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Radio Digest

Spring
Number

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Thirty-Five
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May 1937

Vol. 2

No. 5

COE
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CHICAGO
CIVIC
OPERA

Al Folson

An Open Letter by

Jessica Dragonette

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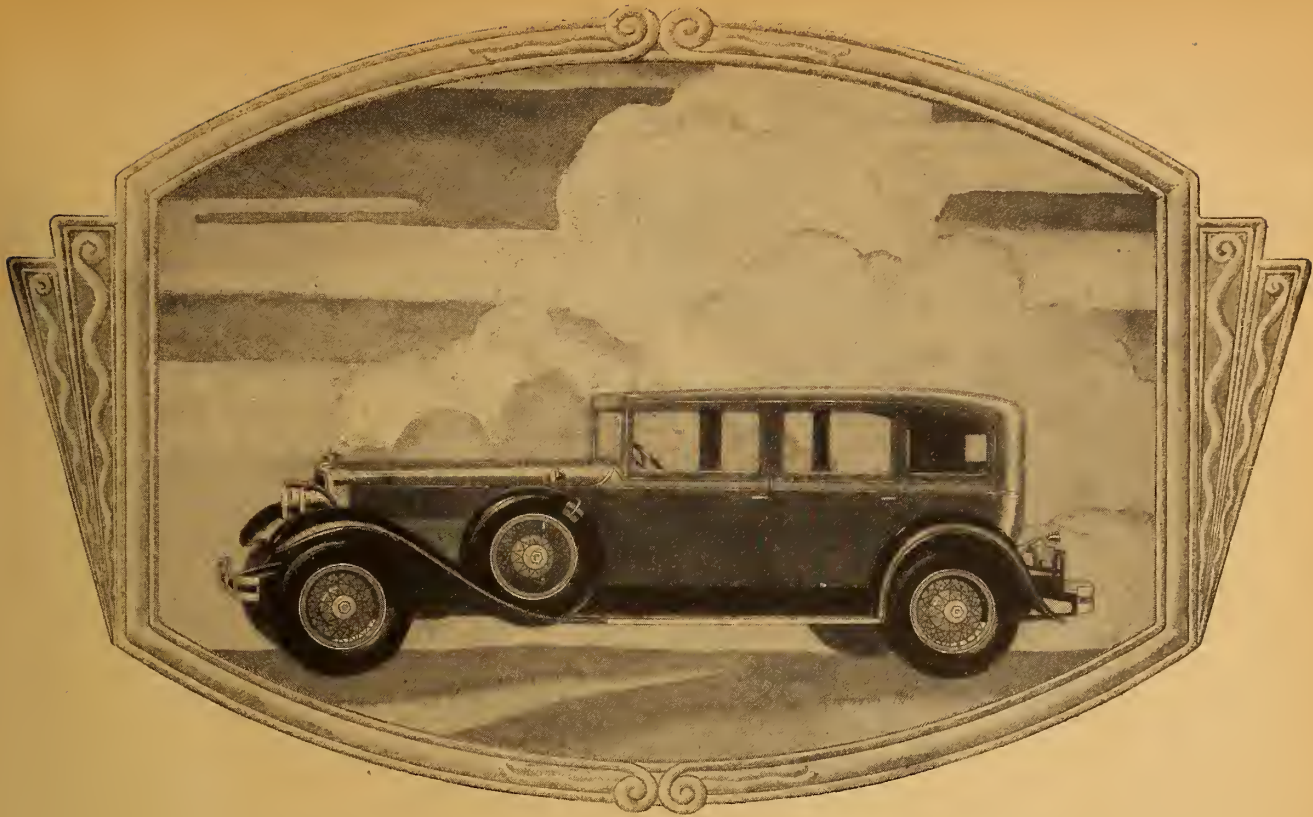
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MAR 28 1929

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E. C. RAYNER,
Publisher

Radio Digest

Illustrated

Harold P. Brown,
Editor

Eastern Representatives:
Ingraham & Walker
33 W. 42nd St.,
New York, N. Y.
Telephone Penn. 2210

 241

Member Audit Bureau of Circulations

Western Representatives:
A. T. Sears & Son,
122 S. Michigan Ave.
Chicago, Ill.
Telephone Harrison 8362

VOL. XXIII

March, 1929

No. 5

ONE of our readers writes to the Voice of the Listener that each new issue of Radio Digest seems just a little bit better than the last. This gives us untold satisfaction because that is just what we are striving for. We hope fervently that our friend will feel that we have kept the faith in the production of this issue. We have tried herein to make our longish articles of more general interest than heretofore. Mr. Archie Schonemann assisted us very ably with the short features and one special article on Jazz vs. Old-Time Melodies, which he signs. This article will interest both pro and con for modern style.

* * *

STARTING at the very front we ask you to especially note our cover. It is a long step from the old news print tabloid to a cover like this. We would be interested to know how our readers feel about this four-color style cover. The subject is Miss Coe Glade, a new opera star who played for the first time this year with the Chicago Civic Opera, winning the particularly effective role of Carmen. Mr. Roy F. Best, whose covers have been seen on the Saturday Evening Post and other well-known magazines, is the artist who made the pastel of Miss Glade.

* * *

NOT long ago we told you that television was here in fact. The article attracted some attention. Many insisted that it still was confined to the experimental laboratory. C. Francis Jenkins, inventor of the first motion picture projection machine, has applied his past experience along this line to the art of Radio-vision, or television, and is actually broadcasting moving scenes to thousands of "lookers"—a name that probably must come as the parallel of the "listener"—and in this issue of Radio Digest he tells you all about it. He gives you a glimpse of future developments also.

* * *

AL JOLSON probably is the most talked-about actor in America today. And while he may not exactly be classified as a Radio star it is the microphone, the essential heart of Radio, and developed to its present efficiency by Radio, that has made it possible for Jolson to acquire his tremendous success. Gerald King, former staff representative of Radio Digest in California, now director of the Warner Brothers broadcast station, KFWB, has had opportunity to watch Jolson work, talk to him and observe the production of his famous audiofilm, The Singing Fool. Mr. King has written an intimate article about the whole story from begin-

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Radio Digest, Illustrated, Volume XXIII, No. 5, published Chicago, Ill., March, 1929. Published four times a year, March 1 (Spring Number); June 1 (Summer Number); October 1 (Autumn Number), and December 1 (Winter Number) by Radio Digest Publishing Co. (Incorporated), 510 North Dearborn Street, Chicago, Illinois. Subscription rates yearly, One Dollar and Twenty-five cents; Foreign Postage, One Dollar additional; single copies, Thirty-five cents. Entered as second-class matter September 6, 1927, at the post office at Chicago, Illinois, under the Act of March 3, 1879. Title Reg. U. S. Patent Office and Dominion of Canada. Copyright, 1929, by Radio Digest Publishing Co. All rights reserved.

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With the Publisher

Radio Can Solve Problem

FROM time to time some multimillionaire arises and offers a vast sum of money to the individual who will submit the most feasible "solution to the prohibition problem." The people make their own laws in the United States. Sometimes they change their minds, and when they do they indicate it at the ballot box. It would seem from the last general election the great majority still believe that they were right the first time. In a republic the majority rules. So it appears there could be no serious question of right or wrong concerning prohibition. The agitation seems to be mainly on the part of some of the metropolitan newspaper publishers who like their liquor and dislike the round-about way it takes to get it. They print venomous cartoons and construe every possible crime as being the consequence of prohibition. They call authorized government police officials "dry snoopers and gun men." They plead the cause of the bootlegger and clamor for the blood of the law-enforcing agent. They even assail and belittle the members of congress for acting according to the expressed wishes of their constituents. When they find their own lobbies balked by counter lobbies of watchful citizens they writhe and froth with hatred. That is the prohibition problem as it really exists.

The solution of this problem, in the main, consists of counter publicity. Very few papers have the courage to take an opposite point of view. But there is one medium of publicity that is even more potent than the newspaper. That medium is Radio. In every locality there are good stalwart patriots who have the respect of their fellow citizens. Let such men come forward to the defense of their country. Let them step up to the microphone of the local broadcasting station and reverse the guns of malice, misrepresentation and deliberate falsehood propagated by the alcoholic newspapers. Let them analyze every perverted fact with the white light of truth. The majority of the people are always right. The majority of the minority are sincere in their desire to do right and act right. The really vicious are, after all, only a very small minority.

Integrity, honor and truth over the air and into the home will be effective in exposing the ulterior motives of the bleary press. Exposed and weakened, this strongest salient of the bootlegger's front will diminish in effectiveness. The violator of the Volstead law, lacking the connivance of a trustworthy newspaper, will sink to the same level as the trafficker in contraband. A crime will be a crime without a halo. Who wants to be a crook? Radio can solve the problem.

Programs Deluxe for All

THOSE who have been peering into the future, touching the tender growing things that are soon to bear fruit, tell us in this issue that soon our greatly improved Radio program will be designed with all the elaborate care of a modern photoplay production. It will be a tangible commodity that can be put in a box and sent to China, if necessary. New processes, new inventions and new media make it possible to work out a program on a specially designed film or heavy wax disc. The "scenes" are shot, studied and re-taken if not up to the desired quality. Enough material may be taken to keep a broadcasting station going constantly for a week, but through eliminating, revision and assembling the supreme essence is put into one evening's program that will be as near perfect as human

genius can make it. Then from the master "negative" will come the prints for the stations.

The little station will have the same chance as the big station. The competition will be in the ability to produce the most attractive programs with most famous artists. Toll lines will be used only for news events.

With all this in prospect up bobs the horny head of the little old music racketeer. Following is an article that appeared on the first page of the Chicago Herald and Examiner of February 21, 1929:

"Operators of phonographs or other mechanical devices for producing music in Radio broadcasting stations, on and after March 1, must be members of the Chicago Federation of Musicians, according to an edict issued yesterday by President James C. Petrillo.

"About twenty-nine stations will be affected. Should they refuse to comply, Mr. Petrillo said, a strike of orchestras would be called.

"While no musical knowledge or training is necessary for the operation of the phonograph, a salary of from \$90 to \$115 a week, depending on the hours worked, must be paid to the person who changes the disks or turns the crank. The salary is based on the hours the phonograph is used."

England Gives U. S. a Program

In the early days before television became such a by-word everybody was trying to pick up foreign stations. We don't hear so much about it lately, although some of our best DX rangers are obtaining splendid results. What a surprise, therefore, when on a winter day not so very long ago we casually listened to an English station sending us a program over the National net! We are promised there will be more such programs in the near future. It comes by wire to the seaside, leaps the Atlantic by short wave, scampers over a phone to New York and spreads out on the net—wonderful!

Static Conquered Once—Perhaps Again

YEARS ago in the early days of the motion picture, there frequently appeared zig-zagging across the screen little white flashes of forked lightning. This was especially true in cold weather and was more noticeable in the news films than in the photoplay productions. The little flashes were indeed a form of lightning. It was our old enemy, Static. Millions of dollars were lost in moving picture film because of static generated in the camera by the whirring sensitized film slipping through the velvet light traps. Then came specially coated film and other devices to eliminate static. Today one rarely sees evidence of static in motion pictures. And perhaps static that still interferes a great deal with Radio transmission will be conquered by science in a similar way. One writer recently described the action that takes place as a flow of negative electrons up through the ground wire, the set and antenna. When lightning occurs there is a discharge of these negative electrons that causes a crash in the receiver. Now that they have the problem analyzed, perhaps we can expect someone to find a way of meeting the conditions that will eliminate the crash.





To the King!

ROLY-POLY is Uncle Dan
King of the Kiddies Hour,
A mighty potentate, this man,
In his castle tower.

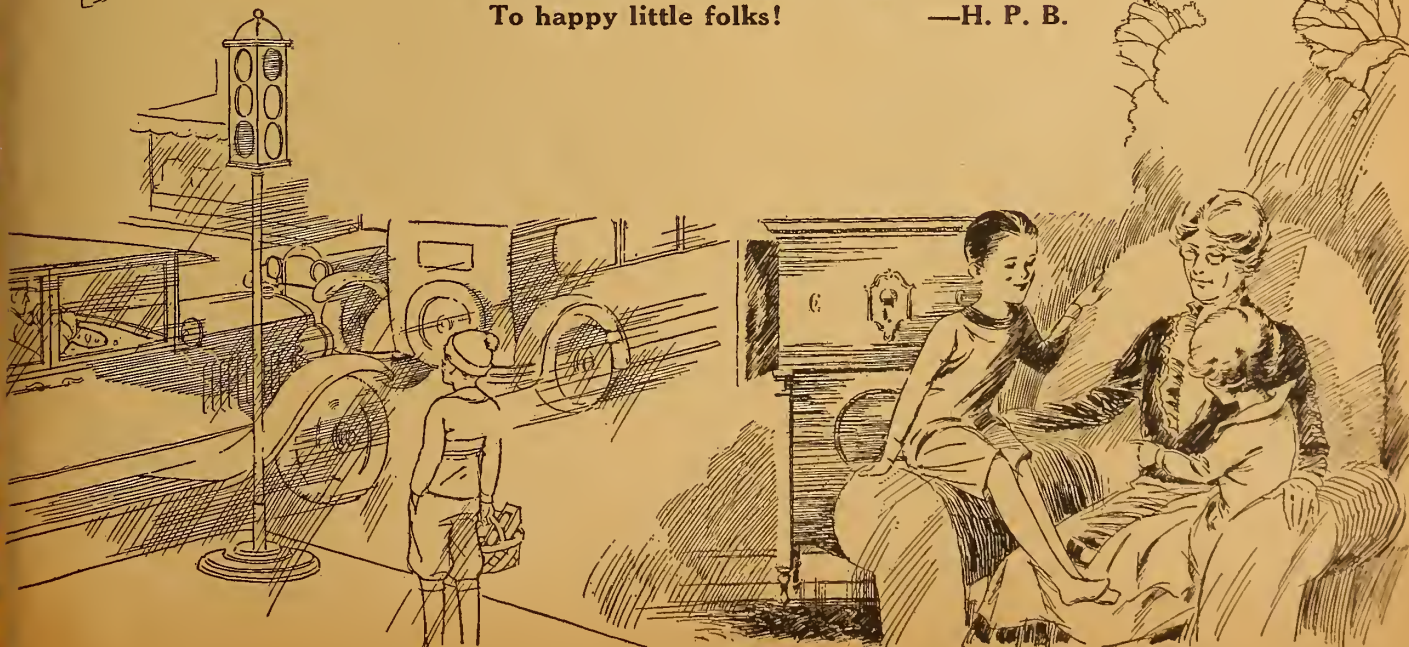
He laughs and chuckles on the air,
A King of Childhood Land,
He sees his subjects circled there—
A loyal little band.

"I have no arms to give away,"
He pleads in plaintive rhyme,
"So won't you look before you stray
From curb to street each time?"

Uncles, Aunties—Bless 'em all—
Buddies and Daddies, too—
Yes, roly-poly, short and tall,
A heap of good you do

Saving lives and singing ditties,
Telling stories and jokes
In the country, towns and cities
To happy little folks!

—H. P. B.





YOU MAY have met Guy Lombardo and his Royal Canadians while they were presenting one of their programs from WBBM and WJBT. Here is Guy himself, the twenty-five-year-old director of the orchestra, and the personality

back of the organization. He was born and raised in Canada, plays the violin, knows what Radio fans want in music, and is a popular entertainer on the air as well as in the cafes and on the concert stage.



Lombardo Started Band Young

*First Professional Appearance Made Before
Meeting of Mother's Club in London, Ontario, in 1918*

MORE THAN a decade ago, a boy in long pants, with a brown shirt and bow tie, presented his orchestra at a meeting of the Mothers' club in London, Ont. There was nothing significant in the fact that his orchestra consisted of three boys, and should have properly been called a trio. Further, there was little other than passing interest in the program presented by this juvenile band.

The fact remains, however, that the lad of fifteen years had his own ideas relative to presenting numbers, and he possessed enough personality to instill considerable enthusiasm not only in his fellow musicians, but the mothers who composed his audience.

All of which is of special interest in considering Guy Lombardo and his Royal Canadians. Anything or anybody attaining eminence in the world invariably has a beginning that transcribed to the printed word makes interesting reading, and such is the case of Lombardo and the organization he has built up in ten years.

The Royal Canadians have a following in and near Chicago, and the elements that have brought about their success include the personality of Guy Lombardo, the director of the band, and the fact that his men provide slow, hot and sweet music for the dance fans.

CHICAGO has its musical sensations every now and then. It has fostered, encouraged and sort of taken to its heart Lombardo and his Royal Canadians. This band came to Chicago September 1, 1927, and became just one of a great number of orchestras that provide programs nightly for the thousands of dance fans who inhabit the city.

In less than a year Lombardo and his Canadians started on a nationwide summer tour which carried them to every part of the United States. This gave them added prestige in the field of popular music dispensers. Fact is that the Royal Canadians have become an established institution in this country, and the reputation they have made in Chicago is being carried to the four corners.

The Lombardo Radio programs broadcast from Stations WBBM and WJBT became the most popular in the middle west, according to the officials of these stations and this fact was substantiated by the tremendous influx of telegrams that were received nightly.

Their fan mail numbered as many as 500 telegrams nightly and they were delivered within a period of two or three hours prior to one of Lombardo's Radio request programs.

THE GRANADA Cafe rose from south side obscurity to become the real center of Chicago night life, and the acknowledged leader of the city's night clubs. Lombardo's Columbia records advanced to among the best sellers.

Every theater and hotel manager, agent, society function chairman and cafe owner from miles around, made a beaten path to Lombardo's door, bombarding the orchestra with price offers that were beyond the wildest dreams of the lad of fifteen who made his first professional appearance before a Mothers' club meeting in London, Ontario, ten years ago, as the director of an orchestra of three pieces—including himself.

There are three Lombardo brothers in the orchestra. Guy, the leader, is the eldest, and famous at the age of 25. Guy is an artist on the violin. Lebert is the sparkling cornetist of the orchestra. He doubles on the drums and trumpet. Carmen, the youngest, is a clever saxophonist, singer and composer. Carmen is usually heard in the vocal chorus of the Columbia records made by the Royal Canadians, and is the author of several popular songs, including A Lane in Spain, Coquette, I Dreamed You Kissed Me, and Rosette.

All three of the Lombardo boys (and all the rest of the orchestra except one American, who has been added in the last year) were born in London, Ontario, Canada, and that little city saw the youthful and very modest beginnings of

the Royal Canadians orchestra. It began, as previously mentioned, as a three-piece combination—Guy on the violin, Carmen on the flute, and Fred Kreitzer on the piano. Kreitzer is still the pianist of the orchestra. Lebert later joined as a drummer.

The boys began entertaining invalided soldiers and playing at charity affairs. They added another musician or so to their unit from time to time, quickly acquired local fame, and before long embarked on a successful tour of Canada.

IN 1923, the Lombardos came to the United States for a six months' vaudeville tour. They were signed afterwards by the Claremont, in Cleveland, and played at that restaurant during 1924, beginning the broadcasting over WTAM that built them the reputation of being the greatest Radio entertainers in the nation. From the Claremont they went to the Music Box at Cleveland, where they remained two years.

Later came the historic ten months' run in Chicago, which was only terminated when they went on a summer tour of the United States under the management of the Music Corporation of America. They were contracted to return to Chicago in September of last year.

This orchestra of ten men has the unusual record of but one change in its personnel in five years. The orchestra works as a unit instead of featuring individual performers, although every man is an entertainer and their repertory includes novelties, singing in solo, duet, trio and harmony.

Variety, a theatrical magazine, pointed out last year that "Guy Lombardo and his Royal Canadians have become the most popular cafe orchestra in the city within a few months. Their music is exactly what Chicago wants—slow, hot and sweet, with well-spaced intervals of peppery stuff to bring a slight trace of dew to the forehead. Concentrating on this version of modern dance music, the Canadians have developed it to a point far beyond the immediate

increasing Radio rep, the Canadians are catering to the mike in their broadcast periods. Their music gets softer, the unique vocalizing is done almost in whispers with small megaphones turned upwards, and numerous other concessions are made to acquire perfect etherization. The guitar player, for instance, climbed upon a chair to let the mike catch a solo break of exactly four notes—and the dancers seemed to enjoy the idea."

AND THAT isn't all, for Lombardo's orchestra has attained the success it enjoys because it is a band wherein teamwork is given first consideration. Most of its members can star as soloists, but the work of the unit is given prestige over that of individual effort.

The Royal Canadians have built up a reputation through their desire to play dance numbers in such a manner that the public will constantly cry, "More, more, more." They have presented a series of programs that are a delight to the ears and satisfy the feet of the most analytical dancer.

The Royal Canadians inject novelty into their work; the idea of something new and highly diverting has been carried out in their presentations, and Lombardo's boys can always be relied on to have something different in the way of musical interpretations for the dance fans who have followed them during the months they have been featured in Chicago.

Radio enthusiasts have found unusual joy and pleasure in listening to the programs of Guy Lombardo and his Royal Canadians because they have sensed the likes and dislikes of the Radio public, and they are ever alert to play up to an audience rather to have their work be of the ordinary and self-satisfied kind.

There is snap and fire to their fox trots, and their waltzes have that dreamy and tantalizing swing that appeals to the dancing public. By injecting novelty features and a variety of unique ideas of presentation, Lombardo and his Royal Canadians have established themselves as Radio favorites.

A FIFTEEN-YEAR-OLD musical enthusiast with his own three-piece orchestra—all of 'teen age—gave his first concert in 1918, in London, Ontario. Later he and his fellow musicians gave programs for invalided Canadian soldiers and charitable affairs. Then vaudeville beckoned, and engagements in Cleveland and Chicago followed, with the usual round of presentations at Stations WBBM and WJBT. A nation-wide tour was the climax. Briefly, that is the story of Guy Lombardo and his Royal Canadians. Their music has been described as "slow, hot and sweet."

Microphone Brings Al Jolson

New Sidelights on Career of
of the Year by Radio Man

By Gerald



As "Singing Fool," Jolson shows he can do a Fandango.

MR. KING, author of this article, was formerly staff representative of *Radio Digest* on the Pacific Coast. He resigned to become director of the Warner Brothers' broadcasting studio, KFWB. There he met Jolson and watched him work through to the completion of *The Singing Fool*.

ONE of the most difficult assignments for an interviewer is to get a story on a world-famous personality that is a little different from the ordinary run of stories dished up day after day for a public that demands news about its heroes and favorites, a story that can show a new angle, a new interest or a different twist on an old story that everyone knows.

More particularly, it is tough to write something about Al Jolson, for years known as the "world's greatest entertainer" and who, since contracting with Warner Bros. to make talking-singing films, has had the facilities of a world-wide publicity service to make his every act and deed known. Stars of the silver-screen have no private life. Their daily actions, thoughts, their homes and even down to the well-being of a favorite pet is news that is chronicled throughout the world. If Jolson goes to a dentist, for example, that is news because the loss of a bicuspid might interfere with his rendition of "Sonny Boy" or put a lisping inflection into his voice that might render it useless for the talkies. And the whole world is interested in this new and latest development of the erstwhile silent screen.

But the request came clicking over the wire one day from *Radio Digest's* editor for a different story on Jolson, and although it came just at a time when new transcontinental network programs were upsetting our schedules at KFWB, with a temperamental program director tearing his hair about them, the commercial manager trying to adjust local accounts to fit in, the building of a new studio and the removal of our transmitter

from its hallowed location of four years, requests from editors are in the nature of commands and must be obeyed. A rainy Sunday afternoon (yes, it does rain occasionally in California in the wintertime) furnishes the opportunity to think back over this romantic story of Vitaphone. But, I hear a reader saying: "Isn't this to be a story about Al Jolson?" It is, my children, but this story of Al Jolson is a story of Al Jolson and the talking pictures and the two must be told together.

Several years ago, the Bell Telephone Laboratories, that great experimental section of the telephone company, began to make a scientific investigation of the possibilities of synchronizing sound and speech with a motion picture, a dream that had lacked fulfillment since the very first days of the leaping celluloid and a problem that had engaged the attention, among many others, of Thomas Edison. Eminent fitted for this research work was this great laboratory. Sound is the basis of the telephone company's life and transmission of sound its business.

In 1925 the experiments had advanced to a stage where the American Telephone and Telegraph Company invited whom they considered the leading business head of the largest motion picture company to a preview of a synchronized talking motion picture. It is reported that this man after viewing the laboratory's forerunner of our present-day talkie said that the thing had possibilities but that he could not use it until it was perfected. Other interviews and other showings followed. No company could be found that was interested. The telephone company ordered the talking picture idea be shelved for a while.

Meanwhile, on the Pacific Coast came word of the experimental talking picture. Warner Bros. were, at that time, one of the leading independent producers of films whose business had been steadily growing from year to year. Four brothers had



As Al Stone in *The Singing Fool*, Jolson starts out as a waiter in love with a blonde entertainer. He handles the dishes like an expert. Then he sings his own songs.

Not until the very last does he put on the burnt cork.



His Greatest Fame and Money

Greatest Theatrical Success
Who Saw Picture Produced

King

founded the company and had battled with the disasters that usually overtake independent producers until their company was on a sound basis, although not comparable in size to the larger com-

panies. One reason for their success, however, had been the policy to try anything that held the remotest promise of better method in the production of film plays.

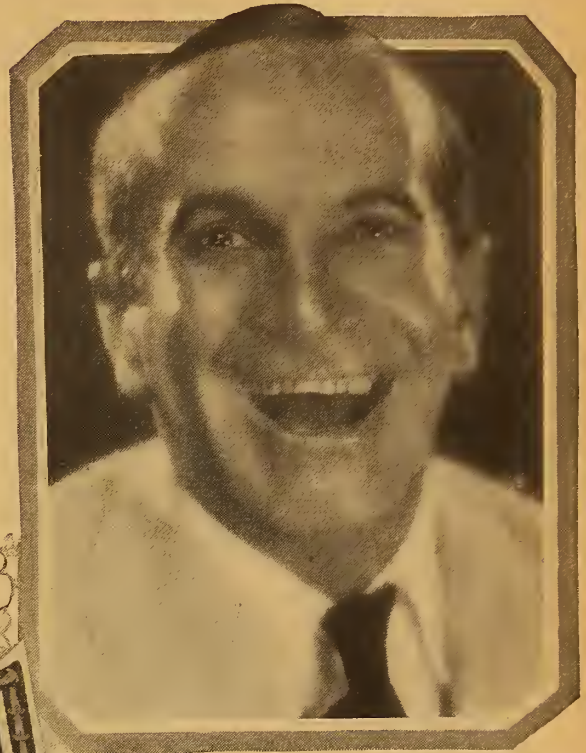
Hearing of this possible talking picture the New York office was asked if they had heard and seen it. They had not but Harry Warner, president of the company, and his brother, Sam, made arrangements for a viewing. They saw and they were conquered.

Sam Warner was enthralled with the possibilities of the device. It was crude, it was not practical according to film usage and production, but the words the players spoke and the sounds that came through a loud-speaker synchronized perfectly with the movement of their lips.

From that day on Sam Warner talked of talking pictures day and night and dreamed of them after going to bed. So contagious was his enthusiasm that he convinced the more sceptical officers of the company and Warner Bros. decided to take one of the biggest gambles in the history of films—to stake practically their all on the future of the talking picture.

The difficulties to overcome were enormous. Not only must talking films, or at least plays with sound effects, be produced, which required an initial outlay of several millions of dollars, but then there would be no market for them until theaters were equipped to handle the sound part and this required an investment of from \$7,500 to \$20,000 on the theater owners' part. Theater owners who were interviewed said the scheme was crazy and that they never would install the necessary equipment to show the pictures even if they were produced.

Realizing all this, Warner Bros. went ahead with their plans. In New York they rented the old Manhattan Opera House and Sam



He reminds you a little of Douglas Fairbanks in his dynamic action and genial smile.



Note his expressive eyes.

IT WAS as a blackface minstrel that Al Jolson first achieved fame. He became known as the Great Mammy Man, for his heart-touching mammy songs. Although he commands a packed house wherever he goes, the audible pictures multiply his audiences thousands of times.

world's greatest entertainer. Not only that but during the showing of the picture no great orchestra would play in the pit but the picture itself carried a synchronized Vitaphone accompaniment by Henry Hadley and the New York Philharmonic orchestra.

Grauman's first nights are a tradition, but the opening of "Don Juan" made Hollywood history. Every film executive and craftsman that could get into the theater was there for the premiere performance. They saw "Don Juan" and they heard Henry Hadley and the great orchestra that he leads. But above all they saw and heard and chuckled with Al Jolson as the great entertainer sang his songs and pulled off a few wisecracks.

(Continued on page 78)

"Oh, My Sonny Boy!"



Radio Digest Presents An OPEN LETTER

from Jessica Dragonette to You

MISS JESSICA DRAGONETTE, prima donna of the National Broadcasting company, has kindly taken her pen in hand to give you a few intimate personal impressions. It's so sincere and youthful you will enjoy it.

"DEAR RADIO FRIENDS:

"The Radio Digest has asked me to tell you about my Radio career, the thrills of my first broadcast, and my advice to young artists ambitious for Radio careers. I am deeply touched, but frankly it seems so silly for me to talk about myself, and as for giving advice, I am so constantly occupied with studying out my own career that it never occurred to me that anything I might say could be of any value to others.

"I should so much rather take this opportunity to greet you all; to thank you for your wonderful encouragement which is my inspiration and, above all, to thank you for

thinks I should engage a secretary to take care of my mail, but I cannot think of it. Somehow I feel it would be an insult to allow other hands than my own to answer your letters or send my picture when you ask for it.

"But I forget myself—Radio Digest has asked me about my first appearance before the microphone. Well, it happened by the sheerest chance two years ago. Two years is actually not a long time, but in Radio it is almost ancient history. Things move so quickly; new thoughts, new methods, new discoveries, new wonders emerge every day. It is an industry in the making, and how fascinating it is to be part of it!

"I was not thrilled at my first microphone appearance. I didn't like it at all. I experienced great nervousness and was conscious of an immense distraction that I can best describe if I tell you that I had the sensation of being pulled in all directions at once. The silence, the lack of applause



Yes, it's Jessica Dragonette, with her teacher, Estelle Liebling, who is seated at the piano. Jessica is a national Radio favorite; she has a lovely voice and a charming personality.

the beautiful welcome to your firesides. For I really sing in your homes, and it is that compelling fact which your letters reveal to me that keeps me disinterested in any other kind of career.

"Of course flattering offers come, and they delight me beyond measure—I am so feminine. But, look! Here's a letter from a dear old lady in Atlanta who never misses me; one from a big chap in Minnesota who is practically confined to his room; here's another from a couple in California who always call me 'their Jessica,' and now a delicious, tiny girl from New Orleans who says, 'Please send me two pictures of you and tell me all about your social and musical life.'

"**I**S ANY flattering offer worth leaving these dear friends? No, nothing could compensate their loss. I agree with Conrad that 'something human is dearer to me than all the treasures of India.'

"My Radio work with the National Broadcasting company does keep me busy. I sing to you only a few hours each week, but most all my time is spent in preparation for our fireside visits. There are rehearsals, singing lessons, dramatic lessons (I still study, you know, that's why I felt so funny when the Radio Digest asked me for my advice to young artists) and hours spent arranging my programs. It's no easy matter to find new songs each week that I like to sing and that you like to hear her sing. My very efficient sister

could come to love. The voice rather than your blue eyes, your brown hair & the way you wear your clothes, can tell all that you are. Hope I haven't worried you with too long letters or that I haven't annoyed Radio Digest with the Editor of the Radio Digest asked. It's been so nice to chat with you. Thank you for this precious opportunity. Faithfully yours, Jessica Dragonette

after the performance, appalled me. I wanted to run away and never come back.

"Several days passed with no word from the station. I was convinced I was a total failure, and was more than ever inclined to agree with my

friends that I had taken a false step. Oh, I was a hopeless failure!

"Then a small packet of letters was forwarded to me. I was thrilled. The relief to know that you actually heard me and felt me. I understood then the distraction I had felt was no distraction at all, but rather the concentration of your thoughts centered on my song. I had not been attuned to you.

"**A**FTER that I determined to study this microphone, this silvery, elusive star-shaped instrument that first opened your doors to me. I had to know its secrets, I wanted your doors always open to me.

"I learned that sincerity is the first requisite; that color of voice is all important. I found that the microphone loves beautiful and gentle tones; a maximum of quality, with a minimum of quantity; that effects are rather a question of tempo than dynamics; that great concentration is required to put genuine feeling across; that the voice is compressed, then released with perfect control and direction, like pressing down music and giving the essence, the perfume instead of flowers.



Colin O'More, left, often Miss Jessica's hero in opera.



Director Sanford with baton poised.

This is the zero hour in a typical Philco Light Opera production, Miss Dragonette in the foreground.



"Now, when the announcer calls: 'Five minutes—three minutes—two minutes—stand by!' I feel an immense thrill as I stand before the microphone collecting myself, and thinking personally of you. Every atom of my being is alive and sensitive. I am keen and tingling, ready for the performance, for that is the way I speak to you.

"Radio to me is the greatest industry of the age; we realize time and space. The world is our stage, and the hearth of each individual is our audience. I like to think of you working with your hands, listening to me and singing with me—our song making a singing world.

"Radio's intimacy and subtlety appeal to me. I merely suggest and you fill the picture each in your own way. It is amusing, the picture some of you form of me. You think of me as tall, dark and fat! I am even addressed as 'Madame'—imagine! If you could see me ducking under the arms of the tall tenors while the production manager adjusts the microphone to its lowest position for me, you would be amused, too.

"You ask in your letters: 'How do you do it?' It is no secret. I work hard, of course, but that, I believe, is the secret of any success. Work, work and then more work. The great truth back of Radio is that the voice is the most powerful medium that we have. Radio has proved that the voice depicts the personality far more than the visible appearance. It is as possible for us to build up our ideas with the ears as it ever was with the eyes. This has always been true, but perhaps we never realized it before. Women who have gone down in history as beauties were often not beauties at all. It has been the same with our great actresses. What was Sarah Bernhardt but a voice? And often voices have not even been charming. They have indicated some human quality which people could come to love. The voice, rather than your blue eyes, your brown hair and the way your wear your clothes, can tell all that you are.

"I hope I haven't wearied you with this long letter, and I trust I have answered some of the questions the editor of the Radio Digest asked.

"It's been so nice to chat with you, and I am grateful for this precious opportunity."

Faithfully yours,

JESSICA DRAGONETTE.

AND isn't that just the kind of a letter you would imagine this modest little lady would write? Her vitality, her intensity and her real sincerity of feeling are revealed in this too brief a letter. Imagine the pride of her instructors!

Miss Liebling, her teacher, talks enthusiastically about her pupil. In her apartment where Galli-Curci, Frieda Hempel and other singers of world fame have congregated, Miss Liebling referred to the rapid rise of Jessica Dragonette.

The teacher soon recognized the girl's remarkable talent and offered her every encouragement. She worked with and for her devotedly. Is it any wonder that Jessica has in her heart such a glowing affection for Miss Liebling?

"Jessica would have been equally successful as a concert, operatic or light opera star," said Miss Liebling. "She has the ability to project herself into any scene, and an instinctive sense of style. Also, she is a very fine linguist, and this brings her close to her Radio audience. Miss Dragonette also is possessed of that quality that is known as charm."

Jessica combined her songs with those of other popular groups of the air when she was heard as guest star of the Hoover Hour.

With David Buttolph, pianist, and the Hoover Sentinels



HENRY M. NEELY, left, and Harold Sanford, troupers of the first rank, who are the powers behind Philco's Hour of Light Operas.

quartet, Miss Dragonette was heard both with the Sentinels and in her own selections. Moonbeams, which Miss Dragonette has carried to thousands of Radio fans on other occasions when she has appeared as one of the featured singers of The Red Mill, was sung by her with the Sentinels. Waltz Huguette, from The Vagabond King, and How Long's This Been Going On? were used by the popular young star with Mr. Buttolph as accompanist.

"She sings the role of a Honeymooner excellently," said Louis Katzman, director of the Hoover orchestra, after Miss Dragonette had been heard for the first time with Cyril Pitts in rehearsal for the Honeymooner role. "She seems to carry the part she plays right across the thousands of miles over which the Honeymooners' voices are being heard by the Radio fans."

Of course Miss Dragonette is best known as the prima donna in the Philco's Hour of Light Operas. It was her brilliant investment of the alluring roles that won for her the love and deep affection of many millions of listeners. Probably no artist has received so many requests for a certain number as has Jessica Dragonette for her theme song, Memories.

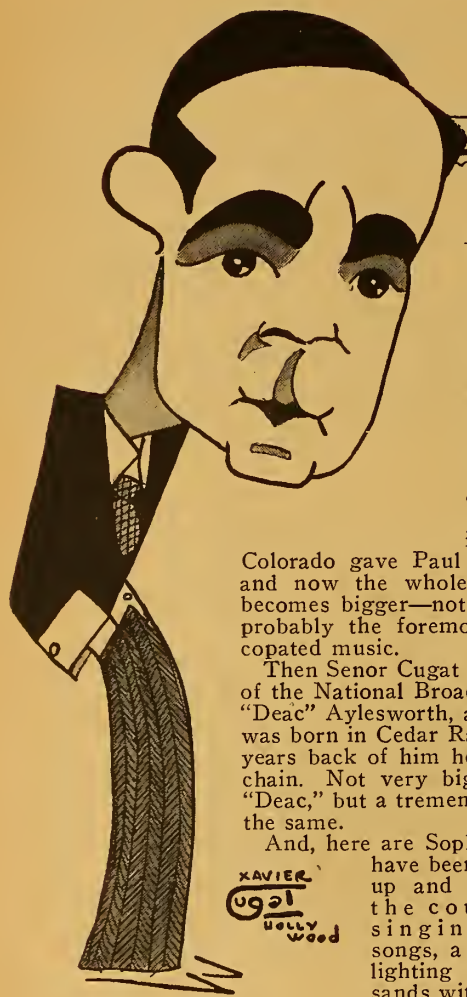
MISS ELSIE RUSHMORE has written an intimate description of what goes on behind the scenes at the zero hour, one minute before Harold Sanford raises his baton and the opening number of the Philco Hour is on the air. Miss Rushmore is quoted as follows:

"High drums of light hang from the ceiling. It is very

(Continued on page 76)

Senor Cugat Scans Proofs

Finds Interesting Characters in His Ideas of How They



M.H. AYLESWORTH

FIRST proofs of this issue of Radio Digest were forwarded to Senor Xavier Cugat of Hollywood, Cal., for his characteristic comment in black and white. The results of his observations are before you.

You will find herein an interesting story referring to Paul Whiteman by Mr. Archie Schonemann, who has been writing about music and musicians for a score of years. On other pages can be found an article about Merlin H. Aylesworth, the writer being Gene Mulholland. Gerald King has told the story of Al Jolson on other pages and Sophie Tucker's picture can be found in the picture album.

Mr. Whiteman's heavy jowls and facial expanse is only exceeded by the expanse of his vest and waist coat. Paul once was a violinist; now he plays all instruments through a brilliant arranger, Ferdie Grofe.

Colorado gave Paul Whiteman to the world; California neglected him, and now the whole world has accepted him. Every year Whiteman becomes bigger—not exactly physically—but in a musical way, and he is probably the foremost and best known international exponent of syncopated music.

Then Senor Cugat offers us a sketch of Merlin H. Aylesworth, President of the National Broadcasting company, familiarly and generally known as "Deac" Aylesworth, and chief of the NBC net. "Deac" is a Hawkeye; he was born in Cedar Rapids, migrated to the West, and now, with two score years back of him he presides over the destinies of a great broadcasting chain. Not very big, physically, is "Deac," but a tremendous fellow just the same.

And, here are Sophie and Al, who have been going up and down the country singing their songs, and delighting thousands with their

Yes sir, Mr. Aylesworth, head of the NBC is above, with checkered tie, a la Cugat, and seriously pondering over the present, past and future of the NBC. And, on the right, Mr. Paul Whiteman, with his violin tucked under his ear and his bow poised to call his syncopateers into action.



Makes Caricature Comment

Radio Digest Articles and Illustrates
Look in Black and White

The Singing Fool, that's what they call Al Jolson in the "talkie" that captured the country, who stands here with his arms and hands waving in characteristic attitude. All the world loves mammy, and Al is her most successful and greatest press agent. And, Sophie Tucker, these many years a variety favorite, is a new microphone star and soon we will see and hear her from the screen. Who knows, she may register like another Jolson!



wit and satire. Sophie Tucker has admirers everywhere she goes, and all Al Jolson has to do is to sing a mammy song, roll his eyes heavenward and traffic becomes paralyzed. Sophie and Al have gone into the talkies, and where they have delighted thousands in the past, it is safe to presume that millions will experience the thrill from hearing their voices and derive joy and pleasure from their reparatee. The hit that Al Jolson has scored in the talkies, will probably be duplicated by Sophie, for in many respects she is like Jolson. Senor Cugat has brought out with striking effect the Jolson eyes, the pretentious white collar, the indifferent string tie, and those hands of Al's which seem to wave majestically and even musically as he sings.

If you, dear reader, have not met Paul Whiteman and his band you have missed a thrill in life. Indirectly you have become acquainted with Mr. Aylesworth if you have enjoyed the super presentations of NBC, for he is the dynamo behind this organization. If you haven't met Al and Sophie you will before long, for they still smile over the footlights, and soon you will know them better after hearing their voices in the talkies.

