchestra, KFL.	750
KPO orchestra, KPO.	750
Pittmore Hotel orchestra, KXN.	750
Bill Funk's Packard Six orch., KFL.	672
Cavaliers dance orchestra, KHL.	451
Piggly Wiggly concert orch., KPON.	450
Herman Kenil's orchestra, KEX.	336

Grvin Beale's Hotel Oakland dance orchestra, KGO.	325
Roy Dyer's El Nido cafe orch., KLX.	325
Pacific Coast Club orchestra, KFON.	163
Georgians, KHL.	158
White King orchestra, KGW.	157
Anson Week's Hotel Mark Hopkins orchestra, KFIC.	155
KPRC dance orchestra, KPRC.	151
Cole McElroy's Columbia Recording dance band, KOIN.	151
KFWI Gypsy band, KFPL.	150
Metropolitan dance orchestra, KFL.	150
Cadillac-La Salle concert orch., KHL.	71
Lombardia orchestra, KJR.	63
Rudy Seiger's Fairmont Hotel concert orchestra, KFO.	60
Cocanut Grove orchestra, KXN.	58
Public Service Little symphony orchestra, KGW.	56
Tom Carunovich's Roof Garden orchestra, KFPL.	47
Seattle Fire Department band, KJR.	43
Sherman Clay & Company concert orchestra, KFOA.	43
Long Beach Municipal band, KPON.	42
Palace orchestra, KOA.	28
Standard Symphony orchestra, KPO.	24
Fox Theatre Grand orchestra, WOO.	24
Los Angeles Philharmonic orch., KFI.	20
Cloverleaf orchestra, KPON.	19
Frank Ellis and his Hotel St. Francis dance orchestra, KGO.	14
Canterbury Candy orchestra, KJR.	10
Oregon Agricultural College symphony, KOAC.	9
Silvertown Cord orchestra, KPRC.	9
Norman Woodside's Roberts-at-the-Beach orchestra, KGO.	7
Calder Infantry band, KJR.	5
Good Humor orchestra, KGW.	5
States Restaurant orchestra, KPO.	5
Canterbury orchestra, KOA.	3
Pilgrims, KGO.	3
U. of Arizona Symphony orch., KOH.	2
Pugot Sound Savings and Loan association, KJR.	2
Strangers Social Club orchestra, KFI.	1
Athens Athletic club orchestra, KLX.	1

DISTRICT NO. 6—CANADA

Comprising: The entire Dominion of Canada.

Irvin Plumm and his orchestra, CNRW.	452
Danny Yates' Hotel Windsor orchestra, CKNC.	452
Eveready orchestra, CKNC.	301
Chateau Laurier concert orch., CNRO.	157
Jack Denny's orchestra, CFCE.	150
Jackie Souders and his orch., CNRV.	150
Palm Room orchestra, CKCL.	102
Cabaret Belmont orchestra, CNRV.	97

Harold Rich-Morris London Versatile Canadians, CFCA.	53
Guy Watkins Art Harmony Seven, CFQC.	51
Charlie Bodley's dance orch., CKNC.	28
CNBC orchestra, CNRC.	22
CNRA Little Concert orchestra.	8
W. Knight Wilson's capitollans, CNRR.	8
Peavey and his orchestra, CKY.	7
Leon Asper's concert orchestra, CFAC.	7
Campbell's Old Time Fiddler orchestra, CFQC.	2
Nightcaps, CNRV.	2



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SHORT WAVES

By Marcella

(Continued from page 23)

When H. H. Johnson was asked whether Stute and Mott were any relation, he said that they were brothers and he is their father, so I guess, Ad-hine, he ought to be able to give complete information. Aren't they cute boys? Here is what he says. "Stute was born June 1st, 1903, Mott, June 21st, 1908. Mott weighs 175 pounds, is about six feet two in his stocking feet, has blue eyes, dark brown hair.

He is a graduate of the Clay Center High School, graduating in 1925. He has had one year at Doane college, 1926-27. In 1925 he ranked among the ten best football players in Nebraska. He did not play college football. Mott is something of a musician; he won as tenor in the four-county contest in 1925, he has played at various times the drum or the tuba in bands, and in orchestras, the saxophone. We are at present using him as solo tenor, vocal, and on the saxophone in the "Masterbilt Quartet," and as an announcer. Mott was born and raised here in Clay Center."

Here is the sweetest letter Marcella got last month and you will agree when you read it. It's from Russ Wilder of the Ray-O-Vac Twins. "I just want to write and thank you for that nice little line you had about my little baby. It certainly was sweet, and Mrs. Wilder and I want to thank you. We have cut it out and put it in the baby's little scrap book, and in years to come she can look at it and think of you. The baby is growing like sixty, and the prettiest baby girl in the world—no foolin' and love her? Oh Boy, and how, and her little mother too."

Speaking of twins! Those handsome Mona Motor Oil Twins, John Wolfe and Ned Tollinger were in New York this fall and whom do you think they ran into? Bernice Alstock of KGW, Portland, Oregon. She is studying voice in New York and she already has a chance to join a musical comedy. It seems John has been writing to her since he met her in Portland and so it wasn't chance they met in New York. Hum! Food for thought there. By the way, Ned, who is Ione? Trying to vamp Marcella when your heart's in Iowa? These Council Bluffs men with their girls and their families, it's mighty hard on Mar-

cella. There is that handsome Don Searle. He was in here the other day and says Miss Searle, is just about ready to appear before KOIL. She is all of four months old.

Lena and Sena, you will have to get sick now if you want to hear Paul Johnson's attractive voice. He isn't with WCCO because he is too busy finishing his medical course at the U. of Minnesota. My, but won't he have a large practice! I really don't feel well myself. Do you? However, mild comfort can be taken in the fact that he announces the weekly organ recitals from 11:30 to 12:30 a. m. each Wednesday evening.

Pegs, I have an uneasy feeling that your questions were not all answered. Did I tell you that Jean Sargent was with a department store, Stew Dawson at WBO, Al Carney is not engaged and Pat Barnes has no little family? Well, there is my New Year's resolution, all questions to be answered.

Just a few lines from another Mrs. A. A. about Mr. Cross. You remember his picture was in the December issue. "I just received the December Radio Digest and to my greatest joy, Mr. Cross's picture adorns the third page. I cut it out and pasted it on a sheet of white cardboard and hung the picture over my Radio and now you should see those gentle (not mischievous, as you say) eyes smiling down on us when we listen to his much Admired Voice. He is indeed the King of Announcers. I dare to say so because I am not in Marcella's shoes and it will not cost my soul. I like the way you speak of Mr. Cross, he deserves to be well spoken of."

Here's a pretty romance! You remember May Singli Breen, the ukulele artist? She has been playing over New York stations for a terribly long time. She is engaged to Peter De Rose who has been her air partner since October 25, 1925.

If you only knew, R. B. W., how I have been trying to detect the whereabouts of Roy Stewart. He left WADC and went to

WLBW, Oil City, Pa., and they don't know where he is. Anybody heard Roy lately?

The reason your question wasn't answered before, Mrs. J. H. W. of Harrison, was because we had no idea where Jack Nelson had gone to. He directed the Radio Show in the fall and then no one heard a thing from him. I saw a familiar form passing me on the busiest street in Chicago yesterday and hailed him. Jack looks just the same. He told me he was giving Prof. Histronia lessons twice a week at WCFL. Mrs. Nelson and little Miss Nelson are both fine.

Of course, Marcella had to do it. She's fallen for a nice tall man with dark hair and brown eyes, but that was before she heard he was married and had three children. La! me, 'tis ever thus. Yes, Harold A. Safford is his name. He is that attractive new announcer at WLS. On the side he writes stories about WLS stars. He came to WLS from Sioux Falls, S. Dak. and has spent most of his thirty years in

South Dakota, where he graduated from the Northern Normal and Industrial School at Aberdeen and then spent two years at South Dakota State college, Brookings. During the war he was in the infantry. Not only has Mr. Safford been known for his newspaper work, but he is a good violinist.

Next time you shake hands with Thomas A. Edson take a good look at the right side of his face. That is the side his genius is indicated. Note the shaggy belligerent eyebrow that will not behave, note the sharp penetrating quality of the eye, the general aggressiveness and push, while the other side of his face is genial and rather docile. These are facts narrated by John E. Garabrant who has made 1,500 photographs of the wizard, and always photographs taken from the right side.

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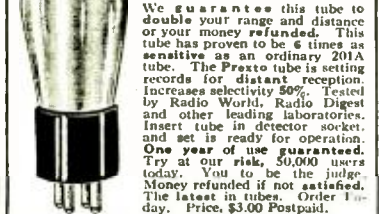
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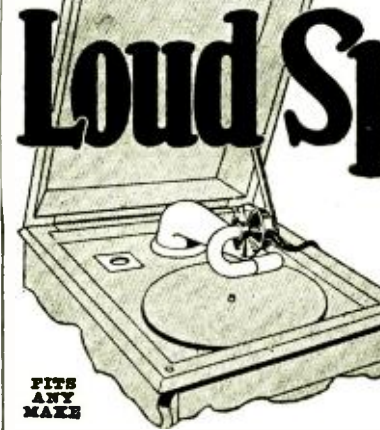
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Fultone Speaker System,
4800 Lincoln Ave.,
Chicago, Illinois.
Please send me Fultone Loud speaker unit for which I enclose Two Dollars and..... cent's for..... adapter.

Name

Address

CityState

Sun Spots Effects

As each eleven year cycle returns scientists learn more of the influence of the great solar storms known as sun spots. The government Bureau of Standards has recently issued a report covering a considerable period of observations as they effect Radio transmission.

"It is reasonably certain that long wave daylight Radio signals were stronger in 1927 when the sunspot cycle was at its maximum than in 1923 when the cycle was at its minimum," states the report, prepared by Dr. L. W. Austin and Miss I. J. Wymore.

Different results are shown at night, when just the reverse condition is shown in the case of the broadcasting band of waves. This effect was observed by G. W. Pickard, commercial expert, and by engineers for the Bell laboratories. Reports on the ultra short waves show conflicting results. The bureau suggests that this field of study offers an interesting field for experiment on the part of those who are scientifically inclined.

New Invention Improves Radio Reception and Eliminates Annoying Set Noises

It has been noticed by many Radio fans that manufacturers are not over-liberal in installing fixed condensers in their receivers. These condensers are costly and are one of the main items in running up the expense of the ordinary set. Consequently, many sets are apt to be shy the required, or ideal, number of fixed condensers necessary to perfect reception.

A new article, justly named the Roll-O Clarifier, has appeared on the market to help fans fill the lack of fixed condensers. It is only a small accessory and is easily attached to any set. Only two connections are necessary in its installation. It is contained in a small glass case and holds no harmful acids of any kind.

This clarifier is said to put an additional capacity of approximately 10 microfarads across the "B" batteries. In fact, it contains about as much capacity as the average "B" eliminator.

One of its main uses is in smoothing over noisy, unsettled reception due to run-down "B" Batteries. It seems to add new life and pleasing sound to any receiver. Its main advantage is its ridiculously low cost. Only \$1.00 is needed to purchase one of these fine accessories.



—just wearing this free cap
Meyers of Ohio, writes "Every man I see means big money to me. I made \$26 my first day just demonstrating the amazing rain-proof feature. Champion rain-proof made-to-measure caps absolutely shed water. They defy rain and snow. Hold one under a faucet. Turn on the water—it rolls right off, leaving the cap dry and shapely! Men and boys are astonished by this sensational demonstration and quickly give you their orders. They like the mufflers and neckties that match—and order them quickly."

Bigger Commissions
We pay a bigger cash commission than any other cap firm in the field. Increase your profits by selling Champion caps, \$100-\$150 and more each week is easy for you now. Pocket your cash commission in advance—simply write the orders. We deliver and collect.

Your Cap Free!
Our new plan enables you to secure one of our finely tailored demonstration caps, made to your measure from any of the rain-proof cloths you choose—at not one penny of cost to you.
Great New 1928 Outfit Free
Grab it quick! It is today's finest and most complete cap outfit. Fits right into your pocket and makes the ideal side line. It features many new styles and twenty-one latest rain-proof fabrics. Rush your name and address for your FREE outfit.
THE CHAMPION CAP COMPANY
Dept. 34 Cincinnati, Ohio

The newest, most luxuriously furnished and conveniently situated hotel in the metropolis. The town home of many distinguished authors, producers and stars of the stage and screen.

The BELVEDERE New York

48th STREET WEST of BROADWAY, (Near Times Square)
Large room, private bath for one - Four Dollars - for Two Five Dollars (serving pantry optional) - - - - Restaurant.
CURTIS A. HALE, Managing Director
Booklet Free

GABRIEL'S CHOICE

(Continued from page 23)

thought he was not getting the service he should while his Eastern brother said nothing but just packed his grips and moved.

There's a Difference

It is the same in broadcasting. Eastern listeners—after the first few years—simply flipped the dial when they felt aggrieved. Out here they write, telephone, send messengers and telegrams if they hear something they don't like. And that is a mighty fine thing for the broadcasters. If the station owner or management doesn't heed the plaints of the many he, or it, is liable to receive a bomb in the morning's mail before he loses his audience.

Not having a constant and overwhelming flood of concerts to attend, not having the multifarious activities to "take in" that are concurrent in the East, the Westerner is naturally more appreciative of the best in music. Why? Because as a rule he must turn to the Radio for such entertainment and musical training and he has there been provided with innumerable "lecture courses" and thousands and thousands of played and sung compositions until he's a pretty wise judge of talent. It is much easier and more frequent, as well.

One thing we lack is Radio critics. Only two such gentlemen regale the daily press with reviews of what has transpired the night before over the air lanes. One is swayed by personal likes and dislikes and the other, to judge from his writings, doesn't know what it is all about technically, and consistently makes ludicrous judgments since the why and and wherefore is cradled in clouds to his eye. Whole-some, unbiased critiques—such as Hawkins in New York, Douglass in Chicago and Grant in Boston—would be valued by the seventy-odd broadcasters to the 600,000 set owners on the Coast.

To sum it up without risking several thousand words which would insure the still-birth of this preachment:

Compete in Quality

While we lack in numbers, we compete in quality with the rest of the country's Radios, excelling sometimes but lacking McCormacks, Giglis, Menglebergs, Dambrosches, Galli-Curcis, et al, for supremacy.

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Entire factory stock of Conner Convent Cabinet now being closed out at



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Prices NOW \$26.25 to \$74.75

Jacobean, Renaissance and Sheraton designs, done in beautifully high-lighted walnut and mahogany. Fronts open down into convenient desks. Write today for illustrations.

A Conner Cabinet assembles every detail of your receiving set, batteries and accessories, in a scientifically convenient arrangement and encloses everything in an exceptionally beautiful piece of period furniture. You can secure one at this emergency bargain price if you act quickly. Write today for illustrations and details.

CONNER RADIO CABINET CO.
New Albany, Indiana



Most of us out here look upon broadcasting as a profession and accordingly strive to do our best. There are still a few small stations who conceive Radio as a medium of hokum, wise-cracking, play-acting and cheap propaganda. But they'll eliminate themselves.

Finally, we have no differences between winter and summer broadcasting. There is no dead season for it's never too hot or too cold. This tends to make the bursars of speech input panels stand on their toes most of the time.

Picking up a local weekly magazine devoted to listings of Coast programs I find that on this, a Saturday night, between 8 o'clock and midnight, I can listen, if I wish to:

Doug Fairbanks, Tom Mix, Gloria Swanson; 27 dance orchestras of A-1 caliber; 14 "classic" orchestras directed by men who receive from \$350 to \$1,000 a week salary; three Metropolitan stars here on tour; two University Glee Clubs; four Hawaiian groups really from the Sandwich Isles; three "Trolleys" of guaranteed excellence; many smaller concert programs and three over the Pacific Coast Network of the National Broadcasting Company which, in the nature of things, compare without bashfulness with eastern N. B. C. chain offerings.

There is, however, one difference. After 2 o'clock tomorrow morning I will not be able to tune in anything. But that's late enough to set up, anyway.

Little Joe Warner, favorite of the Little Listeners of WCFL, was taken off his feet a few days ago when formally presented with a high chair at the Chicago labor station: Although Joe stands about five feet with his shoes on, the high chair was intended for his three-months-old youngster. He was thankful for the gift and responded with his "Tuck-'Em-In-Time" song.

Super-Selective! Assures perfect reception. Eliminates noise and reduces static. Its single-point mounting is quickly installed—no wires, poles or cross-sticks. The Stanley Aerial is sold with a money back guarantee. You're sure of satisfaction! Send check or money order now for \$12.50 and we will ship immediately.

Full information and circulars on request.
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Now—Lowest Priced Quality Tube "B" Eliminator \$18.50

Since 1921 Ferbend Products have been famous for outstanding quality and long-life efficiency at lowest prices—prices "Within Reach of All."
The new HEAVY DUTY "B" Power unit is no exception. In workmanship, performance, materials and appearance it is the equal of any. We INVITE comparison.

See Your Dealer, or Send Direct
Shipment will be made upon receipt of price or C. O. D. Use for thirty days to convince yourself—then if not satisfied write us within that time and purchase price will be refunded. Order today.

DRY NO LIQUIDS OR ACIDS
30 Days Trial.
FERBEND ELECTRIC CO.,
417 W. Superior St. Chicago, Ill.

An amazing value that can't be beat! Latest six-tube tuned radio frequency circuit. Extremely selective, marvelous sensitivity. Three stages of radio frequency, detector, and two stages of low ratio audio frequency for improved tone quality. Two-dial control. Straight-line frequency condensers. All metal chassis. Shielded. Clear and realistic reception guaranteed. Beautiful black front panel (7 in. x 18 in.); ornamental design, degree and kilocycle markings in gold. Metal panel and sub-panel. Complete chassis. No extra parts to buy. All parts mounted. Simply connect a few wires. No special tools needed. Kurz-Kasch indicates knob. New type I-X sockets. All hook-up wire and colored battery cable included. Value \$60.00; our price, \$46.95.

TESTED AND APPROVED
Serious laboratory tests have proved the remarkable efficiency of this set. Owners everywhere are sending us letters praising its wonderful receptive qualities. "Wired set in short order. Getting stations all over the country. Henry of volume. The set sure is a dandy." B. J. Gillis, Denver, Colo. Telegram from Al. A. Syracuse, N. Y.: "Ship at once two more Superphonics."

SIMPLE WIRING DIRECTIONS
Very easy to wire this set with the instructions we furnish. Just connect a few wires. All you have to do is follow numbers. That is all. Can be wired in a few minutes by anyone. No radio knowledge needed. Make money by wiring these sets in your spare time and selling them to your friends.

SEND NO MONEY

Just write your name and address on a post card and ask us to send you this great outfit with six tubes. We ship right away. Upon arrival pay only \$16.95, plus a small delivery charge. (Foreign countries send \$19.50 with order. We pay shipping charges.)
Radio Equipment Co., Dep. 14-B, 649 S. Wells St., Chicago

SEND NO MONEY
Pay postman \$1.50 plus postage. Year's guarantee certificate assures absolute satisfaction. When remittance accompanies order, Inko-graph will be sent postage prepaid. Write name and address plainly.
INKOGRAPH CO., Inc.
199-309 Centre St., New York

SIMPLE EXPLANATION

(Continued from page 19)

On the other hand, you may say that your range for reception is 500 miles. This you cannot truthfully do, as it depends on the power of the stations. Your range may be 500 miles for broadcasters putting 5,000 watts of energy into the air, but it is not 500 miles, on an average night, for stations of but 1,000 watts. You must therefore say, "I can receive stations of so-many watts power within a radius of so-many miles better than 50 per cent of the time." That's your range, for stations of a certain power. It is less than that for stations of less power and more than that for stations of more power.

Thus there are the factors (a) the station's power, (b) your sensitivity, and (c) the condition of the atmosphere, to be considered. Factors "a" and "b" are the same every night, but factor "c" you cannot control and it varies every hour. You may get a 250 watt broadcaster that is 3,000 miles away while listening tonight, yet not be able to tune in a 5,000 watt outfit that is but 400 miles away, tomorrow night. So if you cannot get the old home town Radio program with a set you have purchased, do not blame the set, as it may be that the broadcaster does not have enough power, you purchased too weak a set, atmospheric conditions between the station and you may be poor on the average, or you may have a location that is poor either for receiving that station or a great many stations. You'll just have to blame it on what we do not as yet know about Radio.

EDITOR'S NOTE—In the concluding article of this series, appearing in the March issue, Mr. Thompson will take us into the component parts necessary for reception, why they are used, and what they do.

FORGET YOUR TRIALS

(Continued from page 12)

the scheme that is reflected all the way to the distant listener. They are not disturbed. Protecting hands try to foster their eager desire for contentment by shielding them from ordinary annoyances. But they have had their trials and they know how to appreciate real contentment.

Both Are Entrancing

Charlotte Meyers is older than Mary and I suspect that she mothers her quite a bit. Mary Andor has dark hair that curls all over her head, and wide blue eyes and the

whitest teeth you ever saw. Charlotte has red hair of the warm vibrant color that goes with her Irish blue eyes and her lovely smile. They made an attractive picture as they sat at the microphone by the piano—Mary in her red smocked peasant dress, and Charlotte in her trim blue tail-coat.

"Don't forget, folks, we're just plain—Charlotte—and Mary—and we'll be with you again tonight at WLW." The little red signal light flashed off and Charlotte and Mary turned away from the piano. As Mary began to collect the music, and Charlotte went to the phone to order our lunch, I wandered around their suite. This stunt of playing house and broadcasting at the same time looked like a lot of fun. Especially when there were piles of gay cushions around the brown and gold furniture of the living room; and emerald green furniture and pink lamps and curtains in the bedroom. Charlotte was particularly entranced with the view of the Ohio river that could be seen from the window beside the piano.

When the lunch was set out on the little gate-leg table, and we had tasted our chicken salad, Charlotte and Mary began to reminisce. They told me how they happened to be singing together. Charlotte had been a member of the Red Apple Club of WJR in Detroit for two years when Mary came to the station as a pianist.

"Went Over Big"

"I never thought I could do harmony," Mary said. "Then one day I was helping Charlotte practice a song and we began to sing 'The Land of Jack and Jill.' They put us on the air with it that night, and we were terribly surprised when it really 'went over big.' Every one knows us by 'The Land of Jack and Jill.' Then we learned 'Then I'll Be Happy,' and we sang the two songs every night because people kept asking for them. Finally we thought we'd better have another song, so we learned 'Dinah.'"

Charlotte interrupted with "Yes, and we sang those three songs for three weeks every night, and then we got an eleven-week engagement at one of the biggest theatres in Detroit." She told me that she had been on the stage since the age of thirteen when she went into vaudeville in a singing act. Radio has claimed part of her time for the past five years.

Mary was a little Hoosier girl who studied to be a concert pianist. At the age of fourteen she wanted to take voice lessons. The teachers refused to take her as a voice pupil until she should grow to be "bigger than a minute." She became discouraged then, and abandoned her study of classical music. She played the piano after that only to amuse herself with popular music.

Charlotte and Mary don't talk much about their own accomplishments. But Karl Tuttle, their manager, isn't quite so

modest. Karl came up to the "Contented Studio" while we were having lunch. He just about filled all the available space. He is the same "Creamy" Tuttle who brought Ford and Glenn to WLW last spring for their sensational season there.

Too Good's Tip

"I took Ford and Glenn's tip. They told me that Charlotte and Mary are the best girls' harmony team on the air. And I know that Ford and Glenn know harmony if anyone ever did," Tuttle almost purred.