XAVIER
Cugat
HOLLY
WOOD



"LET US BRAY," said Old Man Mule, waving his ears and crowding into a commanding position before the mike. The Panther Mine Syncopators gave him the air and a startled world wondered how far down they had reached.

Jazz Speaks From PIT OF MINE

*HOT Tunes Rise From Lower
Regions to Tantalize Radio
Fans of WCBS, Springfield.*

JAZZ, the unruly musical child of the present day who is constantly smashing tradition, violating the old rules covering tempo and tone values and ever alert to kick over what is considered conventional, has *tipped* over the applecart.

At various times jazz has been up in the air, down in the mouth, out of sorts, and kicking up a fuss. Now the truth has come to light and jazz has talked up from a coal mine, sending up to the world the same old, haunting, tantalizing strains that have resulted in this form of music being generally dubbed as American.

The truth about the broadcast from the West End Number Four mine of the Panther Creek, Inc., has been revealed. It was sponsored by Station WCBS of Springfield, Ill., right from the heart of the Illinois coal belt.

C. H. Messter, director of WCBS, which has its studio in the St. Nicholas hotel, was responsible for the novel stunt whereby a jazz band talked in tones of syncopation from a studio set up 200 feet below the surface of the earth.

The boss room of the mine, located near the main shaft, was fitted up for a studio. The orchestra, Radio station officials, employees of the mine, photographers and newspaper representatives crowded into the cages and descended to the improvised studio.

Old-time miners stood in awe; a white mule—one of the four-legged kind—deliberately wigwagged his ears in wonderment, and the party from the land of clear skies, growing trees and blooming flowers stood huddled together in wonderment.

The studio was whitewashed. Within it were a piano, chairs, desk and other furnishings. Prior to the broadcast the party from WCBS enjoyed a sight-seeing tour of the mine, during which time they inspected the equipment and studied actual mine operation below the surface of the earth.

Director Messter of WCBS, garbed in white overalls, blue jumper and a miner's cap, presided during the presentation of the novel program. He announced the musical numbers, elab-

orated upon the novelty of the occasion and outlined the changing events of the picture presented before his eyes.

The orchestra was honored with the title, Panther Creek miners. It was costumed in overalls, caps and jumpers. The members of the orchestra were as follows: Pete Bohnhorst, first violin; Emmet Gore, second violin; Betty Rieffler, piano; John Stewart, 'cellist, and Henry Leeder, bass viol.

A thoroughly underground flavor was given to the program as a result of the appearance of Harry Marshall, the Singing Scotchman, who presented a group of songs. Marshall indicated he was at home in any mine, having had considerable experience in South African gold mines, some of which, he said, are 8,000 feet deep.

The program of popular music consisted of ten numbers, and both the masters and popular writers were represented on the air. That the program offered was a success is evident from the countless letters received from fans throughout the middle west.

Director Messter worked out the details of the broadcast with representatives of Panther Creek, Inc., and the program which extended over an hour was carried to points hundreds of miles away from the station.

The entire broadcast was as much a novelty to the Radio artists as it was to the fans who picked up the program. For many members of Director Messter's staff the descent to the depths of a coal mine, and the subsequent trips about the pit, were as interesting as the broadcast was to the fans of the air.

It is believed the broadcast from the mine was the first ever given by a Radio station, and a remembrance of the event has been preserved for posterity by a series of pictures which included a white mule, the orchestra, WCBS staff and a group picture of the entire party.

Director Messter's descriptive story of the mine, its entryways, mules, cave-stables, with the usual bands of rats and mice scurrying about, together with the life underground, was one of the high lights of the program which started about 7:30 o'clock. In front of the shaft a number of cars of coal were loaded and ready for hoisting, and the black walls, and strange shadows stood out in contrast to the white walls of the studio.

Radio Players for "TALKIES"

By Milton Samuel

PACIFIC coast Radio drama producers see in the revocalized film an opportunity for the use of seasoned and experienced Radio players in the movie-talkies for Hollywood actors whose voices are not in keeping with their screen personalities.

It has been pointed out by drama producers that the revocalized film, or the method which makes use of two sets of actors, a pantomime company and an audio company, holds great promise for artistic success of the talking film.

"To turn to the stage for doubles in the audible portion of the movie-talkie would be the wrong method," is the opinion of Wilda Wilson Church. For five years Mrs. Church has directed Radio dramas at KGO. She has produced for the stage and has appeared in the movies, so her opinions are drawn from experience.

"In searching for talent for our Radio dramas at KGO," Mrs. Church goes on to say, "We find stage training helpful because of certain dramatic values, but most stage technique in the use of the voice has to be unlearned. The microphone in the Radio drama, as in the talking picture, will have nothing of stage technique of voice projection. Unlike the human ear, the microphone has no ability to compensate. It merely collects the sound, with an extreme degree of accuracy, which is presented to it. The talking film needs experienced Radio actors who know their microphone."

"**F**IVE years ago a little group of players met night after night at KGO, the Pacific coast station of the General Electric at Oakland, California, carefully working out a technique by

Bert Horton and Bernice Berwin, KGO Players, in "B Minah Duet."



Howard Millholland (left), Wilda Wilson Church (center), directing Radio playlet rehearsal, A Baker's Dozen.



IN the last issue of Radio Digest we were told that "a lot of good jobs are waiting for men and women who can demonstrate that they have 'Radio ears'." Mr. Samuel herein elaborates upon what has gone before in his interview with Mrs. Wilda Wilson Church, who has been one of the most consistent producers of Radio plays in the country. In this endeavor she has the whole-hearted backing of the General Electric company station, KGO, Oakland, California. It is explained here why voices in the "talkies" sometimes sound unnatural. Distance from the microphone may alter the entire character of a voice. The Radio play and the picture sound drama have much in common. Radio prepared the way.

which the dramatic text and accompanying sounds would best go out over the air when picked up by the microphone.

"One of the first things we found at KGO was that the voice could not be used as on the stage, but must be modulated in tone to adapt itself to a microphone which can make a breath intake sound like a cyclone. Those in the ranks of my players at KGO with stage training were found to be less qualified for Radio than those without stage experience.

"There was one applicant at KGO from the stage who recommended his ability to make his voice heard for 'blocks.' 'But,' he was told, 'you could not make your voice heard in New York from the Oakland studio. You will have to leave that to God and the microphone.'

"We found at KGO that stage instructions seemed to mar naturalness, which is the main requisite for the Radio drama as in the 'talkie.' The range of naturalness for the voice was found to lay within one foot or nearer of the carbon microphones," such as are used in the National Broadcasting company studios in San Francisco, "and within three feet of the condenser microphones used at the General Electric station. Bert Horton, one of my KGO players, is noted for his naturalness. He reads his lines within a distance of one to three inches from the center of the microphone.

"The hollow, muffled or hoarse noise we hear from the screen comes to us because the actor cannot be placed within the range of naturalness of the microphone being used, which at all times must be out of camera range. Under such conditions a woman's voice may sound like a man's, or a few feet of action may change the quality of a man's voice until, vocally, he assumes another character.

"STAGE actors who have taken part in the plays at KGO have had to exercise great care to keep the voice from rising to too great volume in emotional scenes, for the station is easily knocked off the air and silence rather than sobs is apt to reign supreme.

"At present the voices from the movie-talkie are for the most part 'up-stage.' They blare at us from in front of the picture. If an actor approaches from a distance, the voice is near. Voices do not enter or leave the room in the 'talkies' as they are made now. They stay in one spot. There is no depth, no movement, no light or shade. With the revocalized film, separate performances can be given by 'optical players' and 'acoustical players.' This system allows the actors to concentrate on the camera when before the glare of its klieg lights, and gives them a chance to speak directly into the microphone.

"Simply, sincerely, naturally and evenly the voice must go through the microphone, and the greater the emotion, the quieter the voice and the nearer it must be to the microphone. Emotional speech is easily blurred and much such speech has been forgiven from the stage. Actors before the microphone in the Radio drama as in the 'talkie' are allowed no such privilege. They must speak plainly or not at all.

"The movie-talkie will make Radio listeners much more lenient toward 'effects.' The public has by this time learned that sounds do not sound like themselves over the microphone.

They have seen men digging in the field, their pickaxes hitting stones, and heard sounds which resembled nothing so much as false teeth rattling around in a glass of water. They have seen rooster sections of thousands giving college yells, which sounded like a couple of terriers that had treed a cat.

"THE first time that we wished to stage a gun shot at KGO, we went to the mayor for a permit and fired a revolver with an empty shell out of the studio window. What was said of that shot from Central America to Alaska is not for print. Some threatened to come to Oakland to show us what a 'real gun' sounds like by trying one on us. Now we hit the seat of a leather chair with a drum stick and the listener is satisfied. When we slammed a real door it sounded like a cork from a pop bottle. We were asked if there were no real doors in the 'great open spaces of the West.' One listener drew a diagram and showed us how to hang microphones overhead, when we acted our parts. He visioned the stage, and thought we acted our parts, as on the stage. That's what they are doing now in Hollywood.

"THERE is just one sound that is welcomed whether it sounds perfectly natural, and that is the kiss. A letter from a grub stake miner in Alaska asks: 'Did you omit the kiss at the end of the play? If not, please make it louder the next time—I couldn't hear it.' Some of the Gilberts and Garbos and Bows of the silver screen will have to change their methods of osculation with the addition of sound to their films, for the microphone is tricky with the kiss, and movie fans are apt to be baffled at some of the sounds which will now accompany the love scenes.

"IN Germany a sound effect machine occupies one end of the broadcasting studios, where an electric button will release any 'noise' desired. The sound of rain is produced by a cascade of tiny glass beads. How often have I seen perspiring property men hold a bucket of water up near the microphone while

sousing a rag up and down to sound like the waves of the sea. One difficult problem in one of our plays was to have the voice sound hollow and still clear as if down in a mine. The result was secured by having the actors speak into the grand piano against the lifted top.

"In spite of all difficulties and often against great discouragement the Radio play goes on, because the audience demands drama. Despite criticism the screen talkie will go on, because in time the mechanical defects will be overcome, and nothing can reveal the manifold reactions of the mind and heart so well as the human voice reinforced by the body in pantomime."

Mrs. Church did not care to make comparisons as to the vocabulary of various of the most popular stars who charm the eye. Mary Pickford, Clara Bow, the Talmadge sisters, the Costellos and many other screen celebrities have already had their microphone experiences on the air and some of them have proven successful with their own voices in the talkies. But that is no reason why those who are the least bit doubtful should not take advantage of a double with a proven voice.



Clara Bow puts
It on air

Has she micro-
phone voice?

Roxy Gives Beethoven Feature

*"NINTH Symphony" Presented as
Premier Before Mike of NBC Chain*

HAVING a penchant for hanging up new records in the field of broadcasting, Roxy has sponsored a presentation of Beethoven's famous Ninth Symphony.

It takes courage plus to mobilize the forces necessary to do justice to any of the symphonies of Beethoven, and Rothafel with the Roxy Symphony Orchestra and chorus have done the trick. That it has met with the approval of Roxy's followers throughout the country is evident from the letters that have piled up in New York, and which are the most convincing proof of the success of this latest and most stupendous undertaking on the part of the New York Radio impresario.

The program was presented through the NBC net, a special staff of artists gathering for the occasion. The first performance of Beethoven's Ninth is said to be the first on the air and, according to present plans, will be the forerunner of other equally interesting contributions from the masters.

The Beethoven work was given with many prominent musicians taking part, the number including Gladys Rice, soprano; Douglas Stanbury, baritone, and Harold Van Duzee, tenor.

With these musicians Roxy has brought before the microphone three artists of note, and if his plans materialize, others of equal importance in the musical world will gather under his banner.

Roxy has presented Casella's

Below, Harold Van Duzee, tenor, in broadcast of Beethoven's Ninth Symphony distinguished himself as an artist with voice well adapted to Radio.

Above, Gladys Rice, soprano, delightful Radio personality on Roxy's staff. Left, Douglas Stanbury, baritone soloist.

Italy, and although this composition has been presented in concert halls, it remained for Rothafel to sponsor its premiere before the mike. Ten million listeners are said to have been in the audience which followed the Italia, which is a rhapsodic treatment of Italian folk-songs.

The Roxy Symphony orchestra having played an important part in the above presentation of Beethoven's famous work, it also has offered

to Radio fans under the baton of Joseph Littau, Rosamunde Overture by Schubert and the Military Symphony of Haydn.

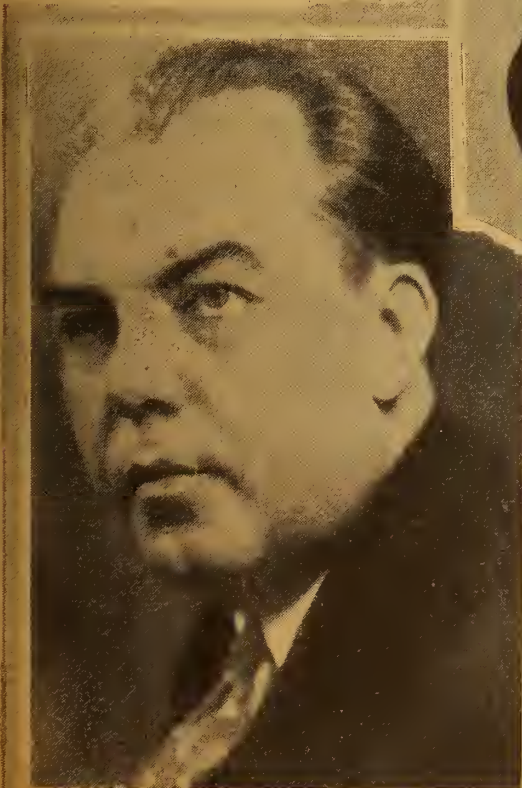
Another program in keeping with Roxy's plan to present the works of the masters included Massenet's Overture to Phedre, the Symphony in D Minor (Second Movement) by Franck, the Gitanella Suite by Lacombe, and Romeo and Juliet by Tschaikowsky.

The idea of offering the best in music to the fans that follow Roxy will mean that thousands of dials will be tuned for the east to pick up from the NBC the new programs.

Gladys Rice comes from a family of the stage, her father John C. Rice being none other than the man who was associated with Tom Wise in that comedy, Are You a Mason? Then there was Sally Cohen, who was Mrs. Rice, and the mother of Gladys. Miss Rice's first professional engagement was at Mount Vernon.

Douglas Stanbury, baritone, and Harold Van Duzee, tenor, are valuable additions to Roxy's staff. They are young artists whose work in the past has justified the new responsibilities that have been given to them by Roxy.

Direction of the new concert programs has fallen to Erno Rapee, musical director of the Roxy theater, who has a splendid assistant in Joseph Littau, who has taken up a large part of the work on account of the recent illness of Conductor Rapee.





TURN to this page and keep your eyes on this face the next time you hear Ruth Etting sing on the Majestic program—for this is Ruth.



*D*AINTY, vivacious and scintillating are all apropos in describing Dorothy Crewe Gurness. Yes, and to top them all she is a soprano singing from KMBC, Kansas City, Mo.



PORTLAND, OREGON, is widely known as the City of Roses. Here is a Rose of which she is more than proud—Miss Rose Columbi, whose lilting soprano voice floats delicately from the Radio transmitter of KOIN as does the fragrance from the flower for which she is named. Miss Columbi was born in southern Italy.



GERTRUDE LAWRENCE, famous English comedienne. A season or two ago Charlot, famous French impresario, selected Miss Lawrence for the principal role in his "A to Z" revue, and via Radio she has qualified from Alpha to Omega.



*SOPHIE TUCKER, Queen of the Varieties,
America's Champion Song Plugger and the Star
With the Personality are among the titles that may
be given to the irrepressible songster who has
charmed thousands with her singing.*



LILLIAN TAIZ, soprano and NBC star singing with the Orchestradians. Clever, that's Lillian, and the avalanche of letters that comes as a result of her singing attests her popularity.



***B**EG PARDON! Just glance around here for a moment, Miss Ethel—thank you. Ladies and gentlemen of the Radio audience, this is Miss Ethel Louise Wright, with the bewitching soprano voice, whom you have so often heard caroling with the Roxy Gangsters.*



GEORGIA FIFIELD, talented director of KNX Players, Hollywood, Calif. One of the contributing factors to the success of KNX is its faithful band of players, and the dominating personality back of the players is Georgia.

SMALL Town Folks
Have Say Before Mike
and Listeners Like 'em.

RURAL CHARACTERS

Quite THE RAGE

THE b'gosh character that in days gone by has symbolized the hick, has passed from the picture. Today he is a memory; he and his straw hat, chin whiskers, denims, and boots are numbered among the things that were rather than the things that are.

The climax of the week with its milking, chores, threshing, sewing, plowing and planting came Saturday night when he drove to town. There he exchanged gossip, cussed and discussed everybody in general and nobody in particular, and viewed with alarm or reviewed with pleasure the events of the week.

In those days there were no automobiles, silos, gang plows, or windmills. In their place were surries, granaries, foot plows and a wheezy pump.

Below, Gus and Louie, comedy characters, join the band.



Right, George Frame Brown, seated in the center, with the small notables of the cast of Real Folks.



The late Cal Stewart brought down to posterity the voice of the old-time hayseed, and in the legitimate drama he left one of the best drawn and most carefully outlined characters that flourished away back beyond the present generation.

Matt Thompkins is doing for the Radio what Stewart did on the phonograph and the stage. In the Chesebrough Real Folks he is bringing back to life the characters of the rural districts and especially those of the small town.

In the group on this page Matt, who is none other than George Frame Brown, occupies the center position. He is the originator and producer of Real Folks. Brown has given to Radio a half dozen characters, notably Dr. Mu, a Chinese philosopher; Capt. Peterson, he with the Swedish dialect; Luke, a lovable soul of the great open spaces, and now comes Matt.

Matt can scrape a fiddle, do a jig, drink cider from a bung-hole, play a mouth harp and call dances.

"Alamand left, do, se, do," are all familiar to Matt, who can chant with characteristic rural gusto the old call which runs—

"Turn to the right and balance all, three steps back and spit on the wall."

Here is Matt in this picture, with Martha, his wife, standing behind him, and prepared to defend every word of wisdom that drops from his lips. Elmer, their adopted nephew, who is all eyes and ears, sits on the floor.

Then there is Mrs. Templeton Jones, to the extreme left, who has means and is eager that everybody should know it. Next is Gus Oleson, the Swede, who is a master in the art of talking without saying anything, and the lady with hat and jabot is Mrs. Watts, a Cockney character which is played by a real English woman.

Harold Overbrook, one of the gay, young blades of the village, stands in front of Matt, and to the right of Martha is Mrs. Bessie Stevens,

(Continued on page 116)

Zeppelin Brings Radio Slogan

*Station WADC Adapts Call Letters
to Akron's New Dirigible Industry*



DESSA ANDERSON JENNINGS, below, contralto at Station WADC at Akron, O. At left, Robert Hilton Wiese, basso and reader.



GLADYS MYERS TSCHANTZ, owner of the soprano voice you may have heard from the Akron station.

PERHAPS it was in the belief that "all things come to him who waits" which caused the broadcasting station in the Allen theater at Akron, O., to go along all this time with the call letters WADC and no slogan to fit them. It was getting out right well, and with programs that no station need be ashamed of, but no one that had any connection with it had been able to think of four words beginning, respectively, with W, A, D and C, which would form themselves into an announcement fit for Akron to be remembered by.

Then, along came the Graf Zeppelin, making new history, setting new records and establishing new precedents.

And along came her commander, from Lakehurst to Akron, making some new contracts for the promotion of travel in lighter-than-air craft and with the events of that trip came the slogan to WADC.

"Watch Akron, the Dirigible City," is, indeed, a slogan worth waiting a long time for, is it not? The answer is "yes," and the Radio station is now devoting some of its efforts to spreading this advice to all of the world that it can reach.

WADC believes in giving its listeners plenty of music, along with those things with which it claims its right to existence from the standpoint of "public service, convenience and necessity." Orchestras of many kinds and sizes are heard from the Akron station.

Special dance music is supplied three times a week by Gene Fogarty's orchestra, playing in one of the largest ballrooms in the city. Besides, there is one hour of "old time" music each Wednesday evening. Contributing to these programs are Warner Coplinger and his Cumberland Mountain entertainers, who are recording artists, the Haymakers and Dad Haskins and his Hicktown String Band.

But the instrumental music is not overdone, by any means. On the station staff are such

practically extinct street corner German band. There is also a wood-wind ensemble, which furnishes for the WADC Radio audience a type of music which is comparatively rare, as broadcast programs go, these days. The station also has two good string quartets at its beck and call.

It furnishes bridge games, both auction and contract, to the card players who like to listen in, and whatever there is in the way of variety that is not of local origin comes through its microphone in the form of broadcasts over the Columbia chain.

In addition to these features, which have been growing gradually to their present total, WADC offers church service every Sunday morning and has been doing so for a long time.

One of the newest features is a Sunday evening Radio hour, with the Rev. George W. Knepper, an old acquaintance of the Radio audience, as the speaker. The music for these latter is furnished by the Stein Quartet, directed by John Stein, who was co-starred with the Russian concert pianist, Alexander Brailowsky, during the recent concert season, when programs were given in the armory at Akron. The Sunday evening services were inaugurated and have been maintained particularly in the interest of shut-ins.

Three concerts a week, played on the big pipe organ at the Allen theater also form a part of the regular entertainment from WADC.

"Watch Akron, the Dirigible City."



vocal soloists as Dessa Anderson Jennings, contralto; Gladys Myers Tschantz, soprano; Robert Hilton Wiese, basso, and Clifford Wilson, tenor. These four sing in quartet and Mr. Wiese is also a dramatic reader.

Hawaiian groups are one of the regular offerings of the station on Friday evenings. Several of these groups are available in the vicinity, but the ones most often heard over WADC are the Honolulu Duo, the Royal Hawaiians, the Four Drexler Brothers and the Akoa Trio.

On the fortnightly programs given for children on Saturday afternoons the entertainers are mostly talented children from Akron and its vicinity. It is really only occasionally the grownups are introduced in these broadcasts.

A MALE quartet from the Joseph Wein post of the Veterans of Foreign Wars and the post's drum and bugle corps and fine military band have become well known to the station's audience. Another frequent "repeater" is Jerry Marlick, whose group of Bohemian musicians recall bygone days with programs of the

CLIFFORD WILSON, who is a member of the Rose Marie company during the theatrical season and, in summer time, is at WADC.



Pep Lacking

*American Newspaper Awakens
Apathy of the Old World*

By Golda M. Goldman
Special Correspondent

"THIS is the Chicago Tribune in Paris, calling the American colonies in Europe." Thus was inaugurated, at 11 p. m., Paris time, on the night of November 6, 1928, one of the most surprising broadcast programs which ever went on the air in Europe.

The great interest manifested on the continent in the American presidential elections had been growing to a climax similar to that which electrified the United States during the early days of November, and the thousands of Americans detained abroad, either by business or by pleasure, were loudly lamenting the time that must elapse before the returns could reach them. How numerous these Americans abroad are may be judged from the fact that Department of the Seine (City of Paris) announced in October that there are 26,187 citizens of the United States permanently domiciled within its limits, not counting the transients!

Therefore, when the announcer called, "the American colonies in Europe," it was no empty cry, for similar numbers are to be found in London, Berlin, Geneva, and a host of other continental capitals.

It was these thousands that the European Edition of the Chicago Tribune had in mind when it determined to celebrate election night by providing an all-American program, with direct cabled election returns. This program, which went off flawlessly, began at 11 p. m., and continued until 4 a. m., and the results were all that this enterprising journal could have wished.

The station which assured the success of the broadcast was
(Continued on
page 106)



Top, left, Mlle. Darys, 'cellist from Station Radio Paris. Right, Francis Dickie of Canadian legation, Paris. Above, left, Harry Cahill, proprietor of Harry's New York bar, whose jazz artists entertained with American blues. At the mike, J. Douglas Pollack, director and English-French announcer Petit Parisien station. Right, Petit Parisien orchestra, with M. Francis Casadesus on platform and M. Pollack standing in rear.



in French Programs

*Government Control Hampers
Development of Broadcasting*

By Francis Dickie

Paris Correspondent, Radio Digest

WHILE Radio broadcasting has made great progress in France during the last eighteen months, it is still a very long way behind that in America. Two important factors make for this state of affairs: First, the slower, more easy-going temperament of the French people and their greatly lesser initiative, and secondly, the chief and most formidable cause, the French government itself.

The state, having the monopoly of the telegraph and telephone systems in the land, has taken in the wireless telephone and telegraph rights, and for months has been considering the monopolizing of the privilege of broadcasting. To date, however, the government has been so busy with matters more important to the country, that the broadcasting has remained in private hands. In the present unsettled state of affairs the people owning receiving sets do not pay any license, thus making any census of Radio impossible. The number of sets, however, must be enormous. A great many people in the various cities have installed them. It is in the country, however, and the small provincial towns where Radio has become most popular.

NATURALLY, with the Damocles sword of government monopoly hanging continually over the heads of the owners of private broadcasting stations, the tendency toward expansion and bigger investment has been curtailed. Private owners have continually raised their voices in protest, but have been unable to receive any assurance from the government of a continued lease of rights. Their activities and the making of improvements have been curtailed and no one can tell when a government order may be issued, closing them down with a consequent loss of money invested.

The chief sufferer from this state of affairs is, of course, (Continued on page 122)



Top, left, Herbert Carrick, American pianist. Right, Mella Borchand, singer. Above, left, The Morgan trio. Right, Eide Norena as Shamcka in Coq d'or. Below, members of the American club of Paris and Paris post of American Legion listening to Paris branch of Chicago Tribune broadcast at the Hotel Bohy.



THE Revelers, NBC stars, with Shaw, Melton and Glenn, standing, and Black and James seated.

Quartets Warble for the Masses

EAST and WEST Present Brilliant Artists to Public

MOST every station has a male quartet and a score or more have attained Radio fame in the Chicago district alone in the last decade.

The Revelers have become famous. They are on the air Wednesday nights in the Palmolive hour, offering a series of interesting selections in the coast-to-coast network of the NBC system.

They have a reputation as a recording and Radio quartet, and their sway among the masses is due to an extended repertoire which they present. The quartet consists of Elliot Shaw, baritone; James Melton, tenor; Wildred Glenn, bass; Frank Black pianist and arranger, and Lewis James, tenor.

Another well known singing organization is a regular late

evening program attraction at WMAQ, the Daily News station in Chicago, and it bears the name of the Aerials Male quartet.

The Aerials are all old-time quartet men, and each member has had extended experience in fraternal and church work. Paul Mallory is second tenor; Eugene Dressler, first tenor; Fred H. Huntley, baritone, and Frank H. Collins, bass.

Mallory, Dressler and Collins have been active in the Scottish Rite Choir of Chicago for many years, and Huntley is a baritone of more than ordinary ability. Doubtless many of you have heard the Aerials frequently, and here is where you see 'em. Wouldn't you just like to know what they are gazing at so intently?



MESSRS. Mallory, Dressler, Huntley and Collins, left to right, who comprise the Aerials of WMAQ.

"Tough Town's" Not Half Bad

CIVIC OPERA and Symphony

Redeem Chicago's Good Name

By George Redman

CHICAGO, some say, is a tough town. They call it the "bad boy" of American cities. For a number of years the rest of the nation, fed on screaming headlines in sensational papers, has looked askance at this "Sodom" on the lake. Bloody tales that have kept press wires humming etch a gory picture in the national mind—Chicago, the littered battleground for merciless gunmen, gang wars, dubious politics. Chicago, in the classic words of Aimee Semple McPherson, the "trap-door to hell."

But among many of Chicago's glorious attributes is musical art. The National Broadcasting Company, spokesman to uncounted millions, has established studios in the city, and people throughout the nation have begun to wonder. Listeners in Omaha, Kansas City, Minneapolis, and throughout the great central west, dial local stations and hear an NBC program from Chicago. Expecting the rattle of machine guns, they hear instead a voice presaging the rumble of timpani and drums in a great orchestra. An announcer introduces Dr. Frederick Stock, veteran conductor of the Chicago Symphony Orchestra. Dr. Stock is speaking. . . .

"This evening we inaugurate a series of concerts which I hope will entitle us at the end of our season to address our Radio audience as 'our friends.' I have long believed the Radio would prove an excellent medium for taking good music, as played by the major symphony orchestras of the country, into the homes of the people. The Chicago Symphony Orchestra has hesitated about entering into any arrangement for a se-



AND here is the famous Frederick Stock, who conducts the equally famous Chicago Symphony orchestra, whose concerts are broadcast early each Sunday evening. The beautiful Maria Olszewska, a new acquisition to the Civic Opera company this year, is pictured at the left as she appears in Lohengrin.

THE sweet-voiced Edith Mason, as Juliet in "Romeo and Juliet" and you may have heard her during the hour of opera which the National Broadcasting gave direct from the stage at the Auditorium theater, Chicago. At left, John B. Daniel, who tells the Radio audience "what it is all about."

ries of concerts until now, being fearful that the mechanics of broadcasting had not advanced to the point where justice could be done to the fine playing of experts who make up the modern intricate symphony orchestras.

"IT is my pleasure to tell you that before consenting to the arrangement for this series I personally investigated the methods by which the National Broadcasting Company aims faithfully to project into the air the quality and the beauty of tone of the various instruments of the orchestra. My approval of the plan is evidenced by the fact that this series of concerts has been inaugurated.

"Personally, I have another great source of satisfaction in the knowledge that the music of our orchestra now becomes available to many who, for various reasons, cannot come to our concerts in Chicago. I refer to those unable to leave their homes because of infirmities, or of age, or of distance from our orchestra's home. I am looking forward to a winter of real satisfaction in broadcasting and I sincerely hope that these concerts will give to the Radio public a full measure of artistic enjoyment.

"That which is worth doing is worth doing well, and I can assure you that the members of the Chicago Symphony Orchestra will co-operate with me and with the sponsors of these con-

(Continued on page 76)



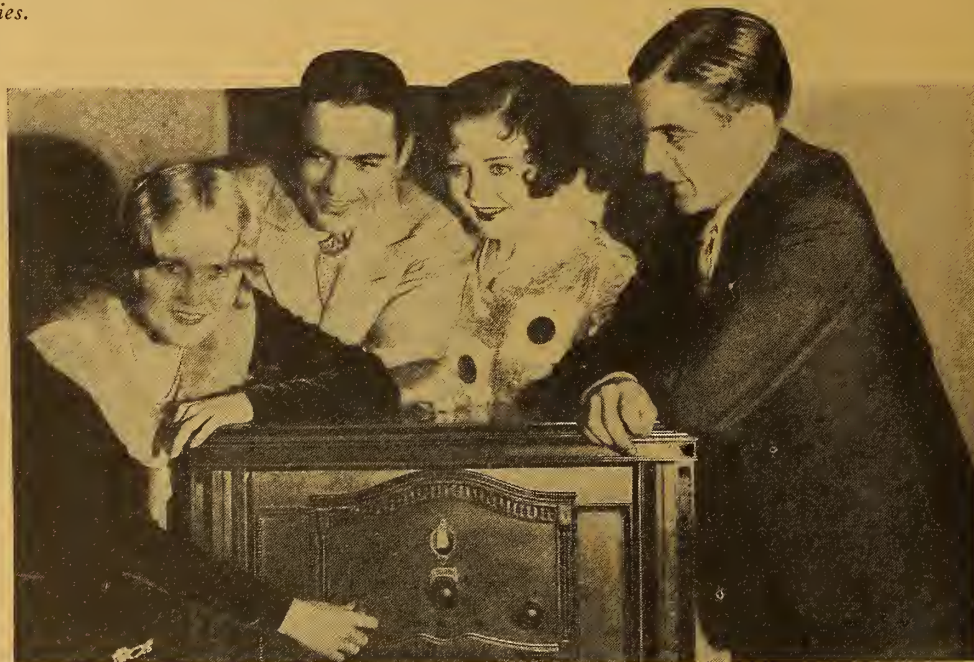
SUZANNE BENNETT, fiancée of Sir George Wilkins, registers joy on Radio reports of his Antarctic discoveries.



FLORENCE WIGHTMAN, popular harpist and only member of Roxy Symphony Orchestra, via NBC.



ARABELLA CHAMBERS, snappy blues singer, WFBM, Indianapolis. There's a chuckle just a-waitin'.



HOLLYWOOD stars listening in. Ruth Taylor tantalizes dials for Buddy Rogers, Nancy Carroll and Phillips R. Holmes.



LOTHARIO, yes, indeed! Cyril Pitts. A NBC favorite.



THEY play, sing and dance, this Russian Art Troupe of KSTP, St. Paul.



SURE! Charles Murray, the film funster, on the air.



MRS. G. UPTON,
favorite play director,
WCAU, Philadelphia.
Popular feature in
Quakertown.



EVERETT LINDSTROM, KSTP, troubadour, and his
double-barreled guitar.



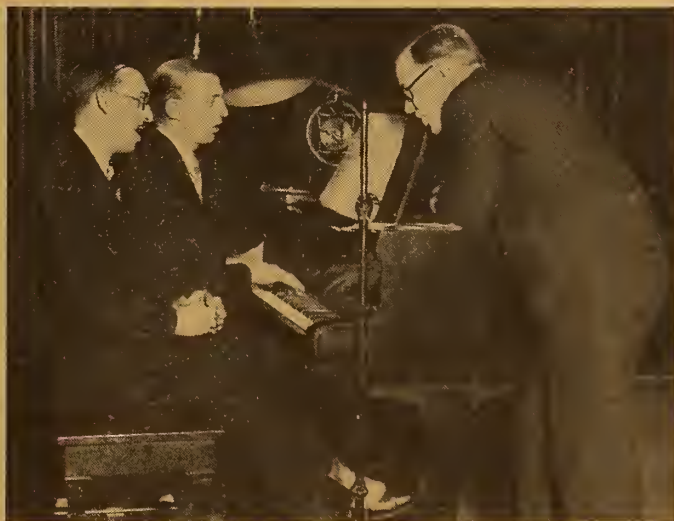
CORNELIA OTIS
SKINNER, just like
'er dad, Otis, took to
the stage. Her forte
is character readings.



THE ROXY MALE QUARTET, another reason for the success of Roxy and his gang
through the NBC system. John Keating, first tenor; John Young, second tenor; George
Reardon, baritone, and Frederick Thoman, bass.



TOM McDERMOTT,
popular songster and ace
pianist, WHB.



THE PHEE-DEES of WMAQ, Chicago Daily News.
Doctors Rudolph, at piano; Pratt, left, and Sherman.

EVERETT E. FOSTER,
A-1 baritone, KOA Light
Opera Co., Denver.



THE ORIGINAL BLACK BOTTOM shakes hands with Deane H. Dickason, on Ceylon visit.



THE SUN FLOWER GIRL from the Lone Star State, Bessie Coldiron, WBAP, Fort Worth.



OHIO speaks through Gov. Vic Donahey, from WLW, baseball taking precedence over politics.



SIR GEORGE WILKINS, Antarctic explorer, searching for voice from the homeland.



PUTTING on the dog at KSTP, St. Paul. The Mut, Sextet, proved a "Wow!"



WILLIAM S. LYNCH, NBC announcer de luxe, operating from Washington studios.



THE happy Pickard family of the NBC System, presenting old-time southern mountain airs.



B' GOSH, here's Len Nash and his Country Boys' Orchestra, broadcasting via KNX.



MARY PICKFORD, trying out for talkie at KGO.



BRIDAL couple take the air at KSTP, St. Paul. Looks like promising harmony team.



"I WILL now read a letter," says Earl May of KMA, Shenandoah, Iowa.



"HEY! HEY!" broadcasts this Champion Clydesdale from 3LO.



A FRIEND of Wagner and Berlin, David Buttolph, is a star on the NBC Net.



A FEW miner chords by the Raybestos Twins, who come on the air over the NBC Chain. Al Bernard, with hammer, is Ray, and Billy Beard, caressing the crowbar, is Bestos.

Jazz vs. Old-

Syncopated Tunes Represent Life as Against Old Songs the Human Interest

By Archie



Paul Whiteman, America's Foremost Apostle of Syncopated Music (above), and Ted Lewis, Exponent of Unadulterated Jazz, on the right.

"KING JAZZ is Dead, Long Live the King."

The rumor that jazz has passed on has persisted for a decade, and yet this child of American musical expression was never enjoying better health nor looking forward with greater anticipation to the future than it is today.

Jazz at intervals is lampooned, praised, reviled, lauded, excoriated and excommunicated, but this fledgling that seems to be anti in its relationship with everything of a musical character, threatens to go on its merry way violating fixed forms, smashing the traditional in music, and otherwise working to cross purposes with what is considered standard in music.

Jazz has come to stay, to have its say and even in its own way. It epitomizes a cross section of American life; jazz symbolizes the intensity of our every day existence, and reflects the complex noises that emanate from the streets of the city.

Jazz transferred to the realities of life is represented by towering buildings, the crash and grind of the city, the roar of its traffic and the hurry and speed of every crowded moment. The soul of the American cries for noises and dissonances, and jazz satisfies the longing he has for a phonetic intoxicant.

There is very little of the pastoral in American life today. It does not contain the elements that make for graceful poetry, nor does its appeal lie in the romanticism that satisfied the human family in the eighteenth and nineteenth centuries.

"JAZZ," Paul Whiteman once reminded the writer, "is what we see as we go about from day to day; it is our life expressed in musical terms.

"Further," he said, "jazz has been a factor in bringing to the masses a sense of appreciation for the music of the masters. Take Cho-Cho-San, the fox trot based on the melodies by Puccini, the Song of India, adapted from Rimsky-Korsakow, and the Meditation from Thais, another fox trot by Massenet-Grofe, all of which have been popularized through special arrangements made for syncopated bands.

"As for the future of jazz, it is impossible to tell what the demands will be tomorrow, and changes are being made from day to day in popular musical forms."

As for Radio, Whiteman has some very pronounced ideas about the subject and referring recently to his concerts via the Columbia Broadcasting System, he said:

"What interests me most about my extended broadcast venture is what the public is going to teach me about music. Let us have a nation wide jury of music critics when I start my series of concerts in the Old Gold-Paul Whiteman Hour on Tuesday nights.

"WHEN it is all over I want to know more about what the American public likes than anyone has ever known before. I will appreciate musical criticisms. One result will be to make possible comparative study of the musical tastes of various sections of the country that ought to be illuminating. In broadcasting it takes much longer to discover what reaction you have inspired.

"Now, for a moment, I would like to consider this question from the point of view of the listener, or, in other words, the Radio public. Hundreds of musical programs are presented nightly on the air, and the choice of orchestra and type of music to be heard is a large one. I do believe that the Radio public is willing to receive jazz with an unprejudiced mind, but in most cases classical programs on the Radio have never been more successful, due to the fact that the individual musicians are better able to play old and well-known pieces than they have played for many years. I do not for a moment wish to under rate



Popular Songs for the Masses Are His Forte, and Irving Berlin is a Human Interest Song Writer for Two Continents.



Time Melodies

Cross Section of American
Which Treat of Simple and
Themes in Daily Life

Schonemann

the value of classical music, but I do think the jazz and rhythmic harmonies, if well presented, would find as receptive a Radio audience, and I propose by means of an orchestra on which I have spent years of training and which I do not think it is an exaggeration to call the best of its kind in the world, to present jazz and rhythms in such a way as to make a universal appeal to my unseen audience."

Ted Lewis, the tragedian of jazz and he of the funeral mein and mournful habiliments, is one of the foremost apostles of unadulterated jazz. Lewis would inject the extreme in his music; resort to novel presentations and make a bid for popular support through his clowning with a clarinet and saxophone.

The irrepressible Ted would not worry over the fine points of syncopation. His plan of action is to take a melody, mobilize his band, and then work out his interpretation of the number, disregarding the thought of following a stereotyped plan of action.

Lewis saw the possibilities some years ago of featuring Bagley's National Emblem March, using the small town band as the idea for its presentation. The song, Bees Knees, afforded Lewis another opportunity for his own interpretation of a popular number, and he utilized his alpaca coat, flaring cape, battered derby and saxophone and clarinet to a good advantage in his own idea of what was proper in the rendition of the song, Fate, and more recently, another number, Laugh, Clown, Laugh.

JOHN Philip Sousa, a composer and bandmaster of many years, has found amusement in jazz because it has featured the ridiculous, and at times tends to the vulgar.

Sousa's programs within a decade have continued to feature the old time numbers, such as the Stars and Stripes Forever, El Capitan, High



John Philip Sousa, the March King, above, and on the left, Victor Herbert, Creator of More Than a Score of Comic Operas.



School Cadets and others that his own pen have made famous, and more recently his band has turned more and more to the presentation of numbers that are not lacking in the features that give them a tremendous vogue with the present generation.

Who can ever forget the brilliant programs that Sousa presented in 1900, and even at the time of the Omaha Exposition, when Arthur Pryor was numbered among the trombonists of his band, and yet when compared with his concerts today the difference is apparent, for Sousa is playing to another generation, and his programs are arranged to satisfy the tastes of the present age.

A score of years ago Victor Herbert, while featuring his own orchestra, played countless programs using his own compositions. Then as now the public never tired of his Oriental Dance from Wonderland and his Entr'Acte from Mlle Modiste.

The popularity of Herbert's music today continues, and Mlle Modiste, The Only Girl, The Velvet Lady, Eileen, Dream City and the Magic Night, and other operas from his pen have increased in popularity.

Herbert's tremendous following was built up long before the advent of the saxophone, an instrument which he said he found little difficulty to handle from the standpoint of composition, but otherwise one which grated on his nervous system.

THE music of Herbert has a following wherever it is broadcast; it does not however, possess the snorts, and cackles that are offensive in jazz, but rather its appeal is in its unique color, the eloquence with which beautiful themes are handled, and finally the resourcefulness in handling timbre and dynamics. All are representative of Herbert, who before his death composed four brief serenades for Whiteman's orchestra.

The place and the environment for jazz is either the cabaret or dance hall if one is
(Continued on page 112)

'Member
In the
Shade of
the Old
Apple
Tree?
Here's
Egbert
V a n
Alstyne,
the man
w h o
wrote it,
w i t h
Harry
Williams.



KLX Entertainers Charm Many

*STUDIO in Oakland, California,
is the Rendezvous of Famous Artists*

Thelma Hall,
soprano at KLX,
is to the right.



Tatyana Popova, Russian mezzo-soprano, left, and below, Rastus and Professor, of "I Know It" fame, who have host of followers on Pacific coast.



Bro. Bob, otherwise Ray Raymond, shown above. George Otto's Hawaiians, on the right, are clever uke and guitar artists, presented daily except Sunday from KLX.



A SMALL army of artists takes part in the daily programs sent out from KLX, and offers almost everything known in the field of entertainment for the fans who follow this station.

KLX has for its slogan, "Where Rail and Water Meet," and its sponsors have nailed to the masthead of the station the suggestion:

"Midway on the dial you'll find programs worth while."

Having been long active in the field of news dissemination, the Oakland Tribune has taken up a similar service in Radio, and daily the Tribune siren comes on the air to announce the hour and present the program features that have made the station popular on the Pacific coast.

P. D. Allen is manager of KLX, which was founded November 20, 1922, and the job of making up daily programs has been delegated to Charles Lloyd.

Lloyd has gathered in the Tribune studio a great band of Radio stars, and they have built up a big following in the West. Something to appeal to everybody is perhaps the best expression one could use in telling in a few words the idea that animates Lloyd in working out the details of his programs.

A regular feature appearing each week day is George Otto's Hawaiians. They star with ukes and guitars, presenting the catchy and dreamy melodies of the Pacific islands. This unit numbers four men, and its members are right from Hawaii, which means they have the background and the understanding of the music of their native land.

Then there is Brother Bob, who talks late in the afternoon. Some of you may have heard his interesting chats, and followed him in his talks before the mike.

Two fine comic artists are Rastus and the Professor, who have featured the quaint expression, "I know it." Their colored dialect is immense; they understand the humor and the chatter of the Negro, and have a naive way of putting over their lines.

Some of you fans have heard Thelma Hall, whose soprano voice has charmed listeners of KLX. She is a popular singer identified with Jean's Hi-Lights.

KLX has another well-known Radio entertainer in the person of Tatyana Popova, a Russian mezzo-soprano. She is on the air during the presentation of the evening programs, and her happy manner and carefree spirits have both contributed to the hold she has on the Radio public along the coast.

Charles T. Besserer is the popular organist at Station KLX. He is a splendid artist.



KMTR FEATURES

MUSIC

and ARTISTS

HOLLYWOOD, aside from being the cinema center of the United States, and the retreat of the Pickfords, Chaplins, Fairbanks and others of the film colony, is the home of KMTR, which was installed in June, 1925.

There is variety plus to the programs of KMTR, but paramount is the musical features. An excellent and well balanced band of musical artists have been mobilized under the banner of KMTR, and from day

to day this station provides its Pacific Coast fans with delightful programs.

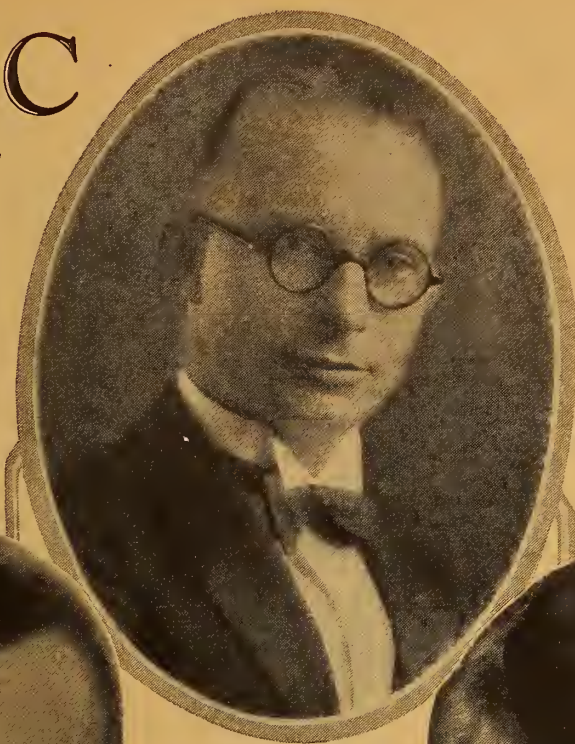
Little Symphony is an exclusive organization and, backed by his indomitable personality and ability as a musician, he has given the fans of KMTR a splendid series of programs.

Another star of KMTR is Harriet Henderson, soprano, who is an exclusive artist, and already an established favorite with the public.

A THIRD member of the staff is James Burroughs, whose repertoire includes Italian, Spanish, French and German selections.

Robert Harker, another personage of the artistic force at KMTR, is a past master of the banjo, and an indefatigable worker.

The magic baton of Powell, combined with the delightful voices of Harriet Henderson and James Burroughs, and the haunting melodies of Harker's banjo all contribute to the popularity of KMTR, and enhance its reputation in the broadcasting field on the Pacific coast.



Above, Loren Powell, conductor Little Symphony, KMTR. Left, James Burroughs, exclusive artist. Right, Harriet Henderson, soprano; Robert Harker, banjoist.

to day this station provides its Pacific Coast fans with delightful programs.

A merry and hard working staff of troubadours functions at KMTR, and the desire to satisfy the public is evidently being realized if one is to judge from the complimentary messages that pour into the station.

Loren Powell is one of the aces of the staff, having charge of the Little Symphony Orchestra, which consists of sixteen pieces. Powell is a finished musician; he not only knows music, but he is familiar with musicians and their work. His



Music hath its charms as well as its charmers, and KMTR at Hollywood, with the Powell-Burroughs-Henderson-Harker combination offers the best that is available to those who have been touched by the spell of the better things in music.

So it is evident that Hollywood not only has its moving picture stars, but it has a Radio station with an established reputation in the field of broadcasting. KMTR is making a bid for popularity in the field of music, and the unusual interest shown in its programs has had the effect of establishing the station among the lovers of good music on the coast.

KMBC Presents VARIETY

DIRECTORS vision audience from bridge parties to corn husking bees and plan programs to suit all tastes.

VARIETY being the well known spice of life KMBC at Kansas City believes in spice. Tuning in this popular station, associated with the Kansas City Journal-Post, one obtains a well flavored program whether it be by night or day. The success and popularity it has widely achieved may be attributed largely to the vision and foresight of Arthur B. Church, managing director, and of its program director, George C. Biggar, who not only organizes the variety of entertainment but takes the "mike" himself. He has not lost sight of the vitally important fact that the voice of the station is the only contact the personality of the station has with its audience; an item somewhat overlooked by many station heads who feel that the business of being an announcer is trivial and well within the scope of a schoolboy's spare time.

Mr. Biggar does his own announcing and does it well. The KMBC audience reaches out through a strata of bridge and tea circles, busy housewives, resting business men, workingmen's homes, stock buyers and sellers, farmers and farmers' families, and into homes that touch every walk of life. There is need for varied entertainment and information. All must be pleased.

Market reports, problems of the home, weather conditions, spot news of the hour take up the daylight span of broadcasting. There is something passing in review all the time. But when the night shadows fall and the cares of the day are ended then

George C. Biggar, who believes in announcing programs himself at KMBC.

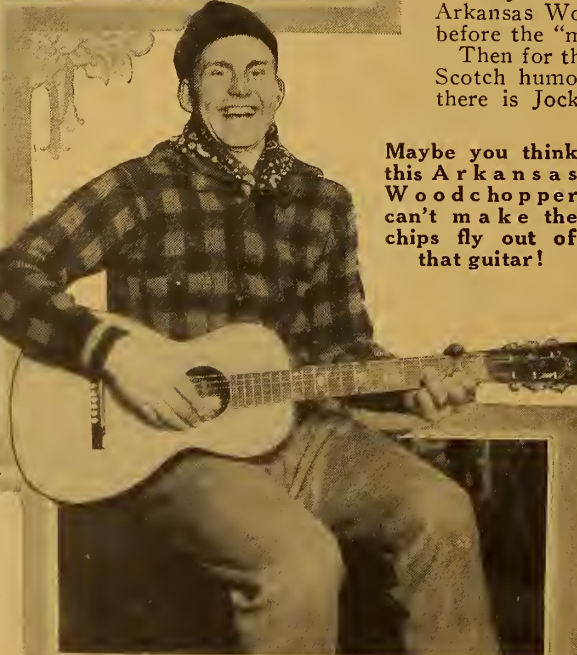


comes the lighter form of entertainment and music fills the air.

The harmony features, embellished by ukulele, are provided by the Side-by-Side Girls, two charming misses who are well and favorably known to the fans who follow the activities of KMBC. They sing



Maybe you think this Arkansas Woodchopper can't make the chips fly out of that guitar!



We think KMBC a little old foggy not to give names of entertainers. These little dears are just the Side-by-Side Harmonizers. An' wouldna ye gie a penny to know Jock's other name? Show us tha' dimpled knee, Jock.

all the blues and dreamy ballads, providing their own "uke" accompaniments. (Seems like KMBC forgot to tell you some of the real names. —Editor.)

The Arkansas Woodchopper is one of those old-time singers who regales with the tunes of long ago. His repertoire includes the care-free and happy old ballads such as "In the Shade of the Old Apple Tree," "Blue Bells," "Old Black Joe" and "Mother Machree." His own guitar accompaniments, his genial personality and infectious good humor make the Arkansas Woodchopper a welcome personage before the "mike."

Then for the benefit of the lovers of genuine Scotch humor and the Lauder type of songs there is Jock, the Wee Scotchman. Jock is a master of the dialect of his native land and can roll his r's and break in with a chuckle, typical of the sons of bonny Scotland.

The Radio features of KMBC have been popular because all classes have found an interest in their Columbia chain broadcasts, farmers' bureau, woman's programs, news reports and dancing presentations, all of which have made many friends for the station. Cooperating with the Journal-Post, KMBC has presented a special program for the farmers in addition to the R. F. D. Dinnerbell Hour.

The studios of KMBC are in the roof garden of the Aladdin Hotel, the Midland Broadcast Central, the transmitter being at Independence, Mo., ten miles away. The station operates on a frequency of 950 kilocycles.

All U.S. Open to Every Listener

NEW ALLOCATIONS Offer Wide Playground For the Great Game of "Getting Distance"

SINCE the beginning of Radio broadcasting, listeners have been interested in seeing how far their sets would reach. Who was not proud the first time his set reached across the continent? In the earlier days of broadcasting it was quite a feat when the listener in New York heard Chicago. As time went on transcontinental reception became more common, until the increasing number of stations crowded the wavebands. In the last few years the air has been so crowded that DX reception has been difficult.

Now, again, thanks to the federal Radio commission, we have a chance for worthwhile DX reception, as a glance at the chart of clear channels shows.

Eastern listeners will find clear channels for Pacific coast stations, coast listeners clear channels in the East, and Midwest fans have clear reception from both directions. As a matter of fact, conditions for DX reception are better now than ever before. Not only are there more clear channels, but the stations have higher power than ever before.

But, you may ask, why all this talk about DX; why not listen to the programs from the local station? One of the marvels of Radio broadcasting has been the ability to tune in stations in any direction. The DX fan is in one sense an explorer, for by turning the dials he can get a symphony concert from New York, dance music from Los Angeles, a talk from Denver, a barn dance from Nashville, or the World's Pioneer Broadcasting Station at Pittsburgh.

SITTING in his easy chair, the fan can tour all parts of the United States. With the new high-power receiving sets fans should have no trouble on the clear channels. Even Chicago and New York listeners have a chance for DX with the clear zones in the city allocations.

The thrill one gets in tuning in a program miles away is hard to equal. Long before man dreamed of Radio there was romance in distance. Today distance still lends enchantment, for who isn't thrilled by hearing an orchestra across the continent. Fans can try for anything from 8WMC St. Johns, Newfoundland (400m.) to KGBU Ketchikan, Alaska (333m.) this season.

You veteran DXers who were on the air when KGO Oakland used to come through on 312 meters—when KFKX came in like a local—when WDAP Chicago was on the air, will all be hard at it these days, but you fans who don't know the thrill of DX, check over the set, get a log of the new waves, and try your hand. The chances are excellent. Let's go!

Reception of foreign stations on the broadcast waves has developed until now programs can be tuned in from stations in Europe, South America, Asia, and Australia. The best transpacific station is 2BL Sydney (New South Wales). It may sound like a fairy tale to hear broadcast programs at a distance of 10,000 miles, yet 2BL can be tuned in many mornings of the year about 6 a. m., E.S.T. (9 p. m. in Sydney). There is little interference at this hour. The best months for 2BL are March and October. It often has good volume and the announcement is given "Station 2BL at Sydney." All types of entertainment can be heard. Often at 6 the GPO clock and chimes sound the hour.

THE BEST (and most famous) transatlantic station is 2LO, the London station of the British Broadcasting Corporation. Many interesting programs have been broadcast since the first one in November, 1922. London can be tuned in on good winter evenings on 361 meters.

To obtain the most satisfactory results there are certain important rules pertaining to the location, condition and operation of the receiver which one should follow diligently—rules that others as well as I have found to be most practical if not absolutely essential. These rules follow:

1. A good location.
2. A high aerial.
3. The best possible ground.
4. A set 100% efficient—selective—with tubes and phones in the best of condition.

CLEAR CHANNELS*

ZONE I EAST		ZONE II E. CENT.		ZONE III SOUTH		ZONE IV W. CENT.		ZONE V PACIFIC	
Kc.	Sta.	Kc.	Sta.	Kc.	Sta.	Kc.	Sta.	Kc.	Sta.
660	WEAF	700	WLW	650	WSM	670	WMAQ	640	KFI
710	WOR	750	WJR	740	WSB	720	WGN	680	KPO
760	WJZ	820	WHAS	800	WBAP	770	WBBM	790	KGO
860	WABC	980	KDKA	850	KWKH	810	WCCO	830	KOA
990	WBZ	1070	WTAM	1040	WFAA	870	WENR	970	KJR
1060	WBAL	1110	WRVA	1080	WBT	1000	WOC	1050	KNX
1100	WPG	1160	WOWO	1140	WAPI	1020	KYW	1130	KSL
1150	WHAM	1170	WCAU	1190	WOAI	1090	KMOX	1180	KEX

By Raymond M. Bell

5. Very accurate tuning and careful calibration.

6. Up-to-date station lists.
7. Patience.
Furthermore, one should keep in touch with the development of Radio in all parts of the world. By experience one learns the best times to listen for DX. We do not say that reception of the Antipodes is an established service; it depends much on proper atmospheric conditions. Yet the fact remains that DISTANCE LENDS ENCHANTMENT.

FOR a number of years the writer has been receiving foreign stations and consequently he has become interested in Radio in all parts of the world. Located in the eastern part of the United States, he has been successful in tuning in medium wave stations on several continents during the past five years. 2LO London has been heard every year since the International Tests of 1923. During the winter of 1927-28, it frequently came in with fair volume. EAJ6 Madrid, EAJ1 Barcelona, and Hamburg (Germany) have been logged on the Continent and OAX Lima in South America. JOAK Tokio and KGU Honolulu have been tuned in under very favorable conditions.

The Australian broadcast stations have been coming in every fall and spring since 1926. 2FC, 3LO, 4QG, 5CL have been logged a number of times. 2BL Sydney has an exceptional record, for it has been heard many times with good volume. The writer has kept in touch with Radio in other lands in a number of ways. He corresponds with fans in England, Australia, and China, and receives Radio papers from England, Argentina, and Australia.

By letter he has kept in touch with foreign stations in all parts of the world. He values very highly letters and cards from the stations mentioned above confirming reception of their programs. Feeling that many fans are interested in the international development of Radio, he has outlined the situation in various parts of the world.

*See detailed table on page 104.

WHILE there are many listeners who "travel abroad" by the ether wave very few Radio devotees from the microphone end enjoy the experience of broadcasting from points around the world. Mrs. Gladys M. Petch, until recently a



Mrs. Gladys M. Petch

member of the KGO staff, claims to be the world's champion globe trotting broadcaster. At latest reports she was in Germany where she wrote home of a machine the Germans had invented that could be utilized for broadcasting any sound effect desired. Mrs. Petch has spoken through the microphone in Italy, France, Spain, England, Belgium, Holland and Norway. In the latter country she has been associated with the Oslo station where she teaches English to the Norwegians under

the auspices of the government. When speaking in Italy Mrs. Petch found it necessary to obtain permission directly from Premier Mussolini. Naturally Mrs. Petch is a good linguist.

Old Prejudice Dissolves—

Radio Keith Orpheum Hour Represents and Brings Wealth of Theatrical

By Harold

LIKE the warm spring sunshine against a frosty snow bank the permeating good will and friendly influence of Radio broadcasting melts down one frigid barrier after another—and now we have the spectacle of America's old established chain of vaudeville houses in the ranks of the broadcasters.

Until recently the management of the Keith and Orpheum circuits considered Radio an enemy to the theatrical interests. Too many people, so they reasoned, would be only too happy to have the entertainment of talented artists come to them over the air and down through the all-embracing throat of the Radio reproducer at the neglect of the box office.

No artist with a contract for stage appearances with these old established houses was signed but that one specific clause was inserted to the effect that said artist must not be heard over the Radio during the term of that contract.

Now, everybody knows that the Radio Keith Orpheum hour over the National Broadcasting company network every Tuesday night at 11 o'clock, E. S. T., is one of the most enjoyable periods of the week. The inaugural program a few weeks ago was one of the sensations of Radio history with pickups from the leading Radio Keith Orpheum houses located in New York, Boston,

Philadelphia, Chicago and Milwaukee. All were shoved into the big Radio performance with such smooth deftness it was difficult to imagine that the bill represented such a wide spread of territory.

Gone were the old prejudices as the stimulating list of headliners was flashed to the listening audience of millions. Is it conceivable that thousands in that audience as the result of that broadcast would not feel sufficiently aroused to go and hear the artist direct when the opportunity afforded?

Whence came this change of heart? The inside story has not all been told—probably never will be. The first crack in the armor seems to have developed last summer when the publicity director in the Chicago area persuaded his conferees that no serious harm would come from a try-out of a few broadcast announcements of current attractions at the Palace. Tom Mix was on his way west from New York. A special reader was sent out over a local station announcing the appearance of Tom and his horse, Tony, on the Palace stage. The result was surprising. The regular summer slump seemed instantly overcome and the big Palace came very close to a complete sell-out.

Other experiments followed with equally surprising results. They were actually getting right into the homes. Radio listeners were interested in vaudeville. They really left their receiving sets to see a vaudeville show! The result was that Radio Keith Orpheum theaters throughout the whole territory were instructed to place announcements with their local broadcasters. All the Chicago Radio Keith Orpheum houses are now on the air regularly, with the leading houses on daily except Saturday and Sunday. Even the Palace Sunday matinee has come from a half-sold house to a regular complete sell-out every Sunday with hundreds turned away, and from no other promotion than Radio.

All this doubtless had its effect in the ultimate change of policy—and the final acquisition of important stock by the Radio Corporation of America. With the advent of the latter company into the organization came the rather mystifying question of

Adela Verne, above, regarded by many authorities as the world's greatest woman pianist, captivated a million listeners at the inauguration of the RKO National broadcast hour.

Flitting from New York to Chicago and then back to New York the trans-continental vaudeville program lifted the curtain on Miss Edith Evans (above), whose voice proved a real find for Radioland.

Nick Lucas, the crooning troubadour, whom Radio discovered for vaudeville.

Radio Wins Stage Talent

Big Concession from Old Management Entertainment to Broadcast Art

P. Brown

"Why?" What is the RCA going to do in the theatrical game? Various statements and theories have appeared. Attempts to get definite and detailed information from headquarters by Radio Digest have not been entirely successful. One story published under the authority of a news syndicate stated that the RCA was planning to line up a string of good theaters for television shows on a big scale. It was indicated that the Radio corporation would produce master shows in key centers and send them either by wire or short wave transmission to affiliated theaters on the circuit. Thus the patrons of perhaps a hundred or more theaters would be sitting in far scattered communities and listening and seeing the same performance emanating from a studio located and operating as one of the present-day Radio broadcast chain studios.

The question as to the truth of this story was put to various people in New York and Chicago. And only evasive or "buck-passing" answers were received.

Perhaps the Radio Keith Orpheum hour is an experiment leading to an arrangement of this sort. And eventually that may be still another phase of the Radio of tomorrow.

There have been transcontinental broadcasts before the opening of the Radio Keith Orpheum hour, but none jumped about the country from one town to another with so little interruption. The exact chronological order of events is not available to the writer at this moment. It is recalled, however, that the master of ceremonies in the New York studios of the National Broadcasting company indicated that the curtain was going up in the Boston theater where Henry Santry's orchestra played an overture to be followed later by incidental music.

The next scene shifted to New York, and other entertainers stepped out from the wings. Every listener could easily visualize a stage and perhaps the very artist announced for that particular number, Will Fyffe, the celebrated Scotch comedian, who had been in Chicago the week before, was readily visualized by patrons of the Chicago Palace when he was announced in New York with his peculiar and fascinating line of patter from old Scotland.

With scarcely a flutter the scene was shifted to Philadelphia where a blackface team shuffled out before the Radio footlights and regaled the audience with African wise-cracks and snappy comebacks. The orchestra played, a new name appeared in the Radio announciator. It was Mae Murray and her marimba band. Mae, all palpitating and so misjudged as an utterly frivolous little thing, stepping from past to present, talks solemnly and draws an impromptu moral from the fact of her broadcasting, for which she contritely apologizes when it is all over.

There is no intermission on high-priced toll lines, so the next curtain goes up in Chicago where Adela Verne, billed as the world's greatest woman pianist, is seated at the piano. When you hear her you feel that the claim is fully justified—at least you never heard any woman play with greater mastery and feeling. And perhaps you might go so far as to say you never heard lordly man do a more artistic interpretation on the piano.

Now you are back in New York where Miss Edith Evans is singing to you. You certainly will want to see the girl who can sing like that when she comes to your local theater—and that's where the old vaudeville czars made their mistake for so long, in their contempt of Radio.

You may miss the handclapping but there is no time wasted before you discover that your ears are now listening to what is going on in Milwaukee, Wisconsin—quite a hop, but you never noticed it. Nick Lucas, the crooning troubadour, is pleasing you with his gentle tenor voice and a faintly sighing ukulele. You sure are glad to hear Nick again, as you have learned to like him from hearing him come to you from various broadcasting stations where he first acquired fame as a sweet singer.

And so the program goes. You realize now that another big field of fine entertainment is opened to the Radio listener. Another formidable ice barrier has melted away and you have a great deal to anticipate for the future in the way of notable talent for your Radio entertainment.



"Rev." Mae Murray offered a little "sermon."



Will Fyffe, famous Scotch comedian, with the smell of the heather still in his clothes, brought an exotic touch to the RKO program.



Henry Santry's orchestra played the overture from Boston.

KVOO Speaking; That's Cowboy State

THE Voice of Oklahoma Talks Up from Tulsa and Tells the Southwest All that Can be Told in Language of Masses

THIS job of being voice of an entire state is no joke. Just ask any of the KVOO staff. For four years now this station has been operating under the title, The Voice of Oklahoma.

Back in 1924 several thousand people gathered in Bristow, Okla., to celebrate the opening of KFRU (since changed to KVOO), the first station in the cowboy state to use the enormous power of 500 watts. Hundreds of artists took part in the twenty-four hour program initiating the station. It was then operating on an average of six hours daily. E. H. Rollestone was its founder.

Two years later another entertainment heralded the installation of a new 1,000-watt Western Electric transmitter and an increase in operating time to ten hours daily.

Last year another step was taken in the advancement of "Oklahoma's Voice" when the equipment was moved to Tulsa with its added talent facilities. Shortly after the stock of the corporation was bought by W. G. Skelly, Tulsa oil man.

Improvements are coming so fast that even the staff cannot keep up with them. New studios, higher power, increased personnel and everything that goes to make a first-class broadcasting station. KVOO is now operating in one of America's finest studios. This includes two studios, inner and outer offices, reception room, control room and smoker lounge.

From a technical standpoint, improvements are just as elaborate. The new transmitter, using 5,000 watts, will be located at a point about fifteen miles from Tulsa. A stucco bungalow is being constructed to house the apparatus, and will, in addition, provide living quarters for operators and engineers.

At present KVOO is maintaining the most complete schedule of any broadcasting station in the southwest, giving uninterrupted service an average of fifteen hours daily. Opening with a shopping hour at 10 o'clock each morning, the Voice of Oklahoma broadcasts almost continuously until 1 a. m.

Right, above, J. Francis Laux, sports announcer, and below to the right is a picture of Harry K. Richardson, director of publicity.

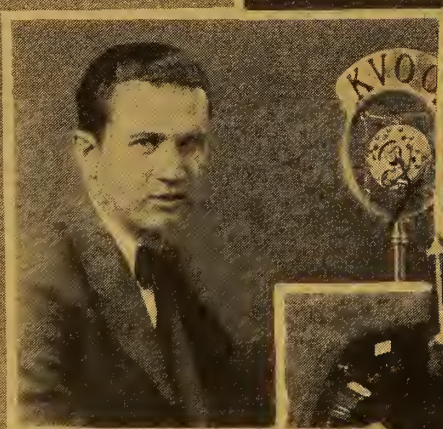


Above, Ann Tieche, program director. Left, Ted Warner, 'cellist.



Every conceivable type of entertainment goes on the air during this daily period of broadcast. Markets, sports, farm talks, vocal numbers, organ music, instrumental soloists and ensembles and dance orchestras, each have a turn at the mike daily in addition to the chain broadcasting.

KVOO was the first southwestern station to obtain a berth on both the red and blue networks of the NBC. At present it is carrying the great majority of well known broadcasts of both chains. (Continued on page 119)



Left, Wade Hamilton, organist, featured on Wednesday night program.

WAPI on the Air

BIRMINGHAM Station Serves
the Institutions of the State

For ALABAMA

Until recently the great State of Alabama has lagged far behind the majority of the states with respect to Radio. While other states have been forging ahead with the installation of one and in some instances several super-power stations, Alabama has been forced to content herself with two very small stations. About four years ago that indescribable Radio bug began working on two of Alabama's leading characters, P. O. Davis and L. N. Duncan, both of whom were connected directly with Extension Service of Alabama.

Through the beneficence of the Alabama Power company a station located at Birmingham, and operated under the call letters of WSY was given to the Alabama Polytechnic Institute of Auburn, Ala.

This station was operated by the college for a while, then enlarged to 500 watts through a gift of Victor Hanson, owner and publisher of the Birmingham News and Age Herald. It was soon found that a 500-watt station was inadequate to serve the purposes of the college, and plans were formulated for the purchase of a new 1,000-watt Western Electric station which was later installed at Auburn.

Because of the small population within the consistent coverage of the one KW station and the lack of talent in Auburn, Mr. Davis and Mr. Duncan decided that a super-power station located at Birmingham, Ala., which is geographically near the center of the state and near the center of the population of the state, would serve the State of Alabama in a far greater way than could ever be expected in Auburn.

After many conferences arrangements were made for the City of

Jesse L. Drennen, Jr., 13-year-old vocalist, at right; also, Walter N. Campbell, manager, WAPI, below, and William Nappi, who directs his own orchestra.



Sara Hunt Vann, on the left, is an organist and carrillonneur at WAPI.



Birmingham to pay half the operating expenses of the station should it be removed to Birmingham. A new 105C type Western Electric transmitter, the third built by Western Electric Company, was purchased by the Alabama Polytechnic Institute of Auburn, and installed at Birmingham with remote control studios in Auburn and Montgomery, Ala., the state capital. The Protective Life Insurance company of Birmingham which had been contemplating the installation of a broadcasting station, offered to co-operate with the officials of the Alabama Polytechnic Institute by furnishing and equipping a suite of studios which were to be used by WAPI. The entire fourteenth floor of the Protective Life Building in Birmingham was turned over to the station. This layout consists of one large main studio, a smaller studio and an auditorium with a seating capacity of 300. All of these were prepared acoustically.

Plans having been completed for the installation of the station, Mr. Davis, who had been made general manager of the station, began to look around to find some one to take charge of the station as manager. It was his desire to find a man who was experienced in radio.

After making several visits to various stations he dropped in at Nashville where it was suggested to him by interested parties in that city that he might be able to secure the services of Walter N. Campbell who for two years had been connected with two of Nashville's radio stations—WLAC and WBAW. An offer was made to Mr. Campbell, who accepted and began work December 15, 1928.

W. A. (Bill) Young, who had been connected with WAPI for two years when it was located at Auburn, was brought to Birmingham. (Continued on page 118)



MRS. IRVING MESSICK, aside from being accompanist for various WJAX artists, is piano soloist.



PICTURE the royal palms, orange groves, white sand and a great stretch of water, and you have a hasty picture from an airplane of Florida. True, as you near the earth you come upon magnificent avenues, stucco houses of colors that defy description and baffle the imagination, and everywhere acre upon acre of vegetation that seems to run rampant.

Then suddenly a city, with its imposing business section, dignified residential district and well appointed outlying centers of activity. And, amid it all blasely rising into the blue are the towers of WJAX, which became an active going Radio station Nov. 26, 1925.

WJAX speaks for Jacksonville.

"And, why?" you ask.

The answer is simple, because the station is maintained by the City of Jacksonville.

Therefore, when WJAX is on the air, Jacksonville is speaking for its 140,700 inhabitants.

John T. Hopkins III, formerly of WCAP, is the manager, announcer and chief engineer at WJAX, and around these three responsible positions the activity of the station radiates.

The burden of caring for the musical features provided by WJAX is carried largely by Mrs. Irving Messick, who is not only accompanist for the countless artists that broadcast from the station, but a piano soloist of the first rank, and director of the Aeolian Trio.

If WJAX has any music to offer to the Radio fans, Mrs.



MANAGER, announcer and chief engineer are the jobs of John T. Hopkins.

JACKSONVILLE

SPEAKS

THROUGH WJAX

in Sunny Florida

Messick handles the infinite details essential to the presentation of the best and most popular numbers.

Of the soloists—and there are many—Nina Gifford has given pronounced evidence of her success as a Radio artist by her three years' service in WJAX. Her repertoire includes ballads and grand opera selections, and her work before the mike is of such a character as to reflect credit not only upon herself but upon WJAX and its management.

The schedule at WJAX is followed daily except Sunday, and since the station was founded, its programs have included almost every feature that has been carried over the air during the last few years.

The responsibility of working out popular programs has been planned with infinite care for detail by Manager Hopkins, who has, through his years of experience in the broadcasting field, been able to analyze public taste and at the same time satisfy the most analytical demands of the public.

Give them what they want and in the way they want it, seems to be the slogan of Manager Hopkins, whose success at WJAX has been due largely to his ability to take seriously this truth, and put it into effect.

FOR three years Nina Gifford, soprano, has sung from WJAX, her repertoire ranging from ballads to grand opera.



Short Waves and Spark Gaps

CHATTER and Small Talk Concerning the Folks You Hear and Read About in Radio

By Marcella

DOESN'T Florida sound wonderful in the winter or early spring time, especially when it is cold outside and then when winter and spring are half way intermingling? I had my mind all made up that I would take a trip down the Eastern coast in that great big flying machine and tell you all about those Southern announcers, but, of course, all one's dreams do not come true. I must confess that I was influenced for a Florida trip by Walter Tison of WFLA and Dudley Saumenig of WSUN. When you look at those two nice men you can't help but feel that Florida is a place where men are men. They are tall you know and good looking and such a sense of humor. I really ought to know because they took me out to dinner and we went to one of those big hotels where they have an orchestra and all kinds of waiters and you have so many courses it takes a long time to eat.



Walter Tison is blonde and quite slender, blue eyes of course, and the softest voice. Dudley Saumenig is six feet two inches tall and he's just the opposite of Mr. Tison, because he has black hair and he's quite tanned. What a merry twinkle he has in his eye and what funny remarks he makes. I couldn't help but wonder if he tells those odd jokes when he broadcasts. Tune in these two stations. With their new transmitters, I am sure you can hear them. Oh, well maybe I can go to Florida next year.



Some of these men are simply impossible. That Ollie Riehl is one of them. I never saw such a man. My boss sent me to the National Broadcasting company and said, "Now please get him to write a story about the future of Radio programs." And I went but did I get a story? I should say not. Just as Mr. Riehl would open his mouth to speak to me, the phone would ring. Once I heard him say, "All right dear," I presume he is married, but, my goodness, you would never get time to ask him. Then when I was all ready to ask him whether he thought Radio would be bigger and better in would come the engineer and ask him something. Then an artist wanted to know whether such and such was so. Really I never saw anybody trying to see more people than Mr. Riehl. The worst of it was he asked me to come over just at noon and I naturally thought he would take me to lunch. Not he, why he never eats lunch. All he was having for his mid-day meal was a glass of malted milk and he was finishing that when I came in.

But he really is a dear, full of fun and just chock full of ideas and that's the reason he doesn't have time to interview anybody. When you are trying to get Radio programs all over the country



and make them absolutely perfect, you would be surprised how many things there are to consider.

* * *

ELIZABETH ANN, how nice it was to get a letter from you. It seems a long time since you have written. Don't I think Leslie Joy devastatingly good looking? I should say I do, and his picture does not do him credit. He has the most attractive blue eyes and the keenest I ever saw. Not married either! You would like Mr. Ruffner if you were to see him. He is tall and quite tanned and athletic looking. Wasn't that a dreadful thing about the Eiffel Tower of Radio. I assure you that wasn't my mistake. Of course, I have met the little pink wife and she is very pleasant indeed. What I referred to was Johnnie Frenkel and look what that printer did. Elizabeth Ann, here is a letter from Carl Menzer, himself and I shall quote it as is. "Sorry I haven't been able to get up to your office but next time I'm in Chicago I certainly will avail myself of the pleasure. (Nice phrase, wasn't it?) Haven't been there for a month and a half, though. Dropped in to see the aircraft show on my way back from Saskatoon, Sask., and had to hurry for a basket ball broadcast.

"Who do I come to Chicago to look at? Well—The Genna Boys and Al Caponi pledged me to their fraternity; nice bunch of boys; and then I have to go in to wind the town clock periodically. Been having some trouble getting Wm. Hale T. pointed in the right direction, too.

"Here's the dope: Drew MacDougal is a student in the University of Iowa and used to be one of the operators at WSUI. Got so busy with studies that he had to give up the Radio operating a couple of weeks ago. I'd guess he was about five feet ten, blue or brown eyes, black or brown hair, and awfully good looking. Elaine Bair is the same sweet girl. I'll enclose a little photo of her. They have glue on the back of them. Told her they come in mighty handy to paste over holes in the windshield of one's car or to paste wrapping paper on packages. Seriously, though, her organ programs are extremely popular. Wish she could do some recording. Jimmy Toyne plays relief for Elaine when she's home visiting Mamma and Papa Bair at Clinton, Iowa. Only thing wrong with Jimmy is that recently he went and done as others have did. Got married, doggone him. Guess that's about all the gore.

"Oh, say! We're starting a novel broadcast tomorrow which will be given every Tuesday and Thursday at eleven. Broadcasting University class room exercises with mikes right in the class room. Ever hear of it before? And, Marcella, if you'll promise to use some extremely good pictures of WSUI's new studios, artists, etc., in Radio Digest, I'll see they are sent pronto. Want story about the station, too? We have the most beautiful reception hall of any broadcasting station in America! No Blah.

"Would like to have you visit WSUI and the University of Iowa."

Would we like those pictures of artists? I will say we would.

* * *

It is so lovely of you, Thelmo, to want to see a picture of the blonde flapper, Marcella, but I have never had any taken. However, here is the picture of Bernice, and Mr. Tomy of WRJ writes as follows:

"Bernice" is just Bernice—at least she has gone without the family name for so long that she has to give a couple of thinks to remember it herself. She became staff pianist for WCX, lately absorbed by WJR, in 1923, and was perhaps the greatest factor in making the Red Apple club nationally known. She is frequently at WJR but is just now in vaudeville, teaming with Thelma Bow with whom she was long associated on Radio. "Bernice" probably has the most distinctive technique of any pianist heard on Radio. Once you hear her you will never fail to recognize her work. She is 23 years old, or will be in a few days, and is not married. She's not so hard to look at, either, as the accompanying picture will disclose." He also says that Bernice and Thelma Bow are booked in Chicago for the last of February and he will have them call me up. Watch for the next issue and will tell you all about them. These men never seem to get in all the details we like, do they? Funny when I was in Detroit last spring I missed Bernice. I gave you her picture recently.

* * *

WHAT bad luck one does have, sometimes. There is Alois Havrilla. I caught just a glimpse of him when I was in New York and thought he was very nice, but did not have time to really get a good impression. He is a visiting announcer with the NBC and was in and out of town last week. I am awfully sorry, Hortense, that I could not get a good chat with him. I will see what can be done for the next issue.

* * *

Ellen dear, when your letter came in asking about Happy Hank, WGN was immediately written to asking for the information you wanted and his picture. Instead of sending back a regular photograph, that WGN publicity man sent a pen and ink sketch, which I will just bet you Hank drew himself, and here is the answer to my letter:

"The enclosed picture was taken of Happy Hank at the tender age of four. His favorite hobbies include yachting on his palatial steam yacht, wintering at Palm Beach and wiping the dishes for his wife. Hoping you are the same, Hank Harrington."

Can you imagine! I think Hank drew that funny picture himself, and everybody knows no Radio announcer could afford a steam yacht and take trips to Palm Beach. I really can't see why these men treat our serious questions so frivolously. Thank you so much for inviting me to visit you if I am ever up that way. I would love to.

* * *

LITTLE JACK LITTLE certainly has wound his way into the hearts of his audience. There are ever so

many requests for his picture. You will find it in a different section of the magazine. Yes, Jack is married and his wife travels with him much of the time. She is devoted. Jack may be small but he is very good looking. He has blue eyes and light hair and has pink cheeks. There is something very attractive about him. Of course, I have seen him! He is 5 feet 3 inches tall and is about twenty-eight years old. He was born in Waterloo, Iowa. I wonder if any of our Iowa readers remember him.

* * *

Even though Ford and Glenn are not on the air at this minute, Helen wants to know more about them. Both the boys are married and have very nice wives. At least I have never heard any complaints against them. Ford Rush was born in New Orleans over thirty years ago. He is six feet tall and weighs close to 200 pounds. Glenn Rowell was born in Pontiac, Ill., about thirty years ago. He may not be as tall as Ford, but he weighs more. Aren't they a jolly pair? Did you know that Edgar Bill, director of WLS, brought them together.

* * *

You are a little late, Elsie, asking for information about Lewis C. TeeGarden of KEX. He became engaged last month to that very pretty contralto, Alice Prindle. It just seems as if they ought not to allow the Radio stars to be so good

looking because it is so fatal to the announcers and directors. Oh, just lots of them have been ensnared by sopranos, not to speak of contraltos and pianists. It doesn't give us girls on the outside very much chance, does it? It is no wonder Mr. TeeGarden has such a lovely, deep voice. He is a graduate of the Alviene School of Dramatic Art in New York City and has had several years of professional experience. He seems terribly young to be getting engaged, don't you think?

* * *

Here is a picture of my little namesake, Marcella Roth. We have quite a close feeling for each other just because we have the same name. However, Marcella Roth is a little red head instead of a blonde and, although she showed no signs of a peppery temper when she was up here several years ago, I expect she can hold her own. Marcella is back on the air again as the Twilight Story Girl of WWL, New Orleans. Tune in at 7:30 p. m. Saturday nights and you can hear her read her delightful stories. My goodness, what an old Radio star Marcella Roth is. She has been on the air for at least two or three years.

* * *

HERE'S a letter from a Radio fan who has been listening to programs for the last four years. She asks me about the United Lansing. Has anybody heard him lately? I haven't, not a word. The Ray-O-Vac Twins are broadcasting under their own names of Russ Wiley and Bill Sheehan at KMA, Shenandoah. The gay pair you hear at WDAF called Jack and Jill are Dean Fitzer and Juanita Collins Fitzer, his wife. There, now, it is out. Is Mr. Fitzer fat? I should say not. He is tall and well built, unless he has put on weight the last two years, and has the dearest little mustache. Jill is a little lady of 115 pounds, blue eyes, dimples and golden hair. There is a little "Jill" called Shirley Dean.

Did I tell you about going to Detroit this year? In that way I met that handsome John Patt at WJR. Oh, I am very much afraid he is married. In fact, Jessie, I saw Mrs. Patt, although I was not introduced. Let me see, John

has been in the Radio field ever since WDAF first went on the air. He has always been right hand man to Leo Fitzpatrick both at WDAF and WJR, and not only that, he was on the air when he went to the University of Kansas at Lawrence. This isn't a new picture, at all. In fact, Mr. Patt is just dreadful about sending out his photographs, and I thought, even though this was taken two or three years ago, it might give you a general idea of his appearance. Of course, he is much more mature nowadays. You might say that he grew up with Radio, because he has done practically nothing else.