He went on to tell me about their sensational success both in Radio and on the stage. He told me of the theaters in Detroit in which they had been engaged for split-week and one-week appearances, and at which they had stayed for three weeks, and for eleven weeks, and for seventeen weeks. He told me about their engagements around Detroit and Cleveland and Toledo. He didn't need to tell me about their recent successes for I knew what a sensation they were creating around WLW.

On the stage they are a different team than the one that delights the Radio audience. They are among the few Radio entertainers who can transfer their appeal from that which is purely audible to one that is both audible and visible. In the first place, they are both awfully good to look at.

"We're contented because our Contented Club is making people happy. Their happiness keeps us happy too. We like the Radio so much because it does spread happiness to people whose lives otherwise would be quite dark." Is the way they expressed their philosophy.

When I finally left Charlotte and Mary

in the Contented Studio that afternoon, I was contented too, for they had invited me to "come back and have tea"—most any afternoon.

SOLEMN OLD JUDGE PICKS MR. PICKARD

GEORGE DEWEY HAY, the Solemn Old Judge of WSM, Nashville, has a faculty of providing Radio entertainment particularly pleasing to his own area, whether it be in Nashville, Tennessee, or Chicago, Ill. One of the best of the typical entertainers of WSM is Obed Pickard and his guitar. Obed has a hearty, wholesome personality. He talks and he plays a character that is himself—and everybody likes Obed a whole heap.

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ON RECEIPT of your order we will ship you by return mail one of our famous JENKINS INDUCTANCE-COUPPLERS, which we unconditionally guarantee to INCREASE VOLUME 40%—MORE THAN DOUBLE DISTANCE—and TRIPLE the NUMBER OF STATIONS you are now receiving.

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This sensational money-maker brings you \$75 to \$97 a week right from the start. Hutchins tailored-to-measure trousers, knickers and riding breeches sell at sight. Every garment is strictly made to measure—at a stock proposition! Men order two and three pairs at a time. You give biggest values at lowest prices.

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Hutchins men jacket astonishing profits just as you order. Send made \$97 his first week.

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New complete outfit brings you big profits in full or spare time. WE FURNISH YOU NEW MOBEL FORD CAR! No red tape—filling to pass. Earn real money this new easy way. Free trouser offer. Wear a pair of Hutchins trousers made to your measure. Send name and address today. Hurry!

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Radio's most amazing bargains direct from big reliable maker (8th successful year). All Electric or Battery sets. Console or table radios. Don't buy unless 10 days trial proves Miraco unsatisfactory at 2 to 4 times the price for performance, distance, volume and reliability. Turn 1 dollar into 10 dollars. Completely guaranteed. Free 30-day trial. Testimony from 100,000 satisfied customers. **FREE 30 DAY TRIAL OFFER** to **MITCHELL'S SPECIAL OFFER** customers. Write for details. **437 W. Miraco Bldg., Cincinnati, O.**

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No craving for tobacco in any form after you begin taking Tobacco Redeemer. Don't try to quit the tobacco habit unaided, it's often a losing fight against heavy odds and may mean a serious shock to the nervous system. Let us help the tobacco habit to quit YOU. It will quit you, if you will just take Tobacco Redeemer according to directions. It is marvelously quick; thoroughly reliable.

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Tobacco Redeemer contains no habit-forming drugs of any kind. It is in no sense a substitute for tobacco. After finishing the treatment you have absolutely no desire to use tobacco again or to continue the use of the remedy. It makes not a particle of difference how long you have been using tobacco, how much you use or in what form you use it—whether you smoke cigars, cigarettes, pipe, chew plug or fine cut or use snuff. Tobacco Redeemer will positively remove all craving for tobacco in any form in a very few days. This absolutely guarantee in every case or money refunded.

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Please send me your free books "What Set Shall I Build," and "For Better Reception," as offered in Radio Digest 1 February.

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Here is the amazing new ROLL-O-CLARIFIER—an absolute necessity to owners of "A" Battery eliminators. This marvelous new chemical condenser immediately eliminates all hum and set noises. Or, two of these can be used in place of a block of high priced condensers when building your own "A" or "B" eliminator.

Eliminates Noises!

Now you can listen to perfect Radio reception. Noises due to run-down dry "A" batteries disappear as if by magic. No harmful acids. Easy to attach—only two connections necessary. Hundreds of satisfied users everywhere. Johnson, Iowa, writes: "Best Radio improvement of the year. Makes my set work perfectly."

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STUART'S ADHESIF PLAPAO is surprisingly different from the truss—being inelastic—chemico applicators—made self-adhesive purposely to keep the muscle-tonic "PLAPAO" applied continuously to the affected part, and to minimize painful friction and dangerous slipping. No straps, buckles or spring attachments. Soft as velvet—easy to apply—inexpensive. For almost a quarter of a century satisfied thousands report success without delay. Awarded Grand Prix from work. Process of recovery natural, so no subsequent use for a truss. Awarded Gold Medal and Grand Prix. Trial of "PLAPAO" will be sent absolutely FREE. Write your name on coupon and send TO DAY.

PLAPAO CO., 176 Stuart Bldg., St. Louis, Mo.

Name.....
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Return mail will bring Free Trial PLAPAO.

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Fastens on shaft of small motor in a jiffy. Holds attachments for Grinding, Polishing, Slicing, Drilling, etc. MADE TO FIT 3/8-inch, 1/2-inch and 3/4-inch shafts.

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Pittsburgh, Pa. 315.6m-950kc. 50,000 watts. Westinghouse Elec. & Mfg. Co. Daily ex Sun. 10 am. 12 n. 4-5 pm. 6, 8. Tues. 7 pm. Wed. Fri. 7 pm. 7:30 pm. Fri. 11:30 pm. Blue chain program. Mon. 7:30-10 pm. Tues. Wed. Fri. 8:10 pm. Thurs. 8:11 pm. Sat. 8:10 pm. Sun. 10:45 am. 4 pm. 4:45. 6, 7, 8:15. Eastern.

KDLR

DeVils Lake, N. Dak. 230.6m-1300kc. 15 watts. Radio Elec. Co. Announcer, Harold Serumgard Bertwick. Daily ex Sun 7:30 am. news, music; 12-12:30 pm. weather; 4:30-5 pm. Mon. 9:30-11:30 pm. Sun. 11 am. church. Founded Jan. 25, 1925. Central.

KDYL

Salt Lake City, Utah. 234.2m-1280kc. 500 watts. Intermountain Broadcasting Corp. Announcer, Philip G. Lasky. Slogan, "On the Air—Tues. Everywhere." Daily ex Sun. 10:30 am. 5-5:15 pm. Mon. Wed. Fri. 6-11 pm. Tues. Thurs. Sat. 6-12 mid. Sat. 12-2 am. Mountain. Founded June 1922.

KELW

Burbank, Calif. 228.9m-1310kc. 250 watts. Earl L. White. Daily ex Sun. 10-12 pm. 6-10. Wed. 10-2 pm. 6-7 pm. 9-11. Last Sat. in month. 10-11 am. Pacific. Founded Feb. 12, 1926.

KEX

Portland, Ore. 239.9m-1250kc. 2,500 watts. Western Broadcasting Co. Announcer, Jack Barnett. Daily ex Sat. Sun. 9 am-12 mid. Sat. 9 am-2 am. Sun. 5:30-10 pm. Pacific. Opened Dec. 25, 1926.

KFAB

Lincoln, Neb. 319m-940kc. 5000 watts. Nebraska Buck Auto Co. Announcer, Gayle Grubb. Daily. 9-10 am. 11:45-12:30 pm. 2-3, 4-5, 6-7, 8-9, 10-11. Founded Dec. 4, 1924. Central.

KFAD

Phoenix, Ariz. 272.6m-1100kc. 500 watts. Electrical Equip. Co. Announcer, Arthur C. Anderson. Slogan, "The Voice of Phoenix." Daily ex Sun. Mon. 3-4 pm. 6-9. Tues. 7-10. Wed. Sat. 10-11 pm. Daily ex Sun. Mon. Sat. 2-3 pm. Sun. 11 am-12:30 pm. 8-9. Founded Oct. 30, 1921. Mountain.

KFAU

Boise, Idaho. 285.5m-1050kc. 4000 watts 6 am-6 pm. 2000 watts. Independent School Dist. of Boise. Announcer Walter T. Lockwood. Mon. Tues. Wed. Thurs. Fri. 12:30-1 pm. weather, markets. 8-10. music. Tues. 7:30-8 pm. children's hour. 8-10. music. Thurs. 8-10 pm. Sun. 3-4 pm. 7:30-9 pm. Founded Oct. 1921. Mountain.

KFBB

Havre, Mont. 275.1m-1090kc. 50 watts. F. A. Buttrey Co. Announcer E. H. Nelson. Daily ex Sun. 12:30-1:30 pm. music, markets, weather reports. Wed. 7:30-9 pm. Sun. 1-3 pm. Founded 1921. Mountain.

KFBC

San Diego, Calif. 247.8m-1210kc. 100 watts. Balboa Theater Bldg. Daily. Sun. 9:30-10:30 am. 12:45-1:45 pm. 5-10. Sun. 10-12 am. Bible lesson. Pacific.

KFBK

Sacramento, Calif. 535.4m-560kc. 100 watts. Sacramento Bee. Kimball-Union Co. Announcer, R. K. Clark. Tues. Sat. 7:30-10 pm. Thurs. 8:10-10 pm. Founded 1921. Pacific.

KFBL

Everett, Wash. 223.7m-1340kc. 50 watts. Lesse Bros. Daily ex Sun. 10-11 am. 4-5 pm. 6-7. Sun. 11-12 n. Tues. 10:30-12 mid. Pacific. Founded Aug. 25, 1922.

KFBU

Laramie, Wyo. 483m-620kc. 500 watts. Bishop N. S. Thomas. Announcer, J. E. Edwards. Sunday services. Daily 11 am. 12 n. 2:30 pm. Tues. Wed. Thurs. Fri. 9 pm. Mountain. Founded Nov., 1925.

KFCB

Phoenix, Ariz. 243.8m-1230kc. 125 watts. Nielsen Radio Supply Co. Announcer, E. A. Nielsen. Slogan, "Kind Friends Come Back." Mon. Thurs. 8-9 pm. Sat. 8-10 pm. Sun. 9-11 am. Mountain.

KFCR

Santa Barbara, Calif. 211.1m-1420kc. 50 watts. Santa Barbara Broadcasting Co. Announcer Jack W. Polley. Daily ex Sun. 12-1 pm. 5:45-7. 7-7:30. 7:30-7:30. Mon. Tues. Wed. Thurs. 7:30-9:30 pm. Fri. 7:30-10 pm. Sat. 12-1 pm. 6:15-7:30 pm. Sun. 7:15-8:15 pm. 8:15-9:15. 9:15-10:30. Pacific. Founded Dec. 22, 1926.

KFDM

Houston, Tex. 483.6m-620kc. 500 watts. Magnolia Petroleum Co. Announcer, "Star" Slogan, "Call for Dependable Magnolene." Daily ex Sun. 11 am. Tues. Through Fri. 12:30 pm. 12:55. Tues. 8-10 pm. Fri. 8:30-10:30 pm. Sat. 3-4 pm. Sun. 8-9 pm. Central. Founded Oct. 1, 1924.

KFDX

Shreveport, La. 236.1m-1270kc. 250 watts. First Baptist church. Announcer, John S. Ramond. Wed. 9-10 pm. Sun. 10:50-12 n. 7:45-9. Founded 1922. Central.

KFDY

Brookings, S. D. 545.1m-550kc. 500 watts. State College of Agriculture and Mechanical Arts. Announcer, Albert Kraus. Daily ex Sun. 12:30-1:15 pm. Tues. Thurs. 7:30-9 pm. Central.

KFDZ

Minneapolis, Minn. 215.7m-1390kc. 10 watts. Harry D. Iverson. Sat. 8 pm. Central.

KFEC

Portland, Ore. 214.2m-1400kc. 50 watts. Meier & Frank Co., Inc. Announcer, R. E. Hartzog. Daily ex Sun. 12-1 pm. weather, music; 4-5 pm. music. 6-7. Pacific. Founded 1922.

KFEL

Denver, Colo. 247.8m-1210kc. 250 watts. Eugene P. O'Fallon, Inc. Announcer, J. H. Hathaway. Daily ex Sun. 7:15 am. 8 pm. 10, 11, 12. 2, 4, 6, 8. Tues. 8:30-10. Mon. 11-12 mid. Sun. 11-12 n. 8-9 am. 10, 2:30 pm. 4:30. Mountain.

KFEQ

St. Joseph, Mo. 230.6m-1300 kc. 1000 watts. J. L. Scroggin. Announcer, Clarence Koch. Daily ex Sun. 4-5 am. 9, 10, 11, 12, 2, markets; 5 music; 6, 30 music. 8:30-10. Mon. 11-12 mid. Sun. 11-12 n. Central. Founded 1922.

KFEY

Kellsgate, Idaho. 232.4m-1290kc. 10 watts. Union High School Station. Announcer, Walter C. Clark. Slogan, "Voice of the Coeur D'Alenes." Mon. Thurs. 7-8 pm. Sun. 11 am. 7:30 pm. Pacific.

KFGQ

Boone, Iowa. 209.7m-1430kc. 10 watts. Boone Biblical school. Founded April 1923.

KFHH

Wichita, Kan. 245.8m-1220kc. 500 watts. Hotel Lassen. Announcer, J. L. Fox. Daily ex Sun. 8:30 am. 9, 10, 11, 1-2 pm. markets; 1:15. music. 7:30-9. Sun. 9:30 am. 7:30 pm. Founded Dec. 1, 1925. Central.

KFHA

Gunnison, Colo. 254.1m-1180kc. 50 watts. Western State College of Colorado. Announcer, E. Russell Wrightman. "Where the Sun Shines Every Day." Tues. Fri. 7-9:30 pm. Founded May 1922. Mountain.

KFHL

Oskalesia, Iowa. 212.6m-1410kc. 10 watts. Penn College. Announcer, Donald Haworth. Tues. Fri. 7 pm. Fri. 9:45 am. Sun. 4 pm. Central.

KFI

Los Angeles, Calif. 468.5m-640kc. 5000 watts. Earle C. Anthony, Inc. Announcer, Leslie Adams. Slogan, "A National Institution." Daily ex Sat. Sun. 5:30-11 pm. Sat. 5:30-2 am. Sun. 11 am. 5:30-11. Installed Spring, 1920. Pacific.

KFIF

Portland, Ore. 214.2m-1400kc. 50 watts. Benson Polytechnic School. Announcer, Albert Skei. Sun. 8:15-9:15 pm. Pacific.

KFIO

Spokane, Wash. 245.8m-1220kc. 100 watts. North Central High School.

KFIU

Juneau, Alaska. 225.4m-1330kc. 10 watts. Alaska Elec. Light & Power Co. Announcer, O. E. Schoenell. Mon. Wed. Fri. 6-7 pm. Alaskan time.

KFIZ

Fond du Lac, Wis. 267.7m-1120kc. 100 watts. Fond du Lac Commonwealth Reporter. Daily ex Sun. 5 pm. news, markets, weather. Central.

KFJB

Marshalltown, Iowa. 247.8m-1210kc. 100-250 watts. Marshall Electric Co. Announcer, E. L. Pickett. Slogan, "Marshalltown, the Heart of Iowa." Daily ex Sun. 10 am. 12-1:30 pm. Daily. 6 pm. 7. Tues. Fri. 8:30 pm. Sun. 11 am. 7:30 pm. Founded June 2, 1923. Central.

KFJF

Oklahoma City, Okla. 272.6m-1100kc. 750-1000 watts. National Radio Mfg. Co. Announcer, Tired Island. Slogan, "Radio Headquarters of Oklahoma City—The City of Opportunity." Daily ex Sun. 9 am. music; 10, sacred music; 10:30, markets; 12-1:30 pm. music; 7-10. Sun. 9 am. I. B. S. A.; 10. Men's class; 11, services; 8, services. Central. Founded July, 1923.

KFJI

Astoria, Ore. 249.9m-1200kc. 15 watts. E. E. Marsh and Liberty theater. Announcer, E. E. Marsh. Daily ex Sun. 7-8 pm. Tues. Fri. 11-12 mid. Wed. Fri. 12:15-1:15 pm. Sun. 11 am-1:30 pm. Pacific.

KFJM

Grand Forks, N. D. 333.1m-900kc. 100 watts. University of North Dakota. Announcers, Howard J. Munley, Alfred R. Botten, Norman Cross. Daily. 12 pm. 6 pm. Sun. 10:45 am. 12:30 pm. 4:30, 6. Founded Oct., 1923. Central.

KFJR

Portland, Ore. 282.8m-1060kc. 100 watts. Ashley C. Dixon & Son. Announcer, Ashley C. Dixon. Sr. Mon. Tues. Wed. Thurs. 5-6 pm. 7-8. Mon. 9-11 pm. Tues. 9-11:30 pm. Fri. 4-6 pm. 7-8, 12-1. Sat. 4-6 pm. 7-8, 9-10. Founded Sept. 23, 1923. Pacific.

KFJY

Fort Dodge, Iowa. 232.4m-1290kc. 100 watts. Tunwall Radio Co. Announcer, Carl Tunwall. Daily ex Sun. 10:30-11:30 am. 5:45-7 pm. Tues. 10-11:30 pm. Thurs. Fri. 8:30-9:30 pm. Wed. 3-4 pm. Sun. 11-12:30 pm. Founded Oct. 1923. Central.

KFJZ

Fort Worth, Texas. 249.9m-1200kc. 50 watts. W. E. Branch. Announcer, Jack Fraida. Daily ex Wed. Sun. 7-8 pm. 9-10, 7-8, 9-10. Sun. 1-3 pm. 6-7. Central. Founded Sept. 24, 1923.

KFKA

Greeley, Colo. 249.9m-1200kc. 200 watts. Colorado State Teachers' College. Announcer, H. E. Green.

KFKB

Midford, Kan. 241.8m-1240kc. 2500-1500 watts. J. R. Brinkley, M. D. Daily ex Sun. 10:15-10:30 am. 12-1:30 pm. Daily ex Sun. Sat. 3-4 pm. 5:30-10. Sun. 8 am. 10, 6-12 mid. Central.

KFKU

Lawrence, Kan. 254.1m-1180kc. 500 watts. University of Kansas. Announcer, Ellsworth C. Dent. Mon. Thurs. 7-8 pm. Founded Dec. 15, 1924. Central.

KFKX

Chicago, Ill. 526m-570kc. 2500 watts. Westinghouse Elec. & Mfg. Co. Mon. Thurs. 8 pm. Sun. 3 pm. Central.

KFKZ

Kirksville, Mo. 225.4m-1330kc. 15 watts. State Teachers College. Announcer, E. M. Henry. Mon. 8:30-9:30 pm. Thurs. 8-9 pm. Founded 1923. Central.

KFLV

Rockford, Ill. 267.7m-1120kc. 100 watts. Swedish Evangelical Mission Church. Announcer, Oscar Olsson. Paul Rodin. Mon. 8:15 pm. Sun. 10:45 am. 9:30 pm. Founded Oct. 1923. Central.

KFLX

Galveston, Texas. 270.1m-1110kc. 100 watts. George R. Clough.

KFMR

Sioux City, Iowa. 232.4m-1290kc. 100 watts. Morningside College. Daily ex Sun. Sat. 11:40-12:30 pm. Tues. Wed. Thurs. Fri. 7:30-8:30 pm. Founded 1924. Central.

KFMX

Northfield, Minn. 236.1m-1270kc. 500 watts. Carleton College. Daily ex Sun. 10:30 am. time. Fri. 8:15 pm. lecture. 8:45, 10. Sun. 7 pm. Central.

KFNF

Shenandoah, Iowa. 461.3m-650kc. 2000 watts. 6 am-7 pm. Henry Field Seed Co. Announcer, Henry Field. Slogan, "The Friendly Farmer Station." Daily ex Sun. 6-8:30 am. 10-11, 12-2:30 pm; 3, ladies-hour; 5-7. Sun. 8:30-9:30 am. 10:45 am. 2 pm. 3-4. services; 6, Golden Rule. church service. Founded Feb., 1924. Central.

KFOA

Seattle, Wash. 447.5m-670kc. 1000 watts. Rhodes Dept. Store. Announcer, Arthur W. Lindsay. Mon. 10 am-10 pm. Tues. 12-10 pm. Wed. 10 am-11 pm. Thurs. 12-10 pm. Fri. 10 am-12 mid. Sat. 12n-10 pm. Sun. 5:30-6:30 pm. Pacific.

KFON

Long Beach, Calif. 241.8m-1240kc. 500 watts. Nichols & Warner, Inc. Announcer, Hal G. Nichols. Slogan, "Piggly Wiggly Station." Daily and Sun. 9:30 am-12 mid. Founded March 1924. Pacific.

KFOR

Lincoln, Nebr. 217.3m-1380kc. 100 watts. Howard A. Shuman. Daily ex Sun. 12-1 pm. 2-3:15. 6-7, 8-10. Fri. 11-11 am. Central. Founded March, 1924.

KFOX

Omaha, Nebr. 258.5m-1160kc. 100 watts. Board of Education. Technical High. Daily ex Sun. Sat. 12-1:30 pm. Tues. 7:30-9 pm. Central.

KFPL

Dublin, Texas. 275.1m-1090kc. 15 watts. C. C. Baxter. Announcer, Mon. Thurs. 8 pm. Sat. 11 pm. Sun. 9:30 am. 1:30 pm. Central.

KFPM

Greenville, Texas. 230.6m-1300kc. 15 watts. The New Furniture Co. Announcer, Dave Atlowich, Jr. Slogan, "The New Furniture Co., the Home of Good Furniture." Located at Greenville, Texas, Where You Find "The Blackest Land, the Whitest People." Daily ex Sun. 1 pm. music. Mon. Wed. Fri. 8 pm. Sun. 11 am. services; 7:30 pm. irregularly. Central.

KFPR

Los Angeles, Calif. 232.4m-1290kc. 250 watts. Los Angeles Co. Forestry Dept. Irregular schedule.

KFPW

Cartersville, Mo. 263m-1140kc. 50 watts. St. John M. E. church. Slogan, "Keeping Pace with Christ Means Progress." Daily ex Sun. 6:30-7 am. 2:30-3 pm. Sun. 1-2:30 pm. Central. Founded April 17, 1924.

KFPY

Spokane, Wash. 245.8m-1220kc. 250 watts. Symons Investment Co. Announcer, E. B. Craney. Daily ex Sun. Sat. 9:45-11 am. 3-9 pm. 6-10:30. Fri. 3-11 pm. Sat. 10:30-11 am. 2:30-3 pm. Sun. 7:40-9 pm. Pacific. Founded 1922.

KFQA

St. Louis, Mo. 234.2m-1280kc. 1000 watts. The Principia. Sun. 11 am. Founded May 9, 1924. Central.

KFQB

Fort Worth, Tex. 333.1m-900kc. 1000 watts. W. B. Fishburne, Inc. Announcer, Zack E. Hurt. Daily ex Sun. 8:30-9:30 am. 12:30-1:30 pm. 7:30-8:30. 9:30-11. Wed. 8:30-9:30 am. 12:30-1:30 pm. Sat. 7:30-11 pm. Sun. 11-12 n. 6-7 pm. 7:30-11. Central.

KFQD

Anchorage, Alaska. 344.6m-870kc. 100 watts. Anchorage Radio Club. Announcer, Frank O. Berry. Fri. 8-10 pm. Sun. 7:30-9 pm. Alaskan time.

KFQU

Holy City, Calif. 249.9m-1200kc. 100 watts. W. E. Riker. Announcer, Arthur J. Landstrom. Daily ex Sun. 6:30-7:30 pm. Tues. Fri. 9:30-11 pm. Wed. Thurs. Sat. 9:10 pm. Sun. 11-12 n. 10-11 pm. Pacific. Found Nov., 1924.