H. Dean Fitzer, WDAF Director.

*There was a director,
His name was Dean Fitzer;
He had a cute whisker
On top of his kitzer.*

* * *

MY GOODNESS, why can't that attractive team, Jack and Jean, stay put. Now they are at WLW. Here is the latest information about them, Jinny. (I just know that printer is going to print your name Jimmy.) Jack and Jean are so mischievous that it is terribly hard to get any information out of them. Every really serious question they laugh at. Doesn't it sound like them? For instance, when asked if they were married, they seemed to take it as a perfect joke. Of course, they are both very young. Both have medium brown hair and blue eyes. Gean Carroll is tall and slim and Jack Grady is shorter and heavier. They used to sing in vaudeville and met four years ago, when they decided to team up. Jack is the one who plays the piano and Jean plays the harmonica and guitar.

* * *

Where do you think that attractive Walter Campbell has gone now? I know you could never guess, Betty, WAPI, Birmingham, Ala. Another reason I should like to have gone south. You remember, I said he telephoned me and said he was going to a new station.

* * *

Henry Wing certainly got fooled when he went to WLBZ. He thought the snow would be so deep that he

would be snowed in for the winter and Radio would be his only communication with the outside world, and he says they haven't had a bit of snow yet and his letter is dated January 18. It seems as if winter is not what it was.

* * *

Lucille says she has palpitations whenever she hears Bob Brown of WGR. Here is what Anne Stewart writes:

"In answer to the unanimous question of the feminine half of the Radio audience, the profile is that of Bob Brown at WGR, whose distinctly friendly and sympathetic personality over the air has made him a favorite in the two years he has been before the mike. New York is Bob's birthplace, but he has spent the greater part of his twenty-six years in Buffalo. He holds swimming championship records, likes to play golf, is adept at boxing and displays his versatility in his ability at writing, whether prose or poetry. Radio is both vocation and avocation for Bob, and, like the mailman who went on a hike on his day off, Bob's spare time is spent knocking about the countryside in his sport roadster, visiting as many Radio stations as he can crowd into each trip. He sings baritone and strums a mean ukelele. And, oh, yes, a whisper to Marcella, appearances in Bob's case are not deceiving—he is just as personable as he looks and, surprisingly enough, is still single."

* * *

While I was over at the NBC I saw Mr. Redmon—by the way, I spelled his name wrong last issue. He is the best looking thing. This picture doesn't do him justice because it only shows what a nice grin he has and it does not tell you how fascinating he is. I heard just in a round about way that he had a fight with his girl. I don't see how she had the heart. Somebody else is just sure to pick him right up, because he has the most irresistible eyes. You can hear him on the air every now and then. But I think he likes to write better, and his programs come over the Midwest network.



While I was in the office I decided I wanted to see just how they sent out the programs and so I went out to the room you rarely hear anything about, and without which you would never hear all the enchanting voices you like so well, the control room. Charles Gray was in charge. Don't you remember, I told you about him last issue? He is the one who works the controls at the opera and makes it possible for you to get lovely music. Do you know just this Chicago office alone, not to speak of all the other NBC offices all over the United States, gets from 12 to 13,000 telegrams a month, and with one little flick of a finger Mr. Gray could control 100 tons. Just imagine! All the networks are worked with buttons just like our electric lights, and fancy what would happen if Marcella, for instance, poked the wrong button.

* * *

If you have an questions you would like to have answered, please write to me and I shall be glad to help you get better acquainted with your Radio friends. Besides, I love to hear from you. Remember that Marcella sees all, hears all and tells everything, so do not be afraid to acquaint her with any personal secrets you want broadcast in this column.

Jenkins Discusses Television

Famous Scientist Says Visual Broadcasts Will Supplement, not Supplant Tomorrow's Programs

By C. Francis Jenkins

Vice-President in Charge of Research Jenkins Television Corporation

IF I remember correctly, the great English novelist, Charles Dickens, began his book, "A Tale of Two Cities," with a series of brilliant contrasts intended to impress the reader with the fact that the period of which he was writing was one of the utmost confusion, both in Britain and in France. Now, if I were gifted with Dickens' ability as a writer, I should set down some more such series, for confusion is unquestionably the dominant note with regard to the present status of television. Inasmuch, however, as I am not an author but a scientist, I shall have to content myself with a simple statement to the effect that television is a most misrepresented subject and let it go at that.

Some, who have apparently allowed their enthusiasm to get the better of their good judgment, vehemently assure the public that television is here and that it is even now ready to compete with sound broadcasting for a share of its interest. On the other hand, competent engineers, speaking on behalf of some of our most powerful electrical organizations, are just as vehement in their assertions that television is at least five years away. And, to cap the climax, some have even gone so far as to say that television is a ridiculous impossibility and that it will *never* be here. Small wonder, then, that the average layman, hearing television lauded to the skies on one hand and disparaged and even ridiculed on the other, should hardly know what to believe.

The fact remains, however, that television is a subject in which the general public is intensely interested, not so much because of its novelty as because it looms up as a potential agency for home entertainment. Accordingly, I have been asked by the editor of Radio Digest to make an attempt to dispel—if such a thing is possible—some of the mists and camouflage which becloud the issue at this time. Although this promises to be no easy task, I believe that, before I have finished, I shall have at least given a satisfactory answer to that pertinent question, "Where do we stand in television?"

IT is my honest opinion that the views held by *both* classes of extremists are wholly inconsistent with the true facts of the case. Television is *not*—most emphatically *not*—perfect at this time, and it is *not* on the verge of setting itself up as a rival of sound broadcasting for the affections and the attention of the Radio public. And, to speak with all frankness, I do not believe that it ever will. Television, when it does come, will supplement rather than supplant the excellent efforts on the part of our sound broadcasting stations to entertain and enlighten the public.

On the other hand, an unbiased and impartial analysis of the present status of the art will, I believe, inevitably force one to

the conclusion that television can no longer be classed as a mere experiment. I submit that television as it stands today, has achieved a technical development quite comparable to that of ordinary broadcasting at the time of its debut in November of 1921. This opinion, may I add, is quite generally held by competent and disinterested observers.

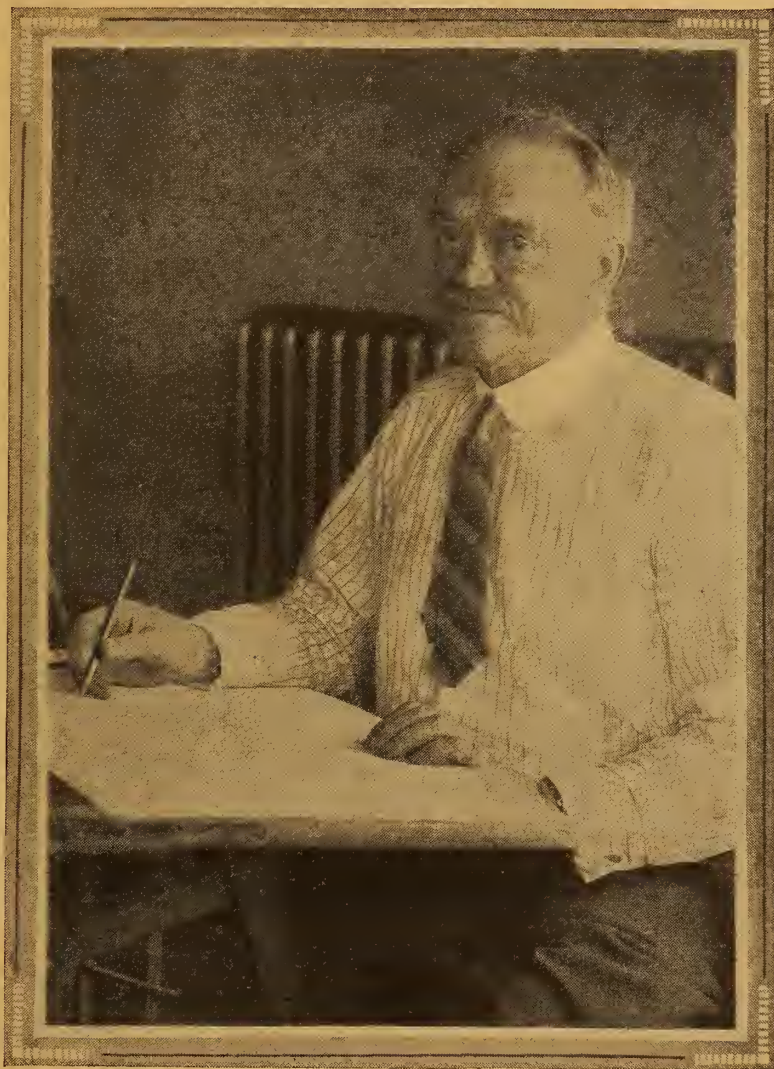
So much has been written regarding the basic principles of television that the Radio minded public is generally familiar with them. Television, as its name implies, is simply "seeing

at a distance," either via Radio or wire. At the transmitting end, the subject must be analyzed, broken up or dissected into a number of parallel and overlapping lines of varying luminous intensity. Usually this is accomplished by means of the so-called scanning disk, a revolving circular plate containing a number of holes so arranged as to form a spiral or eccentric curve. In the more popular form of television pick-up, the scanning disk causes a powerful light source to be reduced to narrow pencils of light which sweep across the subject, line by line, as each hole comes into action. When the last line has been reached, the beginning of the spiral brings the hole for the top line into play, and the cycle is repeated. According to whether the pencils of light fall on light or dark spots, there is a corresponding reflection of light, since the subject is otherwise in darkness. A photoelectric or light sensitive cell converts the line by line scanning of the subject into a series of corresponding electrical values, which are amplified and impressed on the carrier wave of the Radio transmitter. This is the *indirect* method of pick-up.

SINCE it is quite impossible to have news events held in darkness for the benefit of our television pick-up, another method has had to be worked out whereby images in broad daylight may be scanned.

This is the *direct* method of pick-up, and only recently has it been essayed with some degree of experimental success. Here the subject is fully illuminated by daylight or other unhampered source of illumination. However, instead of the photoelectric or light sensitive cell being free to pick up the reflected light, as in the method previously described, in this case we place our photoelectric cell in a dark box or camera. Now we employ a scanning disk, with a suitable lens system, so that the photoelectric cell scans the subject line by line.

At the receiving end, our problem is to take the line-by-line summary of the subject, as represented in electrical terms, and, by reproducing the lines in exact sequence and individual intensity, weave an animated image which will be a faithful replica of that televised at the transmitting end. For this purpose we employ a scanning disk, revolved in perfect step or



C. Francis Jenkins, pioneer inventor, who was first to produce commercial television sets.

synchronism with the disk at the transmitting end, together with a neon lamp or glow tube as the variable source of light. The neon lamp is a most sensitive electrical mechanism, incorporating a plate or plates which glow with a pinkish luminosity in accordance with the strength of the incoming signal. The glowing plate or plates are viewed through the whirling holes in the scanning disk, during a small part of their total circular sweep. This causes a glowing screen made up of parallel and overlapping luminous lines, in the absence of a television signal. As a signal comes in, however, the lines are no longer uniformly luminous, but rather are luminous and dark throughout their length, forming a pattern.

SO it is apparent that the television image is really composed of a series of transmitted parallel and overlapping lines. Really, at any given instant, the television image is simply a single dot of light, just as the motion picture image at any given instant is a still picture. In television our problem is infinitely more complicated. We must weave an entire picture with successive dots, in less than a sixteenth of a second. We simply weave our images with such rapidity that the human eye, which retains an impression for a scant sixteenth of a second, cannot follow the process. Television, then, is nothing more than a new and fascinating form of optical illusion, based on electrical means and made possible by the inability of the eye to respond to rapid changes of scene.

Such, briefly, are the means which the modern scientist has taken to demonstrate that the human eye is a fallible and readily deceivable mechanism. The basic principles which he has utilized, however, are very old, being practically coincident with the earliest attempts to transmit sound through space by electrical means. Nearly fifty years ago, pioneer television experimenters were working with scanning disks. They had conceived the idea of light-sensitive cells, utilizing the element selenium. They had recognized the necessity of keeping the two scanning disks in step. They had resorted to the line-by-line analysis of their subjects. A system of radiovision, patented by Nipkow in 1884, utilized a selenium cell, an objective lens and a spirally perforated disk rotating between the cell and the lens "to dissect the scene."

I mention this with the two-fold idea of correcting the widespread but erroneous impression that television is distinctly a modern development and of acknowledging the debt which the present owes the past. With all due respect to what the present-day television experimenters have accomplished, the reader should bear in mind the fact that theirs has been the task of compiling and refining the basic technique originally supplied by the scientists of nearly half a century ago.

RECENTLY, television, once considered the mad dream of the lunatic, has come into good standing as a subject for research and engineering development. Utilizing the well-known principles available to all, many workers have engaged in this field. Baird, a Scotch inventor residing in London, has made notable progress in television, refining the scanning disc technique at the transmitting and the receiving ends to a considerable degree. Dr. E. F. W. Alexanderson, of the General Electric company and the Radio Corporation of America, has made good use of the enormous engineering facilities at his disposal in refining the usual technique. Likewise with Dr. Frank Conrad of the Westinghouse company, who has worked along the lines of broadcasting television pictures picked up from standard motion picture film. There are many other workers both here and abroad, all engaged in refining the usual standard technique. Perhaps the television work of Dr. Frederick Ives, of the American Telephone & Telegraph company, is the most outstanding in point of results, but it must be remembered that any worker can obtain beautiful detail if given a sufficient number of communication channels, whether through space or over wires. The question of available communication channels is one which has seriously handicapped all of us engaged in developing an economical solution of television.

AS FOR myself, I began experimenting with television in a serious way back in 1925, and I suppose I enjoy whatever advantage there may be in an early start. In many respects my decision to engage in television was a natural climax to my previous experimental efforts. In 1894 I had designed and constructed the first motion picture projector, taking cinematography out of the peep-hole, penny-in-the-slot stage and placing it in the theater where it might develop into a leading industry. Subsequently, picture transmission over wires and Radio engaged my efforts. I turned my earliest attentions to the facsimile transmission of pictures, maps and drawings over wires and later by wire. My efforts in this field were attended by some measure of success, and I was able to develop a system of broadcasting weather maps to ships at sea. This technique I placed at the disposal of the U. S. navy, who made good use of it.

From the transmission of still pictures to that of animated images was a logical step, and in 1925 I decided to take it, beginning my experiments with the so-called "Radio

movies" at that time. Like all other experimenters, I at first made use of the existing technique of television transmission and reception. It was not long, however, before I found myself hampered by the impracticability of televising or picking up my subjects directly. The crude scanning disc and the small amount of reflected light proved, for a time at least, formidable barriers, as did also the reception scanning disc of huge dimensions with its very small image of poor luminosity.

In order to overcome the transmitting difficulties, I resorted to the use of film rather than the subject direct. In other words, I simply film my subject in a suitable manner, so as to obtain a silhouette picture—the figures in black against a white background. There are no delicate shades or half-tone values. From the negative I make the necessary number of positive prints, so that a number of television transmitters can handle the same subject simultaneously, without the necessity of costly and not altogether practical wire tie-ups. The positive film is placed in a machine not unlike a standard motion picture projector. As the film moves along through the mechanism, a scanning disc causes a powerful pencil of light to it line by line. Depending on the transparency of the film, more or less light reaches a photo-electric cell, which in turn controls an electric current. The electric current is enormously amplified and placed on the Radio carrier wave for transmission.

AT THE receiving end, the problems have proved not so simple to solve. Here my legacy was the unwieldy scanning with its eccentric arrangement of holes, an electric glow tube or neon lamp with low luminosity, and an image about one inch square. These are the elements now being employed by most television experimenters.

In order to gain compactness—obviously, any device with a three-foot scanning disc can never prove attractive for home use—I developed the scanning drum which can be as small as six inches in diameter. In this drum I have placed a special form of neon lamp with four plates instead of the usual one or two. These plates are arranged to flash in rotation, corresponding to the first, second, third and fourth quarter of the drum holes, at the proper time, so as to weave the luminous image made up of so many lines. Furthermore, in order to conserve the small amount of light available in the first place, I have made use of light-conducting rods from close proximity to the glowing plates, out to the holes in the scanning disc. With these details worked out, it remained only to provide a suitable optical system with reflecting mirror and magnifying glass, so as to produce an apparent screen image about six inches square.

For many months back, I have been engaged in broadcasting our Radio movies from two transmitters in our Washington laboratories, namely, one signal on short waves, for a general coverage of the nation, and the other on practically broadcast wave lengths, for local lookers-in. Also, I have encouraged boys and grownups to participate in television reception, even going to the extent of supplying television kits at cost price, so that with an old electric motor, anyone could tune in my Radio signals at an investment of about \$2.50! All this has been done in the firm belief that television, as with broadcasting, will have to be a co-operative development, with many taking part.

WITH this brief description of my own system, I shall bring to a close my resume of the present status of the television art. It goes without saying that television, as it stands today is far, far from perfect. There are many and serious problems to be solved, not only in the matter of the television presentation itself, but also in the direction of detail, illumination, synchronization, and finally, the establishment of a nation wide service for our potential lookers-in. The solutions of all these problems, however, are in capable hands and they may be expected as a matter of evolution. In my humble opinion it is utterly ridiculous to discredit television on the ground that it is not now perfect.

Those who argue against it on the ground of imperfection are in a class with those who scoffed at the steam engine of Watt, the locomotive of Stevenson and the crude airplane of the Wright brothers. Yet it is a matter of history that these inventions prevailed in spite of all efforts to discredit them and that they have become integral parts of our civilization. And so, I believe, it will be with television. The service which television is capable of bringing to the masses of this world is too patent and too vital to be dismissed with mere adverse comment.

What is more, I cannot agree with those who claim that television is going to come as a result of the efforts of any single man or organization. The thing is too vast and too complex for such a fate as that. Television, like Radio broadcasting, will reach its ultimate development through a nation-wide pooling of ideas, technical brains, financial resources and, if I may say so, the hearty and intelligent co-operation of the amateurs. Radio broadcasting owes its present status, in large measure, to the unsung efforts of thousands of plain people who do not share the dignity and distinction that comes with an "E.E."

And what is the ultimate in television? That, indeed, is a most difficult question to answer, for there is a vast difference between the ideal and the practical. We hope, in the near future, to be able to work with channels of sufficient width to permit the transmission and reception of pictures incorporating a reasonable amount of detail, but it will be a long time before we attain anything like the crystal clear sharpness of the motion picture. We are working on better light sources—tubes which, while retaining the extreme sensitivity of the present neon lamps, will be capable of infinitely greater illumination, and with projecting systems which will permit us to flash our image on a fair size screen so that it may be viewed by entire theater audiences. And we have high hopes of perfecting a camera for outside work which will permit the picking up of persons or events without the use of the motion picture film as at present.

Some day, perhaps, in the not too distant future, our theater audience will be able to enjoy instantaneous and fleeting glimpses of important news events through the medium of synchronized television and broadcast productions. And, finally, there is something more than a remote possibility that through the medium of an international television service, we here in America will be able to see the coronation of the King of England, the Epsom Derby, the inauguration of the president of France and many other events which we now know only through the medium of the newspapers. Who, indeed, knows?

(Subjoined to the above article written by Mr. Jenkins especially for *Radio Digest* is a report of a broadcast on the same subject which he made from WFBM, Indianapolis, January 22, 1929.—Editor.)

MY initial activity in this development began about fifteen years ago, and has been the subject of active study ever since, except for time out for war work.

Immediately after the Armistice, I set up a laboratory devoted exclusively to this development; took on some enthusiastic young folks; and after practicing on still picture transmission for some months, our first public demonstration of radiovision and radiomovies was made June 13, 1925. This attainment received rather wide publicity, and the favorable comment of scientific and technical authority, but still the public remained indifferent.

But eighteen months later the demonstration by the Bell Telephone company of wire transmission of living images from Washington to New York City put the seal of approval on previous predictions of the possibilities in this new art, and stimulated activities therein to a surprising degree.

For ourselves, as Radio is a two-ended proposition in which there is no occasion for receivers unless someone is broadcasting, I decided it was time to begin broadcasting.

So on July 2nd last year, 1928, we began regular scheduled broadcasting of radiomovies. We chose motion pictures because of the difficulty of getting interesting performers into our studio on scheduled hours with certainty. Judging from our experience of the past few months, I think it is likely that visual Radio will develop very much along the lines audible broadcasting did.

It will be remembered that audio broadcasting was begun by an amateur who set up a crude transmitter in the corner of his garage, broadcasting first from talking machine records, and later from singers in person standing before a home-made carbon button microphone. Those who picked up his broadcast entertainment did so with Radio receivers they had made themselves, out of a bit of galena, a cat-whisker, two pie plates, and some coiled hay wire.

BIG business became interested in Radio as a means of entertainment only after the amateur had demonstrated the tremendous possibilities inherent in this crude toy.

As I had the honor of amateur standing in Radio, and knowing what splendid things the amateurs had already done in Radio, it very naturally occurred to me to invite them to join us in the development of television.

And so we began radiomovies broadcasting on short wave lengths and without previous announcement. It is quite likely that no one got our first broadcasts, perhaps not even our first week's broadcast. Possibly no one tried. But eventually fellow amateurs came to understand that we were broadcasting on a regular schedule which they could depend upon with as much certainty as on a railway time table.

And then things began to happen. Boys and girls all over the country, science teachers in colleges and universities, and others less easily placed, began writing in to us for information on how to build receivers, where to get scanning disks and neon lamps, and with detailed questions regarding the hundreds of little tricks of technique which go to make up successful reception.

This activity, as I have explained, began only a few months ago, but tonight many thousands of amateurs will tune in on W3XX with certainty, proudly exhibiting the results to daddy, mother, and sister Mary, or perhaps it is somebody else's sister Mary, doubly proud as he explains that he built his receiver himself.

And after the show he writes us in typical amateur code language with an enthusiasm which is contagious. And it is from these reports that we get the suggestions which enable us to improve our processes and our mechanisms.

I AM an enthusiastic believer in the cleverness of the amateur and the probabilities of surprising development when he takes up radiovision as an avocation after the day's work at a regular task.

In spite of the universal acknowledgment of the ingenuity and cleverness of the American boy in discovering valuable

communication channels in the scientifically scorned short-wave Radio bands, a noted Radio engineer was quoted last week as saying that "the government should confine its television licenses to experienced and responsible organizations, such as the Radio Corporation of America." I am still quoting—"for only such organizations can be depended upon to uphold high ideals of service in television."

That gentleman has sadly neglected the history of great inventions. He has overlooked the fact that no great laboratory, despite its inestimable contributions to science and engineering, has ever yet brought forth a great, revolutionary invention upon

which a new industry has been founded.

Professor Morse, a portrait painter, invented the telegraph, and the system of dots and dashes by which we communicate electrically; it was Dr. Bell, a teacher of the deaf, who gave us the telephone; Mr. Sholes, a farmer, tinkered up the typewriter; Mr. Berliner, a clothing salesman, gave us the disc talking machine, and Mr. Tainter, a lawyer's clerk, the wax cylinder phonograph; Mrs. Jacquard, a dressmaker, invented the Jacquard loom which gives us beautiful figured fabrics; Mr. Lanston, a groceryman, made the monotype casting machine; Dr. Dunlop, a physician, built the first pneumatic tire; Mr. Eastman, a bank clerk, gave us the portable kodak hand camera; and Rev. Goodman, a country preacher, the film roll used therein; the Wright brothers, bicycle repair men, worked out the flying machine; and Mr. Jenkins, a stenographer, invented the motion picture projecting machine used in every theater the world over to this very day.

IT has always been a poor man first to see these things, and as a rule the more magnificent the vision the poorer the man.

And, by the way, that is right comforting, too, for I sometimes think that perhaps I myself may yet do something worth while if only I stay poor enough, long enough.

So my answer to the contention that radiomovies and radiovision for home entertainment may be expected only from a great organization is to refer to the record of great inventions, and to cite the thousands of amateurs who are now nightly watching with fascination our Radio pantomime pictures in their home-made receivers, as little Gens-Marie performs tricks with her bouncing ball; Miss Constance hangs up her doll

(Continued on page 110)



Examining Newest Radio Television Apparatus in New York, James W. Garside, President, Jenkins Television Co., and Dr. Forest Television Co., left; Mayor James J. Walker, Dr. Leed De Forest and Anthony J. Drexel Biddle, Jr.

BEAUTY KNOWS No Border Lines

MEAN people sometimes have a habit of slurring and making scurrilous remarks pertaining to the physical charms of Radio artists. It all is manifestly unfair, because, just look, here on this page we have four very beautiful young women who are particularly popular with Radio audiences.

And, turn right or left, you will find many charming faces through our album and our feature pages.

The lady in broad brimmed hat and fairly bubbling over with good spirits is Ethel of the Ethel and Harry team at WHK. Her full name is Ethel Hawes. Any Ohio listener will tell you that Ethel and Harry have a very precise faculty of getting down to the everyday life of the average married couple. They have little tiffs, make wise cracks to each other, go through the domestic mill with its daily grist of trials, tribulations and rifts of sunshine.

It's all so natural and convincing that thousands of listeners have written to WHK asking if Ethel and Harry are really married, or are they just play-acting.

Well, are they?

Hush, don't tell a soul. They are married. Oh, positively, but NOT to each other.

Ethel writes the little stories that they broadcast every day. And that Ethel giggle—lots of girls try to imitate her! Just to hear that one little giggle is enough to drive an ordinary case of blues to the bottom of the sea where all blues belong.

Did you ever hear Ethel and Harry do a job of papering the house over the Radio? It's better than any vaudeville sketch you ever saw on the stage, and some listeners have been known to laugh themselves into hysterics.

The sweet señoritas at the bottom of the page are visitors to American audiences from our neighbor republic below the Rio Grande. They are famous in their own country as El Trio Garnica Ascencio. In fact, they attracted so much attention that an American impresario heard of them, made inquiries and engaged them to come to New

York for a series of phonograph records. On their way to the great American metropolis they visited Cuba and sang at the principal theatres throughout the island, winding up their tour with one triumphal engagement at the Encanto theatre in Havana.

Among the many Spanish airs which they have brought to American audiences is "Ojos Triestes" (Sad Eyes), which promises to become a national hit in a very short time. While in New York they have been heard over the National Broadcasting company stations. The Trio Garnica Ascencio do their share to refute such ill mannered imputations that vocal artists do not lean toward excess pulchritude.

That women have a place in the Radio picture and are as versatile as men is apparent when one considers that Ethel can write playlets, home and human interest stories in addition to Radio continuities. She has been active in newspaper work in Cleveland, is a home loving body and a popular Radio entertainer.

The Mexican maids inject the dash and fire of Old Mexico into their singing, and have been such popular Radio artists that a long time engagement is before them in the United States.

Already we are much indebted to our sister republic to the south for many new queens and nobles in the revered circles of our screen royalty. Our great opera companies and our orchestras from the wildest jazz to symphonic bear the names of Mexican artists. Is it not time that we should reasonably expect something extraordinary for Radio audiences?

Welcome to the United States and welcome to the American Radio broadcast studios, señoritas of El Trio Garnica Ascencio. Your voices and your pretty faces are your country's ambassadors (or should we say "ambassadors") of the air to a friendly nation that recognizes no border lines for beauty. We never weary of your La Paloma and other soulful melodies of your country.

**El Trio Garnica
Ascencio, Mexican
senoritas, who are
heard over the NBC
net.**



**Ethel Hawes of the
Ethel and Harry Team
at WHK, Cleveland.**



He Entertains 40,000,000 Fans

Service and Best Programs Available, Are the Ambition of

"Deac" Aylesworth, NBC Chief

By Gene Mulholland

ALIFETIME of concentration on the job at hand has made Merlin Hall Aylesworth president of the National Broadcasting company at the age of 40. This same life philosophy also is held responsible for making that concern the biggest of its kind in the world.

Mr. Aylesworth reversed the Horace Greeley maxim and came out of the west to make good. Rather he was brought out of the west—proof of the theory he has always held, that the man in demand is the man too busy doing his own job to look around for another one.

"I've always been too busy to worry a lot about what was going to happen to me in the future," he has been quoted as saying. This habit of doing the present job first led him from an obscure law office, collecting bad debts for a western county medical society, to the executive desk in the NBC building at 711 Fifth avenue, New York.

Temporary stations along his highway of success have been the chairmanship of the Larimer county, Colo., republican organization; the executive office of the Colorado Public Utility commission; the Utah Power and Light company; the offer, which was declined, of the republican nomination for governor of Colorado, and a New York office as managing director of the National Electric Light association.

His policy of "the public be pleased" has piloted the NBC to the forefront and made of it the biggest business of its kind in the world during the two years he has been at the executive helm. And he still has maintained his reputation as a "regular fellow" among associates and subordinates alike.

WHEN Mr. Aylesworth took over the presidency of the NBC he outlined a policy of pleasing the public, embodying three major points. "First," he said, "we'll find the programs giving the fullest measure of service to the public; next, we'll establish the best facilities for such service, and, lastly, we will make the entire structure self-sustaining. Obviously, if broadcasting is to survive, it must stand on its own legs."

The entire NBC organization has been built on these three fundamentals. Programs for the housekeeper, for the farmer, the churchgoer and the politician are daily features through most of the sixty stations affiliated with the company, together with dozens of broadcasts appealing to the public in general.

That the public has been pleased is evidenced by the estimated potential Radio audience of 40,000,000 persons today. "And the public is going to be pleased with the National Broadcasting company as long as I find it possible to please it. Those three fundamentals are as much effective now as they were the day they were announced," Mr. Aylesworth says.

"We have just about realized our earlier ambition to give Radio listeners in all sections of the country every event of national importance. We will continue to do this and at the same time provide everything that is worthwhile in music and other entertainment," the NBC executive will tell you.

When he took control of the then newly organized Radio broadcasting company, Mr. Aylesworth was variously termed "Czar of Radio," the "Radio Regent," and the "High Commissioner of the Air." Today those terms are practically forgotten, while the nickname "Deac," given him as a youth, still sticks among his friends and associates.

DURING his school and college days the Radio official was known merely as "Deac" to all with whom he came in contact. He liked the name then and he likes it today. He remains the crisp, businesslike, but informal person he was in his school days when he organized debating societies, managed athletic teams and directed glee clubs.

The nickname was bestowed in his early youth when the

son of the Rev. Barton O. Aylesworth played with other youngsters in his home town of Cedar Rapids, Iowa. Early in life the family migrated to Colorado, where the father deserted the pulpit for the school and later became president of the Colorado Agricultural college.

The son received his higher education at the college of his father, The University of Colorado, The University of Wisconsin, Denver University and Columbia University. He not only ranked high as a student, but gained a large following for his work with the campus organizations.

When he was 24 years old he embarked on his business career, his first job was the collection of bad debts for the Fort Collins, Colo., Medical society. Records of the organization for that period show that few delinquents escaped his attention. His court record was impressive and judges and lawyers alike came to know that when "Deac" Aylesworth tried a case that case would be presented fully prepared and with strong legal logic to back up his points.

He jumped from law to politics, becoming chairman of the Larimer County Republican organization. His success there was immediate, and it was there that Mr. Aylesworth developed his desire for contact with people. This desire led him to heed the call of the Colorado Public Utility commission and he accepted the appointment as chairman of that organization in 1915. He was then 28 years old. He remained there three years before resigning to plunge yet deeper into public relations work as assistant to the vice-president of the Utah Light and Power company.

IT WAS with the Public Utility commission, however, that his career as director of business enterprises was really launched, and so intense was his interest in his work that he declined the republican nomination for governor of his state.

The National Electric Light association brought him out of the west from his Utah office and made him managing director. He was told that the job was as big as he cared to make it, and he made it so big that there was no question as to his ability when his name was mentioned for the presidency when the National Broadcasting company was founded.

Considerable persuasion was necessary, however, before Mr. Aylesworth could see that the new place offered greater opportunity for public service—now a part of his very life—than the one he held.

Although his work with the light association—which did not confine itself strictly to lighting problems but extended into practically all branches of the power industry—had been crowned with much success, he did not feel that his job was done. R. H. Ballard, president, had brought him from Utah to reorganize the association. The reorganization had been accomplished in such fashion as to make the N. E. L. A. the leading body of its kind in the world, but its managing director had grown with it and he still felt there was work to do there.

His duties in "bringing up" the lighting group led him to practically every section of the United States and gave him many contacts with the big men of the country. Among these were Owen D. Young, of the General Electric company; Gen. Guy E. Tripp, of the Westinghouse company, and others associated with Radio broadcasting. They "talked him into" taking the proffered place.

ASSOCIATES say Mr. Aylesworth has "licked his job" in making the National Broadcasting company the most important and largest broadcasting system in the world. But he says he is still learning it, and will as long as Radio broadcasting continues to grow. "And don't think that Radio broadcasting won't grow for years and years to come," he declared in a recent interview.

"SCIENCE some day even may find a way to bring food into the kitchen bit by bit via Radio, and there reassemble it for our consumption—that sounds like nonsense, but Radio itself was nonsense not so long ago. To say that we are at the end of development of Radio, or any other art, would be absurd." Thus President Aylesworth, 40, with the vision characteristic of his years, speculates upon the future of Radio, pointing out at the same time that "the men who think the most boldly in the present age are the most apt to be right." If Radio justifies its right to exist, it should be an enriching influence in the lives of the people, and he seeks to bring about this condition.

The executive scouts as "absurd" the idea that Radio broadcasting may some day replace the newspaper or magazine. "Nothing ever takes the place of anything—a new invention only enhances the value of other things," he declared. He also believes that there is always something new, and that the men who think the most boldly in the present age are the most apt to be right.

"For instance, science some day even may find a way to bring food into the kitchen bit by bit via Radio and there reassemble it for our consumption—that sounds like nonsense, but Radio itself was nonsense not so long ago. To say that we are at the end of the development of Radio, or any other art, would be absurd."

In the face of a statement that the modern Radio receiving set is so nearly fool-proof that almost anybody gets good results from it, Mr. Aylesworth once listed the three most common mistakes made in handling Radio receivers and five suggestions for improved reception. The three mistakes listed were: Not learning to tune the set properly in order to shut out "cross talk," forcing the last possible volume of sound from the set and careless handling of the very sensitive and highly technical instrument.

First among the five suggestions for improved Radio reception was to keep the batteries adequately charged. The others were: (1) burn the tube filaments at the specified voltage, (2) keep antenna and leaders tight, (3) keep all connections tight and clean, and (4) last, but not least, leave the set alone and call in a competent repair man whenever anything goes wrong.

AS A MATTER of fact, according to the New York NBC official: "We are just beginning to learn what there is to know about the Radio business. We are able to gauge the size of our audience, to a certain extent, by the number of receivers known to be in use. New York state, with the largest state population, leads in number of sets in operation. The fewer sets are located in states like New Mexico and Nevada, where, according to population, there is probably a larger number of receivers per person than in some of the more densely populated centers.

"So far as has been determined the male and female audience is about the same. Naturally, on special events like baseball games or big fights the male listeners are in the majority, but perhaps only slightly at that. The woman of today is beginning to learn via Radio broadcasting what is the attraction that keeps the wage earner downtown to see the fight card.

"On the other hand, many programs broadcast during the day are directed solely toward the feminine ear. But the average program is a family affair, and we strive for entertainment that will appeal directly to the entire circle as they are grouped about the home fireside," Mr. Aylesworth declared.

It is the hope of Mr. Aylesworth that Radio broadcasting will make the people of the United States feel like "they've been somewhere," give them wider experience and make their lives richer. It is his aim to produce programs that will make the Texas farmer or Kentucky mountaineer feel in touch with the wisest, the most talented and the highest-thinking folks of the world. And at the same time keep them informed of the everyday events of their time and posted on all world affairs.

THE NBC chief believes that there will always be something new to do, especially where Radio broadcasting is concerned and he works as hard today as he did three years ago when he took the reins of the great company at a time when he was "barely able to tune in a station." It is his desire to keep not only abreast of the times, but a thought ahead of them whenever possible. To this end much of his time is spent in study and in contact with various persons connected with the technical departments of his organization.

His tremendous energy, product of almost perfect health, enables him to keep going at top speed long after persons with lesser initiative and persistence have sought rest from any particular task. "Good physical condition is the foundation for a good job, for without good health the brain will not function," he said in an interview shortly after he was named president of the company.

Mr. Aylesworth not only preaches good physical condition, he practices it. Only recently has he deserted tennis for golf. At the net game he was considered very good. At golf "he's not quite so good yet, but watch him a year from now," a friend once remarked after a tour of the links.

One of the reasons advanced by Mr. Owen D. Young for engaging Mr. Aylesworth was the latter's ability to make and hold friends. Bruce Barton once said: "The power to form friendships, which is nothing more nor less than the habit of showing one's self friendly, is one of the great powers that lift men up. 'Deac' Aylesworth has it."

AN ASSET brought from his early days as a preacher's son—one that he considers all-important—is faith. Mr. Aylesworth spends little time worrying about the crumbling and decay of business. To him the possibilities of tomorrow are thrilling rather than otherwise—when he thinks about tomorrow at all.

And the president of the National Broadcasting company attempts to fill his organization with men having that same faith. The young man who comes to his desk looking for a job must have poise and balance, and be able to give a common sense reason for his desire for that particular job. They must be honest, and there is little chance for them if they display evidence of "flipness" and contempt for the ordinary things of life.

"While I have nothing against intellectuality and am one of the most devout worshippers at the shrine of intelligence, I realize that about 99 per cent of all successful persons I know, both

men and women, would be classed as Babbits by the super-cynics, who lead the super-egoists of intelligentsia," he declared recently.

He thinks the young man who exhibits symptoms of contempt for the so-called Babbit type and his methods is starting in business with a handicap and will be difficult to teach. His opinion is that, although modern business is crying for good executives, there is little room at the top for the youngster who feels himself to be the mental superior of his elders or above ordinary modes of living and conservative lines of thought.

"A man of twenty should realize that he has had much less than half the experience he will have at forty. The full experience comes in doing the small and apparently unimportant

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Merlin H. Aylesworth, President of National Broadcasting Company.

Fan Mail Startles Coe Glade

*COVER BEAUTY Surprised by Shower
of Postal Applause at Radio Debut*

OH YES, indeed, the gloriously beautiful dark-eyed maiden on the Radio Digest cover this issue is a real girl! And do not imagine for a moment that Mr. Roy F. Best, the artist, exaggerated her beauty one iota. And just to verify that statement behold the photo of Miss Glade on this page!

When it was decided to have a singer from the Chicago Civic opera on the Radio Digest cover the artist and a representative of the magazine conferred with the National Broadcasting company and the Chicago Civic Opera company representatives as to the most logical candidate.

The artist was dubious.

"These opera singers," he said, "are apt to be stout; that is to say, almost fat. Do you really think we could find a singer suitable for a cover?"

"I'll show you one who is not fat and never will be fat," replied the opera representative. "And more than that, she is young, a brilliant star with a wonderful future, and if you do not admit she is good looking, then I have my doubts of your good judgment as an artist."

And with that remark the gentleman of the opera produced a folder of photographs of which the view on this page was one.

"That's Carmen—Coe Glade as Carmen!"

"A peach!" exclaimed the magazine representative.

"Perfect!" ejaculated Mr. Best. "When can I see her?"

"Can I go, too?" asked the magazine man.

An appointment was made and a week later the two callers waited timidly at Miss Coe's door in the Congress hotel. It was a dim corridor and there was a misty twilight in the room as a slim, big-eyed young woman opened the door.

But the eyes were smiling and there was a softly warm smile on the lips as Miss Coe graciously extended her hand and admitted the two rather awed adventurers into the sacred precincts of her private room.

For a moment it seemed just a little hard to approach the object of the call.

"Of course," she said, "I was expecting you. Mr. Clayton told me you would be here. Perhaps you would like to see some of my photographs. I have some very nice ones taken by a photographer in Florida who seems to understand how to make pictures that please me. But that may be because I am so happy when I am in Florida. I think it is wonderful there. And you would love it, too, Mr. Best. Oh, yes, you

would, I know. There is such a wealth of color. You know what Innes did. And the water, the trees, the clouds, the beaches—sometimes you seem to float in an atmosphere of pure aqua-marine. Dear me, the telephone—please excuse."

She flew to the telephone. In a moment she was back again. She brought an armful of photos. Mr. Best selected half a dozen from which he proposed to compose his preliminary sketches. And then came the adieus. Afterward he went back to the dimly lighted room when there was the flick of a waning sun that seemed to seep its way in, touching with radiant fingers her cheek and pressing back purple shadows that revealed in her raven hair.

Letters from the Radio listeners have told of Coe Glade's success. Her Radio debut was in the opera Carmen on the opening night of the Civic opera. She sang the loveliest arias from the stirring work of Bizet. And the postal applause that followed from the millions who had heard over the great network of the National Broadcasting company almost frightened her. She had not had such an experience before. And as she appeared in subsequent broadcasts there came even a greater deluge of congratulatory messages from an appreciative Radio audience.

On December 23, as the result of the mail plea, Miss Glade was given the Carmen role and handled it in such a manner that she won unanimous praise from the critics who attended the performance.

"She is the kind of a Carmen that makes the lights seem to be turned up a bit when she comes on the stage and the music to sound a little more golden," wrote one critic of her performance. "She likewise has exactly the kind of voice that Bizet must have had in mind when he wrote the score, a dusky mezzo-soprano that can glow warmly or snarl chillingly, and do either with equal surety and intensity."

"In fact, when you try to itemize her qualifications for the part, you find that she has probably more than anyone since the time that Maria Gay was a debutante. Her interpretation is a youthful Carmen, but she would seem to have been born with a comprehensive sense of the stage; a naive Carmen at times but she has the faculty of doing everything certainly and yet with an appearance of deft and carefree ease. She is good to look upon and sang the part angelically, and she created an illusion."

Others commented both upon her voice and the fire Miss

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You can almost reach out and touch Coe Glade in this photograph to make sure that she is a real girl and not an artist's fancy.

THE "Girl Ideal" Wins Dickason

GLOBE Trotter and Author Carries Diamond Purchased in Burma Five Years Before Meeting Sarah Rorer While Working on Manuscript of His Latest Book

DETERMINED to remain emphatically single, a vow which he kept during six cruises around the world, Deane H. Dickason returned to his native land a short time ago, met the girl of his heart, Miss Sarah Crawford Rorer, and was married December 27.

Five years ago, while in Burma, Dickason bought a diamond for what he termed, "the girl ideal," and after going to Colorado to write a book, he suddenly and unexpectedly came upon the girl. Early in the year the young married couple sailed from New York aboard the Resolute, to be gone five months.

Dickason's most recent book, *Ports o' Call*, was completed a few months ago, and it will be published in the spring. Within its pages he has set forth his experiences while cruising about the world.

Miss Rorer, a senior at the University of Oregon, spent the summer in Colorado, returning later to her home in Eugene, Ore. She is the daughter of Mr. and Mrs. C. D. Rorer, her father being president of a bank in Eugene. Dickason is the son of Mr. and Mrs. D. H. Dickason, formerly of Denver, and his father is special agent in charge of the United States Department of Justice now stationed at Butte, Mont.

Before leaving this country with his bride, Dickason purchased a home site above Oakland and Berkeley, overlooking the Golden Gate, where he and his wife will live upon their return to this country.

Dickason is a Radio favorite, lecturer and globe trotter.



Young couple set off on long marital cruise to many interesting points along journey of life. Few lecturers are known to Radio audiences around the world as is Mr. Dickason.

LAURENTIAN HARMONY KINGS, JAZZ ACES, CFLC



WHEN the idea was conceived that Prescott should have a broadcasting station, it was looked upon as having a champagne taste with a beer pocketbook. Nevertheless the idea burnt constantly in the minds of the optimists. They collected data; they talked and received discouraging setbacks, but they persevered until their dreams came true, and prominent among this go-getting little group was Lorne Knight who worked untiringly by applying gratis his electrical expe-

rience. The fascination of broadcasting held this little group like a magnetic force because it opened up new channels for the inquisitive mind, and finally the birth of the idea took place in February, 1925, and it was christened CFLC (interpreted locally as "Canada's Foremost Little Community").

Like most youngsters, CFLC was mischievous and annoying, but gradually it began to know better. People like CFLC because it is original, and serves the public.

Unique Features Over WTMJ

AN ANNOUNCER from College Footlights, a German Zither Player and a Girl Organist Add to These Programs

A RADIO history which extends over seven years, and which started with occasional programs broadcast over the old WAAK station, at that time the only broadcasting station in Milwaukee, down to the present when they have their own station and an array of talent which would do credit to any Radio studio, is the development of the Milwaukee Journal's Radio activities in the broadcasting field.

Radio audiences everywhere know and appreciate the wide variety of entertainment and instruction they have available through this station, WTMJ. The Journal has been particularly successful in its efforts at getting together a group of artists whose personality projects itself well over the microphone.

In selecting "Russ" Winnie as announcer for WTMJ, a new departure was made in choosing a young man who had starred in amateur college dramatic productions and thus has the well trained voice and finish of a

Did you one night recently hear an announcement of strange articulation come over WTMJ that perhaps you did understand, and perhaps you didn't? If you did understand you know what it was all about. If you didn't understand what was said you certainly had no difficulty in understanding the unique zither music which followed the announcement made in German by Herr Chris Deutsch—the only artist who announces in German.

Herr Deutsch plays old German folk songs



ABOVE is Russ Winnie, who brought his college diploma and experience in amateur theatricals with him when he came to WTMJ as announcer. At the left is Margaret Starr. Although she seems but a slip of a girl, Miss Starr does great things on WTMJ's huge pipe organ, both as soloist, in which role she is heard three times daily, and as accompanist.

good speaker, but, at the same time, having been graduated from the University of Wisconsin only a little over a year ago, retains the zest and pep which a youthful viewpoint gives to news.

From the Southwest, a land famous for peaches, Margaret Starr, the studio's official organist and accompanist, came to WTMJ, and those who know her personally as well as those who feel acquainted with her from hearing her lovely music, feel that, in Margaret Starr, the Southwest lived up to its reputation.

Miss Starr is a person of sunshine and rain. In other words, she is exceptionally versatile. At one moment she is feeling frightfully soulful when she accompanies some singer through the strains of a sad, sad song. The next moment she's all smiles and gaiety as she plays the latest rollicking musical hits. Nor is Miss Starr accompanist only. She is heard in recital a mere three times daily from WTMJ, so numerous have been the requests for the delightful way she makes her golden-voiced organ "talk" to her audiences.

and melodies on his zither in a way that has endeared him to the hearts of his American listeners as well as those who hail from the Fatherland.

Myrtle Spangenberg reserves her hour every afternoon except Sunday for "Buddies' Hour," when she sings songs requested by the World War veterans at Soldiers' Home, near Milwaukee, and at Resthaven, another hospital for veterans at Waukesha, Wisconsin.

As you know, there's a power behind every throne. At WTMJ there are two powers—William Benning, the studio musical director, and "BCL," the radio editor of the Milwaukee Journal, who is also director of the broadcasting station.

"Bill," as his radio audience and Milwaukee friends call Mr. Benning, broadcasts piano recitals and directs the augmented WTMJ orchestra, as well as arranges for all musical numbers sent over the air from this station.

"BCL," or Mr. Hertel, used to give cleverly entertaining pianologues. Now that the press of other duties leaves him no time for appearing before the microphone, BCL manages the station. Occasionally he gets an hour or two to sleep.

What Innovations Portend

Experts Predict Perfect Television Sets Soon

By Maurice Wetzel

IS RADIO broadcasting soon to scrape an acquaintance with Old Man Efficiency and Old Man Economy? If so, does that mean we are to have any radical changes in the manner of presenting programs?

Having made a study of this problem for some years, the Radio Digest has asked me to forecast this phase of the Radio of Tomorrow as I see it. Those indefatigable twins, Efficiency and Economy, have been stalking the present profligate order of things and I believe we are on the eve of great improvements. I believe great feature Radio programs are to be produced in much the same manner as great feature photoplay films—perhaps even far more costly in the original production than present day programs but available to every broadcaster in the land and, incidentally, available to every listener in the land.

By eliminating the prodigious telephone tolls that pay for a nightly transcontinental criss-cross of wire service the great producing organizations will be able to employ the best of operatic and theatrical talent in making wax or film electrical transcripts. There will be no monopoly of service. Those who now are producing the finest programs will doubtless continue producing the finest programs under the new system, but there will be an open market with competition that will force all production of programs to a high standard.

When Orlando R. Marsh originated the system of using a microphone as a stylus to cut a transcript he made a long stride toward the refinement of the Radio program as I see it for tomorrow. Other very recent refinements have made it possible to utilize these ultra perfected media for electrical reproduction with an excellence that is practically flawless. The talking pictures have helped in this way. One of the very best of these reproducing machines designed primarily for the picture theater has been modified with still further refinements for broadcasting. It is a recent invention and perhaps owes its primary success to the application of new ideas in recording processes and thus eliminating the magnification of friction sounds. Experts even have failed to detect the electrical reproduction of this device from direct broadcasting. In fact I assume to say that a **thorough and fair** test with the best of wire transmission compared to electrical transcription you will find the latter method with today's latest facilities far more satisfactory.

There is, to my notion, a close analogy between Radio broadcasting and the motion picture industry. Of course in Radio, sound is the only vehicle, and even when Radio-vision is perfected the audible part will still predominate, because ultimately, Radio-vision will be the out-growth of broadcasting as we know it today.

RADIO station directors are now facing the problems that confronted the motion picture producers during the beginning of that profession. The limitations of Radio must be recognized as were the physical restrictions of the movie. Whatever effects the Radio impresario may develop, whatever ideas he may wish to convey, whatever "stage setting" he may construct in the studio, in the loud speaker, or in the listener's mind, his thoughts must necessarily find their means of communication in sound, and sound alone, until such time as Radio-vision is a reality for the masses.

All this is patent, but I mention it to call attention to the fact, that just as there are tricks in the manufacture of movie films, so will there be subterfuge in the weavings of the Radio loom. If Through Venice in a Gondola is the presentation to be broadcast, the unseen audience will hear the dull thuds of the pole against the side of the craft, while the gondolier, singing in native tongue, pilots his passengers through the canals. Other boats pass with a gentle swish of the water, a guitar is heard in the distance—it is a young swain serenading under a balcony up ahead; the gondola ripples toward him, the music is louder, he is playing "Funiculi Funicula," while the tourists stop to listen. Then perhaps they pass a restaurant where Tony is singing, or perchance the old white-haired 'cellist is giving a lesson in his studio 'neath the shadow of the Bridge of Sighs.

True, all this could be done with the proper acoustic effects, in the studio—it all has been broadcast very successfully. True, also could the Photophone and the Movietone send its recording equipment over to Venice, and with proper directors and producers "take-down" the whole succession of scenes. True, once recorded on the side of the film or on a Vitaphone record, the sounds alone could be broadcast by any trans-

THINK of your Radio entertainment of last year, the year before—and the year before that. What changes you have seen! Changes are taking place right now. What will our Radio be next year, or Tomorrow?

Radio Digest has put this question to a number of persons who seem to have been working along the forward line of progress. In this issue you will find two of the salients of the front line—one, the form of Radio from the standpoint of program production, which practically everyone concedes to be operating under a tremendous burden of expense inordinate to the results achieved. Is there not a more economical means to the same end? Can we profit from what has been accomplished along other lines? These questions and similar ones were put to Maurice Wetzel who saw the problem shortly after broadcasting began and has been working thoughtfully toward a solution.

mitter, with all the songs and music, announcements, et cetera, either on the film or record, or in the form of a typewritten continuity that the announcers and speaking cast would read into a microphone.

ALL TRUE, and that is my point. Why not record it, and then send the "program" on its way to station after station, to entertain thousands upon thousands—even put it on a network, if need be? But why produce things in studios, entailing great expense, countless rehearsals, *only to broadcast them once?* Any really worth while program, costing much thought, money and preparation, could be repeated at some future date, and it seems a shame not to record it, thus saving needless duplication of work—and so I say, "Syndicate!"

Network broadcasting, such as that of the National Broadcasting company, Columbia and other chain hook-ups, at least, has enabled a single good program to be broadcast from various transmitters although many stations that have wanted the chain programs have been unable to get them. Of the six-hundred-odd stations in the United States, there are only about 100 on the various networks. And this means approximately 500 stations find no syndicated releases available.

In 1925, when I was with the Furniture Manufacturer's station, WOOD, in Grand Rapids, Michigan, I recorded, on wax, several Radio programs that could well be syndicated to a number of stations. The mechanical deficiencies to that end were: First, lack of proper recording facilities; and second, lack of electrical "pick-up" equipment. I did, however, succeed in making several hundred records of out-door and other effects, that would have been very difficult to achieve in the studio. For example, we recorded a complete rodeo that the Grand Rapids Furniture manufacturers sponsored in the Michigan State Fair Grounds, later using it as the basis of a separate broadcast, to remind the listeners of what we had done previously. I got quite a "kick" out of hearing myself announce the next feature of the "round-up."

I BELIEVE that the Radio broadcasting of the future will have, as its major function, the transcription of programs that are largely made up of special recordings. There are many reasons why such an eventuality should be considered logical. The transcription idea permits the adaptation of all conditions to complete the finished product. On the other hand, as conditions now exist, suppose we are planning a special gala program with advance publicity. Everything is set for a work of art—a splendid announcer, the best of instrumental talent, the most artistic of singers, perfect studio conditions acoustically and mechanically—and then this happens; the announcer inadvertently mispronounces a word or announces the wrong number, the violin soloist gets nervous and slips on one important note, somebody bangs the studio door, the soprano picks up the wrong music, a member of the male quartet stumbles over a chair in approaching the mike; or perhaps the advertising account calls for Paul Whiteman and his orchestra and the flu has knocked out eight members of the orchestra temporarily, Al Jolson, booked for

in Our Radio of Tomorrow?

Feature Programs for All Available for "Lookers"

Probably no invention has been anticipated with such zest by so many people as practical television, as it has been called. Many great minds have been delving into the problem and television in its first crude form is now a fact. While others have been talking and whispering, J. Francis Jenkins, father of the moving picture projection machine, has for some time been broadcasting scenes and action that are actually being tuned in and seen on receivers by television fans. He and his organization have gone so far as to begin mass production in a nine-story factory in New Jersey. So Television is HERE. And we asked Mr. Jenkins to write us about that absorbing topic as one sub-division of our Radio of Tomorrow. And in our next issue of Radio Digest you may hear of still other phases.

—EDITOR.

an exclusive program has had to go to bed with laryngitis—you see what may happen, any one or more of these incidents that may mar or utterly ruin the perfect program. But the time is set—there is no escape and the thing goes "as is." It can't be undone or done over. It's just too bad.

THERE is a solution to all this—a panacea for most of the troubles of broadcasting, and that is to follow the precedent already set by the motion pictures, phonograph records, magazines and newspapers. In all these businesses the finished product does not reach the consumer until dozens of engineers, producers, directors, editors, and assorted experts, have passed upon its perfection. Yet in today's broadcasting, we have allowed hour after hour of schedule to leave the transmitter fairly saturated with error, due to the human element in the program and technical personnel.

Everyone knows that if a motion picture story calls for numerous scenes on board ship, throughout the scenario, all the ship "shots" are taken at one time, and later pieced into the complete film where they fit. The same could be done with a Radio program. Everyone knows that if a certain scene in a movie drags, the director has it taken again, and again, if necessary—all to get a final perfect result.

The same should be true in a Radio program, and a recording process to that end, is in the writer's opinion most feasible and necessary. To record a program under perfect conditions, subject to stopping it at will, even going over a "scene," if need be, would make for perfection in the program of tomorrow.

In 1913, I made one of the first recording mechanisms for hand-played piano rolls. During 1914, I performed considerable experiments in recording, on wax, the work of such an artist as Max Kortlander, now, and for some time, recording manager of the Q. R. S. company. I recorded for that company in 1915, and except for the time spent in the air service during the war, was intimately associated with the mechanical reproduction of music until 1921, when Westinghouse KYW came on the air in Chicago, and when I first became interested in the actual business or technique of broadcasting.

THERE is, possibly, no connection between "Radio Broadcasting of Tomorrow" and my earlier activities with the broadcasting business, which by the way, started with sponsoring the first commercial program in the City of Chicago, in 1922. However, prior to that time, I had seen the possibilities of applying to the "wireless" business, the same principles that had obtained in other mass communication enterprises.

Throughout 1923 and '24, while associated with KYW, it had been constantly going through my mind that there was a considerable duplication of effort in the broadcasting picture and when in 1925, I elected to join my school-boy acquaintances in Grand Rapids, Michigan, with whom I jointly operated station WOOD, subsidized by the furniture manufacturers' association, I made definite experiments in view of recording Radio programs and sending them on to be re-broadcast

elsewhere from stations with available equipment.

It was during this period that we discovered the possibilities of registering permanently outdoor and other sounds of various sorts, incorporating them into subsequent Radio programs, and after shooting several successful programs exploiting this idea, it occurred to me that we might inscribe on a phonograph record, a complete Radio program, announcements, music and all, that could be broadcast at a later date, by ourselves, or any other Radio station.

During the year 1927, while I worked at the Brunswick Recording studios in Chicago, I explained my idea to Ralph Townsend, recording engineer of the Brunswick-Balke-Clender Company, and I recorded a complete thirty minute continuity announcement program, which was electrically, mechanically and artistically the realization of my earlier plans.

THIS experiment gave me the courage of my earlier convictions, and proved to me that, not only was it possible to record an entire Radio program with perfection, but that it opened a field of "spot" broadcasting, hitherto impossible, and therefore untouched. Smaller stations all over the world were crying for just this sort of an opportunity.

I still had my recording apparatus intact when the famous Dodge hour, featuring Will Rogers, was broadcast. I took down the whole proceedings, as Radio Digest readers will remember. It is rumored that it cost Dodge Brothers \$75,000 to put on that program. I could have put on the same program at any station for practically nothing, making use of the recordings I made.

Along this line, one of the largest automobile manufacturers asked me the other day, how much it would cost to put his program on three hundred Radio stations simultaneously. He knew that all the networks could not give him such a coverage. He wanted to use specially made phonograph records, and, knowing that he could not please all kinds of listeners with any one program, his intention was to use a dozen different musical programs, all of which, of course, would carry substantially the same publicity announcements for his motor car.

NOW I come to my prophecy of Radio broadcasting. I am firmly convinced that the future of Radio lies in the broadcasting of highly organized programs recorded on some medium of reproduction. It doesn't matter whether it be wax, celluloid or metal. I am fully cognizant of that which has been done on records, film and steel tape. The medium is irrelevant; I am speaking strictly of the underlying idea. It all comes back to the syndication of effort, and to that end. I see a future for the organization that has at its fingertips a perfect program unit, combined with merchandising facilities. I am not mindful of so-called Radio Television. Dr. Conrad, of the Westinghouse Electric and Manufacturing Company, successfully transmitted motion pictures in the summer of 1928. Simultaneously, this same company was broadcasting talk and music on a celluloid film, while at the same time, the transmission of picture signals was admitted to be more than a laboratory experiment.

Then there are the experiments of C. Francis Jenkins, of which, the editor tells me, you may read in this issue of Radio Digest, so let the engineers and the scientists give us pictures with our Radio, as soon as they can. After all, a motion picture is in reality a quick succession of still pictures—an optical illusion; therefore, the transmission of a succession of still pictures is as feasible as the transmission of a single picture. The time will come when the bright orange glow of the Neon tube will be replaced by a black and white image, and then will come electrical means to natural color.

Who knows, but what the present trend toward stereoscopic movies may soon be transferred to Radio-vision and what with color, depth, talk, music, who can predict the future of Radio broadcasting. Let the scientists tell us the details. All I claim is that there will be syndication of effort.

THE Radio program of the future will be sent by parcel post, or express in a package, just as movies, phonograph records, player rolls, newspapers and magazines are shipped to the consumer today. There is no more reason to send Radio-vision programs over long, expensive land wires than there is to send the "blind" programs of today over costly telephone circuits. There is enough duplication of effort and duplication of programs up and down the dial.

It is my contention that when Radio television becomes an

every day matter, it will not be by means of land wire from a single central studio, except, of course, when instantaneous nation-wide events take place. It is much more economical to record a program on some medium of reproduction, being sure that the program is perfect before releasing it, and then sending copies to various broadcasting centers throughout the country.

It was my privilege recently, to be present at an audition of one of the recorded programs that are now being syndicated throughout fifty-odd stations in the United States and Canada. I was deeply gratified to see my earlier idea carried out and it is without hesitancy that I say that the future of Radio broadcasting lies in the distribution of good Radio programs, recorded in metropolitan centers, and circulated throughout the smaller areas, so that independent broadcasting stations throughout the country may avail themselves of high grade continuity programs, and at a very small fraction of the original cost, due to pro-rata merchandising principles.

No doubt there will be various "fly-by-night" promoters exploiting this phase of Radio broadcasting. It is to be expected. But the field is limited to the few recording centers, because such an endeavor not only needs Radio technique but expert recording facilities as well, of which there are but few.

WE, here at KY-W, have been investigating this situation very thoroughly. We have heard of several stations who have been propositioned to "tie-up" on three year contracts with various organizations who promise to supply a complete program service. It goes without saying that most stations will consider very cautiously before contracting with a new connection for any long period.

Another prediction I would like to make is that the big newspaper chains will have more and more to do with broadcasting. A metropolitan daily has such a wealth of material with which to build programs, that it is very logical to expect to see the broadcasting of tomorrow in the hands of the newspapers, or the newsgathering and disseminating agencies who are already prime examples of syndicate operation.

The philosophy of the printing press is applicable to the art of broadcasting and although a newspaper furnishes something new each day, still remember its reference room, or "morgue"—how invaluable it is to go back into the files and dig up some picture or article when it is badly needed again as a repeat story, with or without additions. Radio studios of the future will have their reference rooms—"morgues," if you please—where, carefully protected from dust, will be various programs filed by subject matter, indexed and cross-indexed.

And, these program files will not be libraries, they will be bins of records or films. When an orchestra plays "Kamennoi-Ostrow," of Rubenstein, and has once played it perfectly for Radio, it stays played, and becomes item No. so-and-so in the program files. And so will be the case with complete programs. A half hour of concert music, properly built and announced, is just as good a year from tonight as it is tonight. The same applies to any program, except, of course, one composed of current popular tunes.

A WELL-AUTHENTICATED rumor states that numerous of the best equipped broadcasting studios in America today are soon to be supplied with special recording facilities, to be used in conjunction with national broadcasting. And I can see in my mind's eye companies producing programs for Radio distribution, nation-wide distributing organizations, that will syndicate programs on records or films to the Radio "theater," which, of course, is the independent station.

Of course, moving picture film is wide enough to have several bands or channels of musical program, side by side, if no pictures were needed, and for this reason, the film may in the final analysis, be the logical means for program distribution, because the program would run as long as the film traveled before the photo-electric cell. Mechanical means of shifting the film sideways could either select another composition, or the film could be reversed to continue the original number; thus, a thousand feet of film might represent an hour or more of program. Think of being able to fade out a song by slowly

dimming the light, or by spraying black ink on the music lines with an air brush.

However, the lowly phonograph record even in the twelve-inch variety, that has a playing time of four and a half minutes per side, has already been used successfully to syndicate programs merely making use of a double turn table device provided with a simple automatic relay pick-up dropping device which permits record after record being used with no perceptible break.

AND, along the record line, various companies are making circular disc records that play a half hour and an hour, so you see the mechanical inhibitions are negligible. The Vitaphone records that you hear in your movie theater are sometimes sixteen inches in diameter.

Possibly in this discussion of the Radio of Tomorrow, should be mentioned the old "wired - wireless" that the utility companies could so easily make use of over their already established facilities

that reach into practically every home. How simple it would be to sit down to your Radio set that receives its current from your light

socket, and to know that over the same wire are coming a dozen different programs. Your "receiver" may have no aerial nor ground, no static, no interference, no heterodyning, no fading, no "blooming," no trouble at all—and still you can switch on at will a dance band, a symphony orchestra, opera, educational talks, comedy, drama, religion or whatever else you want—merely by setting the indicator to your choice.

Achievement and growth demand higher and ever higher efficiency. Efficiency demands economy by the elimination of waste and the maximum of service for every unit of energy expended. Today there is an appalling waste all along the line of Radio broadcasting. I have tried to point out one way that this waste may be materially slashed in the Radio of Tomorrow. With records especially cut for broadcast reproduction, perfect recording and unlimited distribution we have every reason to expect that the Radio of Tomorrow will see the best of programs on every station and the best that the are affords available for all, whether the listener lives in the dense metropolitan area or in the remote wilderness.



Maurice Wetzel (left) is shown with a strip of Musicolor film with sound record of Kreisler's Liebesfreud. Orlando R. Marsh, inventor of electrical recording, testing broadcasting master record.

Boy's Dream Realized at KJR

YOUTH'S Air Castle Founded in Italy Becomes

Fact when Longo Wields Seattle Baton

FRANCESCO LONGO, the eminent conductor of the All-Artists Symphony orchestra, which broadcasts over the Seattle station KJR, has a background in the music world extending over twenty-five years, every year of which has been marked by new artistic development and newly conquered fields.

He first opened his eyes to the light of day in a tiny village near Naples, Italy. Perhaps the blue waters of the Mediterranean stretching out beyond the dusty white roads of his village gave him his musical inspiration. At any rate, in that land which has supplied the world with such a wealth of musical genius, it became evident while Francesco Longo was still only a little boy that he would be musically inclined.

At the age of seven he, like the celebrated renaissance figure, Benvenuto Cellini, was "much given to playing the flute." Martucci, director of the Royal Academy of Music at Naples, heard the child play one day and instantly recognized his unusual talent. Martucci insisted on taking the boy back to Naples with him and keeping him there as a member of his household, so that the lad could receive the best of instruction in music. The result of this action was that the youngster, after two years under the exacting master, won the coveted eight-year scholarship to the Royal Conservatory—the high prize given out annually by the Italian government to one who showed extraordinary genius in music.

Nor did the government choose the wrong aspirant, for at the age of seventeen young Longo was graduated from this famous old conservatory with the highest honors.

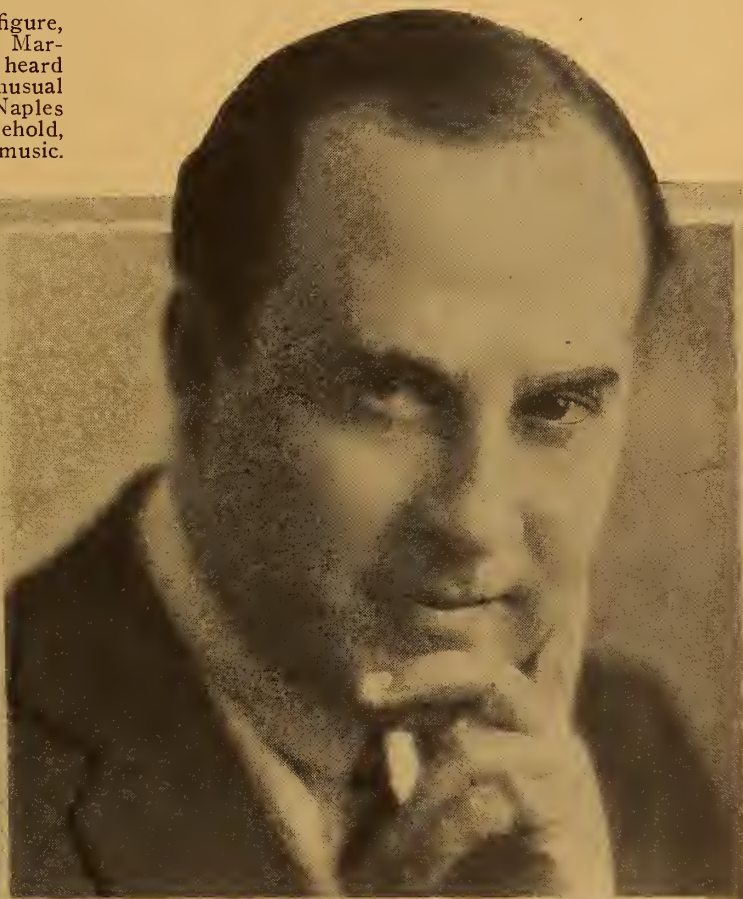
Graduation was followed by two years as the youthful assistant director of the San Carlos theatre. And these two years were marked by a great event in the life of Francesco Longo—his meeting with Oscar Hammerstein, who brought Longo to America and secured him the post of assistant conductor and coach at the Manhattan theatre, in New York. Campanini was the conductor, and in Longo's three years' association with that famous musician, the former acquired much valuable experience. During those three years he worked with such famous artists as Mary Garden and Lucia Tetrazzini.

The next fifteen years Longo was in New York much of his time. In fact, he was for eight years assistant conductor of the

orchestra at the Waldorf-Astoria. He also accompanied various famous artists on their concert tours—Anna Case, Titta Ruffo, Toscha Seidel and Lucia Tetrazzini, whom he knew from the old days at the Manhattan.

Finally Longo has reached the goal which he had in mind all these twenty-five years, ever since he was the child of seven playing his flute for Martucci. He now conducts his own orchestra.

Judging from the letters which pour into that studio expressing appreciation of the work of Longo and his orchestra, this man has pursued the goal, for which nature most certainly destined him.



At right, Francesco Longo, who has been associated with musical celebrities since childhood. Below Mr. Longo and his orchestra in the KJR studio.



Wanderlusters Find Romance

*THEY STROLL from WBAL by Ether Lanes to
Seek Adventure in far Distant Lands*

THE idea of adventuring is always sufficient to stir the blood, to make one's pulse leap, to add a sparkle to the eye. Adventure and Romance! The two are inseparable companions, but regardless as to how one may love the twain and yearn for their companionship, it is nevertheless a cold, cold fact that, prior to the advent of Radio into the homes of the nation, comparatively few persons (considering the millions of souls who inhabit this world of ours) have been able to grasp the hands of these two venturesome spirits and with them a-wandering go.



Henriette Kern
Soprano

Nowadays, however, the "call of the road" can be hearkened to by the laborer, the housewife, the T.B.M. and the T.B.W., the shut-in, the man or woman-with-responsibilities—all, in fact, who "would a vagabond be." No need any more for anyone to be minus romance and adventure, at least, not so long as WBAL draws a broadcasting breath of 5 K.W. power, for at the big Baltimore station now there is a group of Radio wanderlusters who once a week stroll through the ether lanes, where they find all sorts of musical adventures and thrills.

Sometimes these "Musical Memories," as this feature is called, are exchanged over a couple

of steins in a Vienna cafe, or, they may, take place over a glass of vodka drunk along the Russian frontier; or, again, if you will, the mellow confidences of past adventures which are relived during this unique broadcast, may be recorded over the wine glasses in a smart boulevard cafe in Paris. Musical day dreams! What a spell they weave as the Radio wanderlusters stroll through the air and up and down the ether-eal vales of Romance, with a capital "R," please.

FRIDAY night is the night when the listeners-in to WBAL don their seven leagued boots and pouf! a turn of the dial to WBAL's wave length and they're off! And no sooner have they joined the Radio wanderlusters who set forth weekly from the WBAL studios, than one finds himself in strange and alluring places with just as strange and alluring experiences in the offing.

But come, let us join this gay, happy, care-free group for one evening and see for ourselves what a jolly, jolly time can be had by those who stroll through WBAL's ether lanes during one of these broadcasts. For instance, look—here we are beside the sparkling waters of the Mediterranean Sea and such blue, blue water cut into millions of blue diamonds by shafts of sunlight. What a beautiful sight! Surely nothing could be more lovely than the view across that azure expanse of living sea drenched in sunlight and dotted here and there with the white sails of fishing vessels while the smoke of a passing steamer points a smudgy finger at the distant horizon. We had never expected to see the Mediterranean. That was one place that seemed forever beyond our pocketbook and completely outside the force of circumstance that seemingly kept us chained. But thanks to this Radio stroll conducted and piloted by the descriptive powers of S. Broughton Tall, head of WBAL's Literary and musical Research Bureau, who prepares the continuity for these programs, and to Gustav Klemm, program supervisor, who acts as official guide during these fantastic tours, we have stood on the shores of this historic sea and limned on our consciousness the exquisite beauty and exotic loveliness of that spot.

We cannot tarry too long on this enchanted shore, however, as we must be in Nice in time for the premiere performance of "Pom Pom," in which we expect to hear the piquant Mitzi

and Paulette, France's popular prima donna. As to be expected, the place, of course, is crowded, but we should worry! We have already reserved our seats, via the air, and consequently we shall not miss any of the warm thrill that comes with all premieres, regardless of ultimate results. With what delight and joy indeed, do we hear our beloved Mitzi in the "silken tatters of a street gamin," sing, with the aid of a chorus, the melody "Evelyn." Surely no one could ever sing that song just like Mitzi and was there, do you suppose, ever a more infectious smile than this clever little star possesses?

THE house "comes down" with applause after she concludes her song but, though we would like very much to stay and hear some of the other tuneful numbers which our "Musical Memories" recall, we find we must travel along and this time we pass the poppy fields of France and come to a pleasant little Belgian village. Here, of all places, we stop at a glass factory, visiting it as the guests of Octave Flaubert, a gay young Parisian who has just inherited it. All sorts of happy surprises await us here, for we find Romance, again with a capital "R," as the gay and irrepressible Octave completely loses his heart and hand to Eva, a charming and comely apprentice at the factory. We sigh happily as we witness the young lovers who sing several songs from the once popular operetta "Eva" and then we leave them for dear old Manhattan.

Across the pond once more we arrive just in time to join a party going down to Dulcy's, where Gertie of Garter fame brazenly smokes and everyone dances till "Three o'Clock in the Morning." We find ourselves dancing to this infectious waltz, too, and goodness knows how long we would continue waltzing around amid the smoke and laughter and jollity had not our guides again gathered us all together and wafted us once more across the old Atlantic. This time we find ourselves in Paris, and the first thing we do after reaching there is to look for a famous perfume which a Dr. Thorne, nerve specialist, has just discovered and one sniff of which makes you just tingle-tingle all over. Finally, we come to the Doctor's flower garden—such a lovely place—my! just smell the delightful blooms! We find the Doctor at home and he tells us he has named his famous perfume "High Jinks"; and of course we get some of it and still tingle-tingling we finally turn our direction homeward and as the clock strikes the magical hour of 10 o'clock, we find ourselves back in our own living rooms and the loud speaker throws off its cloak of magic to become once more a plain wired instrument.

HAVING skimmed gloriously through the air, adventure-bent, it is but natural that our arrival back home should provoke questioning, as our quest for Adventure and Romance was not unknown to our relatives and friends unable to go with us on this aerial tour. And so we collected a little bit of data regarding these "Musical Memories" programs which we herewith gladly pass on to whomever it may concern.

Not so very long ago, Frederick R. Huber, Director of WBAL, assisted by Gustav (Continued on page 124)



Lady Baltimore



Roberta Glanville
Soprano

Jacqueline Marston, mistress of the Estes organ and WGH piano.

All Flags Fly in Shadow of WGH

EAST Meets West at Station Which Speaks from "World's Greatest Harbor" at Newport News, Va.

as Station WNEW and has continued under his direction. Following five years' service with the Army Air corps, and experienced gained from occupying offices ranging from lawyer to confidential secretary, Radio offered an attractive field of endeavor. Assistance is given to the announcing staff by the director of each day's program. Acquaintances formed while assisting in choral work in various singing groups has proved to be of extreme value in engaging artists suitable for broadcast from the limited talent available.

One of the outstanding features of the program from Station WGH is the work of its chief announcer, G. Douglas Evans. Coming to the microphone from several years

with Broadway productions, all of them successes—the strict adherence to precise pronunciation with tempered accent, lends a highly pleasing quality to this announcer's work. Among the outstanding productions with which he was connected may be mentioned Naughty Riquette, with Mitzi; Peggy Ann, with Helen Ford, and in Lew Fields' production, A Connecticut Yankee. Versatile and constantly in sympathy with whatever style of program is being presented, the announcement is made to conform with the harmony of the presentation.

Finding his chief asset his ability to
(Continued on page 114)

OCCUPYING a central position in the historically renowned Tidewater section of Virginia, Station WGH superimposes itself upon the romantic background supplied by its proximity to the moonlit waters of Hampton Roads and its location in a city where East meets West. For here all nationalities in the world send their representatives on ships flying many peculiarly colored flags—here the streets resound to the tread of the silent Jap, the fiery Italian and the mystic visitor from India.

Station WGH is operated by the Hampton Roads Broadcasting corporation, of Newport News, Va., with the following named officers: E. Ellsworth Bishop, president; Hunter S. Copeland, vice-president, and George B. Colonna, secretary and treasurer. The station is owned by the Virginia Broadcasting Company, Inc., of Richmond, Va.

The duties of directing the activities of the station were assumed by Mr. Bishop back in the days when it was known

Three micro-teers of WGH: E. Ellsworth Bishop (above), director-announcer; Malvern Lee Powell of the Rhythm Raggers (left), and G. Douglas Evans, Broadway favorite and chief announcer.



WIL, "The Friendly Station"

Galaxy of Artists Delight Thousands of Radio Fans Throughout Mississippi Valley in Brilliant and Varied Series of Colorful Programs Broadcast from this St. Louis Station.

THE Friendly Station down St. Louis way has been a going unit in the Radio field since September, 1922, at which time WIL came on the air. Since that time it has been one of the great, powerful and popular stations in the middle west.

William Ellsworth, familiarly addressed by all as Bill, is the managing director of WIL. Ellsworth has qualified in a half dozen fields that make him an invaluable man in any studio. He is a graduate lawyer; has had considerable experience in the field of exploration, and is well known as a sports announcer.

Ellsworth has built up a splendid staff for WIL, and its popularity is only surpassed by the tremendous following he has among the listeners who turn dials. One of Ellsworth's pet announcing stunts is to emphasize the fact that he is speaking for "The Friendly Station," as he has dubbed WIL, and the phrase has become a byword among the friends of the station.

Early in the game Managing Director Ellsworth learned that variety is essential if any success is to be attained in the field of broadcasting.

"Better a little bit of everything, rather than a plenty of one thing," is a verity frequently uttered by Bill Ellsworth, and his plan of action in handling the affairs of WIL gives evidence of the truth of the saying.

Schyler Alward has the difficult and yet interesting assignment of handling the musical features. He is not only an able musical director, but well known as an artist.

The ace of the melody singers of WIL is Bobby Stubbs, a genial and hard working juvenile. Bobby can feature in blues or ballads, and satisfy the most analytical dial twister.

Another entertainer at WIL, who has built up an enviable reputation,

Below, Bill Ellsworth, Managing Director of WIL.

Right, Wilma Emms, Accordionist. Right, above, Agnes Vogler, Soprano.



Bobby Stubbs, the alluring melody man, is just above.



Schyler Alward, Musical Director, is the good looking young man in the center panel above.

is Wilma Emms, piano accordionist. Versatility with a delightful Radio personality are assets of Miss Emms, whose solo work is of such a quality as to enable her to be listed among the most popular artists at WIL.

Agnes Vogler is a soprano of note, and the success of the WIL Grand Opera company is due, in a great measure, to her work as prima donna of the organization.

Year by year during the six years that WIL has been on the air its circle of listeners has widened and become more firmly attached to the station. The slogan of "The Friendly Station" has been more than a slogan. It has grown into a subtle spirit of station individuality. The entertainers feel it. They impart this feeling through their voices and their instruments, and thus the friendly station has in turn cultivated a friendly audience.

St. Louis as a metropolis has felt the growing good will cultivated by the penetrating aerial handclasp from this station—results have been demonstrated in increased volume of trade and marketing.



KOMO OF SEATTLE

REACHES

ALL NORTHWEST

HAPPY crew at studio provides musical, novelty and feature acts for delight and pleasure of many thousands remote from city attractions.

KOMO, speaking for the great Northwest, has been heard in every state in the Union, every province of Canada, all parts of the Arctic together with the islands of the Pacific, Australia, Japan, Panama and the Central American Republics, in addition to ships on both the Atlantic and Pacific oceans.

The gigantic towers of KOMO rise from the edge of Harbor Island. They are visible to ships passing out to all parts of the world. The trapper in the Yukon, the revelers on the beach at Waikiki, the peon in Mexico, and the dial fan in New York have all been brought in contact with the Northwest through KOMO.

Programs from KOMO have been broadcast since February, 1925, when the station was operated under the direction of the American Radio Telephone company. Subsequently its call letters were changed from KTCL to KOMO, and when the year 1927 started this great Seattle station was opened in a new plant.

With the inauguration of the KOMO Fisher's Blend Station, Inc., the Totem Broadcasters came into existence, and this organization leased practically all of the time available from the station. The Totem Broadcasters include a number of established firms, and they are providing continuous service from KOMO, extending from the early morning hours until well beyond the midnight hour. The Totem Broadcasters in 1927, established a connection with the National Broadcasting company, and as a result the East has been brought nearer to the West through the change.

During 1928, KOMO provided more than 1500 hours of concert orchestra music, and a large part of its time was taken up by the Totem Little Symphony Orchestra, one of the regular features of the station. The Totem Little Symphony Or-

Right, The Joy Boys from KOMO, Vierling and Riddell.



Above, Three Belles of Melody Land, popular KOMO singers. Left, Mary Lyon Spear, accompanist and librarian.



chestra is not an over-sized jazz band, but an organization consisting of nineteen men, every one of the number being an artist in his own name, and worthy of the post he occupies with the orchestra.

The Joy Boys from KOMO in real life are Bob Vierling and J. Riddell. They are beloved entertainers, have a large following among the lovers of popular songs and possess that indescribable quality known as Radio personality. They have popularized that odd combination—banjo and piano—and have proved their ability as entertainers.

The Three Belles of Melody Land can sing jazz songs and ballads and put them over with the zest and enthusiasm so essential to the presentation of this type of music.

Mary Lyon Spear is the accompanist at KOMO and has charge of one of the largest musical libraries in the West. She is a capable arranger and an able pianist.

Of the great number who have rendered service to KOMO reference should be made to Montgomery Lynch, who directed The Wayfarer, a spectacular out-of-door production staged in Seattle, Los Angeles and elsewhere, who was selected by the Totem Broadcasters to be general director.

Then there is genial George Nelson, chief announcer; C. Marcus Wienand, assistant business manager of the station; G. Donald Gray, baritone soloist, and dramatic entertainer; Grace Breidenstein, who talks to the housewife; Bob Nichols, announcer and baritone; Rhena Marshall, concert singer; Fred Lynch, tenor; Alice Maclean, special continuity writer, and Sydney Dixon.