KFQW

Seattle, Wash. 217.3m-1380kc. 100 watts. KFOW, Inc. Pacific. Announcer, Harry R. Long. Daily ex Sun. 10-11 am. 12-1 pm. 2-3. 4:30-5:30. 5:30-6. 6-7. 8:30-10. 10-11. Sun. 4-5 pm. 5-7, 10-12. Pacific. Founded June, 1925.

KFQZ

Hollywood, Calif. 232.4m-1290kc. 100 watts. Taft Radio Company. Announcer, Allan Fairchild. Daily ex Sun. 12-1 pm. 5-6 pm. 6-11. Sun. 7-11 pm. Pacific.

KFRC

San Francisco, Calif. 454.3m-660kc. 1000 watts. Don Lee, Inc. Announcer, Harrison Holliday. Daily ex Sat. Sun. 7-9 am. 10-12 n. 12-1 pm. 4:30-12 mid. Sat. 7-9 am. 10-12 n. 12-1 pm. 4-12 mid. Sun. 10-11 pm. 2-4, 5-12. Pacific.

KFRU

Columbia, Mo. 249.9m-1200kc. 500 watts. Stephens college. Announcer, La Von Rall. Slogan, "Where Friendliness is Broadcast Daily." Daily ex Sun. 8:30-11:15 am. 3 pm. 6:30. Wed. 7:30-10 pm. Thurs. 7:30-11 pm. Sun. 7:30 am. 9:20, 10:45, 4. Founded Oct. 25, 1925. Central.

KFSD

San Diego, Calif. 440.9m-680kc. 500 watts. Airfan Radio Corp. Daily ex Sun. 10-11 am. 12:30-1:30 pm. Sun. 11:15-12:15 pm. 2-4, 8:30-10. Pacific.

KFSG

Los Angeles, Calif. 275.1m-1090kc. 500 watts. Temple. Daily ex Sun. Mon. 10:30-11:30 am. 11:30-12:30. organ; 2:30-3:30 pm. program; 3:30-4:30, vesper; 6:30-7:30. Tues. 7:30-9:30 pm. Wed. Sat. 7:30-9:30 pm. Thurs. Fri. 7:30-11 pm. Sun. 7:30-12:30 pm. 2:30-4:40 pm. 6:30-11 pm. Pacific.

KFUL

Galveston, Texas. 258.5m-1160kc. 500 watts. Thomas Groggan & Bros.

KFUM

Colorado Springs, Colo. 282.8m-1060kc. 1000 watts. Corley Mountain Highway. Announcer, Howard Brown. Mon. 5-7 pm. 10-12. Tues. 8-10 pm. Thurs. 8-12 mid. Fri. 10-12 mid. Sat. 8-10 pm.

KFUO

St. Louis, Mo. (Tr. at Clayton.) 545.1m-550kc. 1000 watts. Concordia Theological Seminary (Lutheran). Announcer, Herm. H. Hohenstein. Mon. Tues. Wed. Fri. 6 pm. Sun. 3:30 pm. 4, 9:15. Founded Dec. 14, 1924. Central.

KFUP

Denver, Colo. 227.1m-1320kc. 100 watts. Fitzsimons General Hospital, Educational and Recreational Dept. Announcer, Major Transue. Daily ex Sat and Sun. 10-11 am. Tues. Thurs. Fri. 7:30 pm. Mountain.

KFUR

Farmington, Utah. 225.4m-1330kc. 500 watts. Peery Building Co. Tues. Thurs. Sat. 9:50-11:50 pm. dance music. Mountain.

KFUS

Ogden, Calif. 256.3m-1170kc

KSMR

Santa Maria, Calif. 272.6m-1100kc. 100 watts. Santa Maria Valley Railroad Company. Announcer, Sydney C. Heck. Daily ex Sat. Sun. 10:30-11 pm. 5:30-7 pm. Sat. 7:30 pm. markets. Pacific. Founded Dec. 3, 1925.

KSO

Clarinda, Iowa. 227.1m-1320kc. 500 watts. Berry Seed Co. Announcer, Joe Faassen. Slogan, "Keep Serving Others." Daily ex Sun. 6:30-8 am. 12-1 pm. music talks. Daily ex Sun. 6:30-9 pm. Sun. 11-12 pm. 5-6 pm. Founded Nov. 2, 1925. Central.

KSOO

Sioux Falls, S. D. 209.7m-1430kc. 250, 500 watts. Sioux Falls Broadcast Assn. Announcer, I. M. Austin. Daily ex Sun. 7-8 am. 12-1 pm. 5-6 pm. Central. Founded 1922.

KSTP

St. Paul-Minneapolis, Minn. (fr. Westcott, Minn.). 222.1m-1350kc. 2000 watts. The National Battery Station. Slogan, "The Call of the North." Daily ex Sun. 10:30 am. 19:45. Shopping news. 12. weather. 7. organ. 5:30, 6:30, 6:55, farm flashes. 7. weather. 7:01, music. 7:30, 8:30, 9, 10. Sun. 3 pm. 4, 9:30. Central. Founded May, 1924.

KTAB

Oakland, Calif. 280.2m-1070kc. 500 watts. The Associated Broadcasters. Announcers, Lytton Spaulding, R. M. Rizer. Slogan, "Knowledge, Truth and Beauty." Daily ex Sun. 6:45-1:30 pm. 4:30-7:30 pm. 12:30-1:30 pm. 1:30-2:30 pm. 7-8, 8:30-12. Pacific. Opened Aug. 1, 1925.

KTAP

San Antonio, Tex. 228.9m-1310kc. 20 watts. Robert B. Bridge. Alamo Broadcasting Co. Slogan, "Kum to the Alamo. Playground." Daily ex Sun. 6:30-8:30 am. 10:30-11:30, 12:30-2 pm. 6:30-8, 9:30-10:30. Mon. silent. Sun. 4-6 pm. 9:30-10:30. Central. Founded Sept. 15, 1927.

KTBI

Los Angeles, Calif. 288.3m-1040kc. 500 watts. Bible Inst. of Los Angeles. Announcer, H. P. Herlihan. Daily ex Sun. 8:45 am. 2 pm. Daily ex Sat. Sun. 7:15-9 am. 3, 6 pm. 7:15-9:30. Pacific. Founded Sept., 1922.

KTBR

Portland, Ore. 282.8m-1060kc. 50 watts. M. E. Brown. Announcers, M. E. Brown, Sid Goodwin. Daily ex Sun. 6-7 pm. dinner program. markets. Mon. Tues. Thurs. Sat. 8:30 pm. Mon. 9:12 mid. Wed. 8:30 pm. 9:30-12. Fri. 8:10 pm. 10-12. Sun. 10:30 am. 2-4 pm. 7:30-9. Pacific. Opened Sept. 23, 1925.

KTHS

Hot Springs National Park, Ark. 384.4m-780kc. 1000 watts. The Arlington Hotel. Announcer, G. C. Arno. Slogan, "Kum to Hot Springs." Mon. Tues. Thurs. Fri. 12-1 pm. 7:30-11. Wed. 7:30-11 pm. Sat. 12-1 pm. 6:30-10:30. Sun. 11-12:30 pm. 7:30-11. Installed Dec. 20, 1924. Central.

KTNT

Muscogee, Iowa. 256.3m-1170kc. 2000 watts. Norman Baker. Slogan, "The Home of the Calliphone and Voice of the Iowa Farm Union." Announcer, Adam Reinemund. Daily ex Sun. 6-7 am. 9-11. 12-1 pm. 4-5, 6-9. Sun. 12-1 pm. 2:30-4. Central. Founded 1924.

KTSA

San Antonio, Tex. 265.3m-1130kc. 2000 watts. Alamo Broadcasting Co.

KTUE

Houston, Tex. 212.6m-1410kc. 5 watts. Uhalt Electric. Announcer, Carlos Worley. Daily ex Sun. 2-3 pm. Sat. 8:30-9 pm. Central.

KTW

Seattle, Wash. 394.5m-760kc. 1000 watts. First Presbyterian church. Announcer, J. D. Ross. Slogan, "Hear Ye, Hear Ye, the Gospel." Sun. 11-12:30 pm. 3-4:30, church service. Pacific.

KUJ

Seattle, Wash. 199.9m-1500kc. 10 watts. Puget Sound Radio Broadcasting Co. Mon, Wed, Fri. 6-9 pm. Sat. 6-12 mid. Pacific.

KUOA

Fayetteville, Ark. 296.9m-1010kc. 500 watts. University of Arkansas. W. S. Gregson. Daily ex Sun. 12-1 pm. Sun. Mon. 7-9 pm. Thurs. 7-9 pm. Central. Founded 1923.

KUOM

Missoula, Mont. 461.3m-650kc. 500 watts. University of Montana. Mon. Thurs. 8:30-9 pm. Sun. 9:15-10:30 pm. Mountain. Founded 1924.

KUSD

Vermillion, S. D. 483.6m-620kc. 250 watts. University of South Dakota. Announcer, Lyman Johnson. Slogan, "South Dakota University for the Dakotans." Mon. Fri. 6:45-7:45 pm. Wed. 9-10 pm. Central.

KUT

Austin, Tex. 232.4m-1290kc. 500 watts. University of Texas. Announcer, J. G. Adams. Mon. Wed. 8 pm. Fri. 8 pm. Sun. 11 am. 7:30 pm. Founded 1925. Central.

KVI

Tacoma, Wash. 234.2m-1280kc. 50 watts. Puget Sound Radio Broadcasting Co. Daily ex Sun. 8:10 am. 4-5 pm. 6-8. Sun. 11-12:30 pm. 5-5:30, 7:30-9. Pacific.

KVL

Seattle, Wash. 202.6m-1480kc. 100 watts. Arthur C. Bailey. Moore Hotel. Mon, Tues, Wed, Thurs. Fri. 6-10 pm. Pacific. Founded July 13, 1926.

KVOO

Tulsa, Okla. 348.6m-860kc. 1000 watts. Southwestern Sales Corp. Announcer, Billy Thompson. Daily ex Sun. 11 am. markets. 12-1 pm. 2:45 pm. 3-4, 6-11 pm. Sun. 8:15-12 pm. 12-1 pm. 4-5, 5-6 pm. 6-9:15. Central. Opened Jan. 1925.

KVOS

Bellingham, Wash. 209.7m-1430kc. 50 watts. Mt. Baker Station.

KWBS

Portland, Ore. 199.9m-1500kc. 15 watts. Schaeffer Radio Co.

KWCR

Cedar Rapids, Iowa. 239.9m-1250kc. 250 watts. Announcer, H. F. Paer. Slogan, "The Voice of Cedar Rapids." Daily ex Sun. 6:30 am. 11-30, 3:45 pm. 4, 4:30, 5, 6, 9, 10. Sun. 4 pm. 9:30. Central. Founded July 29, 1922.

KWG

Stockton, Calif. 344.6m-870kc. 50 watts. Portable Wireless Telephone Co. Announcer, George J. Turner. Slogan, "Voice of the San Joaquin Valley." Daily ex Sun. 6:45 pm. news, concert, markets. 5-6 pm. 6:30-8, 10. concert. Wed, Thurs. Sat. 10-11 am. dance music. Sun. 7:30-9:30 pm. service; 9:30-10:30. organ. Pacific.

KWJJ

Portland, Ore. 228.9m-1310kc. 50 watts. Wilbur Terman. Slogan, "The Voice From Broadway." Daily ex Sun. 1-6 pm. 6-8, concert. 8:30-12 mid. 12-1. Sun. 12-1 pm. Pacific. Founded July 25, 1925.

KWK

St. Louis, Mo. 234.2m-1280kc. 2000 6 am-6 pm. 1000 watts. Greater St. Louis Broadcasting Corp. Announcer, Thomas Patrick Convey. Daily ex Sun. Thurs. 9:30 am-11 pm. shoppers' club; baseball, studio concert. Thurs. 9:30 am-6 pm. Sun. 11-9 pm. Central.

KWKC

Kansas City, Mo. 222.1m-1350kc. 100 watts. Wilson-Duncan Studios. Announcer, Edgar E. Hodges. Slogan, "Keep Watching Kansas City." Tues. Wed. Thurs. Fri. 7 pm. 9. Central. Founded 1925.

KWKH

Shreveport, La. 394.5m-760kc. 1000 watts. Heindler Bros. Work & Supply Co. Daily ex Sun. Mon. 8:30-12 mid. Sun. 7:30-12 mid. Central. Founded Jan. 8, 1925.

KWLC

Decorah, Iowa. 247.8m-1210kc. 50 watts. Luther College.

KWLC

Palman, Wash. 394.5m-760kc. 500 watts. State College of Washington. Announcer, Harvey Wikson. Mon, Wed, Fri. 7:30-9 pm. music, lectures. Pacific. Founded 1922.

KWTC

Santa Ana, Calif. 222.1m-1350kc. 100 watts. Dr. John Wesley Hancock. Mon. Wed. 5:30-7 pm. Tues. 5:30-7 pm. 8-10. Thurs. 8:30-10 pm. Fri. 8:30-10 pm. Sat. 5:30-9 pm. Pacific.

KWUC

Le Mars, Iowa. 243.8m-1230kc. 1500 watts. Western Union College. Announcer, Rex Frolke. Daily ex Sun. 9:30-11:15 am. 12:30-4, 5, 7. Wed. Sat. 10 pm. Central. Founded 1922.

KWVG

Brownsville, Texas. 277.6m-1080kc. 500 watts. Home Star Broadcast Co. Inc. Slogan, "Good Night, World." Daily ex Sun. 9:30 am. 12. weather, markets, news; 4 pm. markets. Mon. Tues. Thurs. Fri. 7:30 pm. Wed. 12 mid. Central.

KXA

Seattle, Wash. 348.6m-860kc. 500 watts. American Radio Tel. Co.

KXL

Portland, Ore. 220.4m-1360kc. 50 watts. KXL Broadcasters. Announcer, A. R. Truitt. Slogan, "The Voice of Portland." Daily. 8 am-11 pm. 24 hours on Sat-Sun. 11 pm. Pacific. Founded Dec. 3, 1925.

KXRO

Aberdeen, Wash. 227.1m-1320kc. 50 watts. KXRO, Inc.

KYA

San Francisco, Calif. 309.1m-970kc. 500 watts. Pacific Broadcasting Corp. Announcer, Chester E. Boone. Daily ex Sun. 9-12 pm. 5:30-8:11. Sun. 11 am. 7-10 pm. service. Pacific. Founded Dec. 18, 1926.

KYW

Chicago, Ill. 526m-570kc. 2500 watts. 5000 after 10 pm. Westinghouse Elec. & Mfg. Co. Announcer, John Clark. Daily ex Sun. 6. bedtime story; 6:30. dinner concert; 7-9. WJZ; 9-10:30. program; 10:30. weather; 10:32. orchestra. Congress. Carnival. Tues. 1 pm. Sun. 11:50 am. time. ex. service; 11:50. WJZ; 2; 4:30. 7:15. WJZ; 9:15. WJZ. Central.

KZIB

Manila, P. I. 249.9m-1200kc. 20 watts. I. Beck. Inc. Daily. 6:30-8 pm. Wed. 7:30-10:30 pm.

KZM

Oakland, Calif. 245.8m-1220kc. 100 watts. Western Radio Institute (Hotel Oakland). Announcer, Albert Cowan. Daily ex Sun. 6:30-7:30 pm. Sun. 8-10 pm. Pacific. Founded June 27, 1921.

KZRM

Manila, P. I. 413m-726.1kc. 1000 watts. Radio Corp. of Philippines.

NAA

Washington, D. C. 434.5m-690kc. 1000 watts. United States Army Dept. Daily and Sun. 10:05 am. 10:05 pm. weather; 10 am. 10 pm. time. Daily ex Sun. 3:45 pm. weather. Fri. 7:45-8 pm. Eastern.

WAAD

Cincinnati, Ohio. 230.6m-1300kc. 25 watts. Ohio Mechanics' Institute. Sat. 9:45 pm. Eastern.

WAAF

Chicago, Ill. 389.4m-770kc. 500 watts. Chicago Daily Drivers Journal. Announcer, Carl Ulrich. Daily ex Sun. 8:45 am. 10:50-11; 12:50 pm. Daily ex Sun. Sat. 4:30. live stock and weather reports. Central. Founded May 22, 1922.

WAAM

Newark, N. J. 267.7m-1120kc. 250 watts. I. R. Nelson Company. Announcer, Jack Van Riper. Daily ex Sun. 7-8 am. 11-1:30 pm. Tues. Wed. 6-8 pm. Fri. Sat. 8-10 pm. Mon. Thurs. 10-12 mid. Sat. 12:30 am-2:30 pm. Eastern. Experimental call 2NHA 65.18m. Founded Feb. 1922.

WAAT

Jersey City, N. J. 245.8m-1220kc. 300 watts. Bremer Broadcasting Corp. Announcer, Joseph G. Smith. Slogan, "The Voice at the Gate of the Garden State." Daily ex Sun. 10:30 am. housewives' hour; 6 pm. markets; 6:05. dinner music; 6:40. weather; 6:45. sports; 7. tenderloin. Sun. 9:10-30 pm. 6:7. 7:30, 8. Eastern. Founded Nov. 20, 1926.

WAAW

Omaha, Neb. 440.2m-680kc. 500 watts. Omaha Grain Exchange. Announcer, James Thompson. Slogan, "Pioneer Market Station of the West." Daily ex Sun. 6 am. 8, 9:30. 9:45. 10:15. 10:45. 11:15. 11:45. 12:15. 1:15. 1:35. 1:40. 2-6 pm. Founded 1921. Central.

WABC

Richmond Hill, N. Y. 309.1m-970kc. 2500 watts. Atlantic Broadcasting Corp. Daily ex Sun. 11:50-12:50 pm. 1-2. Mon. Wed. Thurs. Fri. 7:30-11 pm. Sun. 6:30-9:45 pm. 8-9. Eastern.

WABF

Kingston, Pa. 205.4m-1460kc. 250 watts. Markle Broadcasting Corp. Announcer, E. L. Jones. Slogan, "The Voice of the Valley." Daily ex Sun. 12-1 pm. 6-7. Sun. 10:30-12. 7:30-9. 9-10:30. Eastern.

WABI

Bangor, Me. 389.4m-770kc. 100 watts. First Universalist church. Announcer, Prof. W. J. Creamer, Jr. Sun. 10:30 am. 7:30-9 pm. Eastern. Founded 1923.

WABW

Wroster, Ohio. 247.8m-1210kc. 50 watts. The College of Wooster. Dept. of Physics. Announcer, A. W. Coven.

WABY

Philadelphia, Pa. 247.8m-1210kc. 50 watts. John Magaldi, Jr. Slogan, "Quaker City Sleep Dodgers." Daily ex Sun. 11-12 pm. 11-12 pm. 11-12 pm. 11-12 pm. 11-12 pm. music; 10:30. "Sleep Dodgers Session." Eastern.

WABZ

New Orleans, La. 238m-1260kc. 50 watts. The Coliseum Place Baptist church. Announcer, Charles B. Page. Slogan, "The Station with a Message." Sun. 12:15 pm. 7:30-9, church service. Central. Founded January, 1924.

WADC

Alton, Ohio. 238m-1260kc. 1000 watts. Allen Theater Broadcasting Station. Announcer, George F. Houston. Daily ex Sun. 11-12 noon. 5:30-6 pm. Daily ex Sun. Sat. 8-11 pm. Sun. 10:30-11:45 am. 12:30-1:30 pm. 3-5, 8-11 pm. Eastern. Founded Mar., 1925.

WAFD

Detroit, Mich. 230.6m-1300kc. 100 watts. Albert E. Parfel Co. Announcer, Owen F. Urdy. Daily ex Sun. 7:30-9, music. 7:15, 7:30, 8. Eastern. Founded Jan. 1925.

WAGM

Royal Oak, Mich. 225.4m-1330kc. 50 watts. Robert J. Miller. Announcer, R. L. Miller. Slogan, "The Little Station with the Big Reputation." Mon. 8-12:30 am. Wed. Fri. 8-12 mid. Founded Oct. 6, 1925. Central.

WAIT

Taunton, Mass. 214.2m-1400kc. 10 watts. A. H. Waite & Co. Inc. Off the air until October.

WAIU

Columbus, Ohio. 282.8m-1060kc. 5000 watts. American Insurance Union. Announcer, Don Bernard. Daily ex Sun. 10:30-11 am. service; 11:30-12:30 pm. Daily ex Sat. Sun. 3-4 pm. 6-7. Mon. Fri. 7-11 pm. Wed. 8-11 pm. Sun. 2:30-5, 8:30-11. Eastern. Founded June, 1922.

WAIZ

Appleton, Wis. 227.1m-1320kc. 100 watts. Irving Zuelke, Inc. Daily ex Sun. 10-1:30 pm. Mon. 8-8:45 pm. band. Daily. 5-6:30 pm. dinner concert. Eastern.

WALK

Willow Grove, Pa. 201.2m-1490kc. 50 watts. Albert A. Walker. portable.

WAPI

Auburn, Ala. 340.7m-890kc. 1000 watts. Alabama Polytechnic Institute. Announcer, W. A. Young. Daily ex Sun. 12-1. Tues. Thurs. Fri. 9-10 pm. Installed 1922. Central.

WASH

Grand Rapids, Mich. 256.3m-1170kc. 250 watts. Boxer Laundries, Inc. Announcers, Harold Roseberry, Richard Smith, Florence Davis. Daily ex Sat. Sun. 12:30-1:30 pm. 3:30-6. Thurs. 6:00-8 pm. Daily ex Sun. Mon. 7-8 pm. Sun. 10-11:30 am. 4-5 pm. 7-8:30. Central. Founded March 13, 1925.

WATT

Boston, Mass. 201.2m-1490kc. 100 watts. Edison Elec. Illuminating Co.

WBAA

W. Lafayette, Ind. 272.6m-1100kc. 500 watts. Purdue university. Announcer, J. W. Stafford. Daily ex Sun. 11:15 am. stocks, markets, weather. Mon. Fri. 7 pm. special program. Central. Founded 1920.

WBAK

Harrisburg, Pa. 299.8m-1000kc. 500 watts. Pennsylvania State Police. Announcer, A. E. Poorman. Daily ex Sun. 10:30 am. 1:30-4 pm. 4, 7. police reports. Mon. Tues. 10 am. news. Eastern. Founded 1919.

WBAL

Baltimore, Md. 285.5m-1050kc. 5000 watts. Consolidated Gas, Elec. Light & Tower Co. Announcer, Stanley W. Barnett. Slogan, "The Station of Good Music." Daily ex Sun. Sat. 3:30-5 pm. 6-11 pm. Sat. 6:30-11 pm. Sun. 6:30-8:15 pm. Eastern. Founded Nov. 1, 1925.

WBAO

Decatur, Ill. 267.7m-1120kc. 100 watts. James Millikin University. University activities. Mon. Wed. 7-8 pm. Central. Founded 1922.

WBAP

Fort Worth, Tex. 497.7m-600kc. 5000 watts. Fort Worth Star-Telegram. Announcer, "The Hired Hand." Daily ex Sun. 8, 9, 10, 11, 12 pm. 1 pm. 2, 3. "Party of Missing Men." Mon. Tues. Thurs. Fri. Sat. 6-7 pm. 8-9. Mon. Thurs. Fri. 10-12 mid. Sun. 1-7 pm. 8-12. Central. Founded April, 1922.

WBAR

Sishto, Wis. 270.1m-1110kc. 500 watts. Kopp Radio Co. Slogan, "The Station of Northern Wisconsin." Mon. 9-10 pm. Wed. 8-9 pm. Thurs. 7:30-8:30. Sun. 10-11 pm. Central.