Above, Left, Totem Little Symphony Orchestra, a feature organization presented by KOMO.



NORTH AMERICA HEARS MIKE of WHAS



ESTHER METZ is a soprano member of the Louisville Ensemble (above), and **Helen Elizabeth Sprague**, concert pianist of WHAS, on the right.



Charles Letzler, violin, and William Hedden, 'cellist, is a regular Saturday night feature, playing from 10 to 11 o'clock. Ellen Lawrence Gardner, pianist, is musical director and Gustav Flexner managing director and announcer.

Larry Prewitt and his orchestra, playing at the Kosair Hotel; Jimmie Joy and his Brown Hotel orchestra, and the Kentucky Hotel orchestra, directed by Signor Paolo Grosso, former South American violin virtuoso, provide the dinner and dance music that is a part of the daily programs.

Orchestras playing from the main studio include Ray Bahr and his Music, Joe Anderson's Orchestra, Virginia Vetter's Entertainers, Carl Zoeller's Melodists, the Original Southern Night Hawks, the Cardinals and a number of other popular dance groups.

An unusual instrumental trio of women, consisting of Miss Dora Mantle, violin; Mrs. Stephen Jones, organist, and Margaret Dohrmann, pianist, appear in the studio programs regularly. In addition

(Continued on page 120)



ON THE center of the dial, and twenty miles south of the center of population, Station WHAS has become a national station since the reallocation order of the Federal Radio commission went into effect in November. Co-incident with the reallocation, The Courier-Journal and The Louisville Times put into operation a new 5,000-watt RCA transformer of the most modern type on the 820 kilocycle cleared channel.

Test programs brought responses from Hawaii; from Elim, 100 miles northeast of Nome, Alaska; from old Mexico, Porto Rico, Canada and every State in the Union. Steady signals, sent on an unwavering frequency, have made the station one of the most reliable in the entire country, according to reports from listeners.

In addition to selected features from the National Broadcasting company, WHAS presents a variety of local programs, ranging from the popular dance orchestras to complete operettas.

The Greater Louisville ensemble, consisting of Esther Metz, soprano; Anna Scholtz, contralto; George Weiderhold, bass, and William G. Meyer, baritone, with string trio consisting of Paolo Grosso and



A classy orchestra is under the baton of Larry Prewitt, to the left, and Evelyn Todd-Laurent, soprano (above), is a popular artist at WHAS.

MMARGARET HAYMOND manages station and Dorothy Lyon directs orchestra. Let no mere man presume to doubt who's boss here.



LOOK at the way Jane Morse and Judy Rice, harmony team at KMO, turn their backs to the piano, as much as to say they can make music enough without any mechanical aid.

OUT in the "great open spaces" of the State of Washington, "where men are men"—well, if certain information concerning the Radio station KMO is any criterion, men are, indeed, merely men, and the women are the bosses.

KMO is in Tacoma and the quality of its programs has caused many a resident of that city and of the vicinity, which lies within the "dependable range" of the station, to take home a Radio set in order to share in the hours of real entertainment which it furnishes.

The studio, in the Hotel Winthrop, is managed and controlled by Margaret Haymond, and any mere man within those walls will obey her commands if he knows what is good for him. She is a power in the selection of those who shall occupy the station's time on the air, how much of the time shall be allotted to each and what shall be the nature of the offerings to the ear of the Radio listener.

It is she who also dictates what the world shall have in the way of publicity concerning the station.

And then there is Dorothy Lyon, the ever efficient and always willing accompanist of the various vocal and instrumental soloists heard from the station, who is herself a soloist of no mean ability. She, of course, is called the studio pianist, but the business of being studio pianist is by no means the goal, or limit, of her musical efforts.

She has organized a six-piece orchestra—all men—and calls them Dorothy Lyon's

HUGH and Tim, "The Early Birds," start to sing and play every morning at 8 at KMO and keep it up until half past nine. In center is Dorothy Lyon, staff pianist—and conductor of her own orchestra, if you please.

TWO WOMEN CONTROL KMO, TACOMA

Boys. She is their conductor, of course, and they are on the air so much that they have become one of the station's most popular offerings. But their Radio entertainments are only a part of their musical activities. Often they furnish the music for Tacoma entertainments, in which the audience is visible, and takes advantage of the better opportunities to express its appreciation.

TWO of the popular entertainers on KMO programs are Jane Morse and Judy Rice, the smooth blending of whose voices makes them a real harmony team. They like to sing entirely without accompaniment, allowing the piano only to give them a pitch for a start. Then they turn their backs to it and warble into the microphone to their hearts' content—and to the contentment of the Radio audience, too, if you want to know the whole truth.

Jane and Judy have never really had the time to count up how many songs they know the words to, but they admit that they themselves might be surprised if the total were ever written down in bold, plain figures.

But the reader should not get the idea that men are nonentities, by any means, even in a Radio station which seems to be dominated by women, as KMO does.

One pair of male entertainers, which have the public's approval, is Hugh and Jim. They call themselves "The Early Birds," for they are on the air every morning and listeners send them worms and bird seed, which helps to keep the birds fat and contented.



WHAM Has Birthdays Galore

Rochester, "Nation's Musical Capital," Featured via the Air

EVERY NOW and then there is an epidemic of anniversaries among Radio stations, and they are of such a variety and character as to excite the imagination and curiosity of the most rabid dial twister.

For instance, there is the enlarged WHAM of Rochester, N. Y. A mature youngster is WHAM, which is sponsored by the Stromberg-Carlson Telephone Manufacturing company.

Back in 1922 someone pressed a button and WHAM sprang forth panoplied with a 100-watt transmitter crown to do battle on a restricted field. On Sept. 1, 1927, another button was pressed by the Stromberg-Carlson company and the fly-weight clothes fell to the ground and the 100-watt crown suddenly shone with a brilliance fifty times greater, or 5,000 watts. Young WHAM then stepped up into the front rank of broadcasting stations.

In Rochester, which is one of the country's leading music centers, is located the Eastman School of Music, and the theater of the University of Rochester. Here we find harbored a students' concert bureau, two fine organs, the Eastman theater orchestra of seventy pieces, the Symphoners, a select band of Eastman artists, the Little Symphony orchestra, conducted by Howard Hanson, director of the Eastman school, and, as if to make a climax, the Rochester Philharmonic orchestra, Eugene Goossens, conductor. All are in contact with WHAM.

The concert bureau of the school is to aid the students in giving professional performances on the Radio and in concert halls. These student recitals, of which fifty-two were on the air last season, are varied in character and the programs representative of two or three departments of the school, such as voice, piano and violin. By combining students with faculty any type of Radio program may be formulated.

The Eastman Theatre orchestra arranges a Sunday afternoon popular concert that is broadcast from the orchestra pit, and this orchestra of seventy pieces is frequently picked up, and its overtures and music descriptive of the news reel and stage productions, put on the air.

Saturday nights a special Radio program is arranged by the Eastman Symphoners. It consists of instrumentalists from the orchestra and vocalists from the theatre and opera school. During the season three American composers' concerts are held to stimulate musical composition in this country. These are broadcast, as well as the nine afternoon programs

of the philharmonic orchestra. They are featured by the other stations of the New York state net, which include WGY, Schenectady; WFBL, Syracuse, and WMAK, Buffalo.

A popular feature is Sax Smith and his Cavalier band of fifteen pieces. Four other dance and concert orchestras are available, in addition to their own six-piece studio orchestra.

WHAM's entertainment is not all musical. Of programs pertaining to public service, reference should be made to the Chamber of Commerce announcements, weather reports, produce and stock reports, daily talks on health, cooking, care of the home, care of children, road reports, travelogues and weekly agricultural programs. The agriculture talks are sponsored by the Monroe County Farm bureau and the state and federal agricultural departments.

A connection with the University of Rochester and the Rochester board of education enables the station to broadcast other educational features of general interest. Sunday mornings a service is broadcast from one of four churches. The station, of course, is associated with the National Broadcasting company and to its own features adds many of the blue network programs.

As to technical equipment, the station is one of the best equipped 5-kw stations in the United States, the equipment costing approximately \$200,000. It has six studios, alphabetically arranged, and two control rooms, with a proposed automatic crystal control in the offing. It has an auxiliary studio and duplicate control equipment in the Eastman School and theatre of the University of Rochester.

Pickup facilities are continuously maintained to four of Rochester's churches, the Chamber of Commerce, convention hall, Columbus hall and Rochester's leading hotels.

The station's transmitter is at Victor, eighteen miles southeast of Rochester. The towers, 40 feet square at the base and 400 feet apart, rise nearly 400 feet above the surrounding country. When flood-lighted at night they offer an unusual and brilliant spectacle.

The main studios of the station are on the second floor of the Sagamore hotel, Rochester, and at all times they are open to the public. Guests may watch broadcasting activities in either studio through plate glass windows. The staff numbers nineteen persons.

Last year WHAM was on the air 2,800 hours. Its present broadcasting schedule embraces 55 hours average weekly of which 65 per cent is local, 30 per cent NBC, and 5 per cent New York state network.

The territory served by WHAM includes about 36 per cent of the country's population; 31 per cent of the country's dwellings; 36 per cent of the country's radio receiving sets; 40 per cent of the country's residence telephones, and 44 per cent of the country's domestic lighting customers.

WHAM fared well in the new reallocation law of the Federal Radio commission. Under the new ruling, the station will retain its full power of 5,000 watts and it was granted one of the eight cleared channels in Zone 1 operating on 1,150kc., 260.7 meters.

With regard to the close association between WHAM and the Eastman School, Director Howard Hanson says this: "The work done in Rochester and the School, both in school and theatre, is of national significance and to the advantage of the future development."



Above, The Cavaliers, Sax Smith, director. Right, The Eastman Symphony Orchestra, Victor Wagner, conductor.



**SEVEN YEARS OF REAL
Radio Service is Record
for San Francisco's Station**

Goal of KPO IS DIVERSITY

Guiding the destinies of KPO, in the capacity of managing director, is James W. Laughlin, a man of extensive business repute. Jean Campbell Crowe is responsible for programs released through the KPO transmitter. She is a pianiste of note and has been a figure in women's club activities of national scope.

Many concert artists know KPO as their Radio home, and many stars who have realized nation-wide fame twinkled first from this station. Carolyn Cone Baldwin, American pianiste, who has been a guest artist of more than fifty symphony orchestras in Europe and America, is a weekly recitalist.

Nathan Abas, young Dutch-American violinist, former pupil of Franz Kneisel and a featured assisting artist with Willem Mengelberg's Concertgebouw orchestra, is heard in solos and as conductor of KPO's Symphony orchestra, which numbers thirty members. He is first violinist of the Abas string quartet, of which group Michel Penha is cellist.

Stellar vocalists, too, are exclusive at

**Jerry Ger-
maine,
"aristocrat blues
singer"**

DIVERSITY of musical presentation, last minute news detail, programs of human interest and inspiration, addresses by national figures in world events and, in short, a notable collection of interesting features are at the disposal of the dialer who tunes in to KPO, the Hale Chronicle station at San Francisco. KPO is a pioneer of western broadcasting, and has steadily served the fifth zone for seven years.

Beginning humbly with an experimental transmitter, the station officials soon realized the possibilities of Radio as a medium of constructive entertaining, and the potentiality of commercial broadcasting became apparent. As the output increased, the engineering staff was augmented by a program department and, later, a commercial section.

The staff at KPO now numbers more than twenty members, and artists numbering seventy-five take part in the programs. KPO broadcasts on a clear national channel, Channel No. 68, on a wave length of 440.9 meters, 680 kilocycles, and is the San Francisco unit of the National Broadcasting company. The station is heard in Alaska, the Philippines, in Australia, in Cuba and in all parts of North America.



**Carolyn Cone Baldwin (above),
concert pianiste and guest artist.
Left, KPO Symphony orchestra,
of which Nathan Abas is con-
ductor.**



KPO; Elsa Penlow Trautner, Irene Howland Nicoll and Allan Wilson being among them. All are students of master teachers, and concert soloists who have won national and European acclaim.

In the ranks of popular musicians, KPO claims Maurice Gunskey, a balladist who has been a sensation before the mike and his first appearance brought thousands of letters.

Stars Twinkling for Public at KDKA

PIONEER Station of United States Builds Up Strong Friendships in Eight Years' Service on the Air at Pittsburgh.

DESPITE the fact that Radio is a child with the present generation, it has its pioneers and veterans, and chief of the number is Westinghouse KDKA, Pittsburgh.

More than eight years ago KDKA came on the air. The first broadcast program was made up of the Harding-Cox election returns, and it was sent out November 2, 1920. Several months ago the anniversary of that event was celebrated in Pittsburgh.

Through the changing years many artists have stepped before the mike at KDKA. Men, women and children providing every form of entertainment known to the human family have contributed to the success of the station.

Three delightful personages on the staff at present are Helen Bells Rusho, Virginia Kendrick, and Mary Frances Philpot. Perhaps you have met them via the mike, and if you have, you are familiar with their voices.

These young ladies are of the great number of entertainers on the staff of KDKA, but their presentations have been of a high order, and naturally they have a band of faithful fans who follow with interest and applaud their efforts.

FAN MAIL is one of the best barometers of Radio popularity, and this trio at KDKA has oodles of letters that attest the hold they have on the public. Personality is one thing, and Radio pulling power is another, and the Rusho - Kendrick - Philpot trio have established beyond question their position with the fans of the air.

Helen Bells Rusho is a soprano, Virginia Kendrick, a contralto, and Mary Frances Philpot is one of those delightful Radio artists who has been a valuable addition to the staff of KDKA because of her contributions over the air.

Because of its long term of service on the air KDKA has a staff that from almost every angle functions like a family. Everybody plays the good fellow to the other fellow; every artist is interested in the success of his compatriots and all cooperate to the end that KDKA has the high regard and best wishes of the band of faithful who put over its programs.

With unquestioned prestige this broadcast patriarch with its unflinching quality of programs has acquired a nation-wide following, and other stations, compared with it, sometimes seem like mere fledglings.

KDKA has not fought off the innovations that Radio has had to offer the public in the last few years. On the con-

trary, it has initiated them, and recent announcement was to the effect that this pioneer station would broadcast moving pictures. Ere these lines appear in print it is possible the Westinghouse Electric and Manufacturing Company may have its Radio movies on a basis to permit the public to enjoy them.

Everybody most everywhere has heard of KDKA, and it has a staff that has been built up through years of careful selection and diplomatic study of the needs of the station, and the demands of the public.

The programs of KDKA have been worked out with a fine regard for detail, and the three ladies presented herewith have been invaluable to the success of the station.

You may have heard them. If not, tune in and enjoy these artists who are regular features at KDKA, Pittsburgh, Pa.

The feminine contingent was represented recently in the station staff by Mildred Davis Terman, who conducted the KDKA Home Forum; Letha Frazier Rankin, soprano, and

Jean McCrory Newman, contralto, who took part in the sacred song concert; May Singhi Breen, of the NBC Net; Aunt Jemima, of NBC, and Milady's Musicians.

SHOULD motion pictures become a regular feature at KDKA, the demand for feminine artists will in all probability be materially increased and pulchritude will not only be the rule but the guide to many station directors in building up programs. Station KDKA being a pioneer in the Radio field will sustain its reputation in this respect in the matter of presenting Radio pictures.

Pictures by Radio from KDKA with present day equipment will offer a strange contrast when compared to the first broadcast of that station back in 1920. With a veritable army of listeners today the Radio following public is ever alert to innovations of any character, which fact is a striking parallel to the plan followed by KDKA in 1920, when the station sent out to many

of its friends a number of simple receiving sets in order that they might follow the first broadcasting of that station.

The personal element fairly permeates all studio life today, and with KDKA prepared to take advantage of the opportunity that is offered by television, the human interest feature will have drawing power that will compare favorably with that prevailing in the daily newspaper. This element was lacking in the first broadcasts by KDKA, for program material was drawn almost exclusively from phonograph records.

With the passing of these expedients the symphony orchestra came into vogue, the KDKA Little Symphony orchestra presenting a program out-of-doors on the roof of a building the crowded and somewhat restricted facilities of the improvised studio serving more as a handicap than an advantage. Then followed the use of a tent

until a high wind blew it away, thus denying posterity an opportunity to inspect what was in reality the first studio.

With KDKA prepared to be the first in the television field, it is interesting to note that in the matter of firsts this station occupies an enviable position. It was the pioneer in the re-transmission of the Arlington Time Signals, and according to Vice-President Davis of the Westinghouse forces it was first to broadcast sports, presenting the Ray-Dundee boxing bout in 1921. Again KDKA took the initiative in presenting a play from the stage of the Davis Theater, Pittsburgh; it was first in the field with Radio reports of the Davis Cup tennis matches, and first with a play-by-play account of a baseball game in Pittsburgh. One of the first broadcasts of KDKA in those early days included a review of the World Series baseball games.



Helen Bells Rusho, soprano, popular singer, featured at Pittsburgh station.

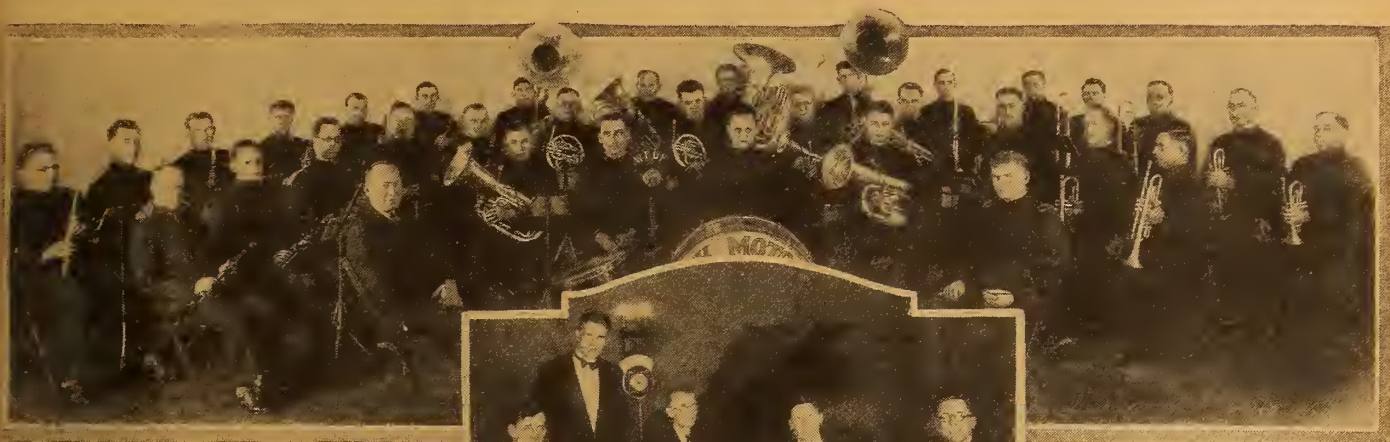


Above, Virginia Kendrick, contralto at KDKA, Mary Frances Philpot, brilliant artist of KDKA family.



WFDF Once One Man Station

*FRANK D. FALLAIN, Formerly All-Around Studio Operator
Now Owns Extensive Flint Broadcaster*



The Buick band, Thomas Hoskins, director, is presented above, and the string quartet at WFDF, at the left, with F. L. McKitrick at the mike.

FRANK D. FALLAIN has been the human element behind Station WFDF since it first came on the air in 1922.

Lacking a schedule of any kind, and compelled to work out the fine points of studio operation, Fallain, after experiencing the thrills incident to founding the station, set about to work out the many problems that confronted him in popularizing WFDF.

In the old days Fallain was the operator, program director, announcer and general manager of the station. While many changes have taken place during the last few years, Fallain continues to take a turn before the mike, and his interest and enthusiasm is of the same brand that was responsible for the founding of the station, which is familiarly known as "One of the Pioneers."

Operation of WFDF is in the hands of the Flint Broadcasting Company of Flint, Mich., and the director of the programs is F. L. McKitrick. The station is situated in the heart of industrial Michigan, and since the time it was licensed, May 25, 1922, it has been an active force in the Radio field in Michigan. It is not hooked up with a chain, and maintains a complete variety of programs for the army of followers it has in Michigan.

The station is handicapped to a certain extent by its inability to secure adequate power, yet this fact does not deter the staff at WFDF from maintaining a high standard in its programs.

Full time on 1,310 kilocycles has been given the station, and the daily service now available in Flint is of such a character as to justify the hopes that the Flint Broadcasting Company had in the change.

The responsibility of arranging programs has fallen to Fred L. McKitrick, who has been associated with WFDF since 1925, when he became a staff artist. Under his guidance programs at WFDF have developed originality, taste and effectiveness. McKitrick has analyzed the situation at WFDF, and his programs have been popular with the fans of Michigan and the contiguous territory.

WFDF is now at the point where it is outgrowing all that has been adequate in the past. With studios located at two outside locations, hookups to two churches, as well as theater and hotel pickups, in addition to the main studio, WFDF now is in a position where additional main studios and larger space for offices and the staff are imperative.

At the present time about 5,000 square feet of floor space is utilized by the station on two floors. This includes facilities for a splendidly equipped experimental and development laboratory.

The personnel of WFDF includes Frank D. Fallain, who is owner, engineer and manager; Fred L. McKitrick, program director and chief announcer; Colleen McKitrick, secretary and hostess; Ralph Crandall, director of the studio string orchestra; Fred Wolcott, director of the studio dance orchestra; George Jewett, first operator, and Frank Folsom, supervisor of service and remote broadcast pickups.

The Buick band is one of the star attractions featured at WFDF, and with an instrumentation of forty it provides programs of a varied character. The band was organized by Jerry Bell in May, 1925, and it is a program feature in the Buick factories every Thursday, and on the air Wednesday evenings at 9:30 o'clock. Its programs extend over an hour.

Thomas Hoskins is director of the band, and most of the Radio programs presented by the band are announced by Jerry Bell, with sponsorship of the band vested in the Buick Recreational Association.

Jerry Bell and his Buick band have received countless complimentary letters covering their work before the mike, and they are always eager to know the reaction of the Radio listeners, so if you have a word to say about Jerry and the band, hurry it along to Flint, Mich.

The band is well organized in the matter of instrumentation, possessing a good wood wind section and with sufficient brass to give balance to its work in presenting both classical and popular programs.

The quartet features two violins, a 'cello and piano, and in the picture on this page McKitrick, the director of programs, is standing at the mike.

WFDF is equipped with laboratory apparatus and constant checking from the microphone to the transmitter output is carried on. In the final transmitted program the watchword is quality, and nothing is left undone that will improve this feature of the station's work.

The commercial department of the station has been reorganized and includes a larger staff for the commercial manager.

WFDF is not in any sense of the word just another small station built on a haywire principle, but rather a splendidly equipped unit with an excellent band of artists. Director McKitrick, in his program work, has set a high standard and its maintenance is one of the ambitions of Manager Fallain.

The station has had a good, consistent growth since 1922, when it came on the air, and its prestige is such as to make WFDF the recognized mouthpiece of Flint. Its followers are legion in Michigan, the nearby states and Canada, and from remote points in the country letters have come from listeners who have picked up its programs.

To know WFDF one must become acquainted with Frank D. Fallain, who has been its sponsor from the start. For nearly seven years he has given most of his time to the station, and he has built up a capable staff to assist him in handling the infinite details connected with the management of WFDF.

The expansion program contemplated by the Flint Broadcasting Company contemplates additional facilities to care for the extended activities of the station.

THEIR MUSIC STIRS HEARTS of THOUSANDS

*LISTENERS THRILLED
by Artists of WHK and
Tiny Singer of Comic Operas*

THERE is no theme in daily life that strikes a greater response from Radio audiences than music.

Program directors, ever alert to meet the changes of the day, usually feature anything of a musical character, knowing well that popular interest in music never wanes and that the love for it is inherent in all mortals.

Size, height, girth, stature and similar descriptive words have no meaning when an estimate is placed upon musical artists. Their abilities as singers or performers upon some instrument are what count.

The smallest legitimate prima donna on the air is said to be Edith Thayer. That is something of a title so far as size is concerned, for the little lady is only four feet ten.

Then there is that happy family of musical stars at WHK, Cleveland, which consists of Ernest H. Hunt, staff organist; Rose Divinsky, violinist; the Morgan Sisters, and Ace Brigode, director of the Virginians.

Edith Thayer took up the study of music some years ago and at one time was numbered among the pupils of the late Jean de Reszke, one of the world's greatest tenors. She studied in Paris and New York, and early in her musical career took up light opera.

She was a member of the original company of Blossom Time, the famous play founded upon incidents in the life of Schubert; also, Cherry Blossom, in addition to the following Hammerstein



Above, the Morgan sisters, Merry and Glad. Right, Ernest H. Hunt, staff organist, WHK.



productions: The Firefly, Katinka, Pom Pom and The Peasant Girl.

The WHK artists constitute a happy family as one can note from the pictures. Mr. Hunt is featured at the organ on Saturday evenings, starting about midnight and continuing until 1 o'clock in the morning.

The Morgan Sisters, who bear a title that is suggestive of their work before the mike, are introduced as Merry and Glad. They are popular entertainers in Cleveland, and their work at WHK has endeared them in the hearts of thousands of fans who tune-in on this well known station, which has been credited as Cleveland's pioneer broadcasting station.

Miss Thayer's Radio career has included her appearance on the air as the original La Palina, The Spur Tie Girl, The Quaker Girl, The Colonial Girl with the Colonial Radio corporation, and recently she was Jane McGrew in Show Boat and Fannie on Main Street, both on the Columbia system, opening with Forhans Song Shop on WEAF.

Miss Thayer has been numbered among the artists singing at the Sherman Hotel in Chicago for the Chiropractic School, also the advertising men's post of the American Legion. Frank Moulan, formerly with Roxy of New York, discovered Miss Thayer and, being impressed with her ability, brought about her appearance before the mike. Her first Radio delineation was La Palina.

Direction of the musical features at WHK is in charge of Louis Rich, who has had considerable experience in musical activities. Programs at this station are thoroughly alive with music, and public reaction has justified the study and time given to this important part of the day's work at WHK.

Hunt has the knack of playing the sort of music that appeals to the masses, and he is alert to pick up new ideas from the tremendous avalanche of fan mail that comes to his desk.

The Morgan Sisters are a sort of merry and care-free singers, with a happy selection of popular numbers, and a style all their own when it comes to putting over a number. To hear them is to want to follow them in their work before the mike.

And who of you that has ever heard Edith Thayer can forget her singing and her pleasing stage appearance. She can sing aplenty and put over those wonderful comic opera airs in a manner that is bound to leave a fine impression.



Left, Edith Thayer, tiniest prima donna appearing before the mike.

Are You a Radio Letter Writer?

*KNOCKS are Welcome as Boosts to Broadcasters
and to Those Who Sponsor Programs*

By Verne Edwin Burnett

MILLIONS of letters have been written by Radio listeners in the last few years to the sponsors of various Radio programs. Do these letters go directly into the paper baler? Are they, so to speak, the bunk? Is the effectiveness of a Radio program measured only by the pounds of morning Radio mail?

You'd be surprised! Hundreds of office employees are working to handle this new giant activity which has bobbed up with the advent of Radio. In most companies, at least, these workers are doing a scientific job.

They get every day some new thrills, some heart throbs, some smiles. Theirs is a most fascinating task.

From Jaffa, in the Holy Land, a British-born resident leaned over his tubes until nearly daybreak to listen to programs coming direct from Schenectady. It was during the early evening in New York State. He wrote down, word for word, the announcer's statements, and described the music and entertainment. He sent this long letter to the American sponsor of the program, who found it correct in almost every detail.

IN Manhattan, a vice president of the great corporation answered this particular letter personally. He, too, had been in Palestine, years before, and was familiar with the land from which the letter came. His answer was newsy—and appreciative.

In northern Canada, a group of fur traders clustered around a little stove. It was fifty below zero outside. But their faces were bright. They were intent upon a loud speaker which carried sweet tunes from Detroit, some two thousand miles to the south.

They wrote, and all signed the letter, that they might go loco if it weren't for their Radio. They said when they returned to Winnipeg, they were going to buy the tooth-paste and motor cars mentioned on the Radio, just to show they appreciated the programs.

The letters come from Latin America, from Europe, from remote islands, written in all languages. They come from castles in Castile and cottages in Canada; from barges on the Gulf and liners on the Pacific; from the farms of Iowa and metropolitan tenements.

Soldiers and sailors, convalescents in hospitals, children getting ready for bed, students grasping for knowledge, lovers of stories, of news, and of cultural subjects; lovers of jazz, lovers of symphony—all write in.

Some of the most touching letters are from people who are very sick. The Radio to many of them is the hand of God reaching out of the ether and laying a benediction upon them.

SOMETIMES a favorite artist sings or plays or speaks. When Dennis King sang the "March of the Vagabonds," a family in Chicago was thrown into ecstasies. They wakened the youngest member of the family, who had gone to bed just before the program started. They had been several times to see and hear Mr. King on the stage. They sat enthralled by the program, and the whole family, seven of them wrote a letter of keen gratitude for presenting again their favorite.

Thousands of persons who are deaf or blind can enjoy the Radio and take a new lease on enjoyment of life. Many of them write in a way which makes the Radio sponsors feel that their efforts have paid at least in spreading happiness.

By the way, do the letters pay in a material way? Some manufacturers are able to make a real check. One who sells his products through drug stores, finds that sales increase one-third after his Radio programs have been added to the efforts of his other necessary advertising campaigns.

Many letters have definitely asked for a salesman to call.

Incidentally, are you putting your foot into it when you write a letter to a Radio sponsor? That is, are you opening the way for a persistent salesman? Decidedly not, at least in the case of the reputable national companies.

The Radio users are trying to win good will. They would not care to get ill will by abusing the precious privilege they have of being welcomed into the sanctity of the home. They are delighted to answer each letter, at least most of them are. They are glad to send booklets, souvenirs or sheets of music, or whatever they mention as being available. Then they let it go at that.

ALL the letters aren't roses. Some are big hard bricks. A music teacher in North Dakota writes that the Tuesday night program was not in accordance with good musical taste. Yet that very program was planned with extreme care by a musical authority who is supposed to be one of the few in the world who best knows what is good taste in music. The ambitious music teacher offered to plan all the programs for the advertiser, for a very small consideration. She may have been capable of doing this job well. But the big advertiser couldn't take a chance. He had to go to the authorities whose reputation was outstanding. Yet the advertisers were glad to get the letter. They answered it carefully and appreciatively.

A rich man from his office in the tower of a skyscraper wrote a letter which some might call very sour indeed. But it contained an idea which struck the Radio planning department as sound. The financier seemed astounded to get any reply at all, apparently, and wrote a second letter saying that he was delighted to get such a prompt, courteous reply and that he didn't think the programs were so terrible after all.

He felt good will toward the advertiser and that was what the advertiser wanted.

A certain novelty jazz feature was used in a "high hat" type of musical program. Five per cent of the letters received in the next few days condemned the novelty as undignified. When complaint letters run up to that amount, they are a warning signal. When people don't like a thing they usually don't write in, so numerous complaints can safely be multiplied several times to get a fair picture of the reactions of the total audience. If you don't like something in a Radio program, you are doing a real service to American business by writing and explaining your views.

FAN mail indeed has lost its poundage, but, by no means, its importance. It seems to have gained in quality and worth all that it has lost in physical weight, if not many times more. It now forms the foundation upon which program changes and revisions are built and provides a real help to the program sponsor as well as to the broadcaster.

And, strange as it may seem, the fault-finding letters are often of even more value and the source of more satisfaction to the recipient than those in high compliment of the programs to which they refer. The dissenters often make constructive suggestions which go far toward improvement of the programs by the broadcaster and the merchandising methods of the advertiser.

RADIO letters show that we are a nation of "wise-crackers." At least, many of us are. Out of every pile of Radio mail, you may be sure there are a few good jokes, some of them quite unintentional.

For instance, one elderly lady in Texas writes that she likes a certain important evening program, but wishes that it would be put on in the afternoon when she sits in her rocking chair "in the shade of the old apple tree."

One young couple about to be married wrote in to a Radio sponsor whose program is on Monday night, and hoped on the following Tuesday the advertiser could arrange for the playing of the wedding march because it would be a considerable saving to them to be able to use their Radio instead of hiring a musician.

Sometimes a letter comes which is worth reading thousands of letters to find. One of these came to a broadcasting company which had been sending out bulletins of the attempted rescue work on a sunken ship.

Hour by hour, day and night, came the bulletins giving rays of hope, telling of the imprisoned crew.

The signs of life grew fainter and fainter and finally hope

(Continued on page 76)

TIMES ARE GOOD AT THE SONG SHOP

NO Election Slump for WEA F Stars

THERE has been at least one shop in this country which was left untouched by the old proverbial business depression of election year, and that is the Song Shop of station WEA F.

Depression? I should say not! Neither figurative nor literal, for business and spirits are both booming at the Song Shop, according to its four popular proprietors—Mildred Hunt, contralto, who is delegated to



Above is Mildred Hunt, chief storekeeper in the WEA F Song Shop. Left, some of her associate merchants in the Song Shop.

be shopkeeper in charge; B. G. De Sylva, Lew Brown and Ray Henderson, all of whom are Miss Hunt's reliable first assistants.

Oh, yes, think a little and you'll remember every one of the three. De Sylva it was who became well known when Al Jolson featured his song, "N'Everything." And later he became even better known when he had composed "California, Here I Come," and "Memory Lane."

Lew Brown is that boon to good nature—a gag man. He attained his greatest fame by writing the words for "Yes, We Have No Bananas," "Collegiate," and "Don't Bring Lulu."

And as for Ray Henderson, the whole jazz world knows him. He has composed the music for any number of best sellers in the popular song field, two of which are "That Old Gang of Mine" and "Bye, Bye, Blackbird."

The Song Shop group is particularly proud of the fact that they are able to sing compositions by members of the group—keep it all in the family, so to speak. We shouldn't have wondered if having all stars in one quartette would give rise to quarrels about just who is the star. But, not so at the Song Shop. They've formed a very harmonious foursome. (And we didn't mean to pun!)

NBC Sentinels Whooping It Up For Hoover



Patterson Pioneer in the South

"KEEP Shreveport Before America"

That is Slogan for Station KSBA

By Rupert Peyton

IF THE time ever comes when monuments are set up to the men who are pioneers in Radio, the name of W. G. Patterson, KSBA, Shreveport, La., will probably be among the number honored in the Southland.

Patterson was one of the first men to obtain a license in Louisiana, and back in 1922, when Radio was young, he became identified with KSBA, which is the oldest operating station in the state.



W. G. Patterson

When Patterson started in the game Radio fans were few and far between, and the nearest approach to anything that smacked of Radio was wireless. Through the changes that have come in recent years, Patterson has stuck because of the inherent love he has for his work, and the fact that he derives satisfaction and pleasure in serving the public via KSBA.

If he has a fetish, and most people have, it is to emphasize the fact that KSBA is broadcasting, and that the call letters have a vital significance to all in that they "Keep Shreveport Before America." Day and night this slogan comes from the lips of Patterson over KSBA, and Radio fans have come to know that both mean KSBA.

Changes in Radio and the business of broadcasting have "come out of the air," so as to speak, and progress in station equipment and studio operation have grown by leaps and bounds. Patterson took up his work before static and aerial became common to the nomenclature of Radio fans, and he took to Radio in Shreveport when it consisted of something with possibilities which was hedged in mostly by an air of mystery.

Patterson's first station was licensed under the call letters of WGAQ, and it carried 50 watts on its antenna, while its sponsors dreamed of greater things. Later 1,000 watts came and a magnificent studio in the Youree hotel.

The call letters were changed; fans began to hurry in their mail and telephone requests, and programs were analyzed. Popular programs developed a following, and the Radio public took to KSBA and the man back of the station—Patterson. He saw the importance of playing to the public and in building routine schedules at KSBA, stressed the importance of popularizing every feature possible.



Above, Lucile Alexander and Fannie Lee Banks, blues artists. Left, Mrs. G. H. Cassity, soprano.



Above, Bruce Banks, tenor of KSBA. Jane Guy and Muriel Frost, entertainers de luxe.



Recently, A. C. Steere, capitalist and developer, together with S. R. Elliott of the Interstate Electric company, teamed up with Patterson, the idea being to further improve the facilities of the station and enlarge upon its service.

The sponsors of KSBA contemplate a plant with from 5,000 to 10,000 watts, extended studio facilities and remote pickups. The transmitting plant is to be removed from Shreveport to Dixie Gardens, which is located nearly eight miles from the city. With the change it is expected that KSBA will operate on a larger basis, and its field of operation be materially extended.

The staff of regular artists working before the mike at KSBA includes Lucile Alexander and Fannie Lee Banks, a clever team; Muriel Frost, Jane Guy, Bruce Banks and Mrs. G. H. Cassity.

One would be lacking in a sense of appreciation to turn the dials and not enjoy the blues of Lucile and Fannie, who are past masters in the art of peppering up songs and giving their numbers the color and snap essential to their presentation.

Bruce Banks is another ace on the staff of KSBA, being a 16-year-old tenor, whose solo work has endeared him to the hearts of thousands of followers of the station. Banks has a delightful voice and a pleasing Radio personality.

Mrs. Cassity has been endowed with a beautiful soprano voice, and her solos have become a regular feature from KSBA.

Another team that has a host of admirers at KSBA consists of Jane Guy and Muriel Frost. They are Mansfield artists and never fail to please with their Radio renditions.

Patterson has taken the initiative, bringing the better things to KSBA, and giving the station the best whenever it is offered and proved worthy.

Are You a Radio Letter Writer?

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was abandoned. Then a letter came from a mother of one of the boys in the unlucky crew. She told how she sat by the Radio at all hours to hear words of hope for the life of her son.

She ended her beautiful letter by the words, "the song is ended but the melody lingers on."

She will always feel grateful to the Radio and its sponsors for what they did.

MANY have said they were moved to write a note to some Radio sponsor. Then they felt, oh, what's the use. The manufacturer probably wouldn't even read their letter. It's wasted time.

That's a mistaken attitude. Your letters will be welcome, whether they are favorable or not. It would be better if you can tell what features you like and what you don't like. That is one of the chief ways the right course is learned.

The days of the heaviest Radio mail are no doubt over. Yet some Radio fans write almost every week. They are practically personal friends with the advertiser whom they have never met and perhaps never will. Letters written today, while somewhat less numerous, are undoubtedly better in quality. They used to be applause only. Now they more often contain constructive suggestions.

Possibly in the gradual adjustment of this great new medium of contact with the general public the importance of letters will become better appreciated by the listeners, and thumbs up or thumbs down, will be more clearly indicated as the result.

Your letters are the straws which show how the changing winds of public reactions move. They are sunset and evening star and one clear call, so far as some of the largest Radio backers are concerned.

They are one of those pleasant things which put the romance and human element into modern business.

"Tough Town's" Not Half Bad

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certs to the fullest extent of their well-known abilities and gifts. "We will now play the first number on tonight's program—Goldmark's Overture, 'In Springtime.'"

THE Chicago Symphony Orchestra concerts, sponsored by the Standard Oil Company of Indiana, are heard on Sunday evenings between 6:00 and 7:00 o'clock, Central Standard Time, through WGN, WTMJ, WOC, WOW, WHO, WDAF, KSD and WCCO. A dance orchestra, exponent of polite syncopation, is also presented from Chicago by the Standard Oil Company on Thursday nights through the same group of stations.

Another cultural contribution Chicago is making to the Radio entertainment of the nation is the series of Wednesday night Balkite Hours, wherein an hour of the Chicago Civic Opera is broadcast through the NBC system. The technique of putting these performances on the air has been greatly developed since the 1927-28 opera series. During each broadcast from the Auditorium, home of the Civic Opera, a symphonic orchestra and a group of operatic vocalists stand by, ready for a "fill-in." The opera is heard by Radio listeners between 9:00 and 10:00 p. m., Central Standard Time. If the running time of the stage performance does not permit inclusion of all the opera's "high spots" in this hour, J. Oliver Riehl, NBC supervisor of music at Chicago, presents them from the studio with his selected talent.

In this manner Barre Hill, brilliant young baritone of the Chicago Civic Opera, made his operatic debut on the air ten days before he appeared on the Auditorium stage. The prescribed hour could include only the second act of "The Masked Ball," as presented to the visible audience. Hill, in the studio, sang "Eri 'tu," the famous aria that occurs in the third act. Helen Freund sang the "Page's Song" from the first act. Thus, in adroitly arranged tabloid form, the best of the whole opera is broadcast.

Eighteen microphones are used in "picking up" the operas. In a control room below stage Don Bernard, Chicago program manager, sits "in a huddle" with Charles Gray, control engineer, and a Morse operator holding contact with the New York and Chicago nuclei. Bernard follows the opera score meticulously; Gray's eyes are fixed on a quivering needle that gauges volume. Together they monitor the performance. Bernard speaks in an endless monotone. . . .

"Put it up . . . hold it . . . down . . . piano . . . very piano . . . down now . . . here comes a high note . . . crescendo . . . signal Moore to move mikes back in hall for off-stage chorus . . . put it up. . . ."

The act ends; the vigilant monitors hold the balance, soften the applause.

"All mikes out except arch . . . signal Riehl in studio . . . fade it slowly . . . signal Daniel to start. . . ."

A tiny light blinks in the announcing booth and John B.