WBAW

Nashville, Tenn. 239.9m-1250kc. 500 watts. WBAW Broadcasters. Announcer, Harry Stone. Daily ex Sun. 10-11:15 am. 12:30-3:30 pm. 5-8, 9-10. Tues. 11-12 mid. Slogan, "From the Nutmeg State." Mon. Wed. 7-7:30 pm. Sat. 7-8 pm. Eastern. Founded Feb. 24, 1924. Central.

WBAX

Wilkes-Barre, Pa. 249.9m-1200kc. 100 watts. John H. Stenger, Jr. Slogan, "In Wyoming Valley. Home of the Anthracite." Tues. 6:30-11 pm. Thurs. 9-2 am. Sun. 5-9 pm. Eastern. Founded May, 1924.

WBBC

Brooklyn, N. Y. 227.1m-1320kc. 500 watts. Brooklyn Broadcasting Corp. Announcer, John M. Hurley. Mon. 10-3 pm. 7-8, 10-12. Tues. 9:30-12 p. 9:30-10:30-12. Wed. 10-3 pm. 6-7, 10-12. Thurs. 10-12 pm. 4-6, 7-10. Fri. 10-3, 6-8, 10-12. Sat. 9:10-10:45 am. 3:30-9 pm. Sun. 9:10 am. 3-8 pm. 10:30-12. Eastern. Founded Aug. 1926.

WBBL

Richmond, Va. 249.2m-1280kc. 100 watts. Gray Covenant Presbyterian church. Announcer, W. L. Pierce. Tues. 8 pm. Sun. 11 am. 7:45 pm. Eastern. Founded Feb. 1924.

WBMM

Chicago, Ill. (Tr. at Glenview.) 389.4m-770kc. 5000 watts. Atlas Investment Co. Announcer, Nate Caldwell. Daily ex Sun. Mon. 1-2 pm. 7-11. Mon. 1-2 pm. 6-7 pm. 7-10. Thurs. 11-12 mid. Sat. 12-2. Central.

WBPP

Petoskey, Mich. 239.9m-1250kc. 100 watts. Petoskey High School. Announcer, Carl Bowman. Daily ex Sun. 12-12:15 pm. weather stocks, news. Wed. 6-7 pm. popular program. Central. Founded 1924.

WBRR

WHAD

Milwaukee, Wis. 270.1m-110kcc. 500 watts. Marquette University, Cy Foster, Ed Rant, Harry Friedman, Wm. W. ...

WHAM

Rochester, N. Y. 280.2m-107kcc. 5000 watts. Stromberg-Carlson Tel. Mfg. Co. Announcer, E. E. Chappell, F. W. Reynolds, Donald Clark, Slogan, "This is Rochester's Where Quality Predominates."

WHAP

Carlstadt, N. J. 236.1m-127kcc. 1000 watts. Defenders of Truth Society, Inc. Announcer, Franklin Ford, Mon. Thurs, 9-11 pm. Wed, 9-11:30 am. Sat, 7-11:30 am. Sun, 7:30-9:30 pm. Eastern. Founded May, 1925.

WHAS

Louisville, Ky. 322.4m-93kcc. 500 watts. Courier-Journal and Louisville Times Co. Daily ex Sun, 3-5 pm, 7-9:30 pm. Sun, 10 am, service; 2-3, 4:30-5:30, 6:20-8:15, 8:15-9:15. Founded July, 1922. Central.

WHAZ

Troy, N. Y. 305.9m-98kcc. 500 watts. Rensselaer Polytechnic Inst. Announcer, Rutherford Hayner, Slogan, "Transcontinental and International Broadcasting Station Located at the Oldest College of Science and Engineering in America. Club, R. P. I. students. Mon, 8-12 midnight, concert, educational talks, orchestra, features. Founded June 22, Eastern.

WHB

Kansas City, Mo. 340.7m-88kcc. 500 watts. Sweeney Auto & Electrical School, Announcer, John T. Schilling, Slogan, "Heart of America." Daily ex Sun, 8:25 am, 9:25, 10:25, 10:30, 11:20, 12:30, 1:56, market reports; 2-3, ladies' hour. Daily ex Sun, Sat, 12:15 pm, 12:30, 1:25, 1:40, stocks. Daily, 7-8 pm. Mon, 8-10 pm. Tues, Thurs, 8-10 pm. Sat, 12:05 pm, 12:30, 1:25, markets; 8-10 pm. Sun, 9:45-10:45 am, service 6:30, 7:15, 7:45; 11:15-1 am organ. Central. Founded April, 1922.

WHBA

Oil City, Pa. 260.7m-110kcc. 10 watts. Shaffer Music House. Tues, 9-10 pm. Eastern. Founded Nov., 1924.

WHBC

Canton, Ohio, 236.1m-127kcc. 10 watts. Rev. E. J. Graham. Slogan, "Ignorance Is Our Greatest Enemy." Mon, 8-8:30 pm. Central. Founded Feb., 1925.

WHBD

Bellefontaine, Ohio, 222.1m-135kcc. 100 watts. Chamber of Commerce, Sun, 11 am, 7:30 pm. Eastern. Founded Feb., 1925.

WHBF

Rock Island, Ill. 222.1m-135kcc. 100 watts. Beardsley Specialty Company, Announcer, C. L. Beardsley, Slogan, "Where Historic Blackhawk Fought." Daily ex Sun, 12-2 pm. Mon, Wed, 9-11 pm. Sat, 2-4 pm, 7-9. Central. Founded Feb., 1925.

WHBL

Chicago, Ill. 204m-147kcc. 100 watts. C. L. Carroll (Portable.) Founded, 1925.

WHBM

Chicago, Ill. 201.2m-149kcc. 100 watts. C. L. Carroll. (Portable.)

WHBN

Gainesville, Fla. 202.6m-148kcc. 5000 watts. U. of Florida. Not on air.

WHBP

Johnstown, Pa. 228.9m-131kcc. 250-500 watts. Johnstown Automobile Co. Announcer, J. C. Tuilly, Slogan, "The Voice of the Friendly City." Daily ex Sun, 9-11 pm. Mon, 11 pm. Thurs, 10 pm. Sat, 10 pm. Sun, 8:30 pm. Eastern.

WHBQ

Memphis, Tenn. 232.4m-129kcc. 100 watts. Broadcasting Station WHBQ, Inc. Announcer, Thomas Thompson, Daily ex Sun, 9-10 pm. Sun, 10:45 am. Central. Founded March, 1925.

WHBU

Anderson, Ind. 220.4m-136kcc. 15 watts. Citizen's Bank, Announcer, A. L. McKee, Slogan, "First Bank on the Air." A. L. McKee, Slogan, "First Bank on the Air."

WHBW

Philadelphia, Pa. 220.4m-136kcc. 100 watts. D. R. Kienzie, Tues, Fri, 7 pm-12:15 am. Sun, 7:30-10:30 pm. Eastern.

WHBY

West De Pere, Wis. 249.9m-120kcc. 50 watts. St. Norbert's College. Green Bay-De Pere Broadcasting Station, Daily, 6:30 pm, weather, markets, Wed, Fri, Sat, Sun, 5-6 pm. Fri, 7-8 pm. Sun, 10-11 am, service. Central. Founded Jan., 1925.

WHDI

Minneapolis, Minn. 245.8m-122kcc. 500 watts. Wm. Hood Duwoudy Industrial Institute, Announcers, M. B. Bass, A. P. Upton, Slogan, "Northwest Leading Trade School." Mon, 8-9 pm. Wed, 8:30 pm. Fri, 9-10 pm. Daily ex Sun, 6:57-9:30 am, time. Central. Founded May 22, 1922.

WHEC

Rochester, N. Y. 254.1m-118kcc. 500 watts. Hickson Electric Company, Inc. Slogan, "The Magazine of the Air." Announcer, E. H. Troan. Daily ex Sun, 12-3 pm, 6:30-10 pm. Sun, 10:30-12 n, 7:30-10 pm. Eastern. Founded Jan., 1924.

WHFC

Chicago, Ill. 215.7m-139kcc. 200 watts. Triangle Broadcasters. Daily ex Mon, 8-12 mid. Central daylight.

WHK

Cleveland, Ohio. 265.3m-113kcc. 500 watts. 1,000 watts. 6 am-6 pm. Radio Air Service Corp., Slogan, "Cleveland's Pioneer Broadcasting Station." Daily, 12 n-1 pm, music; 3:30, housekeepers' chat; Daily ex Sun, 6 pm. Thurs, 6-12 mid. Sun, 10 am, 2-3 pm, 4:30-9:30. Eastern. Founded 1921.

WHN

New York, N. Y. 394.5m-76kcc. 500 watts. Loew's State Broadcasting Station, Announcers, N. T. G. I. Lewis Reid, Slogan, "The Voice of the Great White Way." Daily ex Sun, 1-2 pm, 6-12:30 am. Sat, 12-11 pm. Sun, 9-11 am, 12:30-3 pm, 7:30, 9:45-12 mid. Eastern. Founded March, 1922.

WHO

Des Moines, Ia. 535.4m-56kcc. 5000 watts. Bankers Life & Co. Announcer, N. Dean Cole. Daily ex Sun, 8-9 am, 10:30-12 n, 12:15-1:15, 2:15-4:30, 6:30-12. Sun, 11 am, 2:5 pm, 6:30-9:30. Central. Founded 1924.

WHPP

New York, N. Y. 206.8m-145kcc. 10 watts. Bronx Broadcasting Co.

WHT

Chicago, Ill. (tr. at Deerfield). 305.9m-98kcc. 5000 watts. Radiophone Broadcasting Corp., Announcer, Pat Barnes, Slogan, "Write Home Tonight." Daily and Sun, 10 am-2:30 pm. Daily ex Mon, 6-7 pm. Tues, Wed, 8:30-10 pm. Thurs, Fri, Sat, 8:30-10 pm, 11-12. Sun, 8:30-10 pm. Central. Founded April 25, 1925.

WIAD

Philadelphia, Pa. 288.3m-104kcc. 100 watts. Howard R. Miller, Slogan, "The Voice from the Birthplace of Liberty." Tues, Thurs, Fri, 6-12 mid. Eastern. Founded June, 1922.

WIAS

Ortunwa, Ia. 322.4m-93kcc. 100 watts. Poling Electric Co. Announcer, Ernest Gray. Daily ex Sun, Tues, 12-1 pm, 2:30-3:30, 5-6. Central. Founded June 12, 1922.

WIBA

Madison, Wis. 239.9m-125kcc. 100 watts. The Capital Times Strand theater. Announcer, Kenneth F. Schmitt, Slogan, "Four Lakes City." Mon, 8-11 pm. Wed, 7-9 pm, Fri, 6:15-7 pm. Sun, 12-1 pm. Central. Founded June, 1924.

WIBG

Elkins Park, Pa. 440.9m-68kcc. 50 watts. St. Paul's Protestant Episcopal church, Announcer, W. Le Roy Anspach. Sun, 10:55 am, 3:55 pm. Eastern. Founded 1925.

WIBJ

Chicago, Ill. 201.2m-149kcc. 100 watts. C. L. Carroll. (Portable.)

WIBM

Chicago, Ill. 201.2m-149kcc. 100 watts. C. L. Carroll. (Portable.)

WIBO

Chicago, Ill. (tr. at Des Plaines). 305.9m-98kcc. 5000 watts. Nelson Brothers Bond and Mfg. Co. Announcer, Walter Preston, "Stu" Dawson, Daily ex Sun, 2:30-6 pm. Daily ex Mon, 7:8-30, 10-11 pm. Sun, 8:45-10 am. Sun, Tues, Wed, 11-1 am. Central. Founded May 20, 1925.

WIBR

Steubenville, Ohio. 249.9m-120kcc. 50 watts. Thurman A. Owings, Announcer, Robert Merry, man, Slogan, "Where Investments Bring Results." Mon, 2:30-6 pm. Daily ex Mon, 7:8-30, 10-11 pm. Sun, 8:45-10 am. Sun, Tues, Wed, 11-1 am. Central. Founded May 20, 1925.

WIBS

Elizabeth, N. J. 204m-147kcc. 250 watts. New Jersey Broadcasting Corp. Announcer, Capt. H. J. Jenner. Mon, Wed, Fri, 3-5 pm, 6-12:30. Tues, Thurs, 3-5 pm, 6-7:30, 11-12. Sat, 6-11 pm. Sun, 5:30-7:30 pm. Eastern. Founded June, 1925.

WIBU

Poyntette, Wis. 217.3m-138kcc. 20 watts. The Electric Farm, Wisconsin State Journal, Mon, 9 pm, Sun, 2 pm, 4. Central. Founded July 10, 1925.

WIBW

Toneka, Kan. 294m-147kcc. 250 watts. C. L. Carroll. (Portable.) Announcers, H. A. Kyrle, N. W. Macy. Daily ex Sun, 10:30 am, 5:30-8:30 pm. Sun, 12:15 pm, 4, 6:15 pm. Central.

WIBX

Utica, N. Y. 238m-126kcc. 300-150 watts. WIBX Inc. Daily ex Sun, 9:30-11 am, shopping tour; 12-1, news, stocks, markets, music, farm news, 3-4, music, 6-11. Wed, silent night, Sat, 6-1 am. Sun, 10:30-1 pm, 6-11. Eastern. Founded 1923.

WIBZ

Montgomery, Ala. 230.6m-130kcc. 15 watts. A. D. Trum.

WICC

Easton, Conn. 265.3m-113kcc. 500 watts. The Bridgeport Broadcasting Station, Inc. Announcers, Charles W. Seley, William B. Snodgrass, Slogan, "The Industrial Center of Connecticut." Daily ex Sun, 9-11 am, 12-1 pm, 5-11. Sun, 10:50 am-12:30 pm, 2-5, 7:30-9:30. Eastern. Founded Aug. 2, 1926.

WIL

St. Louis, Mo. 258.5m-116kcc. 250 watts. Benson Broadcasting Co. Announcers, "Bill" Ellsworth, L. A. Benson. Daily and Sun, 9:30-11:30 am, 2:45-5 pm. Daily ex Wed, 8-11 pm. Central. Founded Sept., 1922.

WIOD

Miami Beach, Fla. 247.8m-121kcc. 1000 watts. Carl G. Fisher, Announcer, Jesse H. Jay, Slogan, "Wonderful Isle of Dreams."

WIPI

Philadelphia, Pa. 348.6m-86kcc. 500 watts. Gimbel Bros. Announcer, E. A. Davies, Slogan, "Watch His Progress." Daily ex Sun, 1:1-3 pm, 3-4:30, 6:30-7 pm. Tues, Fri, Sat, 10:30 am. Wed, 10 pm, Wed, 8-9 pm. Thurs, 8-10 pm. Sat, 9-11:30 pm. Sun, 10:45-12 n, alternate Sun, 9 am and 7:45 pm. Eastern. Founded Nov, 1921.

WJAD

Vaco, Tex. 333.1m-90kcc. 500 watts. Hotel Raleigh. Mon, Tues, Thurs, 6:30-7:30 pm. Mon, Tues, Thurs, Fri, 8:30-10 pm. 1st and 3rd Wed, 8:30-9:30 pm. Central. Founded July 22, 1922.

WJAG

Norfolk, Nehr. 285.5m-105kcc. 250-500 watts. Norfolk Daily News, Announcer, Slogan, "The World's Greatest Country Daily, and Home of Printer's Devil." Daily ex Sun, 12:15 pm; 4 pm; Wed, Sat, 6:30-7:30 pm, orchestra. Sun, 3 pm. Central. Founded 1922.

WJAK

Kokomo, Ind. 234.2m-128kcc. 50 watts. Kokomo Tribune, Daily ex Sun, 11:45 am, chapel, Mon, 7:30 pm, music, Wed, Thurs, 5:30 pm, concert, Fri, 7:30 pm. Central. Founded Sept., 1921.

WJAM

Cedar Rapids, Iowa. 239.9m-125kcc. 250 watts. D. M. Perham, Daily ex Sun, 9 am, 9:40, 12:30, 1:20, markets. Mon, Wed, Fri, 7-9 pm. Tues, Thurs, 7-9 pm. Central. Founded July 29, 1922.

WJAR

Providence, R. I. 483.6m-62kcc. 500 watts. The Outlet Co. Announcer, J. A. Reilly, Slogan, "The Southern Gateway of New England." Daily ex Sun, 1:05-2 pm, weather, reports, music, Wed, Thurs, Fri, 10 am, household hints, A. M., 7:30-10:30 pm. Tues, 7:40-10 pm. Thurs, 7:30-9 pm. Fri, 8-1 pm. Sat, 7:45-10 pm. Sun, 6:30-10:15 pm. Eastern. Founded Sept. 6, 1922.

WJAS

Pittsburgh, Pa. 270.1m-110kcc. 500 watts. Pittsburgh Radio Supply House, Pickering's Studio, Announcer, Howdy Clark, Slogan, "World's Jolliest Aerial Station." Daily ex Sun, 10:30 am-2 pm, 9-11 pm. Tues, Thurs, Sat, 10:30 am-2 pm, 8-11 pm. Sun, 11 am-2 pm, 3-4, 9-10. Eastern. Founded Aug. 4, 1922.

WJAX

Jacksonville, Fla. 340.7m-88kcc. 1000 watts. City of Jacksonville, Daily ex Sun, 11:55-12:05 pm. Daily ex Sun, Wed, 7:30-11 pm. Sun, 11 am, 6:30-7:30 pm, 8-9, 10-11. Eastern. Founded Nov. 26, 1925.

WJAY

Cleveland, Ohio. 227.1m-132kcc. 500 watts. Cleveland Radio Broadcasting Center, Announcer, Johnny Mack, Slogan, "On the Hollenden." Daily ex Sun, 10 am, 12 n, time; 6-12 mid. Sun, 10:30 am, service; 6:30 pm, 7, 11 pm, 11, time. Eastern. Founded Jan. 7, 1927.

WJAZ

Mt. Prospect, Ill. 263m-114kcc. 5000 watts. Zenith Radio Corp. Announcers, George G. Smith, Dan G. Smith, M. N. Thurs, 7-8 pm, 9-11. Thurs, 9-12 mid. Sun, 7:30-9:30 pm. Founded 1922. Central.

WJBA

Joliet, Ill. 247.8m-121kcc. 50 watts. D. H. Lentz, Jr. Tues, Thurs, Fri, Sat, 7-12 mid. Central.

WJBB

Sarasota, Fla. 238m-126kcc. 250 watts. Financial Journal, Daily ex Sun, 11:30-2 pm, 4:30-6, 6-7, 9-12. Eastern. Founded 1920.

WJBC

La Salle, Ill. 227.1m-132kcc. 100 watts. Hummer Furniture Co. Announcer, LeRoy Stremiau, Slogan, "Better Home Station." Daily ex Sun, 12:30-1:30 pm. Mon, 7:10 pm. Sat, 4-5 pm. Sun, 10:11:30 am, 3:30-4:45 pm, 7:30-9:30 pm. Founded May 4, 1925. Central.

WJBI

Red Bank, N. J. 263m-114kcc. 250 watts. Robert S. Johnson, Founded Sept. 15, 1925.

WJBK

Ypsilanti, Mich. 220.4m-136kcc. 15 watts. Ernest Goodwood, Announcer, H. T. Augustus, Mon, 9-11 pm. Thurs, 10-12 pm. Sun, 10:11:30 am, 7:30-8:30 am. Eastern. Founded Oct. 7, 1925.

WJBL

Decatur, Ill. 212.6m-141kcc. 250 watts. William Gushard Dry Goods Co., Announcer, W. H. Wiley, Mon, 9-10:30 am, Wed, 9-11 am, Sat, 9-11:30 am. Sun, 10:45-12:15 pm. Central. Founded Sept. 24, 1925.

WJBO

New Orleans, La. 263m-114kcc. 100 watts. Valdemar Jensen, Founded 1922.

WJBT

Chicago, Ill. 389.4m-77kcc. 500-5000 watts. J. S. Boyd, Inc. Announcer, Bobby Griffin, Daily ex Sun, 11:05 am, 3 pm, 5 pm, Mon, 10-11 pm. Tues, Wed, Fri, Sat, 11 pm. Thurs, 12 mid. Sun, 10:30-12n, 2:30-12 mid. Central. Founded 1926.

WJBU

Lewisburg, Pa. 214.2m-140kcc. 100 watts. Bucknell University, Announcer, R. B. Lauderbach, Slogan, "In the Heart of the Keystone State." Thurs, 8 pm. Eastern. Founded 1925.

WJBW

New Orleans, La. 238m-126kcc. 30 watts. C. Carlson, Jr. Tues, Fri, 7-8 pm. Sun, 9-10 pm. Central.

WJBY

Gadsden, Ala. 234.2m-128kcc. 50 watts. Electric Construction Co. Mon, Wed, Fri, 8-9 p.m. Central. Founded Aug. 11, 1926.

WJBZ

Chicago Heights, Ill. 208.2m-144kcc. 100 watts. Roland G. Palmer, Anthony Caponelli, Mon, Wed, Fri, 7-12 mid. Central. Founded an. 10, 1926.

WJDD

Chicago, Ill. (tr. at Moonshert). 356.6m-82kcc. 1000 watts. Loyal Order of Moose station, Palmer House Herald Examiner, Announcer, Gene Rouse, Slogan, "The Call of the Moose." Daily ex Sun, 10 am, news; 10:30, organ; 11-12 n, Frudence Penny; 12, music; 4 pm, piano recitals; 4:45, Palmer house orchestra; 5:45, music; 6, symphony; 6:35, talk. Daily ex Sun, Mon, 8 pm. Tues, Fri, 11-1 am. Wed, Thurs, 11-12 mid. Sat, 9-10 pm, 12-2 am. Sun, 7:30-10:30 am, services; 1:30-2 pm, funnies; 2-4, Bible class; 9, studio program; 10, news. Central.

WJKS

Gary, Ind. 232.4m-129kcc. 500 watts. Thomas J. Johnson and Frances Kennedy Radio Corp. Mon, 7-11 am. Tues, 7-9 pm, 11-12. Wed, 7-9 pm, 11-11 am. Thurs, 7-9 pm, 11-12. Fri, 7-9 pm, 11-12. Sat, 3:30-5 pm, 7-9, 11-1 am. Sun, 3:30-5 pm, 7-9, 11-12. Central. Founded Aug. 16, 1927.

WJPW

Ashtabula, Ohio. 208.2m-144kcc. 30 watts. J. P. Wilson, Mon, Wed, Fri, 7:45 pm, 8:30-11. Sun, 10:30-12 n, 7:30-8:30. Central.

WJR

Pontiac, Mich. 440.9m-68kcc. 5000 watts. 8X A. O. 32 m. The Richards-Dakland Co. Slogan, "The Good Will Station of Announcers." Daily ex Sun, 10 am, Thurs, 7-9 pm, 11-12. Fri, 7-9 pm, 11-12. Sat, 3:30-5 pm, 7-9, 11-1 am. Sun, 3:30-5 pm, 7-9, 11-12. Central. Founded Aug. 16, 1927.

WJRW

Ashtabula, Ohio. 208.2m-144kcc. 30 watts. J. P. Wilson, Mon, Wed, Fri, 7:45 pm, 8:30-11. Sun, 10:30-12 n, 7:30-8:30. Central.

WJW

New York, N. J. (tr. at Bound Brook). 454.3m-66kcc. 400-900 watts. R. C. A. Managed by National Broadcasting Co. Announcers, Milton M. Cross, Marley Sherris, Norman Sweetser, Curt Peterson, Daily ex Sun, 10-10:15 am, 12:30-12 mid. Sun, 9-10 am, 10:45-10:45 pm. Founded 1921. Eastern.