Daniel starts speaking. Through his long association with singers and his own extensive musical training the son of Tom Daniel, the celebrated English basso, is thoroughly equipped to limn verbally the musical significance of the opera. His experience in Radio and on the stage enables him to interpret the technical phases in lucid and entertaining language.

In the control room at 180 North Michigan Avenue Howard Luttgens, division engineer of the NBC, and an assistant, "feed" the broadcast to KYW, WJZ, WBZ, WBZA, WBAL, WHAM, KDKA, WJR, WLW, KWK and WCCO. Three Morse men attend the clicking keys.

The minute hand hovers at ten o'clock. The operator below stage taps his staccato signal—"Take it away!" The Opera Hour is ended.

With these and various other network programs going weekly to the nation, Chicago stands in grave danger of losing its naughty reputation. Already distant listeners are evolving a mental picture of old Father Dearborn putting on his tall hat, adjusting his evening coat, and attuning a hoity-toity ear to little Miss Euterpe.

Jessica Greets Radio Digest Readers

(Continued from page 11')

becoming to the crinkly gold hair of the young woman turning over the pages of a music score at the top of a big piano. She is a very small, slight person in a yellow gown with gold slippers. If the force of gravity went off ever so little she would be walking about three inches off the ground! Of course it's Jessica Dragonette. Don't be silly—who else could it be? Her small hand has a very strong handclasp and her small face a quick, cordial smile. Did you ever try to talk to most singers before a large concert? But Miss Dragonette, who is just going to sing to some scores of thousands of listeners, is perfectly collected and ready for a chat.

"And so is everyone else in the room.

"It is beginning to fill now very fast as we approach the zero hour, so let us back up against the wall out of the way. The musicians take their seats. Most of them are wearing gray linen smocks. Harold Stanford steps up on his conductor's stand. The singers drift toward the microphone where the 'old stager' is standing already, his face turned toward the control room. You can just see the operator through the glass like a big fish in a dark aquarium.

"Half a minute of the hour. A breathless hush. Everyone in place. It is not so much that they are waiting to start. Everyone is holding back, stretching every nerve, not to start before the right second. It has all the thrill of the moment before a horse race or the starting of some fast train.

"The voice of the announcer begins. It is wholly informal and very quiet. Bows cross strings, the piano glides into the music, the old stager's voice takes up the story. Miss Dragonette steps to the microphone with Dan Gridley. We're on the air!

"THE charming Victor Herbert music flows in. Henry M. Neeley, the 'old stager,' adds two seconds to the time gained, he holds up an improvised sign to the conductor, 'encore o.k.' 'That was a lovely song, Jessica. Can we have the chorus again?' 'Yes.'

"Again the music and Mr. Neeley's friendly comments.

"For all the tenseness in the room you can hear how smooth, how effortless it must all sound where dials are tuning in, in thousands of homes. You can see the farm living room with the cat stretched on the floor, the campfire where the children perhaps are joining in the chorus, the wide veranda with the music floating through the open window and mixing with the sound of the waves on a distant beach, the young couple in a tiny flat, the mechanic and the invalid, the old woman with folded hands, the lighthouse keeper and the student. 'I hear America singing.'

"For this is no audience of gallery gods and box holders. It is as wide as the continent and as varied as its people and races are.

"The man in the control room signals. One minute more, half a minute. Two seconds. 'Please stand by.' A breathless hush. No sound must go over the air which has not been planned for and released and worthy of its audience.

"A raised hand drops. Conversation breaks out. Doors open. The hour is over."

Sanford, because of his long association with Herbert and his experience in the production and staging of light operas, is eminently qualified in the field in which he is now enlisted. His knowledge of scores and the time he has devoted to the production end of the game have been invaluable to him in presenting the light operas offered under the banner of the Philco forces.

Neely and Sanford are responsible for "Memories," the musical signature of the Philco Hour. It has run well above 30,000 copies and continues to be popular with the fans.

And this is the gist of the story of the busy life in which our charming little Radio star, Jessica Dragonette, lives and has her being. You'll know her better now.

Voice of the Reader

HERE we are, back again with the Voice of the Listener. Letters of general interest were selected for a starter. We would like to present this page as a discussion forum on Radio subjects of general interest. Let it be an exchange of ideas for the good of the cause, but please let us avoid the technical subjects that deal with the machinery of Radio transmission and reception. Sit down and write a thought for this page. If you give us enough interesting letters (not necessarily just friendly tributes to Radio Digest) we will make it two pages. What do you say?

Greetings to Stations

I HAVE long felt it a matter of duty to write some letters to the Canadian and American broadcasting stations which furnish us with such excellent programs. It seems to me I cannot do so in any better way than by a letter to all of them through the Radio Digest. And so I take this opportunity to express my sincere appreciation. We are listening here day and night and we do enjoy the programs so much. Keep up the good work. Best wishes and success.

CAROLINE SJOBERG and FAMILY,
Williston, N. D.

* * *

We've Tried That, Too

As a subscriber to Radio Digest I would say I am deeply interested in the future of the paper. It seems to me there is room for a Radio newspaper—a publication that will collect all the news regarding broadcasting and what is going on in the Radio world. This, with many of the features already included in your paper, would appeal to the Radio fans. I wonder if it is not possible. It seems as if a paper of this type would come in time. Why not your paper? In its present form it does not seem to be of much value except to please the people who broadcast, and the stations. It comes so seldom it gets stale before the next copy comes and one loses interest. Hoping your paper may live and fill the place open.

(REV.) MISS A. E. SWITZER,
Athol, Kan.

* * *

Clip Pictures for Album

I believe that one of the features of most general interest to the average Radio listener in your magazine at present is the pictures and brief sketches of the popular Radio artists and announcers. Hearing the artists over the air over a period of time, one naturally forms a mental picture of the artists. When we meet them or see their pictures sometimes our mental picture is correct and sometimes it is not so correct. Who, from listening, could picture Matt Thompkins? I noticed one of my children the other evening cutting pictures out of Radio Digest and pasting them in a scrap book so that, as they heard a Radio artist, they could look at the picture.

As you know, it is pretty hard to keep a file of magazines in a home and find what you want in back numbers. I believe if you would, from your cuts, make up a booklet of pictures of all the popular or noted artists that appear on Radio programs, that it would meet with a ready sale and advertise your magazine. They could be sold for you by the Radio stations themselves. They could be combined with your very excellent Radio log, which appeared in the last Radio Digest.

P. M. PRICE, President,
Johnstown Automobile Co., Johnstown, Pa.



Many inquiries have been made concerning Fawn Post Trowbridge of WGN, Chicago. You see her in the picture above. Sometimes she is called the California Nightingale. An excellent soprano heard on a Sunday afternoon.

This Is Real Bouquet

I am very much in favor of having the Voice of the Listener restored back in Radio Digest. I think this column was very interesting. It gave the readers a chance to know what other people thought about stations, programs, etc. I think the Radio Digest is the most wonderful Radio magazine printed. It is my favorite of all the magazines. (Even including American, Colliers, etc.). I can hardly wait from one magazine until time for the next issue. I have taken Radio Digest for two years and will continue doing so until I die. I wish Radio Digest was published more than four times a year.

Your Radio friend,

VIRGINIA PETERS,
120 Fremont St., Battle Creek, Mich.



Henry Field and his little grandchild probably has incited more letters from the Radio fans than any other single individual on the air. Mr. Field and his friends are welcome to this page.

Thanks, Mr. Affleck

Please accept my congratulations upon the wonderful improvement in the new Radio Digest. I am writing in response to your request for opinions as to whether or not you should revive the Voice of the Listener column. My belief is that the restoration of this column is all that is necessary to make your magazine undoubtedly the foremost Radio publication of its kind in the country. In the old days when Radio Digest was a weekly, I, personally, got more kick out of the Voice of the Listener section than any other part of the magazine. Wishing Radio Digest the best of success.

R. W. DONALD AFFLECK,
567 Gilmour St., Ottawa, Can.

* * *

Thinks Each Issue Better

We think you have certainly one splendid publication and . . . have always liked Radio Digest, but think that each new number as it comes out is a little better than the last one.

C. E. WHITMORE, Owner,
WCLO, Kenosha, Wis.

* * *

Too Much About Chains?

For the past several numbers of Radio Digest I have noticed that most of the articles, news and other information you carry, seems to be devoted to the so-called chain stations. Has it ever occurred to your staff that many of the readers might be interested in having some news or other information concerning the so-called local stations? Of course, we all like to know about the chain stations and their way of doing things but the thought occurred that readers might be interested in local stations.

A. L. McKEE,
Anderson, Ind.

* * *

"Give Those Call Letters!"

I have often been surprised at the slovenliness of some broadcasters in calling their station letters and towns; they call them indifferently, and at long intervals, so that if a little static or distraction of some kind interferes you may go for an hour before catching the station, if even then. It is highly important now when we are all casting about to find satisfactory stations, but it is important at all times, and a few stations lose no interval to call the stations.

You might help us listeners and the stations as well by calling their attention to this small matter. I notice some of your Chicago stations are very careless, at least it appears so.

I like your magazine very much.

R. D. HAISLIP,
354 Sherwood Av., Staunton, Va.

* * *

Write a letter and get it off your chest. Let's hear from you and we'll pass it on.

Microphone Brings Jolson Fame

(Continued from page 9)

GRAUMAN put the show on as a novelty, saying that for such houses as his it would remain probably in that class. Jack Warner, production chief of Warner Bros., whose home and work is in Hollywood and not in New York, where the Vitaphone work was done at that time, thought a great deal about Vitaphone that night, and a great deal about that little short subject of Jolson's.

When Jolson had first been approached by Sam Warner in New York to make the short subject, he had refused to appear before the camera. Like others, he was extremely sceptical about the possibilities of Vitaphone, and in addition he had had one unfortunate experience with motion pictures, leaving him with the belief that the screen robbed him of so much of his stage personality that it would be poor business to go before the camera under any consideration. Warner Bros., however, knew that they must get the biggest names in the entertainment world on their discs or the public would not even come to hear and be convinced. The Radio networks later followed the same policy until today we not only hear the world's greatest artists on the air but later can see and hear them via the talking film.

Finally Warners offered Jolson so much for the one little ten-minute record that he could hold out no longer. A stipulation of his original contract, so it is supposed, was that he was to sing three songs only and not more than sixteen "takes" were to be made for a master wax selection.

After making this short subject Jolson went back with the Schuberts in another revue and Warner Bros. continued to increase the prestige of Vitaphone by not only making similar short subjects with great stars of the operatic and concert stage but also by producing several of their pictures with accompaniment similar to "Don Juan."

Exhibitors began to install equipment for the pictures that sang and talked, other producing companies began to investigate the possibilities of this new method of entertainment. Warners removed their Vitaphone plant to Hollywood and Sam Warner came to the West Coast to continue as the guiding head of that department of their business. Several months later, while in the midst of plans for expansion and exploitation and Vitaphone, plans that Warner Bros. have followed almost to the letter, he died. He was cut off in the prime of an unusually useful life, not living to see the completion of his model theater in Hollywood, nor to see Vitaphone accepted by its critics and his company rise to a great leader in the amusement world. The film colony of Hollywood has never paid another the tribute it did pay to the genius of Sam Warner, who beyond question of doubt, will be remembered as the spirit that made the talking motion picture possible.

BEFORE he passed away, Sam Warner had visions of a feature length picture wherein the leading character not only spoke some lines but would sing several songs as well. A story was finally purchased that seemed ideal for this new medium of entertainment. It was "The Jazz Singer," which George Jessel had starred in for several seasons with great success. It seemed to have everything necessary for the final convincing proof that the talking-singing picture was not a novelty but was here to stay.

Due to a disagreement and conflicting contracts, Warner Bros. found it impossible to use Jessel for the role that he had played on the stage. It was a bitter disappointment at the time and temporarily held up production on the picture.

At this point Jolson again enters into the story. Perhaps his history is well-known. If so, skip the next few paragraphs.

Al Jolson, whose real name is Asa Yoelson, was born in Washington, D. C., the son of a Jewish cantor, who regretted the theatrical talent which his son manifested at an early age. In spite of his father's protests and threats there was no keeping Al Jolson from appearing before the public, and he appeared when very young in a performance in Washington of Israel Zangwill's "Children of the Ghetto." His school days ended there.

Later he ran away from home and joined a circus as a ballyhoo man, for which a pair of leather lungs was the chief requirement. Jolson has never forgotten his experiences with the circus, and if asked today about them follows up with a flood of reminiscences. They provided him with a storehouse of experiences of incalculable value to his career.

Shortly after the Spanish-American war he sang in a Washington cafe, which engagement ended abruptly when the elder Yoelson, maddened at the thought that the son of a Jewish cantor should sing in a cafe, had his son placed in a House of Refuge. Not long after, however, the boy became ill and his father repented and took him home.

Once again under the home roof Jolson quickly recovered (always an excellent actor) and as soon as possible thereafter got another theatrical job. This time he joined Al Reeve's burlesque show, which for many years was known as the greatest of all burlesque performances.

AFTER a year or two with Al Reeves he induced his brother to join him, and with a third partner they appeared in vaudeville as Jolson, Palmer and Jolson. Vaudeville yielded only a meager wage. He appeared in white face and the public did not feel that Jolson, Palmer and Jolson were better than hundreds of other third-rate acts.

In black face it was different. "I recall vividly how I came to black up," says Jolson. "I was from Washington, you know, and while I was unable to employ a regular dresser, I did have an old southern darky who assisted me occasionally. All my life I've had a fondness for children and negroes of the South, and I used to imitate the talk of this old darky while he was helping me get ready for my act. One night this old dresser of mine said to me while I was playing at a little theater in Brooklyn: 'Boss, if you-all's skin be black they'd always laugh.' I thought it might turn out to be an idea after all and decided to try it.

"I got some burnt cork and blackened up and rehearsed before the old darky. When I finished he chuckled and said, 'Mistah Jolson, you's jus' as funny as me.'"

Jolson in blackface was an overnight hit, and from that November day in 1909 he was uniformly successful. His blackface routine got him a place with Dockstader's Minstrels.

"My big break came in 1911," continued Jolson. "I was still with the minstrel show and thinking I was on top of the world—and I was compared with my vaudeville days. We played a show and J. J. Schubert—yes, the same fellow—was in the audience. It was a fortunate occasion, because it was the year of the opening of the Winter Garden and, although I did not know it at the time, they were looking for talent."

J. J. Schubert thought Jolson would do, and the association was begun with the two theatrical producers that has lasted to this day.

Jolson's first Winter Garden productions were "Bow Sing" and "La Belle Paree." Thereafter he appeared in any number of the Winter Garden shows, always with ever-increasing popularity. At the Winter Garden his fame as a "mammy singer" began, became world-wide and have set a standard for thousands of imitators.

AFTER productions like "The Whirl of Society," "The Review of Reviews" and "Vera Violetta," the Schubert's thought it time to give Jolson a bigger place on the bill. Accordingly in 1923 he was co-featured with that most remarkable personality and dancer from Paris, Gaby Deslys, in "The Honeymoon Express."

"The Honeymoon Express" verified the Schubert's belief that he had arrived, and in the following year he was starred as the attraction of the Winter Garden production in "Dancin' Around."

His first great success was "Robinson Crusoe, Jr.," in 1916 (can it be that long ago), which he followed with "Sinbad."

By the time "Bombo" was produced Jolson was recognized as America's greatest entertainer and a playhouse, Jolson's Fifty-Ninth Street Theater, was named for him.

So it was Jolson, the world's greatest entertainer, star of the Schubert extravaganza "Big Boy," who came to the Biltmore Theater in Los Angeles, on the crest of his wave of popularity, so it seemed, whom the two Warner brothers, Jack and Sam, set to entice to take the place of Jessel in the "Jazz Singer."

Again in was an opportune moment in Jolson's career. He was tired frankly of more than a decade of appearing in one revue after another, even though his greatest enjoyment is getting up before an audience and singing his songs for them until his voice goes to a whisper. But four more weeks of the run for "Big Boy" remained and these were scheduled for San Francisco.

Jolson listened to the two brothers, came out to their Hollywood studios and heard the improvements in technique that had been made in recording since the time he had made his short subject. Several months would elapse before the Schubert's were to have another show for him. One night, at a little dinner party, Jolson took the two brothers' hands and signified his intention of doing the "Jazz Singer." That was a dramatic climax in his own career destined to bring him millions of new admirers.

With Jolson, to do a thing is to throw his whole heart and effort into its making. "The Jazz Singer" went into production with Alan Crosland as its director. Crosland was the director who made "Don Juan" and two other pictures with John Barrymore, and the director who had had more sound film experience than any up to that time.

For the first time in his career Jolson was asked to do more than sing mammy songs. Here was a story full of pathos that required some real acting. Not only acting, but accomplishing a result with always a thought in mind of a microphone hanging overhead and a wax that was being cut. Long nights shooting on the two small sound stages that Warner's had built to produce short subjects on and later on the stages that were only temporarily equipped to handle recording. Takes and re-takes and the heart-breaking

(Continued on page 105)

Everybody Writes LITTLE JACK

Do You Remember ROSALINE GREENE?



LITTLE JACK LITTLE, right, and Happy Harry Geise, left, two Radio artists young in years but old in experience, who have an army of followers.

LITTLE JACK LITTLE and his mail appeal! Wherever he goes this little giant of the air draws letters by thousands, and if he ever should announce his intention of running for President on the democratic ticket it will be time for the republicans to become alarmed.

In the picture shown above, Little Jack Little is answering one of the flood of telephone calls that followed immediately after one of his broadcasts. Happy Harry Geise, chief announcer at KSTP, St. Paul, is helping to open up the letters. "How-do-you-do, Harry," that's what they used to call him in Chicago, seems to be happy about what he is reading, so we—that means you, too, dear reader—may reasonably suppose that this billet doux has a word or two of mutual interest for the two of them.

But, speaking of the telephone calls, Jack and Harry introduced a novelty during the brief visit of the former at the St. Paul station. They put the listeners on the air. Oh, yes, indeed. You will have to get the technical information as to details from the station engineer, but it's true. Somebody called up from Dallas, Texas, and the operator hooked the call into the microphone. If the Dallas fan had been listening to the loud-speaker while he was making his call, he would have heard his voice come back to him—all the way from Dallas to St. Paul and back to Dallas. Everybody else who happened to be listening in at the time also heard the voice from Texas.

Then came other calls, one from Lima, Ohio; another from Glendive, Mont.; others from Elkhart, Ind.; Sioux City, Iowa; Milwaukee, Wis.; Aberdeen, S. D., and Bismarck, N. D.

But Little Jack Little is a flighty favorite—here today, somewhere else tomorrow. Wherever he goes he is warmly welcomed in return. From St. Paul he hopped down to WLW, Cincinnati, and there he remains to this very day, according to last accounts.

RADIO'S first leading lady, who was playing leads while still in her 'teens, has cemented her claims to this unique title more closely than ever.

Rosaline Greene, who was the leading lady of the famous little band of WGY players at Schenectady during her college days in Albany, is now a leading lady of the Eveready Hour, which has been the medium for the introduction by Radio of a long list of stage and concert stars during the five years of its existence.

Supported by a regular stock company, which includes a number of actors and actresses known to legitimate theatre goers, she has already received warm critical approval for her work in three recent Eveready Hour continuity productions and will soon be heard in other ambitious undertakings which that pioneer program has scheduled for this new year.

Although, in the interim following her work with the WGY players and before her appearance in the Eveready Hour studios, she played in stock and on Broadway, Miss Greene possesses no desire to win triumphs upon the visible stage in preference to her Radio successes.

The girl who, as the new star of the Eveready Hour played Joan of Arc in the production of that name, and who was Josephine to Lionel Atwill's Napoleon in the play of the latter title, is firmly wedded to a permanent Radio career.

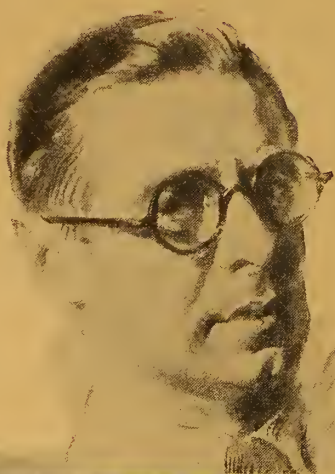
Possessed of a splendid voice, whose clear tones won for her first prize for the best Radio voice at the Radio World's Fair, the Eveready leading lady has more than the average actress' share of beauty and charm. It is easy to imagine her as a popular matinee idol on Broadway.



ROSALINE GREENE took to stage in her 'teens and now heads stock company for exclusive Eveready Hour presentations.

Rosaline Greene was born on Long Island and attended the New York State Teachers' college at Albany, where she was picked from a number of members of the school's dramatic society by the WGY director, for a Radio try-out. From WGY, after a year of teaching elocution, she went to New York a few years ago, to meet with similar successes in a number of Radio productions.

Chic Cosmetics Accent Eyes



MME. CIRCE, Beauty Expert, Differs with Artists; Agrees with Hazel Cades, Modern Woman Seeks Smartness, not Beauty.

“WHAT is beauty and how can every woman have it,” was asked every one of the artists on this page and it is a question every one of us asks. In this day of modern inventions and modern ideas of styles and cosmetics, it is possible for every woman to have individual charm and style. Of course, no doubt, Helen Dryden, to the left, who has designed stage settings and costumes as well as fashions and magazine covers, likes a chic loveliness. Her own simple smartness shows this. Dean Cornwell, whose picture is next to Miss Dryden, is a mural painter and admires those lovely creatures, who would look best on his canvas, of classic graceful appearance. Who doesn't know the pretty ladies James Montgomery Flagg, left, has drawn for a generation? From his illustrations I should say he likes blondes of curving lines. Arthur William Brown, who turns

Helen Dryden, above;
Dean Cornwell, left,
above; James Montgomery Flagg, left.

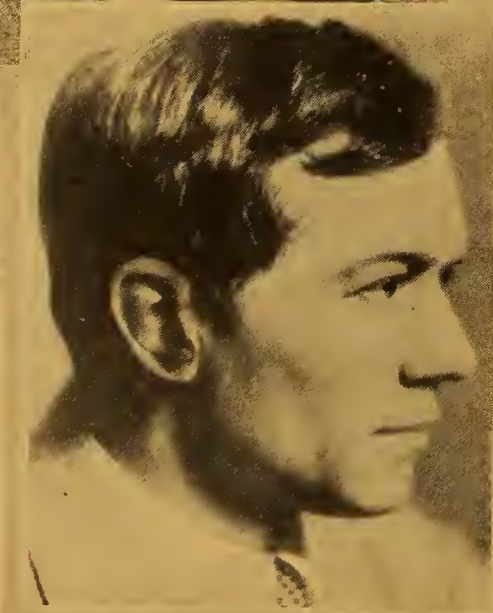
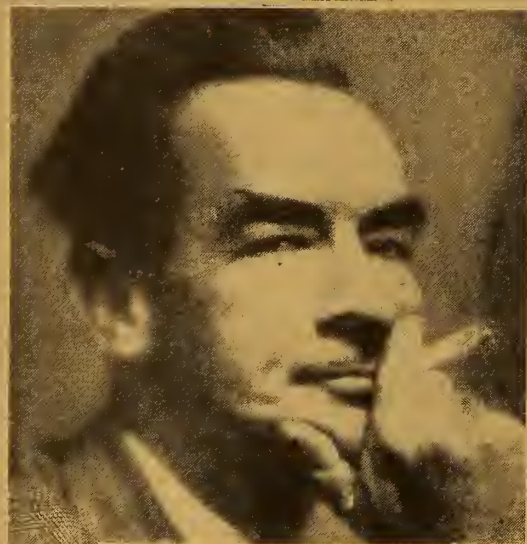
his profile this way, is certainly a judge of beauty because he has been on the job of helping select Miss America from the swarms of girls who come each year to Atlantic City.

WHO CAN help but wonder if John Held, Jr., below with the mustache, really likes the thin little flapper he creates, and if Pehnryn Stanlaws, next to him, only admires the beautiful ladies of his pen and brush. At any rate, all of these people have been heard over the National Broadcasting company network telling what they think is beauty, but the simple statement of Hazel Rawson Cades, whose picture is not here, appeals to the modern woman much more. She says, “Beauty is quite unimportant. This is the age of smartness and smartness is simply a matter of education and keeping up-to-the-minute.”

This smartness Mrs. Cades speaks about, is impossible without a few beauty aids. Why do some women scorn to accept these and have a feeling of superiority because they will not use a bit of rouge, lipstick and eye darkener. Ragged brows, too light lashes, a sallow skin are not things to be proud of, especially when it is so possible to disguise defects with modern makeup.

The most important feature of the face and the one to be given prominence is the eye, for this is the season of accented eyes. Whether they are blue, brown, black, green or hazel they can be made to look larger, deeper in tone and even coquettish with a little treatment. Of course, the colors we wear help to accent them. Brown, tan and yellow bring out the sparkle and color of brown eyes. The light blue ones gain in tone quality from deep blues and greens. Violet eyes reflect

(Continued on page 120)



Arthur William Brown, above, assists in selecting Miss America; John Held, Jr., on the right, is the daddy of the flappers in raccoon coats; Pehnryn Stanlaws, extreme right, is an artist, dramatist and former motion picture producer.

Dressing up to Your Personality

By Josephine Felts

Who Speaks through WJZ of the NBC System on Friday afternoons at 2:30

WHENEVER someone asks me what type of clothes to wear I always feel strongly tempted to refer her to that wise old maxim, "know thyself" for no advice could be more profitable when it comes to the art of dressing well.

Several seasons ago most of us wore much the same frocks and colors with utter disregard of our own characteristic quirks. But the creators of costumes decided this would never do. So they got together and devised ways and means of stimulating our inert imaginations. They completely reversed the standard of smartness until it came to mean individuality. The influence of personality invaded the shops. Instead of persuading a reluctant customer with, "Why, they're all wearing this frock," the clever saleswoman now holds her interest by telling her that this is the only frock of its kind, subtly intimating that this particular patron is the logical person to wear it successfully.

In my opinion, type is a very much overdone word, anyhow, and it really is dreadfully misleading. There are so few women who have all the attributes that go to make up a type. In fact it is, in all probability, those unexpectedly dark eyes that make one's blonde hair so interesting or a glorious ivory skin that gives such glossy overtones to black hair.

Suppose you take stock of yourself frankly and impersonally, leaving out of consideration any thought of type. You will un-

The best way to minimize your imperfections is to emphasize your good features and in this way smart women come to the fore.

Costume harmony includes consideration of fabric and color, also appropriateness to its purpose.

doubtedly find both good points and bad. The best way to minimize your imperfections is to emphasize your good points. And that's where the smart woman comes to the fore, for clothes have the power to make you either the picture or the background, and who in this day and age wants to be background? The thing is to know yourself.

There is, for instance, the question of hats. Most hats are rather simple in treatment and material, so it is most important for you to be careful to select the hat that means *you*. If you are round-faced and a bit chubby don't, for heaven's sake, go in for one of those very popular visca tricot turbans even if all your friends do think they're perfectly adorable. Some kind of modified brim or one-sided treatment will give longer lines to your face and be infinitely more becoming. On the other hand your features may be irregular. Your hat should have a soft rippling brim

that lends a softness to your face, or can even be one of those dashing up-on one-side, down-on-the-other hats. Color need not puzzle the woman who knows her good points, for there is such a wide range to choose from that anyone can wear her favorite shade and still be modish. Of course, newer and brighter colors are prevalent in spring, but many of them are the greyed or muted tones that are almost universally flattering.

Costume harmony includes the consideration of fabric and color and appropriateness of the costume to its purpose. Very few women would wear low-heeled oxfords with a rather formal afternoon frock, and yet many of them think nothing of wearing high heeled slippers and very sheer hose with tweeds or, other definite sportswear. It is impossible to achieve chic without assembling your costume so that the accessories and the frock or coat have a definite relation. The accessories should match (Continued on page 108)

Your hat should have a soft rippling brim that lends softness to the face.



This Clever Cook Uses Leftovers

Appetizing and Tasty Meals Made Up in Kitchen From Odds and Ends

By Mildred Davis Terman

Mildred Davis Terman, Director of the KDKA Home Forum, is on the air at 10:30 a. m. each morning with practical hints for saving time and money.

PRACTICALLY any woman can serve tempting meals if she has everything with which to work and can market as she desires, but it takes a clever cook to use what she has at hand and to prepare it so that the resulting meal is an appetizing and tasty one.

Using the left-over is an important part of any housekeeper's work, for in this way she is able to keep within her budget. In planning the weekly expenditures how many of you consider not only the actual money spent for food, but your gas and your time as well? When you cook enough potatoes to last two days, you are saving on the fuel used. No more heat is needed to boil ten vegetables than to cook six. The next day you can spend a shorter time getting the dinner ready. The economy of your own time is just as important as the economy of the food and fuel.

Using up the left-overs test the imagination of the housewife. There is an art to good cooking. One woman will look at a few cold potatoes, peas, lettuce and apricots and perhaps, a bit of steak, and sink disconsolately into a chair, whereas, another will visualize an attractive meal. Perhaps a casserole of the potatoes and meat with a few onions added to give flavor, a salad made of the peas, apricot short-cake will make an appetizing dinner.

Test your family with well cooked left-overs and you will be surprised how well they will be received. If cooked just right, they are tasty and have even more flavor than the first day's meals. But I do think that Americans as a whole need to learn to season their food more temptingly. The addition of just the right pinch of pepper and the right amount of salt and other spices improves the taste.

In the following menu, the main dishes have as their basis, food which has been left over from other meals.

Cream of Tomato Soup

Fish Pie

Rolls

Cabbage Salad

Caramel Rice Pudding
Coffee

Buttered Beets

Butter

Fish Pie

Make a cream sauce of:
1 tablespoon butter,
2 tablespoons flour,

1 cup milk.

Add 2 tablespoons chopped pimento.

Flake 2 cups fish.

Grate 1 cup cheese.

Butter a baking dish.

Line with mashed potatoes,

(2 to 3 cups, depending upon size of dish).

Arrange fish, sauce, and cheese in layers, finishing with a layer of cheese.

Put in hot oven heated to 425 degrees.

Bake 20 to 25 minutes.



Mildred Davis Terman, Director of KDKA's Home Forum, preparing a talk from the result of her experiment on a new recipe which she will broadcast from the studio of Station KDKA.

Have you ever thrown away sour cream just because you did not know what to do with it? There are many delicious dishes with sour cream used as an ingredient, and among these is a dressing for cabbage salad.

Cabbage Salad
Shred a medium sized head of cabbage.

Add 1 shredded green pepper, if desired.

Whip $\frac{1}{2}$ cup sour cream.

Add 1 tablespoon vinegar, 2 tablespoons minced onion or juice, (to obtain juice, cut onion and scrape with spoon).

$\frac{3}{4}$ teaspoon salt.

$\frac{1}{8}$ teaspoon pepper.

Mix with cabbage.

Serving caramel rice pudding aids in two ways; it helps to use left-over rice and assists in using the daily quota of milk necessary in the diet.

Caramel Rice Pudding

Caramelize 1 cup granulated sugar by melting in frying pan until sugar is a thick brown syrup.

Add 2 cups milk.

Let cook until sugar is dissolved.

Add to 3 eggs beaten slightly

1 cup cooked rice.

$\frac{1}{4}$ teaspoon salt.

$\frac{1}{2}$ teaspoon vanilla.

Pour into a greased baking dish.

Bake 30 to 35 minutes in a slow oven.

The following menu utilizes left-over beef, rice, peas, and sponge cake:

Casserole of Beef and Rice

Buttered Spinach

Carrot and Pea Salad

Rolls

Butter

Stale Sponge Cake with Lemon Sauce

Casserole of beef and rice is an unusually attractive and appetizing dish.

Casserole of Beef and Rice

Grind 2 cups of beef.

Season to taste with salt and pepper.

(Continued on page 112)

Log Your Favorite Stations

Met.	KC	STATIONS	DIALS			Met.	KC	STATIONS	DIALS		
			1	2	3				1	2	3
199.9	1500					293.9	1020				
201.2	1490					296.9	1010				
202.6	1480					299.8	1000				
204.0	1470					302.8	990				
205.4	1460					305.9	980				
206.8	1450					309.1	970				
208.2	1440					312.3	960				
209.7	1430					315.6	950				
211.1	1420					319.0	940				
212.6	1410					322.4	930				
214.2	1400					325.9	920				
215.7	1390					329.5	910				
217.3	1380					333.1	900				
218.8	1370					336.9	890				
220.4	1360					340.7	880				
222.1	1350					344.6	870				
223.7	1340					348.6	860				
225.4	1330					352.7	850				
227.1	1320					356.9	840				
228.9	1310					361.2	830				
230.6	1300					365.6	820				
232.4	1290					370.2	810				
234.2	1280					374.8	800				
236.1	1270					379.5	790				
238.0	1260					384.4	780				
239.9	1250					389.4	770				
241.8	1240					394.5	760				
243.8	1230					399.8	750				
245.8	1220					405.2	740				
247.8	1210					410.7	730				
249.9	1200					416.4	720				
252.0	1190					422.3	710				
254.1	1180					428.3	700				
256.3	1170					434.5	690				
258.5	1160					440.9	680				
260.7	1150					447.5	670				
263.0	1140					454.3	660				
265.3	1130					461.3	650				
267.7	1120					468.5	640				
270.1	1110					475.9	630				
272.6	1100					483.6	620				
275.1	1090					491.5	610				
277.6	1080					499.7	600				
280.2	1070					508.2	590				
282.8	1060					516.9	580				
285.5	1050					526.0	570				
288.3	1040					535.4	560				
291.1	1030					545.1	550				

Sunday					Eastern 9 m.			Central 9 m.			Mountain 9 m.			Pacific 9 m.			Eastern 9 m.					Central 9 m.			Mountain 9 m.			Pacific 9 m.						
National Artists.					Our Government.			Majestic Theatre of the Air.			Key Station—2XE (58.5-970).			WABC (309.1-970).			Key Station—2XE (58.5-970).			WABC (309.1-970).			Key Station—2XE (58.5-970).			WABC (309.1-970).								
Meters Kc. Call					Meters Kc. Call			Meters Kc. Call			Meters Kc. Call			Meters Kc. Call			Meters Kc. Call			Meters Kc. Call			Meters Kc. Call			Meters Kc. Call								
252.8	1060	KBAL	399.8	750	WJR	325.9	920	KOMO	468.5	640	KFI	245.6	1220	WCAE	265.6	820	WHAS	245.6	1220	WCAE	265.6	820	WHAS	245.6	1220	WCAE	265.6	820	WHAS					
394.5	760	WJZ				379.5	790	KGO	483.6	620	KGW	252	1190	WOAI	379.5	790	WGY	252	1190	WOAI	379.5	790	WGY	252	1190	WOAI	379.5	790	WGY					
						440.9	680	KPO	508.2	590	KHQ	263	1140	KVOO	405.8	740	WSB	263	1140	KVOO	405.8	740	WSB	263	1140	KVOO	405.8	740	WSB					
1:30 p.m. 12:30 p.m.					11:30 a.m. 10:30 a.m.			Stetson Parade.			KSTP			WSAI			KSTP			WSAI			KSTP			WSAI			KSTP			WSAI		
Peerless Producers.					Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.			Peerless Producers.		
205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY					
245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI					
252	1190	WOAI	454.3	600	WEAF	252	1190	WOAI	454.3	600	WEAF	252	1190	WOAI	454.3	600	WEAF	252	1190	WOAI	454.3	600	WEAF	252	1190	WOAI	454.3	600	WEAF					
263	1140	KVOO	461.3	650	WSM	263	1140	KVOO	461.3	650	WSM	263	1140	KVOO	461.3	650	WSM	263	1140	KVOO	461.3	650	WSM	263	1140	KVOO	461.3	650	WSM					
277.6	1080	WBT	491.5	610	WDAF	277.6	1080	WBT	491.5	610	WDAF	277.6	1080	WBT	491.5	610	WDAF	277.6	1080	WBT	491.5	610	WDAF	277.6	1080	WBT	491.5	610	WDAF					
280.2	1070	WTAM	499.7	600	WTIC	280.2	1070	WTAM	499.7	600	WTIC	280.2	1070	WTAM	499.7	600	WTIC	280.2	1070	WTAM	499.7	600	WTIC	280.2	1070	WTAM	499.7	600	WTIC					
293.9	1020	KYW	508.2	590	WFAA	293.9	1020	KYW	508.2	590	WFAA	293.9	1020	KYW	508.2	590	WFAA	293.9	1020	KYW	508.2	590	WFAA	293.9	1020	KYW	508.2	590	WFAA					
299.8	1000	WOC	508.2	590	WEEI	299.8	1000	WOC	508.2	590	WEEI	299.8	1000	WOC	508.2	590	WEEI	299.8	1000	WOC	508.2	590	WEEI	299.8	1000	WOC	508.2	590	WEEI					
405.2	740	WSB	508.2	590	WOW	405.2	740	WSB	508.2	590	WOW	405.2	740	WSB	508.2	590	WOW	405.2	740	WSB	508.2	590	WOW	405.2	740	WSB	508.2	590	WOW					
315.6	950	WRC	516.9	580	WTAG	315.6	950	WRC	516.9	580	WTAG	315.6	950	WRC	516.9	580	WTAG	315.6	950	WRC	516.9	580	WTAG	315.6	950	WRC	516.9	580	WTAG					
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325.9	920	KPRC	545.1	550	KSD	325.9	920	KPRC	545.1	550	KSD	325.9	920	KPRC	545.1	550	KSD	325.9	920	KPRC	545.1	550	KSD	325.9	920	KPRC	545.1	550	KSD					
336.9	890	WIAR	545.1	550	WGR	336.9	890	WIAR	545.1	550	WGR	336.9	890	WIAR	545.1	550	WGR	336.9	890	WIAR	545.1	550	WGR	336.9	890	WIAR	545.1	550	WGR					
365.6	820	WHAS				365.6	820	WHAS				365.6	820	WHAS				365.6	820	WHAS				365.6	820	WHAS								
2 p.m. 1 p.m.					12 n. 11 a.m.			6:30 p.m. 5:30			4:30			3:30			9:15 p.m. 8:15			7:15			6:15											
Roxey Stroll.					Roxey Stroll.			Roxey Stroll.			Roxey Stroll.			Roxey Stroll.			Roxey Stroll.			Roxey Stroll.			Roxey Stroll.			Roxey Stroll.			Roxey Stroll.					
222.1	1350	KWK	305.9	980	KDKA	222.1	1350	KWK	305.9	980	KDKA	222.1	1350	KWK	305.9	980	KDKA	222.1	1350	KWK	305.9	980	KDKA	222.1	1350	KWK	305.9	980	KDKA					
234.2	1280	WEBC	325.9	920	KPRC	234.2	1280	WEBC	325.9	920	KPRC	234.2	1280	WEBC	325.9	920	KPRC	234.2	1280	WEBC	325.9	920	KPRC	234.2	1280	WEBC	325.9	920	KPRC					
245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ					
282.8	1060	WBAL	399.8	750	WIR	282.8	1060	WBAL	399.8	750	WIR	282.8	1060	WBAL	399.8	750	WIR	282.8	1060	WBAL	399.8	750	WIR	282.8	1060	WBAL	399.8	750	WIR					
293.9	1020	KYW	428.3	700	WLW	293.9	1020	KYW	428.3	700	WLW	293.9	1020	KYW	428.3	700	WLW	293.9	1020	KYW	428.3	700	WLW	293.9	1020	KYW	428.3	700	WLW					
302.8	990	WBZ	483.6	620	WTMJ	302.8	990	WBZ	483.6	620	WTMJ	302.8	990	WBZ	483.6	620	WTMJ	302.8	990	WBZ	483.6	620	WTMJ	302.8	990	WBZ	483.6	620	WTMJ					
Biblical Dramas.					Biblical Dramas.			Biblical Dramas.			Biblical Dramas.			Biblical Dramas.			Biblical Dramas.			Biblical Dramas.			Biblical Dramas.			Biblical Dramas.			Biblical Dramas.					
245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI					
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288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF					
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325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW					
365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD					
2:30 p.m. 1:30 p.m.					12:30 p.m. 11:30 a.m.			7 p.m. 6			5			4			9:45 p.m. 8:45			7:45			6:45											
Frances Paperte.					Frances Paperte.			Frances Paperte.			Frances Paperte.			Frances Paperte.			Frances Paperte.			Frances Paperte.			Frances Paperte.			Frances Paperte.			Frances Paperte.					
245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI	245.6	1220	WCAE	374.8	800	WSAI					
263	1140	KVOO	454.3	600	WEAF	263	1140	KVOO	454.3	600	WEAF	263	1140	KVOO	454.3	600	WEAF	263	1140	KVOO	454.3	600	WEAF	263	1140	KVOO	454.3	600	WEAF					
288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF	288.3	1040	WFAA	491.5	610	WDAF					
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325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW	325.9	920	WWI	508.2	590	WOW					
365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD	365.6	820	WHAS	545.1	550	KSD					
3 p.m. 2					12 m.			Longines Time.			6			5			9:45 p.m. 8:45			7:45			6:45											
Young People's Conference (Dr. Poling).					Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).			Young People's Conference (Dr. Poling).					
205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY	205.4	1460	KSTP	379.5	790	WGY					
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245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ	245.8	1220	WREN	394.5	760	WIZ					
263	1140	KVOO	428.3	700	WLW	263	1140	KVOO	428.3	700	WLW	263	1140	KVOO	428.3	700	WLW	263	1140	KVOO	428.3	700	WLW	263	1140	KVOO	428.3	700	WLW					
277.6	1080	WBT	483.6	620	WTMJ	277.6	1080	WBT	483.6	620	WTMJ	277.6	1080	WBT	483.6	620	WTMJ	277.6	1080	WBT	483.6	620	WTMJ	277.6	1080	WBT	483.6	620	WTMJ					
Symphonic Hour.					Symphonic Hour.			Symphonic Hour.			Symphonic Hour.			Symphonic Hour.			Symphonic Hour.			Symphonic Hour.			Symphonic Hour.			Symphonic Hour.			Symphonic Hour.					
Key Station—2XE (58.5-970).					Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).			Key Station—2XE (58.5-970).					
204	1470	WKWB	258.5	1160	WOWO	204	1470	WKWB	258.5	1160	WOWO	204	1470	WKWB	258.5	1160	WOWO	204	1470	WKWB	258.5	1160	WOWO	204	1470	WKWB	258.5	1160	WOWO					
215.7	1390	WHK	257.1	1090	KMOX																													