WKAQ

San Juan, Porto Rico. 322.4m-93kcc. 500 watts. Radio Corporation of Porto Rico, Announcer, Joaquin Rodriguez, Slogan, "The Island of Enchantment Where the World's Best Coffee Grows." Wed, 8-10 pm. Intercontinental. Founded Dec. 3, 1922.

WKAR

East Lansing, Mich. 277.6m-108kcc. 500-1000 watts. Michigan State College, Announcer, Keith Himebaugh, Daily ex Sun, 12-12:30 pm, weather, markets, agricultural, Announcers, Leo Fitzpatrick, John F. Patt, Daily ex Sun, 12:45-2 pm, 6-12 mid. Mon, Wed, Fri, 10 am, 11. Sun, 10 am, service; 2-4 pm, service; 6:10-30 pm. Eastern. Founded 1925.

WKAV

Laconia, N. H. 223.7m-134kcc. 50 watts. Laconia Radio Club, Fri, 7:30 pm. Sun, 5 pm. Eastern. Founded Oct. 1, 1922.

WKBB

Joliet, Ill. 215.7m-139kcc. 150 watts. Sanders Brothers, Mon, 7-9 pm. Tues, Thurs, 8-12 mid. Mon, 8-10 pm. Sun, 3-5 pm. Central.

WKBC

Birmingham, Ala. 218.8m-137kcc. 10 watts. H. L. Ansley, Tues, Thurs, 5-6:30 pm. Central. Founded June, 1926.

WLBW
Oil City, Pa. 372.6m-1100kc. 500 watts. Petroleum Telephone Co. Announcer, Deane Moore. Daily ex Sun. 12:15-1:15 pm. 5:15 pm. Mon. 12:1-3:30 pm. Mon. 9:30-11 pm. Thurs. 10:11-30 pm. Sun. 3:30-5 pm. Eastern. Founded 1926.

WLBX
Long Island, N. Y. 204m-1470kc. 250 watts. John H. Gray.

WLBZ
Iron Mountain, Mich. 209.7m-1430kc. 50 watts. Annoue Electric. Daily and Sun. 12-1 pm. Central.

WLBZ
Roxcott, Me. 208.2m-1440kc. 250 watts. Thompson L. Guernsey. Irregular schedule.

WLCI
Ithaca, N. Y. 247.8m-1210kc. 50 watts. Lutheran Assn. of Ithaca. Announcer, Robert F. Schuetz. Slogan, "The Church at the Gate of the Campus." Sun. 10:45 am. 7:45 pm. Eastern. Founded 1926.

WLEX
Lexington, Mass. 215.7m-1390kc. 50 watts. Lexington Air Station Co. Announcer, Gerald Harrison. Daily ex Sat. 8:30-10:30 pm. Sat. 11 am. Eastern. Founded Oct., 1926.

WLBI
Elkhart, Ind. 416.4m-720kc. 15000 watts. Liberty Magazine. Announcers, Bill Hay, Art Smith. Daily ex Sun. 10:30-11 am. 11:30-11:57. 12:01-12:40 pm. 7-8. 11:30. Sun. 5:15-6 pm. Central. Founded 1925.

WLIT
Philadelphia, Pa. 405.2m-740kc. 500 watts. Lit Bros. Mon. Wed. Fri. 12-2 pm. music, 2-3, 4:30, music, 5:30, stories, 7:30-10 pm. Tues. Thurs. 11 am. Tues. Thurs. Sat. 12n. 2 pm. 4:30, 5:30, 7:30. Eastern. Founded Mar. 18, 1923.

WLOE
Chelsea, Mass. 211.1m-1420kc. 100 watts. William S. Pote.

WLS
Chicago, Ill. (tr. at Crete). 344.6m-870kc. 500 watts. Sears, Roebuck & Co. Slogan, "World's Largest Store." Daily ex Sun. 7:13-9 pm. half hour markets. 12-1 pm. farm program; 2:30-3:30, homemakers hour. Mon. 4:30-10 pm. Wed. Fri. 4:30-12 mid. Sat. 4:30-11 am. Tues. Thurs. Sat. 12n. 2 pm. 4:30, 5:30, 7:30. U. S. C. services; 12:15-1:30 pm. concert; 1:30-2:30. S. S. school; 6-8. Little Brown church. Central. Founded April 6, 1924.

WLSI
Providence, R. I. 269.7m-1150kc. 250 watts. Lincoln Studios Inc. Announcer, Armande J. Lopez. Mon. 6:45 pm. Tues. 6:30 pm. Wed. 7 pm. 9. Thurs. 6:30. Fri. Thurs. Sat. 6:30 pm. Sun. 6:30 pm. Eastern. Founded Jan. 1925.

WLTH
Brooklyn, N. Y. 256.3m-1170kc. 250 watts. Voice of Brooklyn, Inc. Mon. 10 am. 5-6 pm. 9-11. Tues. Wed. Thurs. 4-7 pm. 9-12. Fri. 5-7 pm. 11-1 am. Sat. 4-6 pm. 9-12 mid. Sun. 1-2 pm. 5-6. 9-11. Eastern.

WLTS
Chicago, Ill. 483.6m-620kc. 100 watts. Lane Technical High School. Mon. 9-10 am. 2-4 pm. 6-7. Tues. Wed. Thurs. Fri. 9-10 am. 2-4 pm. Central. Founded May 1924.

WLW
Cincinnati, Ohio. (tr. at Harrison). 428.3m-700kc. 5000 watts. S.M. 576kc. 250 watts. The Crosley Radio Corp. Announcer, Fred Smith. Daily ex Sat. Sun. 8 am. exercises; 10. woman's hour; 11:15, markets; 11:55. 10 am. weather, music; 1:30, 2:30-4 am. musicals; 3:30, markets; 6:45, markets; 6:12. Sat. 10 am. woman's hour; 11:15, markets; 11:55. 10 am. weather; 12:45, markets; 2:30-4:30, musicals; 6:45, markets; 6:12. Sun. 9:30 am. 11:30. 11:15. Alternate Sun. 5:30 pm. chain. Eastern. Founded 1919.

WLWL
New York, N. Y. (tr. at Kearney). 370.2m-810kc. 1000 watts. The Paulist League. Announcer, Joseph A. Bier. Slogan, "For God and Country." Tues. Thurs. 8-11 pm. Sat. 7-9 pm. Sun. 8:9-15 pm. Eastern.

WMAC
Casenovia, N. Y. (tr. at Casenovia). 225.4m-1330kc. 500 watts. C. B. Meredith. Announcer, C. R. Jones. Thurs. 12 n. farm program; 8 pm. popular studio. Founded 1922. Eastern.

WMAF
South Dartmouth, Mass. 428.3m-700kc. 500 watts. Round Hills Radio Corp. Not operating.

WMAK
Buffalo, N. Y. (tr. at Lockport). 545.1m-550kc. 750 watts. (tr. at Tonawanda). WMAK Studios, Inc. Announcer, William Fay. Daily ex Sun. 12 n. news; 12:15, music, 4-12 mid. Sun. 2:30-11 pm. Eastern. Founded Sept. 22, 1922.

WMAI
Washington, D. C. 241.8m-1240kc. 500 watts. M. A. Leese Radio Co. Daily 6-30 pm. Eastern.

WMAN
Columbus, Ohio. 234.2m-1280kc. 50 watts. First Baptist church. Announcer, John Bohannon. Sun. 10:30-11:45 am. 7:30-8:45 pm. Eastern. Founded Sept., 1922.

WMAQ
Chicago, Ill. 447.5m-670kc. 1000 watts. The Chicago Daily News. Announcer, Harry Geise. Daily ex Sun. 6:30-11 am. 12 n. 2-2 pm. 4-6 pm. 7:10-15. Sun. 4-6 pm. 7:10-15. Daily ex Sun. Sat. 12:10-12:25 pm. farm. Central. Founded April 13, 1922.

WMAZ
St. Louis, Mo. 234.2m-1280kc. 100 watts. Kings Highway Presbyterian church. Slogan, "May Every By Way Hear Kings Highway." Sun. 11 am. 8 pm. Central.

WMAZ
Mason, Ga. 270.1m-1110kc. 500 watts. Mercer University. Announcer, E. K. Cargill. Tues. Wed. Thurs. 8:9-15 pm. Fri. 11-12:15 pm. Eastern. Founded 1925.

WMB
Newport, R. I. 204m-1470kc. 100 watts. LeRoy Joseph Beebe. Daily ex Sun. 3-4 pm. 8-10.

WMBB
Homewood, Ill. 252m-1190kc. 5000 watts. American Bond & Mortgage Co.-Triano. Announcer, Hugh Aspinwall. Slogan, "World's Most Beautiful Ballroom." Daily ex Sun. 7:10-30 pm. Sun. 4-6 pm. 7:40-10:30. Central. Founded 1925.

WMBG
Detroit, Mich. 243.8m-1230kc. 100 watts. Michigan Broadcasting Co. Announcer, Gordon Highland. Daily. 6-10 pm. Eastern. Founded 1925.

WMBD
Peoria Heights, Ill. 205.4m-1460kc. 250 watts. Peoria Heights Radio Laboratory. Daily ex Thurs. musicals. Sun. service.

WMBE
St. Paul, Minn. 208.2m-1440kc. 10 watts. Dr. C. S. Stevens. Mon. Fri. 10-12 n. Wed. 8-10 pm. Sat. 9-11 pm. Central.

WMBF
Miami Beach, Fla. 384.4m-780kc. 500 watts. Fleetwood Hotel. Announcer, Paul Whitehurst. Daily ex Sun. 6:30-7 pm. Wed. Fri. Sat. 10-11 pm. Tues. Thurs. Fri. Sun. 10-12 mid. Eastern. Founded 1924.

WMBG
Richmond, Va. 230.4m-1360kc. 15 watts. Havens and Martin. Slogan, "The Public Be Pleased." Announcer, Wm. K. Sealey, Jr. Daily ex Sun. 2-3 pm. 6-8. Eastern.

WMBH
Joplin, Mo. 204m-1470kc. 100 watts. Edwin Dudley Abernethy. Announcers, M. E. Jones, E. D. Abernethy. Slogan, "Where Memories Bring Happiness." Mon. Tues. Wed. Thurs. 12:15-1 pm. 5:30-7:30, 8:30-10:30. Fri. 12:30-1:15 pm. 5:30-7:30. Sat. 12:30-1:15 pm. 5:30-7:30. Sun. 10:50-12 n. 6, 7:30. Central.

WMBI
Chicago, Ill. 263m-1140kc. 5000 watts. Moody Bible Institute. Slogan, "The West Point of Christian Service." Announcer, Wendell P. Lovelace. Daily ex Sun. 7:40 am. 10:30-11:30. 12:30-1:30 pm. 3:30-4:30. Tues. Wed. Fri. Sat. 8-9 pm. Thurs. 7-9 pm. Sun. 7:40-9 pm. Central. Founded July 28, 1926.

WMBJ
Monessen, Pa. 232.4m-1290kc. 50 watts. Star theater. Fri. 9:45-11 pm. Eastern.

WMBL
Lakeland, Fla. 228.9m-1310kc. 100 watts. Bedford's Radio studios. Daily ex Sun. 10:30-11:30 pm. 7:30-9. 9-10. 10-11. Sun. 11-12 n. 7:30-8:30. Eastern.

WMBM
Memphis, Tenn. 309.7m-1430kc. 10 watts. Seventh Day Adventist Church.

WMBO
Auburn, N. Y. 220.4m-1360kc. 100 watts. Radio Society Laboratories.

WMBQ
Brooklyn, N. Y. 204m-1470kc. 100 watts. Paul J. Goldfarb.

WMBR
Tampa, Fla. 252m-1190kc. 100 watts. F. J. Reynolds. Daily ex Sun. 1-2 pm. 2-3. 7-8. 8-9. 10-11. Eastern.

WMBT
Lenoyne, Pa. 234.2m-1280kc. 250 watts. Mack's Battery Co. Announcer, W. S. McLaughlin. Slogan, "The Voice of the Susquehanna." Daily ex Sun. 11:30 am. musicals. 12 n. 2-3 pm. 4-6. 11-12 pm. music. Sat. 11:30-3 pm. Kmt Kracker Klub. Mon. 8:30 am-9 pm. Eastern. Founded March 14, 1924.

WMBW
Youngstown, Ohio. 214.2m-1400kc. 50 watts. Youngstown Broadcasting Co., Inc. Mon. Wed. Fri. 2:30-3:30 pm. 6-12. Sat. 10:30-12:30 am. Founded Jan. 1927.

WMC
Memphis, Tenn. 516.9m-580kc. 500 watts. The Commercial Appeal. Announcer, Francis S. Chamberlin. Slogan, "Station WMC, Memphis." "Down in Memphis." Daily ex Sun. 9:45 am. 12 n. 2:30 pm. weather, markets, music. Daily. 7 pm. program; Sun. 11 am. church service. Founded Jan. 20, 1923. Central.

WMCY
New York, N. Y. (tr. at Hoboken). 370.2m-810kc. 500 watts. Hotel McAlpin. Announcer, Snedden Weir. Slogan, "Where the Searchlight Flashes and the White Way Begins." Daily ex Sun. Sat. 10:30 am. 1 pm. 2-5. 8. 6-11 am. Sat. 10:30-11 pm. 6-11 am. Sun. 10 am-12 mid. Eastern.

WMES
Boston, Mass. 211.1m-1420kc. 50 watts. Mass. Educational Society. Mon. Thurs. 8-10:30 pm. Sun. 10:45-12 n. 7:45-9:30. Eastern. Founded Aug. 1, 1927.

WMPG
Lapeer, Mich. 234.2m-1280kc. 30 watts. First Methodist Protestant Church. Daily ex Sat. 12-1 pm. Daily ex Sat. Thurs. 7:30-10 pm. Mon. 12-12:30 pm. Daily ex Sat. 4-5 pm. Sun. 10:30-12 n. 12-1 pm. 4:5-5:30. 7:30-12. Central. Founded Dec. 6, 1926.

WMRJ
Jamaica, N. Y. 206.8m-1450kc. 10 watts. Peter J. Prinz. Tues. Thurs. 8-11:30 am. Sat. 12-2:30 pm. Sun. 12-2:30 pm. 9-11:30. Eastern. Opened July 9, 1926.

WMSG
New York, N. Y. 236.1m-1270kc. 500 watts. Madison Square Garden. Announcer, Horace E. Beaver. Mon. 7:45-12 mid. Tues. 6-11 pm. Wed. Sat. 3-6 pm. Sun. 8:30-11. Eastern.

WNAC
Boston, Mass. 461.3m-650kc. 500 watts. The Shepard Stores. Announcers, Rex Hadfield, F. Lewis Dunham, Joseph Loney, Jean Sargent. Daily ex Sun. 7:45 am-12 mid. Sun. 10:45 am-5 pm; 6:30-11. Eastern. Founded July 31, 1922.

WNAD
Norman, Okla. 239.9m-1250kc. 500 watts. University of Oklahoma. Announcer, Fred Humphrey. Mon. Wed. Thurs. 7:15-9:45 pm. Tues. Fri. 12:15-1 pm. Sat. 2-5 pm. Central. Founded Jan. 5, 1925.

WNAL
Omaha, Neb. 528.5m-1160kc. 250 watts. R. J. Rockwell. Announcer, Ronald J. Rockwell. Slogan, "Famous Station of Omaha." Fri. Sat. 7-9 pm. 9-11 pm. Central. Founded 1921.

WNAT
Philadelphia, Pa. 288.3m-1040kc. 100 watts. Lenig Bros. Co. Slogan, "We Never Are Tired." Wed. 3-6 pm. Sat. 8 pm. Eastern. Founded 1921.

WNAX
Yankton, S. D. 302.8m-990kc. 1000 watts. 6 am-6 pm. 250 watts after 6 pm. Gurney Seed & Nursery Co. Daily ex Sun. 7:45 am. Sun. 9:30-12 n. 2-7 am. Central. Founded 1921.

WNBA
Forest Park, Ill. 208.2m-1440kc. 200 watts. Michael. Irregular hours.

WNBK
Eldersburg, N. Y. 206.8m-1450kc. 50 watts. Hewitt-Wood Radio Co. Irregular schedule.

WNBH
New Bedford, Mass. 247.8m-1210kc. 250 watts. New Bedford Hotel. Announcer, I. Vermilyea. Mon. Tues. Wed. Thurs. 7-8 pm. Fri. 7:30-9 pm. Fri. 6-10:30 pm. Sun. 11-12:15 pm. 7:30-9 pm. Eastern. Founded 1923.

WNBK
Knoxville, Tenn. 206.8m-1450kc. 50 watts. Lonsdale Baptist Church. Sun. 9:45 am. 10:45. 5-6 pm. 7, 9-10. Central.

WNBO
Washington, Pa. 211.1m-1420kc. 15 watts. John Browne Springs. Daily ex Sun. 2-4 pm. 9-11 pm. Sun. 11 am. 7 pm. services. Eastern. Sun. 9-11 pm. Central.

WNBQ
Rochester, N. Y. 205.4m-1460kc. 15 watts. Gordon P. Brown.

WNBR
Memphis, Tenn. 228.9m-1310kc. 100 watts. Popular Radio Shop. Announcer, Mrs. John Ulrich. Daily ex Sun. 6:30 pm. Sun. 2:30 pm. Central. Opened Jan. 21, 1927.

WNBW
Carbondale, Pa. 199.9m-1500kc. 5 watts. Home Cut Glass and China Co.

WNBX
Springfield, Vt. 241.8m-1240kc. 10 watts. WNBX Broadcasters.

WNBZ
Saranac Lake, N. Y. 232.4m-1290kc. 10 watts. WNBZ Broadcasters. Daily 10 am-12 n. Eastern.

WNJ
Newark, N. J. 267.7m-1120kc. 250 watts. Herman Lubinsky. Announcer, Snedden Weir. Daily ex Sat. 10 am. 1:30-3:30 pm. Mon. Tues. 6-8 pm. Wed. Fri. 10-12 mid. Thurs. 6-8 pm. Sun. 6:30-12 mid. Eastern.

WNOX
Knoxville, Tenn. 265.3m-1130kc. 1,000 watts. Peoples Telephone & Telegraph Co. Mon. Wed. 7-10 pm. Fri. 7-11 pm. Tues. 9-9:30 pm. Central. Founded 1921.

WNRC
Greensboro, N. C. 223.7m-1340kc. 250 watts. Wayne M. Nelson. Mon. Wed. Fri. 12:30-1:30 pm. 6:45-9. Tues. Thurs. 7-11 pm. Sun. 11-15 am. 8 pm. services, 9. spirituals. Eastern. Founded Mar. 24, 1926.

WNRY
New York, N. Y. 526m-570kc. 500 watts. New York Municipal Radio Station. Announcer, Christie R. Bolnsack. Slogan, "Municipal Broadcasting Station of The City of New York." Daily, 7-10 pm. Eastern. Founded July 8, 1924.

WOAI
San Antonio, Texas. 499.7m-600kc. 5000 watts. Southern Equip. Co. (Evening News-Express). Announcer, G. Cunningham. Slogan, "The Winter Playground of America, Where the Sunshine Spends the Winter." Daily ex Sun. 9:30 am. weather, markets, news; 12:30 pm. 2:30, 3:30, music; 4:30, 5:45, markets; 6:45, news, sports; Mon. 7-9 pm. Tues. Wed. Thurs. Fri. 9-10 pm. Sun. 11 am. 7:30 pm. Central. Founded summer 1922.

WOAN
Lawrenceburg, Tenn. 219.9m-1250kc. 500 watts. James D. Vaughan. Announcer, James D. Vaughan. Sun. 11-12 n. 7:30-8:30 pm. Central.

WOAX
Trenton, N. J. 239.9m-1250kc. 500 watts. F. J. Wolf. Slogan, "Trenton Makes the World Takes." Daily ex Sun. 12:15-1:15 pm. Mon. 7:30-8:30 pm. Daily ex Sun. Sat. Wed. 7:30-9 pm. Fri. 7:30-8:30 pm. Sun. 7:30-9 pm. Eastern. Founded March 2, 1923.

WOBR
Ohio. 204m-1470kc. 10 watts. Karl Smith. (Portable).

WOBT
Union City, Tenn. 205.4m-1460kc. 15 watts. Tittsworth Radio Music Shop. Daily ex Sun. 9:30-10:30 am. 4-5 pm. 8-10. Sun. 4-5 pm. Eastern.

WOBW
Charleston, W. Va. 267.7m-1120kc. 50 watts. Charleston Radio Broadcasting Corp. Announcer, Wally Fredericks. Tom Mays. Slogan, "You're There With a Crosley." Daily 7-9 pm. Eastern.

WOC
Davenport, Iowa. 374.8m-800kc. 5000 watts. The Palmer School of Chiropractic. Announcers, Peter Mac Arthur, Edgar Twanley, Pat Flanagan. Slogan, "Where the West Begins and in the State Where the Tall Corn Grows." Daily ex Sun. 7 am. Happy hour; 9:45, markets, 11-11:15, 1:57 pm. time; 2 markets; 3. Aunt Jane's. Wed. 7 pm. music; 7:30-9:30. WCAF. Fri. 9:30-10:30. Tues. 7-8 pm. 8:9-30. WCAF. Wed. 6:45-9:30. N. B. C. 9:30. talk; Thurs. 7 pm. 7:30-10. N. B. C. Fri. 7-10 pm. N. B. C. Sat. 7-9 pm. WCFZ. Sun. 11 am. 12:15 pm. 1-5:30. N. B. C. 7:30-8:15-10:15. N. B. C. Central. Founded May, 1922.

WOCL
Jamestown, N. Y. 223.7m-1340kc. 25 watts. A. E. Nerston. Announcer, Bob Page. Tues. Fri. 6:30-7 pm. Sun. 10:30 am. 7-9 pm. Eastern.

WODA
Paterson, N. J. 293.9m-1020kc. 1000 watts. O'Dea Temple of Music. "A Voice from the Sky." City. Daily ex Sun. 7-10 am. 12-2 pm. Mon. 5:30-9 pm. Tues. 4:30-6 pm. 9-11. Wed. 5:30-9 pm. 11-12. Thurs. 4:30-6 pm. 9-12. Fri. 5:30-9 pm. 11-12. Sat. 4:30-6 pm. 9-12. Sun. 9 am. 7 pm. Founded April 13, 1925. Eastern.

WOI
Ames, Iowa. 265.3m-1130kc. 2500-5000 watts. Iowa State College. Announcer, A. G. Woolfries. Daily ex Sun. 7:30, 8:45, 9:30, 10, 10:30, 12:10, 12:15 pm. 12:30, 12:40, 12:45, 1 pm. 1:30, 9:30. Mon. 7, 7:20, 7:45, 8. Thurs. 7:45, 8. Sat. 4:15 pm. Boy Scouts. Sun. 10:45 am. 3:15 pm. Founded April, 1922. Central.

WOK
Chicago, Ill. (tr. at Homewood). 252m-1190kc. 5000 watts. Karzas-Chicago Beach Hotel. Announcer, Hugh Aspinwall. Daily. 11-12:30 am. Founded July 20, 1925. Central.

WOKO
Peekskill, N. Y. 215.7m-1300kc. 250 watts. H. E. Smith. Daily ex Sun. 10 am. Daily ex Sun. 10-11 am. 6-8 pm. Sat. 9-11 pm. Sun. 11 am. 12:30 pm. 3-3:30. Eastern. Founded Mar., 1924.

WOKT
Rochester, N. Y. 209.7m-1430kc. 500 watts. Titus-Elliott Corp. Announcers, F. M. Titus, E. F. Kinsman, Vincent Irolli. Daily ex Sun. 12-1 pm. 5-6. 7:45. Eastern.

WOMT
Manitowish, Wis. 222.1m-1350kc. 150 watts. The Mikado theater. Announcer, F. M. Kardon. Daily ex Sun. 11:50 am-1:10 pm. 5:45-7. Mon. 10:30-1:30 pm. Central. Founded July 1926.

WOO
Grand Rapids, Mich. 360.7m-1150kc. 500 watts. Walter S. Stiles, Inc. Mon. Tues. Wed. Thurs. Fri. 9-11 pm. Sun. 9-10 pm. Central.

WOQ
Kansas City, Mo. 340.7m-880kc. 500 watts. Unity School of Christianity. Announcer, Rex G. Best. Daily ex Sun. 11-11:30 am. Daily ex Sun. 6-7 pm. Mon. 9-10 pm. Wed. Fri. 8-10 pm. Sat. 10-11 pm. Sun. 11-12:30 am. 2:30-3 pm. 7:45-9. Central. Founded 1921.

WOR
Newark, N. J. (tr. at Kearney). 422.3m-710kc. 3500 watts. Bamberger & Co. Announcers, Louis A. Witten, Meredith Page, C. M. Bosworth. Daily ex Sun. 6:45-8 am. 2:30-5 pm. Daily and Sun. 6:15-12 mid. Sun. 3-5 pm. 7:45-11 pm. Founded 1922. Eastern.

WORD
Batavia, Ill. 252m-1190kc. 5000 watts. Peoples Pulpit association. Announcer, J. P. Holmes. Slogan, "Watchtower Station WORD." Daily 6-7:10 pm. Sun. 10-12 n. 2-4 pm. 6-7. Founded Dec., 1924. Central.

WOS
Jefferson City, Mo. 422.3m-710kc. 500 watts. Missouri State Marketing Bureau. Announcer, Jack Henny. Slogan, "Watch Our State." Daily ex Sun. 9 am. 12, 10, 11, 12, 1 pm. 2 markets; stocks, weather. Mon. Tues. Wed. Thurs. Fri. 7 pm. markets, baseball; 7:15, news. Fri. 4 pm. children's hour. Mon. Wed. 8 pm. Fri. 8:15 pm. Central. Founded 1922.

WOW
Omaha, Neb. 508.2m-590kc. 1000 watts. Woodmen of the World. Announcer, Lester Palmer. Slogan, "Where the West is at its Best." Daily ex Sun. 8:15 am. 8:55, 10:30, 12:30 pm. 1:45, 3:15, 5 markets. Daily ex Sun. Sat. 12:45 pm. Daily ex Sun. Wed. 6:7-30, 9-11. Sun. 9-10:45 am. 1-4:30 pm. 6:3-3. 9:15. Founded April 2, 1923. Central.

WOWO
Fort Wayne, Ind. 228.9m-1310kc. 5000 watts. 6-6 pm. 2500 watts after 6 pm. Main Auto Supply Co. Announcers, Al Becker, Dan Cruise. Daily ex Sat. Sun. 10:30-12 n. home news, farm flashes. Daily ex Sun. 12-1:30 pm. music. Mon. 6:15-11:30 pm. Wed. 7:11 pm. Thurs. Fri. 7-11 pm. Fri. 4-5 pm. Sat. 6-7 pm. Sun. 4-5 pm. service; 8-10. Central. Founded April, 1925.

WPAP
Palisade, N. J. 394.5m-760kc. 500 watts. Palisades Amusement Park. Announcer, Ferris Charles. Slogan, Lewis Reid. Mon. Wed. Sat. 8 pm. Tues. Fri. 8:30 pm. Thurs. 9 pm. Eastern.

WPCC
Chicago, Ill. 223.7m-1340kc. 500 watts. North Shore Congregational church. Announcer, Ralph E. Briggs. Tues. Thurs. 7:30-8:30 pm. Wed. 7:30-8:30 pm. Fri. 7:30-9:30 pm. Sun. 11-12:30 pm. 3:30-5:30. 6:30-9. Central. Founded July, 1924.

WPCH
Hoboken, N. J. 325.9m-920kc. 560 watts. Concourse Radio Corp. Mon. 7-12 mid. Tues. 4-7 pm. Wed. 10-11 pm. Thurs. 4-12 mid. Sat. 4-7 pm. 9-2 am. Sun. 6:30-12 mid. Eastern.

WPEN
Waukegan, Ill. 215.7m-1390kc. 250 watts. Announcer, Maurice Mayer. Slogan, "Waukegan Pep Station." Daily. 3-5 pm. 6:30-9. 9:30-12. Central. Founded Dec. 1, 1926.

WPG
Atlantic City, N. J. 272.6m-1100kc. 5000 watts. Volley Slogan, "Atlantic City Slogan, 'World's Playgrounds.'" Daily ex Sun. Fri. 1 pm. 6:45-1:30 am. Sun. 3:15 pm. 4:15 pm. 5:15, 9:15, 10:30. Eastern. Founded Jan. 3, 1924.

WPRC
Harrisburg, Pa. 209.7m-1430kc. 100 watts. Wilson Printing & Radio Co. Mon. Wed. Fri. 6-7 pm. Sun. 7:30-10:30 pm. Eastern. Opened Sept. 30, 1925.

WPSC
State College, Pa. 299.8m-1000kc. 500 watts. Pa. State College. Announcers, D. M. Cresswell, D. H. Henry. Slogan, "The Voice of the Nittany Lion." Tues. Wed. 6:30-7:30 pm. Eastern. Founded Nov., 1925.

WPSW
Philadelphia, Pa. 206.8m-1450kc. 50 watts. Philadelphia School of Wireless Telegraphy. Slogan, "First Wireless School in America." Wed. Fri. 7 pm. Eastern. Founded 1908.

WPTF
Raleigh, N. C. 545.1m-550kc. 5000 watts. Durham Life Ins. Co. Slogan, "We Protect the Family." Mon. Wed. Fri. 6-8 pm. Sun. 11 am. 7:30 pm. Eastern. Founded Oct. 1, 1927.

WQAM
Miami, Fla. 384.4m-780kc. 750 watts. Electrical Equip. Co. Announcer, Frederick W. Mizer. Slogan, "Florida's Pioneer Radio Station." Daily ex Sun. 11:50-12:30 pm. 7:30. Tues. Fri. 11-12 mid. Sun. 9-12:10 pm. 7-9. Eastern. Founded Feb. 1, 1922.

WQAN
Scranton, Pa. 230.6m-1300kc. 250 watts. Scranton Times. Announcer, T. V. Nealon. Slogan, "The Voice of the Anthracite." Daily ex Sun. 12:30-1 pm. 4:30-5, news, reports, sports, music. Tues. Fri. 8 pm. Entertainment. Sat. 6:30-7:15 pm. dance music. Sun. 4-5 pm. Eastern. Opened Jan. 8, 1923.

WQAO
Palisade, N. J. 394.5m-760kc. 500 watts. Calvary Baptist church. Announcer, C. R. Windham. Slogan, "The First Church Owned and Operated Broadcasting Station in the World." Wed. 7:30 pm. church service. Sun. 11:15 am. 3 pm. 7:30. church service. Founded 1922. Eastern.

WQBC
Tampa, Fla. 238m-1260kc. 250 watts. WQBC Inc.

WQB
Utica, Miss. 215.7m-1390kc. 100 watts. I. R. Jones. Daily ex Sun. 7 am-7 pm. Central.

WQBQ
Charlottesville, Va. 239.9m-1250kc. 65 watts. John Balkes.

WQBO
Gullport, Miss. 222.1m-1350kc. 15 watts. Gullport Music Co.

WQJ
Chicago, Ill. 447.5m-670kc. 500 watts. Calumet Baking Powder company-Chicago Daily News. Daily ex Sun. 11-12 n. 3-4 pm. 6-7. Daily ex Sun. Mon. 7:30 pm. 10-11 am. Sun. 10:45-12:30 pm. 2-4. 6-7. Founded May 22, 1924. Central.

WRAF
La Porte, Ind. 208.2m-1440kc. 1000 watts. Radio Club, Inc. Announcer, Charles Middleton. Slogan, "The Voice of the Maple City." Daily ex Sun. 12-1 pm. Sun. 10:45-12:15 pm. Founded April, 1922. Central.

WRAH
Providence, R. I. 199.9m-1500kc. 250 watts. Stanley N. Read.

WRAK
Escanaba, Mich. 282.8m-1060kc. 500 watts. Economy Light Company. Announcer, H. E. Flath. Slogan, "The Gateway to Cloverland." Mon. Fri. 8:30 pm. Eastern. Founded 1924.

WRAM
Galesburg, Ill. 247.8m-1210kc. 50 watts. Lombard College. Mon. 7-11 pm. Founded 1922. Central.

WRAY
Reading, Pa. 238m-1260kc. 100 watts. Avenue Radio. Elec. Shop. Slogan, "The Schuylkill Valley Echo." Announcer, C. M. Chafey. Tues. 9-11 pm. Thurs. 8-12 mid. Sun. 11 am. 3-4. 7:30. Eastern. Founded June 5, 1923.

WRAX
Philadelphia, Pa. 212.6m-1410kc. 250 watts. Berchard Church, Inc. Announcers, Walter S. Smalley, Herbert Hogk. Tues. Thurs. 7:30-9:30 pm. Sun. 11:15-12:15 pm. 4-5, 9-10. Eastern. Founded 1923.

WRBC

Valparaiso, Ind. 238m-1260kc. 250 watts. Immanuel Lutheran church. Announcer, Gerhard Schutes. Slogan, "World Redeemed by Christ." Mon. 7:30 pm. Sun. 7:30 pm. church service. Central. Founded March, 1924.

WRC

Washington, D. C. 468.5m-640kc. 500 watts. Radio Corp. of America. Announcer, John B. Daniel. Slogan, "The Voice of the Capitol." Daily ex Sun. 6:45 am-1 pm. WEAF: 1-2, organ; 5-11 pm. Sun. 11 am-9:30 pm. Eastern.

WRCV

Charlottesville, Va. 209.7m-1430kc. 100 watts. Radio Corporation of Virginia. Slogan, "The Voice of the Business District." Mon. Tues. Thurs. Fri. 7-8 pm. Sun. 10:30-12:15 pm. 7:15-8:45. Eastern.

WREC

Memphis, Tenn. 249.9m-1200kc. 100 watts. WREC Inc. Announcer, Hoyt B. Wooten. Daily ex Sun. 7-8 pm. Sun. 3-5:30 pm. Central. Founded Sept. 1923.

WREN

Lawrence, Kan. 254.1m-1180kc. 750 watts. Jenny Wren. Daily ex Sun. 6:30-8 am. 10-12 noon. school; 5-6 pm. 9-10:30. Sun. 8-9:30 pm. Central. Founded Feb. 1927.

WRES

Quincy, Mass. 217.3m-1380kc. 50 watts. Harry Leonard Sawyer. Tues. Wed. Thurs. Fri. 8-11 pm. Eastern. Founded Nov., 1926.

WRHF

Washington, D. C. 322.4m-930kc. 150 watts. American Broadcasting Company. Daily ex Sun. 10-12 n. 6-7. Sun. 5:30-7 pm. Founded 1924. Eastern.

WRHM

Minneapolis, Minn. 260.7m-1150kc. 1000 watts. Rosedale Hospital, Inc. Announcer, Troy S. Miller. Daily ex Sun. 9:10-30 am. 12-1 pm. 5-6, 6-7. Mon. Wed. Fri. 8-10 pm. Thurs. 10-12 mid. Sat. 6-11 pm. Sun. 9-15 am, 11, 7-45 pm. Central.

WRK

Hamilton, Ohio. 205.4m-1460kc. 100 watts. John C. Stade, S. W. Boran. Mon. Wed. Fri. 1-2 pm. 5-45-10. Tues. Thurs. 1-2 pm. 6-45-2 am. Sat. 1-2 pm. 2:30-5, 6:45-2:30 am. 10-30. Eastern. Founded 1919.

WRM

Urbana, Ill. 272.6m-1100kc. 500-1000 watts. Univ. of Ill. Announcer, John Bayles. Daily ex Sun. 5-6 pm. 7-8 pm. musical. Sun. 3:45-5 pm. Central. Founded 1922.

WRMU

New York, N. Y. 201.2m-1490kc. 100 watts. Atlantic Broadcasting Corp.

WRNY

New York, N. Y. (tr. at Cortesville, N. J.). 325.9m-920kc. 500 watts. Short wave 2XAL. (30,900-97,000). Experimenter Pub. Co. Daily ex Sun. 11-1 pm. 2:30-4, 7-11 pm. Sun. 11 am. 1-6:30 pm. Eastern. Founded June 12, 1925.

WRPI

Terre Haute, Ind. 208.2m-1440kc. 100 watts. Rose Polytechnic Institute Broadcasting Assn.

WRR

Dallas, Tex. 461.3m-650kc. 500 watts. City of Dallas. Announcer, John Thorwald. Slogan, "City of Achievements." Daily ex Wed. 11:30-12:30 pm. 6-7, 8-9, 10-11. Sun. 11-12 n., 7:30-9 pm. 9-10:30. Central.

WRRS

Racine, Wis. 247.8m-1210kc. 50 watts. Racine Broadcasting Corp. Announcer, F. G. Leavenworth. Daily ex Sun. Sat. 6-7 pm. news. Mon. Wed. Fri. 12-1 pm. organ. 8-10. Central. Founded Dec. 1, 1926.

WRST

Bay Shore, N. Y. 211.1m-1420kc. 150 watts. Radiotele. Mfg. Co. Inc. Slogan, "Bay Shore, the Garden Spot of Long Island." Daily ex Sun. 12-1 pm. 4-5, 6-8. Daily ex Sun. Thurs. 12-1 pm. 4-5. Daily ex Sun. Tues. 12-1 pm. 4-5, 8-12. Eastern. Founded 1925.

WRVA

Richmond, Va. 254.1m-1180kc. 1000 watts. Laris & Bro. Co. Inc. Slogan, "Carry Me Back to Old Virginia." Announcer, J. Robert Beattles. Daily ex Sat. Sun. 12-1:30 mid. Mon. Wed. Thurs. Fri. 9-12 mid. Sun. 11-12 n. 8-9. Eastern. Owned Nov. 2, 1925.

WSAI

Cincinnati, Ohio. (tr. at Mason). 361.2m-830kc. 5000 watts. United States Playing Card Co. Daily and Sun. 7-12 mid. Fri. 8-9 pm. Eastern.

WSAJ

Grove City, Pa. 223.7m-1340kc. 250 watts. Grove City College. William L. Harman, activities. Irregular schedule. Founded April 1920.

WSAN

Allentown, Pa. 222.1m-1350kc. 100 watts. Allentown Call Pub. Co. Announcer, Charles Walp. Tues. Thurs. 8:15 pm. Eastern.

WSAR

Fall River, Mass. 252m-1190kc. 250 watts. Doughty & Welch Elec. Co. Inc. Announcer, Barton G. Albert. Daily 12-1 pm. 5:30-6:30. Founded Jan. 1923. Eastern.

WSAX

Chicago, Ill. 204m-1470kc. 100 watts. Zenith Radio Corp.

WSAZ

Huntington, W. Va. 249.9m-1200kc. 100 watts. McKellar Elec. Co. Announcer, F. B. Smith. Daily ex Sun. 12-4 pm. 6-10. Sun. 10-12:30 pm. 3-4, 6-10. Eastern. Founded Jan. 1927.

WSB

Atlanta, Ga. 475.9m-630kc. 1000 watts. Atlanta Journal. Announcer, Lamdon Kay. Slogan, "The Voice of the South." Daily ex Sun. 10 am, home-makers half hour; 12-1 pm. music, weather; 1 farm service; 2:30, reports; 8-9, concert; 10:45-12, concert. Mon. 6:30 pm. Wed. 9:30-11:30 pm. Thurs. 9-11:30 pm. Wed. 6:15 pm. health talk; 7. WJZ. Sat. 6 pm. S. S. lesson. Sun. 9:30 am. 10:54, 5 pm. 6:15. WEAF. 8:15, music. Central.

WSBC

Chicago, Ill. 322.4m-1290kc. 500 watts. World Pattern. Daily ex Sun. Mon. Thurs. 6:30-8 pm. 10-11.5 pm. Mon. 9-11 am. Sat. 2-4 am. Sun. 5-7 pm. Central.

WSBF

St. Louis, Mo. 258.5m-1160kc. 250 watts. WSBF Broadcasters.

WSBT

South Bend, Ind. 399.8m-750kc. 500 watts. South Bend Tribune. Announcer, C. G. Livensood. Daily ex Sun. 6-7 pm. Mon. 9:30-11:30 pm. Thurs. 9-11:30 pm. Fri. 10-12 mid. Founded April, 1922. Central.

WSDA

New York, N. Y. 227.1m-1320kc. 250 watts. City Temple. Thurs. 7:45-9:30 pm. Sat. 10:45-11 pm. Sun. 7:30-9:30 pm. Eastern.

WSEA

Virginia Beach, Va. 263m-1140kc. 500 watts. Virginia Beach Broadcasting Co. Founded Jan. 7, 1927.

WSGH

Brooklyn, N. Y. 227.1m-1320kc. 500 watts. Amateur Radio Specialty Co. Daily ex Sun. 4 pm. 12 mid. Sun. 12:30-3 pm. Eastern.

WSIX

Springfield, Tenn. 249.9m-1200kc. 150 watts. 638 Fire and Ice Co. Announcer, George H. Lawrence. Daily ex Sun. 12:30-1:30 pm. 7-8. Sun. 11 am. Central. Founded Jan. 7, 1927.

WSKC

Bay City, Mich. 272.6m-1100kc. 250 watts. World's Star Knitting Co. Announcer, S. F. Northcott. Slogan, "Where the Summer Trails Begin." Daily ex Sun. 12-1 pm. Hardy hour of music. Tues. Thurs. Sat. 9-11 pm. Sat. 12-2 am. Sun. 11 am. Eastern. Founded June 15, 1925.

WSM

Nashville, Tenn. 336.9m-890kc. 5000 watts. National Life and Accident Insurance Company. Announcer, George Hay. Daily ex Sun. Sat. 11:45 am. 12-30 pm. 1-1:30, 5:30-6. Mon. 6:15-11 pm. Tues. Wed. 7-11 pm. Thurs. 6:30-11 pm. Sat. 6-11 pm. Sun. 11 am. 7:15 pm. services. 6:20-7:15 pm. 8:15-9:15. Founded Oct. 5, 1925. Central.

WSMB

New Orleans, La. 296.9m-1010kc. 750 watts. Saenger Theaters, Inc. and The Maison Blanche Co. Daily ex Sun. 12:30-1:30 pm. 6-7 pm. Mon. Wed. Thurs. Sat. 8:30-10:30 pm. Founded April 21, 1925. Central.

WSMK

Dayton, Ohio. 296.9m-1010kc. 500 watts. S. M. Krohn, Jr. Slogan, "The Home of Aviation." Daily ex Sun. Thurs. 9-10 am. vocal. 8-10 am. 12-1 pm. 6-11. Thurs. 9 am. 12 pm. 6, 11-3 am. Sun. 10:30-12 n. 7-9 pm. Central.

WSOE

Milwaukee, Wis. 270.1m-1110kc. 250 watts. School of Engineering of Milwaukee. Managed by Wisconsin News. Slogan, "In the Land of the Sky-blue Waters." Daily ex Sun. Sat. 1:30 pm. request music. 2:15. Wed. 2:15. newspaper features; 2:30, orchestra; 5:15, Peter Rabbit; 6:15, organ; 8, dance music; Mon. Fri. 10 pm. Sun. 3:30 pm. Bible class; 7:30, service. Central. Founded Sept. 21, 1922.

WSRO

Middletown, Ohio. 236m-1270kc. 100 watts. Middletown Broadcasting Co. Announcer, Harry W. Fahrlander. Tues. Fri. 10:30-11 am. 8-10 pm. Sun. 2-4 pm. Central. Founded 1923.

WSSH

Boston, Mass. 288.3m-1040kc. 100 watts. Tremont Temple Baptist church. Announcer, Raymond B. Meier. Fri. 7:30-9 pm. Sun. 10 am. 6:30 pm. Eastern. Founded June 8, 1924.

WSUI

Iowa City, Iowa. 475.9m-630kc. 500 watts. Univ. of Iowa. Announcer, Carl Menzer. Daily ex Sun. 9 am. 10-30. Daily ex Sat. Sun. 12:25 pm. 5 pm. 6. Mon. 7 pm. 9, 11. Wed. 7 pm. Mon. 4 pm. 12 mid. Sat. 7:30 pm. Sun. 9:30 pm. Founded Feb. 12, 1924. Central.

WSUN

St. Petersburg, Fla. 516.9m-580kc. 1500 watts. City of St. Petersburg. Announcer, J. Dudley Sauninger. Slogan, "The Sunshine City." Tues. Thurs. Sat. 3-5 pm. 7-12. Eastern. Founded Nov. 1, 1927.

WSVS

Buffalo, N. Y. 204m-1470kc. 50 watts. Seneca Vocational School. David Warnhoff, announcer. Slogan, "Watch Seneca Vocational School." Wed. Fri. 8-9:30 pm. Eastern. Founded Nov. 9, 1925.

WSYR

Syracuse, N. Y. 293.9m-1020kc. 500 watts. Olive B. Meredith. Slogan, "Voice of Central New York." Daily ex Sun. Thurs. 6:20-10:30 pm. Sun. 6:20-9:15 pm. Eastern. Founded 1922.

WTAD

Quincy, Ill. 236.1m-1270kc. 250 watts. 500 watts. 6 am-7 pm. Illinois Stock Medicine Broadcasting Corporation. Slogan, "The Voice of Agriculture." Daily ex Sun. 11:30-12:30 pm. Central. Founded Dec. 29, 1926.

WTAG

Worcester, Mass. 516.9m-580kc. 250 watts. Worcester Telegram Gazette. Announcer, Chester Gaylord. Slogan, "The Voice from the Heart of the Commonwealth." Daily ex Sun. Sat. 10:30 am. 12 n. 12:30, 12:35, 1 pm. 6:30, 7:30, 8:30, 9, 9:16 pm. Eastern. Founded May 12, 1924.

WTAL

Toledo, Ohio. 239.9m-1250kc. 250 watts. Toledo Broadcasting Co. Announcer, Carl Beinke. Slogan, "The Gateway to the Sea." Daily, 8 pm. Sat. 9 pm. Sun. 10:45 pm. Eastern.

WTAM

Cleveland, Ohio. 399.8m-750kc. 3500 watts. 5000 watts. 6 am-6 pm. Willard Storage Battery Co. Announcer, R. B. Humphrey. Slogan, "From the Storage Battery." Daily ex Sun. 6-12 mid. Sun. 11 am. 6, 7, 8, 9, 10 pm. Founded Sept. 26, 1923. Eastern.

WTAQ

Fan Claire, Wis. 254.1m-1180kc. 500 watts. Gillette Rubber Co. Announcer, C. S. Van Gorden. Slogan, "The Voice of the Wilderness." Mon. 12:15 pm. weather, news; 5, 6, 10, 10:30. Tues. 12:15 pm. weather, news; 5, 6, 10:30. Wed. 12:15 pm. weather, news; 5, 6, 10:30. Thurs. 12:15 pm. 5, 6, 10, 12. 12:15 pm. Sat. 6:20. Sat. 12:15. Sun. 11 am. Central. Founded Oct. 12.

WTAR

WSUF Norfolk, Va. 236.1m-1270kc. 500 watts. Reliance Electric Co. Announcer, Ray Winters. Slogan, "Down in Old Virginia." Daily ex Sun. 12:30-1:30 pm. organ; 4-4:30, popular program; 4:30-5:30, 6-6:30, 6:30-10, 10-11. Sun. 2-3 pm. 4:15-5:45, 5:45-7:9. Eastern. Founded Sept. 21, 1923.

WTAS

Chicago, Ill. 275.1m-1090kc. 3500 watts. Illinois Broadcasting Corp.

WTAW

College Station, Tex. 483.6m-620kc. 500 watts. Agricultural and Mechanical College of Texas. Daily ex Sun. Sat. 12:10 pm. Wed. Fri. 7 pm. Founded Oct. 17, 1927. Central.

WTAX

Streator, Ill. 247.8m-1210kc. 50 watts. Williams Hardware Co. Radio Division. Announcer, N. B. Slogans. Slogan, "Down in Old Virginia." Mon. 8:10-9 pm. Thurs. 9-11 pm. Central. Founded 1922.

WTAZ

Richmond, Va. 230.4m-1360kc. 15 watts. W. Reynolds, L. I. and T. J. McGuire.

WTFF

Washington, D. C. 202.6m-1480kc. 10,000 watts. Independent Pub. Co.

WTFI

Toccoa, Ga. 209.7m-1430kc. 250 watts. Toccoa Falls Institute. Announcer, Kelly Barnes. Tues. Thurs. 7-8 pm. Sun. 9-10 pm. Eastern. Founded Oct. 19, 1927.

WTIC

Hartford, Conn. 535.4m-560kc. 500 watts. The Travelers Insurance Company. Slogan, "The Insurance City." Daily 6:30-11 pm. Sun. 4:30-7:30 pm. Founded Feb. 10, 1924. Eastern.

WTMJ

Milwaukee, Wis. 293.9m-1020kc. 1000 watts. Milwaukee Journal. Announcers, Fred Jeske, Larry Teich. Slogan, "Voice of Wisconsin, Land of Lakes." Mon. Tues. Wed. Thurs. Fri. 10-2 pm. 3-12 mid. Sat. 10-2 am. 3-11. Sun. 9:30-10:45 pm. Central. Founded July 25, 1927.

WTRL

Midland Park, N. J. 206.8m-1450kc. 15 watts. Radio Laboratory. Tues. 7-9 pm. Fri. 7-8 pm. Sun. 2-4 pm. Eastern.

WWAE

Chicago, Ill. 227.1m-1320kc. 500 watts. Dr. George Courrier. Daily ex Sun. Mon. 7-9 pm. Central.

WWJ

Detroit, Mich. 352.7m-850kc. 1000 watts. The Detroit News. Announcers, E. L. Tyson, F. F. Wallace, Fred W. Jencks. Mon. Wed. Fri. 7:30 am. exercises; 9:30-10, household hints; 10:30-10:35, weather; 11:55-12, time; 12:05-12:45 pm. music; 1, organ; 2, music. Daily ex Sat. Sun. 6-8 pm. Mon. exercises; 9:30-10, WEAF. Tues. 8, WEAF. Wed. 8 pm. music; 8:30, WEAF. 9:30, WEAF. Thurs. 8 pm. WEAF. Fri. 8 pm. WEAF. Sat. 9:30, WEAF. Sun. 11 am. 7:20 pm. WEAF. 9:15, WEAF. Sat. 9-11 pm. variety program. Eastern. Founded Aug., 1920.

WWL

New Orleans, La. 245.8m-1220kc. 500 watts. Loyola Univ. Announcer, O. L. Ahell. Sat. 7:30-8:30 pm. Central. Founded March 31, 1922.

WWNC

Asheville, N. C. 296.9m-1010kc. 1000 watts. Asheville Chamber of Commerce. Announcer, J. Dale Stentz. Daily ex Sun. 1 pm. 2, 7-8. Tues. 7:30-30 pm. Thurs. 6:30-12 mid. Sun. 11 am-4 pm. 7:30 pm. Central. Founded Feb. 21, 1927.

WWRL

Woodside, N. Y. 199.9m-1500kc. 100 watts. W. H. Reuman. Founded Aug. 15, 1926.

WWVA

Wheeling, W. Va. 516.9m-580kc. 250 watts. John C. Stroebel, Jr. Daily ex Sun. 7 am. 8, 11, 12, 2, 3, 4, 6 pm. Mon. 7-11 pm. Sat. 11-1 pm. Sun. 10, 11 am. 1 pm. 3, 7:30. Eastern. Founded Dec. 6, 1926.

Canada

CFAC

Calgary, Alta. Can. 434.5m-690kc. 1000 watts. Calgary Herald. Announcer, Fred Carleton. Daily ex Sun. 11:30-12:15 pm. 1:15 pm. weather, markets. Mon. 3:30-4:30 pm. 9:30-10:30. Tues. 6-7 pm. Wed. 2:30-4:30 pm. 7:45-8:45. Thurs. 9 pm. 9:30-10:30. 12. Fri. 3:30-4:30 pm. 8:30. Sun. 11 am. 7 pm. service.

CFCA

Toronto, Ont. Can. 356.9m-840kc. 500 watts. Toronto Star. Announcer, Gordon W. McClain. Daily ex Sun. 12 n. 5:45, 6:20. weather, stocks. Mon. 6:30-8 pm. Wed. 6:30-12 mid. Thurs. 6:30-9 pm. 10:30-12 mid. Sat. 6:30-10 pm. Sun. 11 am. 7 pm. 8:15 eastern. Founded March, 1922.

CFCF

Montreal, P. Q. Can. 410.7m-730kc. 1650 watts. Canadian Marconi Co. Announcer, C. Walter Darling. Daily ex Sun. 12:45-1:40 pm. stocks, music. Mon. Fri. 7-7:30 pm. bedtime stories; 7:30-8:30, music; 9-10, 10:30-11:30, orchestra. Wed. 7-8 pm. orchestra. Eastern.

CFCH

Iroquois Falls, Ont. 499.7m-600kc. 250 watts. Abitibi and Paper Co., Ltd.

CFCN

Calgary, Alta. Can. 434.5m-690kc. 1800 watts. W. W. Grant, Ltd. Slogan, "Voice of the Prairies." Daily ex Sun. Wed. 9-10 pm. 13-12. Thurs. 7:45-8:45 pm. Fri. 9-10 pm. Sun. 11 am. 7:15 pm. services. 3 pm. Mountain.

CFCQ

Vancouver, B. C. 410.7m-730kc. 10 watts. Sprout-Shaw Radio Co.

CFCT

Victoria, B. C. Can. 475.9m-630kc. 500 watts. The Victoria Broadcasting Assn. Daily ex Sun. 11-12:15 am. 7:30-9:15 pm. Daily, 8-8:30 pm. Fri. 7:30-9:30. Thurs. 10:30-12 mid. Pacific. On air March, 1924.

CFCY

Charlottetown, P. E. I. 312.3m-960kc. 100 watts. Island Radio Co. Daily, 12-1 pm. 4-6. Wed. Thurs. 7-8 pm. Sun. 11 am. 7 pm.

CFGC

Brantford, Ont. Can. 296.9m-1010kc. 50 watts. The Brant Radio Supply Co., Ltd.

CFJL

Kamloops, B. C. 267.7m-1120kc. 15 watts. N. S. Dalkeish and Sons, Weller and Weller. Mon. Fri. 5:30-6:30 pm. Wed. 8 pm. Pacific.

CFLE

Prescott, Ont. 296.9m-1010kc. 50 watts. Radio Association of Prescott. Fri. 8-10:30 pm. Sun. 3-4:30 pm. 7-8.

CFMG

Kingston, Ont. Can. 267.7m-1120kc. 20 watts. Monarch Battery Mfg. Co., Ltd.

CFNB

Fredericton, N. B. 247.8m-1210kc. 25 watts. James S. Neill & Sons, Ltd. Wed. Thurs. 7-8 pm. Sun. 11 am. 7 pm. services. Atlantic.

CFQC

Saskatoon, Sask. Can. 329.5m-910kc. 500 watts. The

Official Wave Lengths Table

Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location							
113.9	1.500	15	KGFN	Aneta, N. D.	218.8	1.370	100	KGEW	F. Mrgn., Col.	238	1.280	50	KFVI	Houston, Tex.	263	1.140	50	KFPW	Carville, Mo.	312.3	960	100	CFCY	Chilte'n, Can.		
		15	KUJ	Seattle, Wash.			500	WCGU	Coney Is., N.Y.			500	WABZ	N. Orlns., La.			500	KGEF	Los A., Calif.			15	CHWC	Regina, Can.		
		100	KWBS	Portland, Ore.			500	WQWB	Milw., Wis.			1,000	WADC	Akron, O.			50	KGHP	Yuma, Colo.			500	CJBR	Regina, Can.		
		100	WBKN	N. Y., N. Y.			10	WKBC	Bhamm., Ala.			250	WJBB	Sarasota, Fla.			250	WDAG	Manassas, Va.			5,000	CKCK	Regina, Can.		
		100	WBMS	N. Y., N. Y.			500	WKBO	Jay, C., N. J.			250	WJWB	N. Orls., La.			5,000	WEAM	N. Phld., N.J.			50	CKCW	Brownsv., C.		
		100	WCOG	N. Y., N. Y.			500	WKBY	N. Y., N. Y.			250	WJWI	Red Band, N.J.			5,000	WJBO	Beans, La.			500	CKSH	St. Hycnthe, C.		
		15	WKZ	W. Mich.			25	WLBO	Atwood, Ill.			250	WRWB	Reading, Pa.			500	WMBI	Chicago, Ill.			500	CNRR	Regina, Can.		
		250	WRAH	Prvde, R. I.			100	KCCI	San Ant., Tex.			250	WRBC	V'raiso, Ind.			500	WSEA	Va. Bch., Va.			1,000	KDKA	Pitts'br, Pa.		
		100	WRRL	Woodside, N.Y.			100	KGCR	San Ant., Tex.			250	WRBC	V'raiso, Ind.			500	WSEA	Va. Bch., Va.			1,000	KPSN	Passad's, Calif.		
201.2	1.490	50	KGEH	Eugene, Ore.	220.4	1.360	100	KGCI	San Ant., Tex.	239.9	1.250	2,500	KEX	Portland, Ore.	265.3	1.130	15	KKP	Seattle, Wash.	315.6	950	50,000	KDCA	Pitts'br, Pa.		
		250	KGEY	Denver, Colo.			100	KGRS	San Ant., Tex.			100	KGCU	Mandan, N. D.			2,000	KTSA	Sant Ana, Tex.			5,000	KFAB	Lincoln, Neb.		
		500	WALK	Will, G., Pa.			50	KJBS	San Fran., Cal.			250	KWCR	Cedar R., Ia.			100	WBEES	To'ma P. Md.			1,000	KOIL	Coun. Bluffs, Ia.		
		100	WBRB	Prvde, R. I.			50	KRAC	Shrevep't, La.			500	WBWP	Nashvle, Tenn.			100	WCVS	Brdpt., Conn.			1,000	KOIN	Portland, Ore.		
		100	WGMU	N. Y., N. Y.			50	KXKL	Portland, Ore.			100	WBWP	Nashvle, Tenn.			100	WCVS	Brdpt., Conn.			322.4	930	100	CHNS	Hallfax, Can.
		100	WHBB	Chicago, Ill.			15	WHBU	Anders., Ind.			500	WJBA	Madison, Wis.			500	WICG	Cleveland, O.			100	KHKS	Atlantic, Ia.		
		100	WHBB	Chicago, Ill.			15	WHBU	Anders., Ind.			100	WJBA	Madison, Wis.			1,000	WICG	Cleveland, O.			500	WHAS	Louisville, Ky.		
		100	WHBB	Chicago, Ill.			500	WJBA	Madison, Wis.			100	WJBA	Madison, Wis.			500	WICG	Cleveland, O.			500	WHAS	Louisville, Ky.		
		100	WHBB	Chicago, Ill.			15	WHBU	Anders., Ind.			500	WJBA	Madison, Wis.			1,000	WICG	Cleveland, O.			500	WHAS	Louisville, Ky.		
		100	WHBB	Chicago, Ill.			15	WHBU	Anders., Ind.			500	WJBA	Madison, Wis.			2,500	WICG	Cleveland, O.			150	WRHF	Wash., D. C.		
		100	WHBB	Chicago, Ill.			15	WHBU	Anders., Ind.			500	WJBA	Madison, Wis.			2,500	WICG	Cleveland, O.			150	WRHF	Wash., D. C.		
202.6	1.480	100	KVL	Seattle, Wash.	222.1	1.350	100	KFWC	Pomona, Cal.	241.8	1.240	1,500	KFKB	Millard, Kan.	267.7	1.120	15	CFJC	Kamloops, B.C.	325.9	920	2,500	KOA	Denver, Colo.		
		5,000	WHBN	G'sn'vle, Fla.			50	KGFB	C'imb's, Nebr.			50	KGFB	Millard, Kan.			500	CFMC	Kingston, Can.			500	WRPN	J'ry C'n, N.J.		
		10,000	WTFM	Mt. Vn. Hls., Pa.			50	KGFB	Raton, N. M.			250	WBCR	Bngm., Ala.			25	CHGS	S'm'f'side, Can.			500	WRNY	N. York, N.Y.		
204	1.470	15	KFXD	Jerome, Idaho.	223.7	1.340	50	KFBL	Ev'r't, Wash.	243.8	1.230	125	KFCB	Phoenia, Ariz.	270.11	1.110	100	KFLX	C'veston, Tex.	329.5	910	500	CFUC	Saska'tn, Can.		
		50	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.			500	WBCR	Bngm., Ala.			1,500	KLDS	Ind'nc'e, Mo.			500	CHUC	Saska'tn, Can.		
		100	KGEO	Mnpls., Minn.			50	KFVS	C. Girard, Mo.																	

An Evening at Home with the Listener

IN CENTRAL TIME

IN EASTERN TIME

Call	Met.	Kc.	Watts	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Call	Location	Met.	Kc.	Watts	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday				
CFA	356.9	840	500	8:00-9:00	6:00-7:00	6:15-8:15	Silent	6:00-10:00	7:00-10:00	Silent	CFC	Toronto	356.9	840	500	9:00-10:00	7:00-8:00	7:15-9:15	Silent	7:00-11:00	8:00-12:00	Silent	6:30-8:30			
CJR	296.9	1010	50	9:00-11:00	Silent	5:30-7:30	Silent	6:00-10:00	7:00-10:00	Silent	CJRM	Montreal	296.9	1010	50	10:00-12:00	Silent	6:30-8:30	Silent	6:30-8:30	9:00-10:30	Silent	Silent	8:00-11:30		
CKAC	410.7	730	7500	7:15-12:00	2:45-5:45	Silent	7:15-11:30	Silent	8:30-9:30	Silent	CKAC	Montreal	410.7	730	7500	7:00-10:00	3:00-4:45	Silent	8:15-12:30	Silent	6:40-1:00	Silent	Silent	9:00-10:30		
CKCL	356.9	840	500	6:00-7:00	6:00-7:00	Silent	5:40-12:00	Silent	Silent	Silent	CKY	Winnipeg	384.1	780	500	8:00-11:30	7:00-10:00	8:15-12:00	Silent	9:00-1:00	8:30-10:00	Silent	Silent	8:00-11:00		
CKY	384.1	780	500	7:30-10:30	6:00-7:00	Silent	6:15-9:00	Silent	9:30-11:30	Silent	CKNO	Ottawa	343.5	690	500	Silent	Silent	7:15-10:00	Silent	10:30-12:00	Silent	Silent	10:30-11:30			
CKNO	434.5	690	500	Silent	Silent	6:15-9:00	Silent	9:30-11:30	Silent	Silent	CYH	Monterey	400	750	1000	10:00-11:00	Silent	10:00-11:00	10:00-11:00	10:00-11:00	10:00-11:00	10:00-11:00	10:00-11:00			
CYH	311	964	250	Silent	9:30-11:00	Silent	Silent	9:00-10:00	9:00-10:00	Silent	CYK	Pittsburgh	315.6	950	5000	10:00-11:00	1:00-1:15	6:00-11:00	6:00-10:30	6:00-10:30	6:00-10:30	6:00-11:00	6:00-11:00	6:00-10:30		
CYJ	400	750	1000	9:00-10:00	Silent	9:00-10:00	9:00-10:00	9:00-10:00	9:00-10:00	Silent	CKDA	Pittsburgh	315.6	950	5000	10:00-11:00	1:00-1:15	6:00-11:00	6:00-10:30	6:00-10:30	6:00-10:30	6:00-11:00	6:00-11:00	6:00-10:30		
CKDA	315.6	950	5000	5:00-6:00	12:00-11:00	8:00-10:00	8:00-2:00	8:00-2:00	8:00-2:00	Silent	KEN	Portland	239.9	1250	2500	9:00-3:00	8:00-1:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00		
KFA	319	940	5000	5:30-10:00	9:00-10:00	5:30-10:15	8:00-10:00	8:00-10:00	Silent	5:30-10:15	KFAB	Lincoln	319	940	5000	6:00-11:00	10:00-11:00	6:30-11:15	6:30-11:00	6:30-11:00	Silent	Silent	Silent	6:30-12:00		
KFDM	483.6	620	500	Silent	Silent	Silent	8:00-10:00	8:00-10:00	Silent	8:30-10:00	KFDM	Beaumont	483.6	620	500	8:30-10:00	9:00-10:00	9:00-11:00	9:00-11:00	9:00-11:00	Silent	Silent	Silent	8:30-11:30		
KFI	245.8	1220	500	2:30-9:00	7:30-8:30	7:30-9:00	7:30-9:00	7:30-9:00	7:30-9:00	Silent	KFII	Wichita	245.8	1220	500	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	8:30-10:00	
KFJ	468.5	640	500	7:30-9:00	8:00-9:00	7:30-10:00	7:30-10:00	7:30-10:00	7:30-10:00	Silent	KFJF	San Francisco	468.5	640	500	8:30-3:00	8:00-2:00	8:30-2:00	8:30-2:00	8:30-2:00	8:30-2:00	8:30-2:00	8:30-2:00	8:30-2:00	8:30-2:00	
KFJF	267.2	1120	750	7:00-10:00	3:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	Silent	KFJF	San Francisco	267.2	1120	750	8:00-11:00	9:00-10:00	8:00-11:00	8:00-11:00	8:00-11:00	8:00-11:00	8:00-11:00	8:00-11:00	8:00-11:00	8:00-11:00	
KFNF	461.3	650	2000	8:00-7:00	6:00-7:00	5:00-1:00	5:00-1:00	5:00-1:00	5:00-1:00	Silent	KFNF	Shenandoah	461.3	650	2000	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00	8:00-8:00
KFOA	447.5	670	1000	8:00-1:00	8:30-3:00	8:00-1:00	8:00-12:00	8:00-12:00	8:00-12:00	Silent	KFOA	Seattle	447.5	670	1000	9:00-2:00	9:00-4:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00
KFON	241.8	1240	500	8:00-2:00	8:00-3:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	Silent	KFON	San Francisco	241.8	1240	500	7:30-3:00	8:00-3:00	7:30-3:00	7:30-3:00	7:30-3:00	7:30-3:00	7:30-3:00	7:30-3:00	7:30-3:00	7:30-3:00	7:30-3:00
KFR	445.5	680	1000	6:30-2:00	7:00-9:00	6:15-7:15	6:15-7:15	6:15-7:15	6:15-7:15	Silent	KFR	Columbia	445.5	680	1000	9:00-3:00	Silent	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15
KFRU	249.9	1200	500	Silent	Silent	6:15-7:15	6:15-7:15	6:15-7:15	6:15-7:15	Silent	KFRU	Columbia	249.9	1200	500	Silent	Silent	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	7:15-8:15	
KFSD	440.9	680	500	6:00-12:00	2:00-9:00	6:00-9:00	6:00-9:00	6:00-9:00	6:00-9:00	Silent	KFSD	San Diego	440.9	680	500	7:00-1:00	3:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00	7:00-10:00
KFUG	545.1	550	500	8:00-2:00	9:00-12:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	Silent	KFUG	St. Louis	545.1	550	500	8:15-9:15	10:15-11:15	9:00-10:00	7:25-8:30	10:00-11:30	Silent	8:15-9:15				
KFWB	361.2	500	500	8:00-2:00	9:00-12:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	Silent	KFWB	Hollywood	361.2	500	500	9:00-3:00	10:30-1:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00
KFWI	267.7	1120	500	8:00-2:30	9:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	Silent	KFWI	San Francisco	267.7	1120	500	8:00-11:00	10:10-12:00	9:00-12:00	9:00-12:00	9:00-12:00	9:00-12:00	9:00-12:00	9:00-12:00	9:00-12:00	9:00-12:00	
KGA	260.7	1150	2000	Silent	9:30-11:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	Silent	KGO	Oakland	260.7	1150	2000	9:00-3:00	9:15-1:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	
KGC	484.5	620	500	8:00-2:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	Silent	KGC	Oakland	484.5	620	500	9:00-3:00	9:15-1:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	
KGW	491.5	610	1000	8:00-2:00	9:30-1:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	Silent	KGW	Portland	491.5	610	1000	9:00-3:00	9:15-1:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	
KHJ	416.4	740	500	8:00-1:00	9:00-12:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	Silent	KHJ	San Francisco	416.4	740	500	9:00-3:00	9:15-1:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	
KIAT	421	709	500	Silent	Silent	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	Silent	KIAT	Seattle	421	709	500	Silent	3:00-4:00	8:00-9:00	Silent	8:00-9:00	Silent	Silent	8:00-9:00			
KJR	344.6	860	2500	8:00-2:00	8:15-11:00	8:00-2:00	8:00-2:00	8:00-2:00	8:00-2:00	Silent	KJR	Seattle	344.6	860	2500	9:00-3:00	9:15-12:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	9:00-3:00	
KLDS	270.1	1110	1500	Silent	9:15-10:15	Silent	8:00-9:00	8:00-9:00	8:00-9:00	Silent	KLDS	Seattle	270.1	1110	1500	Silent	10:15-11:15	Silent	9:00-10:00	Silent	Silent	Silent	9:00-10:00			
KLX	508.2	590	500	6:00-3:00	Silent	7:00-12:00	7:00-12:00	7:00-12:00	7:00-12:00	Silent	KLX	Oakland	508.2	590	500	7:00-12:00	Silent	8:30-1:00	8:30-1:00	8:30-1:00	8:30-1:00	8:30-1:00	8:30-1:00	8:30-1:00		
KMA	394.5	550	500	6:00-3:00	Silent	5:00-8:30	5:00-8:30	5:00-8:30	5:00-8:30	Silent	KMA	San Francisco	394.5	550	500	9:00-3:00	9:15-10:15	9:00-11:00	9:00-11:00	9:00-11:00	9:00-11:00	9:00-11:00	9:00-11:00	9:00-11:00		
KMMJ	285.5	1050	500	8:00-9:00	8:15-9:45	8:00-9:00	8:00-9:00	8:00-9:00	8:00-9:00	Silent	KMMJ	Jolly Center	285.5	1050	500	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00		
KMN	299.8	1000	5000	6:00-1:00	6:00-1:00	6:00-1:00	6:00-1:00	6:00-1:00	6:00-1:00	Silent	KMN	Hollywood	299.8	1000	5000	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00	7:00-2:00		
KMX	328.8	900	500	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	8:00-1:00	Silent	KMX	San Francisco	328.8	900	500	9:00-3:00	9:15-1:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00	9:00-2:00		
KOA	325.9	920	500	10:00-12:00	7:30-9:45	7:30-11:00	7:30-11:00	7:30-11:00	7:30-11:00	Silent	KOA	Denver	325.9	920	500	11:00-1:00	8:30-10:45	8:30-12:00	8:30-12:00	8:30-12:00	8:30-12:00	8:30-12:00	8:30-12:00	8:30-12:00		
KOIL	319	940	2000	Silent	11:00-12:00	6:00-12:00	6:00-12:00	6:00-12:00	6:00-12:00	Silent	KOIL	Council Bluffs	319	940	2000	12:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00	7:00-1:00		
KOIN	319	940	1000	9:15-10:00	8:00-12:00	8:00-12:00	8:00-12:00	8:00-12:00	8:00-12:00	Silent	KOIN	Portland	319	940	100											

Table with 12 columns: Wave length, Frequency (kilocycles), Power (watts), Call signal, Location. It lists various radio stations across different regions.

Canada (Continued from Page 43)

- CKCR St. George, Ont., Can. 257.7m-1120kc. 25 watts. John Patterson.
CKCV Quebec, P. Q. 340.7m-880kc. 100 watts. G. A. Vandry.
CKCX Toronto, Ont. 291.1m-1030kc. 1000 watts. International Bible Students' Assn.
CKFC Vancouver, B. C. Can. 410.7m-730kc. 50 watts. United Churches of Canada.
CKGW Bowmanville, Ont., Can. 312.3m-960kc. 5000 watts. Gooderman & Worts, Ltd.
CKLX Fed Deer, Alta. 356.9m-840kc. 1000 watts. Alberta Pacific Grain Co., Ltd.
CKMC Cobalt, Ont. 247.8m-1210kc. 5 watts. R. L. MacAdam.
CKNC Toronto, Ont., Can. 356.9m-840kc. 500 watts. Canadian National Carbon Co., Ltd.
CKOC Hamilton, Ont., Can. 340.7m-880kc. 50 watts. Wentworth Radio Supply Co., Ltd.
CKPC Preston, Ont. 247.8m-1210kc. 7 1/2 watts. Wallace Russ.
CKPR Midland, Ont. 267.7m-1120kc. 50 watts. E. O. Swan.
JKSH St. Hyacinthe, P. Q. 312.3m-960kc. 50 watts. City of St. Hyacinthe.
CKSM Toronto, Ont. 291.1m-1030kc. 1000 watts. St. Michael's Cathedral.
CKUA Edmonton, Alta. 516.9m-840kc. 500 watts. U. of Alberta.
CKWX Vancouver, B. C. 410.7m-730kc. 100 watts. Sparks Company.
CKY Winnipeg, Man., Can. 344.4m-780kc. 500 watts. Manitoba Tel. System.
CNRA Moncton, N. B., Can. 316.9m-890kc. 500 watts. Canadian National Railways.
CNRC Calgary, Alta., Can. 434.5m-690kc. 1000 watts. Canadian National Railways.
CNRE Edmonton, Alta., Can. 516.9m-840kc. 500 watts. Canadian National Railways.
CNRM Montreal, Que., Can. 410.7m-730kc. 1,000-1,650 watts. Canadian Radio.
CNRO Ottawa, Can. 434.5m-690kc. 500 watts. Canadian National Railways.
CNRQ Quebec City, Can. 340.7m-880kc. 100 watts. C. N. R.
CNRR Regina, Sask., Can. 312.3m-960kc. 500 watts. Canadian National Railways.
CNRS Saskatoon, Sask., Can. 329.5m-910kc. 500 watts. Canadian National Railways.
CNRT Toronto, Ont., Can. 356.9m-840kc. 500 watts. Canadian National Railways.

CNRV

Vancouver, Can. 291.1m-1030kc. 500 watts. Canadian National Railways. Announcer, G. A. Wright.

CNRW

Winnipeg, Man., Can. 384.4m-780kc. 500 watts. Canadian National Railways. Announcer, R. H. Roberts.

Cuba

- PWX Havana, Cuba. 407m-750kc. 500 watts. Cuban Telephone Co.
2CT Havana, Cuba. 350m-855kc. 50 watts. Casimiro Pujadas.
2FG Helyshey, Cuba. 200m-999.4kc. 20 watts. Alberto A. Feriera.
2GF Havana, Cuba. 192m-1540kc. 5 watts. Francisco Williams.
2HP Havana, Cuba. 205m-1460kc. 200 watts. Cristina W. Vda. Cruet.
2JF
2JT Havana, Cuba. 46m-650kc. 5 watts. Jose A. Terry.
2JL Havana, Cuba. 294m-1020kc. 5 watts. Jose Leiro.
2MA Havana, Cuba. 305m-980kc. 50 watts. Malesio Alvarez.
2MF Madrugá, Cuba. 100m-299kc. Moises Fernandez.
2MG Havana, Cuba. 284m-1055kc. 20 watts. Manuel Y. Guillermo Salas Music Store.
2MK Havana, Cuba. 85m-349kc. 100 watts. R. V. Waters.
2MU Havana, Cuba. 265m-1330kc. 100 watts. Ulpiano Munia.
2OK Havana, Cuba. 360m-833kc. 100 watts. Mario Garcia Velez.
2OL Havana, Cuba. 257m-1170kc. 100 watts. Oscar Collado.
2RK Havana, Cuba. 315m-950kc. 100 watts. Ranul Karman Casa De La Porte.
2TW Havana, Cuba. 270m-1110kc. 20 watts. Roberto E. Ramirez.
2UF Havana, Cuba. 355m-844kc. 20 watts. Roberto E. Ramirez.
2XA Havana, Cuba. 230m-1300kc. Lectona Music Co.
2XX Havana, Cuba. 225m-1333kc. 5 watts. Antonio A. Ginard.
5DW Matanzas, Cuba. 270m-1110kc. 100 watts. Ramon Sarría Calderon.
5EV Colon, Cuba. 360m-833kc. 5 watts. Leopoldo V. Fiala.
6BY Cienfuegos, Cuba. 260m-1153kc. 200 watts. Jose Gandux.
6EV Caibarien, Cuba. 250m-1200kc. 50 watts. Maria Josefa Alvarez.
6SH S. La Grande, Cuba. 200m-1500kc. 10 watts. Santiago Ventura.
6KC Cienfuegos, Cuba. 240m-1250kc. 10 watts. Carlos Hernandez.
6KP Sancti Spiritus, Cuba. 195m-1540kc. 20 watts. Antonio Galguera.
6KW Tuinucu, Cuba. 340m-880kc. 100 watts. Frank H. Jones.
6LO Caibarien, Cuba. 325m-920kc. 250 watts. Manuel A. Alvarez.
6RG Santa Clara, Cuba. 200m-1500kc. 20 watts. Rafael Garcia Perez.
6XJ Tuinucu, Cuba. 272m-1080kc. 100 watts. Frank H. Jones.

6YR

Camaguey, Cuba. 200m-1500kc. 20 watts. Diego Iborra.

7AZ

Camaguey, Cuba. 225m-1333kc. 10 watts. Pedro Nogueiras.

Mexico

- CYA Mexico City, Mex. 265m-1130kc. 500 watts. Mon. Fri. 6:45-8 pm. Sun. 4-6 pm. Partido Liberal Avanzado.
CYB Mexico City, Mex. 270m-1110kc. 500 watts. El Buen Tono. Tues., Thurs., Sat. 7:30-9 pm. concert.
CYF Oaxaca, Oax., Mex. 270m-1110kc. Federico Zorrilla.
CYG Mexico City, Mex. 300m-1000kc. 1000 watts. Secretaria de Guerra y Marina.
CYH Monterey, Mexico. 311m-964kc. 1000 watts. Tarranza & Cia. Slogan, "The Industrial Center of the Mexican Republic."
CYJ Mexico City, Mex. 410m-730kc. 1000 watts. General Electric Co.
CYL Mexico City, Mex. 480m-625kc. 500 watts. La Casa del Radio.
CYR Mazatlan, Sin., Mex. Rosseter Y Cia.
CYX Mexico City, Mex. 333m-900kc. 500 watts. Excelsior & Revista de Revistas.
CZA Mexico City, Mex. 70-500-1070 meters. Aviation Dept., War Ministry.
VOICE OF READERS Nash Official Writes The purpose of this letter is to indorse the editorial written in your January issue of "Radio Digest" on the subject of placing chain programs on one band.

purchased, however, until the chain programs remove the present wall that they have now erected to exclude the programs of smaller stations.

The average listener dislikes to have a program thrust upon him. He wants to select his own program, and sooner or later the National Broadcasting Company will discover this.

So, we say keep up the good work that you have been carrying on in your editorial columns because there are thousands of listeners in favor of your attitude. C. F. BORKENHAGEN, Kenosha, Wis.

Nail You at the Next

Regarding your editorial "Put the Chain on One Band" it's easy to tell you why the commission doesn't—and probably won't. First: The Radio Commission has been dominated by the R. C. A. crowd. Their placing of chain stations on cleared wave bands, and giving those stations high power, is self evident of that fact.

Backs Vega Petition

I thoroughly agree with the views of the Vega, Texas, folks that all chain stations be put on a separate wave length. I don't like the idea of being forced to listen to their commercial programs although they are convenient if it comes to broadcasting a President's speech.

TRY SUBANTENNA FREE Enjoy Louder, Clearer Better DX at our Risk Why listen in on weak, noisy, scratchy, squeaky air waves when ground waves are clean, smooth and strong? Why listen to fading, mumbled-up distant reception when you can bring in in loud, clear and clear like local? SUBANTENNA—the first and only satisfactory device and clear like local waves, completely does away with the old style "aerial" and enables any set to get distant stations that it never could get before.

\$75 to \$125 Weekly Charging Batteries Starts You Let me show you how to make big money right from the start. I've prepared a FREE book explaining all details. First week's profit pays for all equipment. You can get all the battery charging business in your community with my Service Station Charger—it's years ahead of ordinary chargers—handles 50% to 70% more batteries. I explain everything—start you in a business of your own and put you on the way to big money. Write for FREE BOOK. C. F. HOLMES, Chief Engineer, Dept. R.D. Independent Electric Works 5116 Ravenswood Ave. Chicago, Ill. FREE BOOK—Just Out SAVE 60% ON DIAMONDS Import unmounted diamonds from Mexico—have them mounted by jeweler—save 60% of usual cost. We sell only genuine diamonds. U. S. customs appraisal is proof of value. Sent C. O. D. No money in advance. Write for price list. Block Hermanos, Dept. 13-A, Bulivar 15, Mexico City, Mex.

State and City Index Continued

Texas (Continued)			
City	Call	Meters	Kc. Watts
Dallas	St. WTAW	463.6	620 500
Dallas	KRLD	461.3	650 500
Dallas	WFAA	545.1	550 500
Dallas	WR	461.3	650 500
Dallas	KFPL	275.1	1,090 15
Dallas	WDAH	234.2	1,280 100
El Paso	KFIZ	249.9	1,200 50
Fort Worth	KFQB	333.1	900 1,000
Galveston	WBAP	499.7	600 5,000
Galveston	KFLX	270.1	1,110 100
Galveston	KFUL	258.5	1,160 500
Greenville	KFPM	230.6	1,300 14
Hartlingen	KHMC	236.1	1,270 100
Houston	KFVI	238	1,260 250
Houston	KFRC	293.9	1,020 500
Houston	KTUE	212.6	1,410 5
San Angelo	KGFI	220.4	1,360 15
San Antonio	KGCI	220.4	1,360 100
San Antonio	KGDR	206.8	1,450 15
San Antonio	KGRC	220.4	1,360 100
San Antonio	KTAP	228.9	1,310 20
San Antonio	KTSA	265.3	1,130 2,000
Waco	WOAI	499.7	600 5,000
Waco	WJAD	333.1	900 500

Washington			
City	Call	Meters	Kc. Watts
Aberdeen	KXRO	227.1	1,320 50
Bellingham	KVOS	209.7	1,430 50
Everett	KRL	249.7	1,340 50
Lacey	KCY	243.8	1,230 50
Pullman	KWSC	394.5	760 500
Seattle	KFOA	447.5	670 1,000
Seattle	KFOW	273.6	1,300 50
Seattle	KGLL	240.6	1,300 50
Seattle	KJR	348.6	860 2,500
Seattle	KKP	265.3	1,130 15
Seattle	KONO	305.9	980 1,000
Seattle	KPCB	230.6	1,300 50
Seattle	KRSC	211.1	1,420 50
Seattle	KTW	199.9	760 1,000
Seattle	KUJ	245.8	1,480 100
Seattle	KVA	348.6	860 500
Spokane	KFO	234.2	1,280 50
Spokane	KFFV	245.8	1,220 250
Spokane	KGA	260.7	1,150 2,000
Spokane	KHQ	370.2	810 1,000
Tacoma	KVI	234.2	1,280 50
Tacoma	KMO	254.1	1,180 250

Washington (Continued)			
City	Call	Meters	Kc. Watts
W. De Pere	WHBY	249.9	1,200 50

Wyoming			
City	Call	Meters	Kc. Watts
Laramie	KFBU	483	620 500

Alaska			
City	Call	Meters	Kc. Watts
Anchorage	KFOF	344.6	870 100
Juneau	KFIU	225.4	1,330 10
Ketchikan	KGBU	228.9	1,310 500

Hawaii			
City	Call	Meters	Kc. Watts
Honolulu	KGHB	227.1	1,320 25
Honolulu	KGU	270.1	1,110 600

Philippines			
City	Call	Meters	Kc. Watts
Manila	KZIB	249.9	1,200 20
Manila	KZRM	413	726.1 1,000

Porto Rico			
City	Call	Meters	Kc. Watts
San Juan	WKAQ	322.4	930 500

Canada			
City	Call	Meters	Kc. Watts
Bowmanville	CKCW	312.3	960 5,000
Calgary	CFAC	434.5	690 1,000
Calgary	CFCA	434.5	690 1,800
Calgary	CJJC	434.5	690 2,20
Calgary	CNRC	434.5	960 1,000
Charlottetown	CFNS	322.4	930 100
Chatham	CKMC	247.8	1,210 5
Edmonton	CHMA	516.9	580 250
Edmonton	CJCA	516.9	580 500
Edmonton	CKUA	516.9	580 500
Edmonton	CNRE	516.9	580 500
Edmonton	CHCY	516.9	580 250
Fredericton	CFNB	247.8	1,210 25
Halifax	CHNS	322.4	930 100
Hamilton	CHCS	340.7	880 10
Kingston	CKOC	340.7	880 50
Kingston	CKUA	340.7	880 250
Kingston	CFJC	287.7	1,120 15
Kingston	CFRB	291.1	1,030 1,000
Kingston	CICQ	410.7	730 10
Kingston	CNRA	336.1	1,20 20
Kingston	CFRC	287.7	1,120 500
Kingston	CJGC	329.5	910 500
Kingston	CKPR	267.7	1,120 50
London	CNRA	336.1	1,20 500
Montreal	CFCE	410.7	730 1,650
Montreal	CHYC	410.7	730 750
Montreal	CKAC	410.7	730 1,200
Montreal	CNRM	410.7	730 1,000

Canada (Continued)			
City	Call	Meters	Kc. Watts
Moose Jaw	CJRM	296.9	1,010 50
Burnaby	CFYC	410.7	730 500
Ottawa	CNRO	434.5	690 100
Ottawa	CKNO	434.5	690 500
Prescott	CFCL	296.9	1,010 50
Prescott	CKPC	247.8	1,210 7 1/2
Quebec	CHRC	340.7	880 45
Quebec	CKCI	340.7	880 45
Quebec	CKCJ	340.7	880 100
Quebec	CNRQ	340.7	880 100
Quebec	CKLC	356.9	840 1,000
Red Deer	CHWC	312.3	960 500
Regina	CJBR	312.3	960 500
Regina	CKCB	312.3	960 500
Regina	CNRR	312.3	960 500
Regina	CFQC	329.5	910 500
Saskatoon	CHUC	329.5	910 250
Saskatoon	CJWC	329.5	910 250
Saskatoon	CNRS	329.5	910 500
Scarboro	CJYC	291.1	1,030 500
Scarboro	CKCX	291.1	1,030 500
Sea Island	CJOR	291.1	1,030 100
St. Hyacinthe	CKSH	312.3	960 50
Summerside	CHGS	267.7	1,120 25
Toronto	CFCA	356.9	840 500
Toronto	CHC	356.9	840 500
Toronto	CHFC	356.9	840 500
Toronto	CJBC	291.1	1,030 500
Toronto	CJSC	356.9	840 500
Toronto	CKC	291.1	1,030 500
Toronto	CKCL	356.9	840 500
Toronto	CKCX	291.1	1,030 1,000
Toronto	CKNC	356.9	840 500
Toronto	CKSM	291.1	1,030 1,000
Toronto	CNRT	356.9	840 500
Unity	CHSC	267.7	1,120 50
Vancouver	CICQ	410.7	730 10
Vancouver	CHP	410.7	730 50
Vancouver	CKCD	410.7	730 1,000
Vancouver	CKFC	410.7	730 50
Vancouver	CKWX	410.7	730 50
Victoria	CNVR	291.1	1,030 500
Winnipeg	CFCT	475.9	630 500
Winnipeg	CKY	384.4	780 500
Winnipeg	CNRV	384.4	780 500
Yorkton	CJGX	475.9	630 500

CLASSIFIED ADVERTISEMENTS

HOW about that new set you want to buy? What are you going to do with the old one? A Radio Digest classified advertisement will sell it for you. Rates are twenty cents a word for each insertion. Five per cent discount for four insertions, 10 per cent discount for six insertions, 15 per cent discount for twelve insertions. Name and address are counted. Two initials count one word. Cash must accompany any order. Minimum of ten words. Objectionable and misleading advertisements not accepted.

Employment

Instructions
DO YOU DRIVE A CAR? U. S. Government Chauffeur-Carrier jobs will pay you \$141 to \$175 a month. "How to Qualify," mailed free. Write, Instruction Bureau, 206 Arcade, St. Louis, Mo.

Earn \$25 weekly spare time, writing for newspapers and magazines. Experience unnecessary. Copyright book, "How to write for Pay." Free. Press Reporting Institute, 1269 St. Louis, Missouri.

Men qualify for forest ranger position; start \$125 month; cabin and vacation; patrol the forests; protect the game. Write Mokane Institute, M-50, Denver, Colorado.

Male Help

MEN—South American work. Oil, fruit, rubber companies. Expenses paid. South American Service Bureau, 14,600 Alma, Detroit, Michigan.

Men to do radio experimenting for us in spare time. Write Experimental Dept., Lambert Mfg. Co., Wichita, Kans.

WANTED—Men to work with National Radio Service organization. No selling scheme. Co-Operative Radio Doctors, Department D, 131 Essex Street, Salem, Mass.

Maps

New Radio Maps. We are now able to supply our readers with new radio maps, showing location of stations, list of all stations by call letters. Come folded in cover, but may be used for pasting on cardboard. Size 28x34". Send 25 cents stamps or coin to Shopping Service, Radio Digest, 510 N. Dearborn St., Chicago, Ill.

Miscellaneous

The new and improved Proof of Reception Cards are the most practical and convenient proof of reception of those distant stations. Contains spaces for complete reception record, dial settings, call letters, stamps and signature of announcer. Handy size, 3x5 inches. 150 for \$1 or send 25 cents (stamps or coin) for sample package. Shopping Service, Radio Digest, 510 N. Dearborn St., Chicago, Ill.

If you want to buy radio sets, parts, logs, stamps or books, you will find them advertised in the classified columns—where buyers and sellers meet.

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Inventors who derive largest profits know and heed certain simple but vital facts before applying for patents. Our book Patent-Sense gives those facts; free. Lacey & Lacey, 721 F. Street, Washington, D. C. Established 1869.

PATENTS. Booklet free. Highest references. Best results. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

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INVENTIONS COMMERCIALIZED. Patented or unpatented. Write Adair Fishler Manufacturing Company, 555 Enright, St. Louis, Missouri.

Radio

DIRECT FACTORY SALE
Wholesale prices. Tremendous savings. Selling direct to you. Here are some of our many items: 30 Henry Choke, 100 M. A., \$2.19; 10 Henry Choke, 400 M. A., \$5.48. Power Transformers for all kinds of Eliminators and for all types of A. C. Tubes, at Special Low Prices. EVERY ITEM FULLY GUARANTEED. Promptly shipped, upon receipt of order. Send for free illustrated catalog today. Todd Electric Co., Inc. (Manufacturers), 36 West 20th Street, Dept. C, New York City.

UTAH LOUD SPEAKERS: Large \$22.50 Speaker for \$8.95; new stock in sealed cartons; \$25.00 7" x 7" Speakers for \$7.95 while they last. Write for bargain sheet. Dealers write for quotations on above speakers. Radio Supply Co., 119 W. Main St., Springfield, Ohio.

Change your phonograph into a loud speaker with the Fultone Unit for only \$2 C. O. D., or postpaid if cash accompanies order. Bronstein's Pharmacy, 4600 Lincoln Ave., Chicago.

EDISON "A" BATTERIES—3 cell, 20 ampere hour, in neat metal cases. Price \$3.50 each, ten or more \$3.00 each. Cash with order. Department B, 25 East South Street, Indianapolis, Indiana.

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THIS magnificent Apartment Hotel overlooks Central Park, faces the Museum of Natural History and is only a few minutes from Broadway—Fifth Ave. and the Shopping and Theatre centers. The rooms are uniquely large and furnished with luxurious refinement. An ideal summer residence for families.

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Standish Hall
45 W. 81st St. New York

Radio

600 MILE RADIO, \$2.95 postpaid. Needs no tubes, batteries or electrical current. Over 300,000 homes have them. Postcard brings free pictures. National Radio Sales Co., Fuller Bldg., Wichita, Kans.

We have an oversupply of the famous Fultone loud speakers which we are disposing of at only \$4.95 C. O. D. or postpaid if cash accompanies the order. Bronstein's Pharmacy, 4600 Lincoln Ave., Chicago.

Wanted to Buy
Crosley pups—Crosley No. 51 Radiolas Model III. Advise how many you have and what price. Lambert Mfg. Co., Wichita, Kans.

Radio Log

New 1928 RADIO ATLAS and STATION LOG ready. 32 pages. Lists of nearly 800 stations by call letters and wave lengths with ample logging space. Stations listed also by states, cities and provinces. Four double page maps—special distance finding map; Radio map of the U. S.; Radio map of Canada; Radio map of the world. Maps and data of American Relay League, Federal Radio Commission and Radio zones. Wave length conversion table for kilocycles and meters; comparative time chart in principal cities; international call assignments. Send 35 cents (U. S. stamps or coin) to Shopping Service, Radio Digest, 510 N. Dearborn Street, Chicago, Ill.



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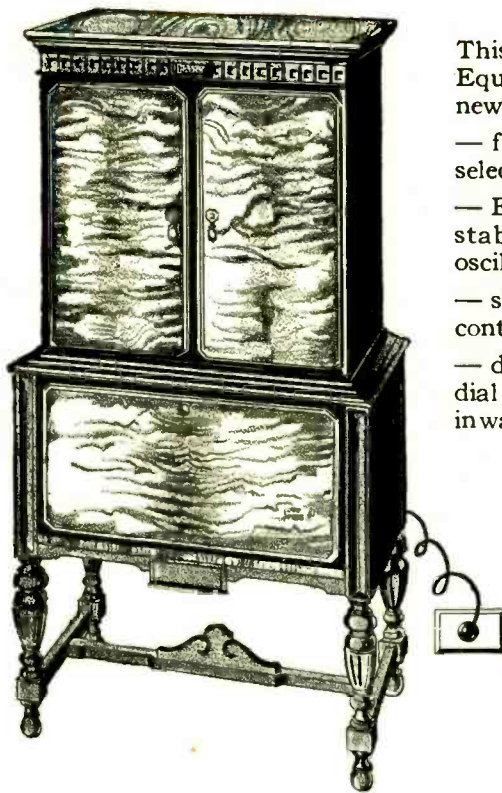
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