Eastern 1 p.m.				Central 12 m.				Mountain 11 a.m.				Pacific 10			
Montgomery Ward Farm and Home Hour.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	315.6	950	WHAS	222.1	1350	KWK	361.2	830	KOA	222.1	1350	KWK	361.2
222.1	1350	KWK	361.2	830	KOA	222.1	1350	KWK	361.2	830	KOA	222.1	1350	KWK	361.2
252	1190	WOAZ	365.6	820	WHAS	252	1190	WOAZ	365.6	820	WHAS	252	1190	WOAZ	365.6
263	1140	KVOO	405.8	740	WSB	263	1140	KVOO	405.8	740	WSB	263	1140	KVOO	405.8
288.3	1040	WFAA	461.3	650	WSM	288.3	1040	WFAA	461.3	650	WSM	288.3	1040	WFAA	461.3
293.9	1020	KFKX	491.5	610	WDAF	293.9	1020	KFKX	491.5	610	WDAF	293.9	1020	KFKX	491.5
299.8	1000	WHO	508.2	590	WOW	299.8	1000	WHO	508.2	590	WOW	299.8	1000	WHO	508.2
305.9	980	KDKA				305.9	980	KDKA				305.9	980	KDKA	
1:15 p.m.				12:15				11:15 a.m.				10:15			
U. S. Department of Agriculture.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	315.6	950	WRC	222.1	1350	KWK	361.2	830	KOA	222.1	1350	KWK	361.2
222.1	1350	KWK	361.2	830	KOA	222.1	1350	KWK	361.2	830	KOA	222.1	1350	KWK	361.2
252	1190	WOAI	365.6	820	WHAS	252	1190	WOAI	365.6	820	WHAS	252	1190	WOAI	365.6
263	1140	KVOO	405.8	740	WSB	263	1140	KVOO	405.8	740	WSB	263	1140	KVOO	405.8
288.3	1040	WFAA	461.3	650	WSM	288.3	1040	WFAA	461.3	650	WSM	288.3	1040	WFAA	461.3
293.9	1020	KFKX	491.5	610	WDAF	293.9	1020	KFKX	491.5	610	WDAF	293.9	1020	KFKX	491.5
299.8	1000	WHO	508.2	590	WOW	299.8	1000	WHO	508.2	590	WOW	299.8	1000	WHO	508.2
305.9	980	KDKA				305.9	980	KDKA				305.9	980	KDKA	
7:30 p.m.				6:30				5:30				4:30			
Roxey and His Gang.				Kc. Call				Meters Kc. Call				Kc. Call			
222.1	1350	KWK	302.9	990	WBZA	222.1	1350	KWK	302.9	990	WBZA	222.1	1350	KWK	302.9
234.2	1280	WEBC	305.9	980	KDKA	234.2	1280	WEBC	305.9	980	KDKA	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC	305.9
245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6	950	WRC	245.8	1220	WREN	315.6
260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6	870	WLS	260.7	1150	WHAM	344.6
277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5	760	WTIC	277.6	1080	WBT	399.5
282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8	750	WJR	282.8	1060	WBAL	399.8
288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2	740	WSB	288.3	1040	WFAA	405.2
302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3	650	WSM	302.8	990	WBZ	461.3
8 p.m.				7				6				5			
The Voice of Firestone.				Kc. Call				Meters Kc. Call				Kc. Call			
205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6	820	WHAS	205.4	1460	KSTP	365.6
234.2	1280	WEBC	305.9	980	WRC	234.2	1280	WEBC							

Eastern 8:30 p.m.				Central 7:30				Mountain 6:30				Pacific 5:30			
Champion Sparkers.				Call				Call				Call			
Meters	Kc.	Kc.	Kc.	Meters	Kc.	Kc.	Kc.	Meters	Kc.	Kc.	Kc.	Meters	Kc.	Kc.	Kc.
222.1	1350	KWK	302.8	302.8	990	WBZA	302.8	302.8	990	WBZA	302.8	302.8	990	WBZA	302.8
245.8	1220	WREN	305.9	305.9	990	KDKA	305.9	305.9	990	KDKA	305.9	305.9	990	KDKA	305.9
260.7	1150	WHAM	399.8	399.8	750	WJR	399.8	399.8	750	WJR	399.8	399.8	750	WJR	399.8
282.8	1060	WBAL	428.3	428.3	700	WLW	428.3	428.3	700	WLW	428.3	428.3	700	WLW	428.3
293.9	1020	KYW													
302.8	990	WBZ													
Hoover Sentinals.				KSTP				KSTP				KSTP			
205.4	1460	KSTP	379.5	379.5	790	WGY	379.5	379.5	790	WGY	379.5	379.5	790	WGY	379.5
245.6	1220	WCAE	405.2	405.2	740	WSB	405.2	405.2	740	WSB	405.2	405.2	740	WSB	405.2
277.6	1080	WBT	454.3	454.3	660	WEAF	454.3	454.3	660	WEAF	454.3	454.3	660	WEAF	454.3
280.2	1070	WTAM	499.7	499.7	600	WDAF	499.7	499.7	600	WDAF	499.7	499.7	600	WDAF	499.7
288.3	1040	WFAA	491.5	491.5	610	WEEI	491.5	491.5	610	WEEI	491.5	491.5	610	WEEI	491.5
299.8	1000	WHO	508.2	508.2	590	WOW	508.2	508.2	590	WOW	508.2	508.2	590	WOW	508.2
315.6	950	WRC	535.4	535.4	560	WFI	535.4	535.4	560	WFI	535.4	535.4	560	WFI	535.4
325.9	920	WVJ	545.1	545.1	550	WGR	545.1	545.1	550	WGR	545.1	545.1	550	WGR	545.1
333.1	900	WKY													
265.6	820	WHAS													
9 p.m.				8				7				6			
Aunt Jemina.				8				7				6			
204	1470	WKBW	275.1	275.1	1090	KMOX	275.1	275.1	1090	KMOX	275.1	275.1	1090	KMOX	275.1
215.7	1390	WHK	315.6	315.6	950	KMBC	315.6	315.6	950	KMBC	315.6	315.6	950	KMBC	315.6
223.7	1340	WSPD	333.1	333.1	900	WBFL	333.1	333.1	900	WBFL	333.1	333.1	900	WBFL	333.1
227.1	1320	WADC	348.6	348.6	860	WABC	348.6	348.6	860	WABC	348.6	348.6	860	WABC	348.6
232.4	1290	WJAS	389.4	389.4	770	WBMM	389.4	389.4	770	WBMM	389.4	389.4	770	WBMM	389.4
238	1260	KOIL	419.5	419.5	610	WFAA	419.5	419.5	610	WFAA	419.5	419.5	610	WFAA	419.5
238	1260	WLWB	479.9	479.9	630	WMAL	479.9	479.9	630	WMAL	479.9	479.9	630	WMAL	479.9
241.8	1240	WGHP	499.7	499.7	600	WCAO	499.7	499.7	600	WCAO	499.7	499.7	600	WCAO	499.7
243.8	1230	WNAC	545.1	545.1	550	WEAN	545.1	545.1	550	WEAN	545.1	545.1	550	WEAN	545.1
258.5	1160	WOWO													
Seiberling Singers.				KSTP				KSTP				KSTP			
205.4	1460	KSTP	365.6	365.6	820	WHAS	365.6	365.6	820	WHAS	365.6	365.6	820	WHAS	365.6
238	1260	WJAX	379.5	379.5	790	WGY	379.5	379.5	790	WGY	379.5	379.5	790	WGY	379.5
245.6	1220	WCAE	405.2	405.2	740	WSB	405.2	405.2	740	WSB	405.2	405.2	740	WSB	405.2
277.6	1080	WBT	454.3	454.3	660	KPO	454.3	454.3	660	KPO	454.3	454.3	660	KPO	454.3
280.2	1070	WTAM	499.7	499.7	600	WEAF	499.7	499.7	600	WEAF	499.7	499.7	600	WEAF	499.7
288.3	1040	WFAA	491.5	491.5	610	WDAF	491.5	491.5	610	WDAF	491.5	491.5	610	WDAF	491.5
299.8	1000	WHO	508.2	508.2	590	WEEI	508.2	508.2	590	WEEI	508.2	508.2	590	WEEI	508.2
315.6	950	WRC	535.4	535.4	560	WOW	535.4	535.4	560	WOW	535.4	535.4	560	WOW	535.4
325.9	920	WVJ	545.1	545.1	550	WGR	545.1	545.1	550	WGR	545.1	545.1	550	WGR	545.1
333.1	900	WKY													
336.9	890	WJAR													
361.2	830	KOA													
Seiberling Transcontinental Program.				8:30				7:30				6:30			
325.9	920	KOMO	483.6	483.6	620	KGW	483.6	483.6	620	KGW	483.6	483.6	620	KGW	483.6
379.5	790	KGO	508.2	508.2	590	KHQ	508.2	508.2	590	KHQ	508.2	508.2	590	KHQ	508.2
468.5	640	KFI													
9:30 p.m.				8:30				7:30				6:30			
Sonora Phonograph Hour.				8:30				7:30				6:30			
Key Station 2XE (58.5m-970kc), WABC (309.1m-970kc).				8:30				7:30				6:30			
201.2	1490	WLAC	258.5	258.5	1160	WEAN	258.5	258.5	1160	WEAN	258.5	258.5	1160	WEAN	258.5
204	1470	KFFJ	267.1	267.1	1120	WISN	267.1	267.1	1120	WISN	267.1	267.1	1120	WISN	267.1
204	1470	KGA	275.1	275.1	1090	KMOX	275.1	275.1	1090	KMOX	275.1	275.1	1090	KMOX	275.1
204	1470	WKBW	309.1	309.1	970	KJR	309.1	309.1	970	KJR	309.1	309.1	970	KJR	309.1
215.7	1390	KLRA	315.6	315.6	950	KMBC	315.6	315.6	950	KMBC	315.6	315.6	950	KMBC	315.6
215.7	1390	WHK	322.4	322.4	930	WBRC	322.4	322.4	930	WBRC	322.4	322.4	930	WBRC	322.4
223.7	1340	WSPD	333.1	333.1	900	WBFL	333.1	333.1	900	WBFL	333.1	333.1	900	WBFL	333.1
227.1	1320	WADC	348.6	348.6	860	WABC	348.6	348.6	860	WABC	348.6	348.6	860	WABC	348.6
230.6	1300	KFH	370.2	370.2	810	WCCO	370.2	370.2	810	WCCO	370.2	370.2	810	WCCO	370.2
232.4	1290	KDYL	384.4	384.4	780	WTAR	384.4	384.4	780	WTAR	384.4	384.4	780	WTAR	384.4
232.4	1290	WJAS	479.9	479.9	630	WMAL	479.9	479.9	630	WMAL	479.9	479.9	630	WMAL	479.9
234.2	1280	WDOD	491.5	491.5	610	WFAA	491.5	491.5	610	WFAA	491.5	491.5	610	WFAA	491.5
234.2	1280	WRR	499.7	499.7	600	WREC	499.7	499.7	600	WREC	499.7	499.7	600	WREC	499.7
236.1	1270	WDSU	499.7	499.7	600	WCAO	499.7	499.7	600	WCAO	499.7	499.7	600	WCAO	499.7
238	1260	KOIL	526	526	570	KMTR	526	526	570	KMTR	526	526	570	KMTR	526
238	1260	WLWB	526	526	570	WNAC	526	526	570	WNAC	526	526	570	WNAC	526
241.8	1240	WGHP	535.4	535.4	560	WLZ	535.4	535.4	560	WLZ	535.4	535.4	560	WLZ	535.4
243.8	1230	KYA	545.1	545.1	550	WKRC	545.1	545.1	550	WKRC	545.1	545.1	550	WKRC	545.1
243.8	1230	WNAC													
254.1	1180	KEX													
Maxwell House Coffee.				KSTP				KSTP				KSTP			
205.4	1460	KSTP	361.2	361.2	830	KOA	361.2	361.2	830	KOA	361.2	361.2	830	KOA	361.2
234.2	1280	WEBC	365.6	365.6	820	WHAS	365.6	365.6	820	WHAS	365.6	365.6	820	WHAS	365.6
238	1260	WJAX	379.5	379.5	790	WGY	379.5	379.5	790	WGY	379.5	379.5	790	WGY	379.5
260.7	1150	WHAM	384.4	384.4	780	WMC	384.4	384.4	780	WMC	384.4	384.4	780	WMC	384.4
270.1	1110	WRVA	398.8	398.8	750	WJR	398.8	398.8	750	WJR	398.8	398.8	750	WJR	398.8
277.6	1080	WBT	405.2	405.2	740	WSB	405.2	405.2	740	WSB	405.2	405.2	740	WSB	405.2
282.8	1060	WBAL	428.3	428.3	700	WLW	428.3	428.3	700	WLW	428.3	428.3	700	WLW	428.3
293.9	1020	KYW	461.3	461.3	650	WSM	461.3	461.3	650	WSM	461.3	461.3	650	WSM	461.3
299.8	1000	WHO	491.5	491.5	610	WDAF	491.5	491.5	610	WDAF	491.5	491.5	610	WDAF	491.5
302.8	990	WBZ	508.2	508.2	590	WOW	508.2	508.2	590	WOW	508.2	508.2	590	WOW	508.2
305.9	980	KDKA	483.6	483.6	620	WTNJ	483.6	483.6	620	WTNJ	483.6	483.6	620	WTNJ	483.6
325.9	920	KPRC	545.1	545.1	550	KSD	545.1	545.1	550	KSD	545.1	545.1	550	KSD	545.1
10 p.m.				9				8				7			
Columbians.				9				8				7			
201.2	1490	WLAC	267.7	267.7	1120	WISN	267.7	267.7	1120	WISN	267.7	267.7	1120	WISN	267.7
204	1														

Eastern 10 p.m.		Central 9		Mountain 8		Pacific 7	
Hudson-Essex		Challengers.					
Meters	Kc.	Call		Meters	Kc.	Call	
205.4	1460	KSTP		205.4	1460	KSTP	
222.1	1350	KWK		222.1	1350	KWK	
234.2	1280	WEBC		234.2	1280	WEBC	
245.8	1220	WREN		245.8	1220	WREN	
252	1190	WOAI		252	1190	WOAI	
260.7	1150	WHAM		260.7	1150	WHAM	
263	1140	KVOO		263	1140	KVOO	
265.3	1130	KSL		265.3	1130	KSL	
277.6	1080	WBAL		277.6	1080	WBAL	
282.8	1040	WFAA		282.8	1040	WFAA	
288.3	1020	KYW		288.3	1020	KYW	
302.8	990	WBZ		302.8	990	WBZ	
302.8	990	WBZA		302.8	990	WBZA	
305.9	980	KDKA		305.9	980	KDKA	

10:30 p.m.		9:30		8:30		7:30	
Thirty Minute		Men.					
215.7	1390	WHK		215.7	1390	WHK	
223.7	1340	WSPD		223.7	1340	WSPD	
227.1	1320	WADC		227.1	1320	WADC	
232.4	1290	WIAS		232.4	1290	WIAS	
238	1260	KOIL		238	1260	KOIL	
241.8	1240	WLBW		241.8	1240	WLBW	
243.8	1230	WGNAC		243.8	1230	WGNAC	
256.3	1170	WCAU		256.3	1170	WCAU	
258.5	1160	WEAN		258.5	1160	WEAN	

11 p.m.		10		9		8	
Slumber Music.							
315.6	950	WRC		315.6	950	WRC	
365.6	820	WHAS		365.6	820	WHAS	
394.5	760	WJZ		394.5	760	WJZ	

St. Regis Hotel Orchestra.		12:30		11:30		10:30	
245.6	1220	WCAE		245.6	1220	WCAE	
325.9	920	WWJ		325.9	920	WWJ	
333.1	900	WKY		333.1	900	WKY	
361.2	830	KOA		361.2	830	KOA	

Saturday		5:45		4:45		3:45	
Tower Health Exercises.							
245.6	1220	WCAE		245.6	1220	WCAE	
315.6	950	WRC		315.6	950	WRC	
379.5	790	WGY		379.5	790	WGY	

8 a.m.		7		6		5	
Rastus and His Musical Menagerie.							
379.5	790	WGY		379.5	790	WGY	
454.3	660	WEAF		454.3	660	WEAF	

8:15 a.m.		7:15		6:15		5:15	
Federation Morning Devotions.							
315.6	950	WRC		315.6	950	WRC	
379.5	790	WGY		379.5	790	WGY	

8:30 a.m.		7:30		6:30		5:30	
Cheerio.							
315.6	950	WRC		315.6	950	WRC	
379.5	790	WGY		379.5	790	WGY	

8:50 a.m.		7:50		6:50		5:50	
Farnassus Trio.							
315.6	950	WRC		315.6	950	WRC	
454.3	660	WEAF		454.3	660	WEAF	

9:30 a.m.		8:30		7:30		6:30	
U. S. Marine Band.							
299.8	1000	WOC		299.8	1000	WOC	
454.3	660	WEAF		454.3	660	WEAF	

Eastern 10:30 a.m.		Central 9:30		Mountain 8:30		Pacific 7:30	
Bluebirds.							
Meters	Kc.	Call		Meters	Kc.	Call	
222.1	1350	KWK		222.1	1350	KWK	
245.8	1220	WREN		245.8	1220	WREN	
293.9	1020	KFKX		293.9	1020	KFKX	

11 a.m.		10		9		8	
Forecast School of Cookery.							
222.1	1350	KWK		222.1	1350	KWK	
260.7	1150	WHAM		260.7	1150	WHAM	
302.8	990	WBZ		302.8	990	WBZ	

11:15 a.m.		10:15		9:15		8:15	
Radio Household Institute.							
245.6	1220	WCAE		245.6	1220	WCAE	
280.2	1070	WTAM		280.2	1070	WTAM	
293.9	1020	KYW		293.9	1020	KYW	

12:30 p.m.		11:30		10:30		9:30	
Walder-Astoria Orchestra.							
315.6	950	WRC		315.6	950	WRC	
325.9	920	WWJ		325.9	920	WWJ	
454.3	660	WEAF		454.3	660	WEAF	

3:30 p.m.		2:30		1:30		12:30	
R. C. A. Demonstration Hour.							
205.4	1460	KSTP		205.4	1460	KSTP	
222.1	1350	KWK		222.1	1350	KWK	
252	1190	WOAI		252	1190	WOAI	

6:30 p.m.		5:30		4:30		3:30	
White House Dinner Music.							
205.4	1460	KSTP		205.4	1460	KSTP	
222.1	1350	KWK		222.1	1350	KWK	
252	1190	WOAI		252	1190	WOAI	

7:45 p.m.		6:45		5:45		4:45	
A Week of the World's Business.							
222.1	1350	KWK		222.1	1350	KWK	
282.2	1060	WBAL		282.2	1060	WBAL	
305.9	980	KDKA		305.9	980	KDKA	

8 p.m.		7		6		5	
Puro Band Concert.							
205.4	1460	KSTP		205.4	1460	KSTP	
222.1	1350	KWK		222.1	1350	KWK	
234.2	1280	WEBC		234.2	1280	WEBC	

8:30 p.m.		7:30		6:30		5:30	
Puro Band Concert.							
205.4	1460	KSTP		205.4	1460	KSTP	
222.1	1350	KWK		222.1	1350	KWK	
234.2	1280	WEBC		234.2	1280	WEBC	

OFFICIAL CALL BOOK AND LOG

KDB

Santa Barbara, Calif. 199.9m-1500kc. 100 watts. Santa Barbara Broadcasting Co. Announcer, H. J. Hine. Daily ex Sun, 12-1 pm, 6-10 pm, Sun, 6-10 pm. Sat, 6 pm-mid. Pacific. Founded Dec. 22, 1926.

KDKA

E. Pittsburgh, Pa. 305.9m-980kc. 50,000 watts. Westinghouse Elec. & Mfg. Co. Daily ex Sun, 9:40 am, 12 n, 4 pm, 5 markets, weather; 6:30, dinner concert, Mon, 10:30 pm; Wed, 11 pm; Thurs, 10:30 pm; 9:40 am-11 pm, Tues, Fri, 9:40 am-10:30 pm, Sat, 9:45 am-11 pm, Sun, 11 am-10:15 pm, Eastern.

KDLR

Devils Lake, N. Dak. 247.8m-1210kc. 100 watts. Radio Electric Co. Announcer, Bert Wick. Daily ex Sun, 7:40 am, 12-12:40 pm, 6-6:40 pm, Mon, 9:30-11 pm, Sun, 10:45 am, service. Founded Jan. 25, 1925, Central.

KDYL

Salt Lake City, Utah. 232.6m-1290kc. 1000 watts. Intermountain Broadcasting Corp. Announcer, Philip G. Lasky. Slogan, "On the Air-Goes Everywhere." Daily ex Sun, 7 am-12 mid. Sun, 12 n-12 mid. Mountain. Founded June, 1922.

KEJK

Beverly Hills, Calif. 239.9m-1250kc. 500 watts. R. S. MacMillan. Daily ex Sun, 7-9 am, 2-4 pm, 9-11 pm, Mon, Wed, Sat, mid-2 am, Pacific. Founded Feb. 7, 1927.

KELW

Burbank, Calif. 284.4m-780kc. 500 watts. Earl L. White. Daily ex Sun, 10 am-1 pm, 5-8 pm. Pacific. Founded Feb. 12, 1927.

KEX

Portland, Ore. 254.1m-1180kc. 5000 watts. Western Broadcasting Co. Announcers, Archie Presby, Louis C. Tegarden. Daily ex Sun, 7 am to 7 pm, 8-12 pm, 12 mid. Sun, 10 am to 11 pm. Pacific. Opened Dec. 25, 1926.

KFAB

Lincoln, Neb. 389.4m-770kc. 5000 watts. Nebraska Buick Auto Co. Announcer, Ray E. Ramsey. Daily, 6-8 am, 9-10, 11:30-1 pm, 2-3, 4-5, 6-7, Mon, Wed, Fri, Sat, 6-8 pm, 10-12 pm, Tues, Thurs, 6-8 pm. Founded Dec. 4, 1924, Central.

KFAD

Phoenix, Ariz. 483.6m-620kc. 500 watts. Electrical Equip. Co. Announcer, Arthur C. Anderson. Slogan, "The Voice of Phoenix." Daily ex Sun, 7-9 am, 12-1 pm, 3-4 pm, 6-9 pm, Sun, 11 am-12:30 pm, 1-3 pm, 7:30-9 pm, Mon, 6-9 pm, Thurs, 6-9 pm. Founded Oct. 30, 1921, Mountain.

KFBB

Havre, Mont. 220.4m-1360kc. (500 watts, 6 am-6 pm) 250 watts. Buttrey Broadcast, Inc. Daily ex Sun, 12-2 pm, music, markets, weather reports, household talks; 3-4 pm, record hours; 4-5 pm, woman's hour, Mon, Wed, Fri, 8-10 pm, Sun, 1-15-2, Sunday School; 7:15, organ; 7:30-9, church services. Founded 1921, Mountain.

KFBK

Sacramento, Calif. 228.9m-1310kc. 100 watts. Sacramento Bee. Bimball-Upson Co. Announcer, R. K. Clark. Founded 1921, Pacific.

KFBL

Everett, Wash. 218.8m-1370kc. 50 watts. Lesse Bros. Announcer, Al Folkins. Daily ex Sun, 9-12 am, Tues, 6-12 pm, Thurs, Sat, 6-10 pm, Sun, 11-12:30 am, 8-9:30 pm, Pacific. Founded Aug. 25, 1922.

KFCB

Phoenix, Ariz. 228.9m-1310kc. 100 watts. Nielsen Radio Supply Co. Announcer, E. A. Nielsen. Slogan, "Kind Friends Come Back." Mountain.

KFDM

Beaumont, Tex. 535.4m-560kc. 500 watts. Magnolia Petroleum Co. Announcer, Lee O. Smith. Slogan, "Call for Dependable Magnolene." Daily ex Sun, 6:30 am, 11 am, 12 n, 12:55 pm, Tues, 8-10 pm, Fri, 8-10 pm, Sat, 6:30-11 pm, Sun, 12-1 pm, Mon, 7:30-8:30 pm, Central. Founded Oct. 1, 1924.

KFDY

Brookings, S. D. 545.1m-550kc. 500 watts. State College of Agriculture and Mechanic Arts. Announcer, F. E. Perkins. Daily ex Sun, 12:20-1 pm, Tues, Thurs, 7:40-9:30 pm, Central.

KFEC

Portland, Ore. 218.8m-1370kc. 100 watts. Meier & Frank Co., Inc. Announcer, Sid Goodwin. Daily ex Sun, 10 am-mid. Sun, 8-10:30 pm, Pacific. Founded 1922.

Eastern 8:30 p.m.		Central 7:30		Mountain 6:30		Pacific 5:30
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KFIU

Juneau, Alaska. 228.9m-1310kc. 10 watts. Alaska Elec. Light & Power Co. Announcer, O. E. Schoenbell. Mon, Wed, Fri, 6-7 pm. Alaskan time.

KFIW

Hopkinsville, Ky. 319m-940kc. 1000 watts. Acme Mills, Inc.

KFIZ

Fond du Lac, Wis. 211.1m-1420kc. 100 watts. Fond du Lac Commonwealth Reporter. Daily ex Sun, noon, 5 pm.

KFJB

Marshalltown, Iowa. 249.9m-1200kc. 100 watts. Marshall Electric Co. Announcers, Darrel E. Laird, C. F. Brady. Slogan, "Marshalltown, the Heart of Iowa." Daily, 7:45-8:45 am, 10:15-11:15 am, 12:15-1:30 pm, 2:30-3:30 pm, 4:30-5:30 pm, 7-8 pm, 9:30-10:30 pm. Sun, 11 am-12:30 pm. Founded June 2, 1923. Central.

KFJF

Oklahoma City, Okla. 204m-1470kc. 5000 watts. National Radio Mfg. Co. Announcer, Tired Hand. Slogan, "Radio Headquarters of Oklahoma City." Daily ex Sun, 9 am, music; 10, sacred music; 10:30, markets; 11:30 am-2 pm, music; 6-12, Sun, 9 am, I. B. S. A.; 10, Men's class; 11, services; 7:30-9:30 pm, services; 9:30-10:30 pm, entertainment. Central. Founded July, 1923.

KFJI

Astoria, Ore. 218.8m-1370kc. 50 watts. Kincaid News Co. Oregonian Fast Express. Announcers, Clay Osborne, J. Robert Hughes. Daily, 9:30 am-1:15 pm. Mon, Tues, Wed, Thurs, Sat, 5-8 pm. Fri, 5 pm-12 mid. Sun, 11 am-8 pm. Pacific.

KFJM

Grand Forks, N. D. 218.8m-1370kc. 100 watts. University of North Dakota. Announcers, Jack Stewart, Howard J. Monley. Daily, 12 n-1 pm, 6:40-7 pm. Sun, 10:45 am, 12:30 pm, 6, 7:15-8:15 pm. Founded Oct., 1923. Central.

KFJR

Portland, Ore. 230.6m-1300kc. 500 watts. Ashley C. Dixon & Son. Announcer, Ashley C. Dixon, Sr. Daily ex Sun, 11:30 am-2:30 pm. Mon, Thurs, Sat, 5 pm-6 pm-7 pm. Tue, Wed, Fri, 7-12 pm. Founded Sept. 23, 1923. Pacific.

KFJY

Fort Dodge, Iowa. 228.9m-1310kc. 100 watts. Tunwall Radio Co. Announcer, Carl Tunwall. Daily ex Sun, 10 am, 6:30-7:30 pm. Tues, 10-11:30 pm. Thurs, Fri, 9:30 pm. Wed, 3-4 pm. Fri, 10-11 pm. Sat, 9:30-10:30 pm. Sun, 11-12:30 pm. Founded Oct., 1923. Central.

KFJZ

Fort Worth, Texas. 218.8m-1370kc. 100 watts. W. E. Branch. Announcer, Texas Joy Boy. Slogan, "The Voice of Texas, The Home of Texas Hour." Central. Founded Sept. 24, 1923.

KFKA

Greeley, Colo. 340.7m-880kc. 500 watts after 6 pm. 1000 watts day. Colorado State Teachers' College. Announcers, Geo. A. Irvin, Lynn Greig. Daily ex Sun, 9-10 am-6-7 pm. Fri, 11 am, school assembly program.

KFKB

Milford, Kan. 265.3m-1130kc. 5000 watts. J. R. Brinkley, M. D. Announcer, Dee D. Denver. Fri. Daily ex Sun, 5-8 am, 9-10 am, 11:30 am-1 pm, 2:30-4 pm, 5:30-7 pm. Sun, 8-8:30 am. Central.

KFKU

Lawrence, Kan. 245.6m-1220kc. 1000 watts. University of Kansas. Announcer, Ellsworth C. Dent. Wed, 6:30-7:30 pm. Thurs, 8-9 pm. Founded Dec. 15, 1924. Central.

KFKX

Chicago, Ill. 293.9m-1020kc. 5000 watts. Westinghouse Elec. & Mfg. Co. Daily ex Sat, Sun, 10 am, 11, 12, 1:30 pm, 3, 5:15, 5:30. Sat, 10 am, 11, 12 n, 5:15, 5:30. Central.

KFKZ

Kirksville, Mo. 249.9m-1200kc. 50 watts. State Teachers College. Announcers, Garret Underhill, John Hart. Mon, 8:30-9:30 pm. Thurs, 8-9 pm. Founded 1923. Central.

KFLV

Rockford, Ill. 212.6m-1410kc. 500 watts. Rec. A. J. Frykman. Announcers, Paul Bodin, Willard Anderson, Aaron Markuson, Harold Nelson. Founded October, 1923. Central.

KFLX

Galveston, Texas. 247.8m-1210kc. 100 watts. George R. Clough.

KFMX

Northfield, Minn. 239.9m-1250kc. 100 watts. Carleton College. Central.

KFNF

Shenandoah, Iowa. 336.9m-890kc. 500 watts. 6 am-7 pm. Henry Field Seed Co. Announcer, Henry Field. Slogan, "The Friendly Farmer Station." Founded Feb., 1924. Central.

KFOR

Lincoln, Neb. 247.8m-1210kc. 100 watts. Howard A. Shuman. Daily ex Sun, 10-11, 12-1, 2-2:30, 7:30-10. Sun, 9-10 am. Fri, 11 pm-1 am. Central. Founded March, 1924.

KFOX

Long Beach, Calif. 239.9m-1250kc. 1000 watts. Nichols & Warner, Inc. Announcer, Hal G. Nichols. Slogan, "The Hancock Oil Co. Station." Daily ex Sun, 8-1 am. Founded March, 1924. Pacific.

KFPL

Dublin, Texas. 228.9m-1310kc. 15 watts. Announcer, C. C. Baxter. Daily ex Sun, 6 am. Mon, Thurs, 8 pm. Sat, 11 pm. Sun, 7:30-11 am, 1:30-7 pm, religious programs. Central.

KFPM

Greenville, Texas. 228.9m-1310kc. 15 watts. The New Furniture Co.

KFPW

Siloam Springs, Ark. 223.7m-1340kc. 50 watts. John E. Brown College. Slogan, "Keeping Pace With Christ Means Progress." Daily ex Sun, 5-6 am, 1:30-2:30 pm. Sun, 1-2:30 pm. Central. Founded April 17, 1924.

KFPY

Spokane, Wash. 215.7m-1390kc. 500 watts. Symons Investment Co. Announcers, T. W. Baird, Jr., Wesley Bell, Ralph Stewart. Mon, Wed, 9 am-3:30 pm, 5-7:30, 10-12 mid. Tues, Sat, 9 am, mid. Fri, 9 am-3:30 pm, 5:12 mid. Thurs, 9 am-12 mid. Sun, 6 pm-10 pm. Pacific. Founded 1922.

KFQD

Anchorage, Alaska. 243.8m-1230kc. 100 watts. Anchorage Radio club. Alaskan time.

KFQU

Holy City, Calif. 211.1m-1420kc. 100 watts. W. E. Riker. Announcer, Arthur J. Landstrom. Daily ex Sun, 10 am-12:30 pm, 2:30-5 pm, 7-8 pm, 11 pm-2 am. Sun, 11-12 n, 10-11 pm. Pacific. Founded November, 1924.

KFQW

Seattle, Wash. 211.1m-1420kc. 100 watts. KFOW, Inc. Pacific. Announcer, Edwin A. Kraft. Daily ex Sat, 9 am-1:30 am. Sat, 9 am-3 am, Pacific. Founded June, 1924.

KFQZ

Hollywood, Calif. 352.7m-850kc. 1000 watts. Taft Radio Broadcasting Co., Inc. Announcer, Bob Swan. Daily, 7 am-6 pm, 9 pm-7 am. Pacific.

KFRC

San Francisco, Calif. 491.5m-610kc. 1000 watts. Don Lee, Inc. Announcer, Harrison Holliday. Daily ex Sat, Sun, 7-9 am, 10-12 n, 12-1 pm, 2-12 mid. Sat, 7-9 am, 10-12 n, 12-1 pm, 2-12 mid. Sun, 9 am-12 n, 12-12 mid. Pacific.

KFRU

Columbia, Mo. 475.9m-630kc. 500 watts. Stephens College. Announcer, La Von Rall. Slogan, "Where Friendliness Is Broadcast Daily." Founded October 25, 1925. Central.

KFSD

San Diego, Calif. 499.7m-600kc. 1000 watts. Airline Radio Corporation. Announcer, Tom Sexton. Daily ex Sun, 9 am-1:30 pm, 3:15-4:15 pm, 4:45 pm-mid. Sun, 2-4 pm, 8:30-10. Pacific. Founded March 28, 1926.

KFSG

Los Angeles, Calif. 267.7m-1120kc. 500 watts. Echo Park Evang. Assn. Slogan, "The Glory Station of the Pacific Coast." Daily ex Sun 6:30 am-12 pm, 2-5 pm, Mon, Thurs, Sat, 10-11 pm, Tues, 11 pm-mid. Sun, 10:15 am-12:30 pm, 2:30-4:30 pm, 7 pm-mid.

KFUL

Galveston, Texas. 232.4m-1290kc. 500 watts. Will H. Ford and Community Broadcasting station. Daily ex Sun, 11 am-12:30 pm, 6:30-7:30 pm, 8:30-9:30 pm. Wed, 8:30-11:30 pm. Fri, 9-11:30 pm. Sun, 10-11 am.

KFUM

Colorado Springs, Colo. 236.1m-1270kc. 1000 watts. Corley Mountain Highway. Announcer, Lew Faris. Slogan, "The Voice of the Rockies." Daily ex Sun, 9 am-12:30 pm, 5:15-7:30 pm. Mon, 7:30-10 pm, Tues, 7:30-10:30 pm. Thurs, 7:30-2 am special Dx program. Fri, 7:30-9 pm. Mountain.

KFUO

St. Louis, Mo. (Tr. at Clayton.) 545.1m-550kc. 500 watts. Concordia Theological Seminary (Lutheran). Announcer, Herm. H. Hohenstein. Daily ex Sun, 7:15 am. Daily ex Sat, Sun, 9:25 am, 12:15 pm. Daily, 3 pm. Mon, Wed, Fri, Sat, 6 pm. Tues, Thurs, 10 pm. Wed, 10:30 pm. Sun, 8:30 am, 10 am, 10:45 am, 3 pm, 3:30 pm, 9:15 pm. Founded Dec. 14, 1924. Central.

KFUP

Denver, Colo. 228.9m-1310kc. 100 watts. Fitzsimons General Hospital. Educational and Recreational Dept. Announcer, Major Transue. Daily ex Sat, Sun, 10-11 am. Tues, Thurs, Fri, 7:30 pm. Mountain.

KFUR

Ogden, Utah. 218.8m-1370kc. 50 watts. Peery Building Co. 5:30-11. Mountain.

KFVD

Culver City, Calif. 428.3m-700kc. 250 watts. Auburn-Fuller Co. Announcers, E. V. Oversby, Paul Meyers. Founded April, 1925.

KFVS

Cape Girardeau, Mo. 247.8m-1210kc. 100 watts. Hirsch Battery & Radio Co. Announcer, W. W. Watkins. Slogan, "The City of Opportunity." Mon, Wed, Thurs, Sat, 12:15 noon; 5-7:30 pm. Mon, Wed, Fri, 8-9 pm; Tues, Thurs, Sat, 9 pm-12. Tues, Fri, 10 am, 12:15 noon, 5-7:30 pm. Sun, 11 am-12 noon, church. Founded May 27, 1925.

KFYR

Bismarck, N. D. 545.1m-550kc. 500 watts. Hoskins-Meyer.

KFWB

Hollywood, Calif. 315.6m-950kc. 1000 watts. Warner Brothers. Announcer, William "Bill" Ray.

KFWC

Pomona, Calif. 249.9m-1200kc. 100 watts. James R. Announcer, Hal D. Jerome. 12 noon-11 pm. Pacific.

KFWF

St. Louis, Mo. 249.9m-1200kc. 100 watts. St. Louis Truth Center. Slogan, "The Voice of Truth." Announcer, Rev. Charles H. Hartmann. Tues, Fri, 9:45 am. Thurs, 10:45 am. 7:45 pm. Sun, 9 am, 10:45, 7:45 pm. Founded 1925. Central.

KFWI

San Francisco, Calif. 322.4m-930kc. 500 watts. Radio Enter. Announcers, W. D. Announcer, C. Henken. C. Blank. Mon, Wed, Fri, 7-8 am, 9-1:30 pm, 6-7 pm, 8:30-11 pm. Tues, Thurs, Sat, 7-8 am, 9-11 am. Tues, Sat, 10-11 am. Thurs, 12-1:30 pm, 6-7 pm. 8:30-9 pm. Sun, 7:50-9:15 pm. Pacific.

KFWM

Oakland, Calif. 322.4m-930kc. 500 watts. Oakland Educational Society. Announcers, O. B. Eddins, Max Peacock. Sun, 9:45-11 am, 12-2:30 pm, 6-7:45, 9:15-10:30 pm. Mon, Wed, Fri, 8-9 am, 2:30-3:30 pm, 4:30-6 pm, 7-8:30 pm. Tues, Thurs, Sat, 8-9 am, 11-12 am, 1:30-6 pm, 7-8:30 pm, 9-11 pm.

KFXD

Jerome, Idaho. 211.1m-1420kc. 50 watts. KFXD, Inc. Daily ex Sun, 12 u. Wed, Sat, 8-10 pm. Sun, 11:20-12:20 pm. Mountain.

KFXF

Denver, Colo. 319m-940kc. 250 watts. Colorado Radio Corp. Announcers, W. D. Announcer, C. Henken. Lee Goldsmith. Slogan, "The Voice of Denver." Daily ex Sun, 8 am-6 pm, 6-11. Sun, 7 pm-1 am. Mountain.

KFXJ

Edgewater, Colo. 228.9m-1310kc. 50 watts. R. G. Howell. Slogan, "America's Scenic Center." Daily ex Sun, 8-9 am concert hr, 9-9:30 popular, 11 am-1:30 pm matinee, 6-7:30 pm dinner music. Wed, Sat, 7-12, Thurs, 8-12. Mountain.

KFXR

Oklahoma City, Okla. 228.9m-1310kc. 100 watts. Exchange Ave. Baptist church. Daily, 7:30-9 pm. Sun, 10:50 am, 3-4:30 pm, 7:30-9 pm. Central.

KFXV

Flagstaff, Ariz. 211.1m-1420kc. 100 watts. Mary M. Costigan. Announcer, Frank Wilburn. Daily, 12 noon-1 pm, 5-7 pm. Mon, Wed, Sat, 9:30 pm-10:30 pm. Mountain.

KFYO

Abilene, Texas. 211.1m-1420kc. 100 watts. Kirksey Brothers Battery & Elec. Co. Daily ex Sun, 9-10 am, 11-11:15 am, 12-1 pm, 6-6:30 pm, 8-10. Sun, 8-10 pm. Central. Founded February 19, 1927.

KFYR

Bismarck, N. D. 545.1m-550kc. 500 watts. Hoskins-Meyer, Inc. Announcer, Stanley Lucas. Daily ex Sun, 8:30-12 noon, 1-5:30 pm, 6-9 pm. Wed, Sat, 10-11 pm. Sun, 10:30-12 n, 3-5 pm. Founded December, 1925.

KGA

Spokane, Wash. 204m-1470kc. 5000 watts. Northwest Radio Service Co. Announcer, Harry Long. Daily ex Sun, 7-8 am, exercises; 8-12 n, chain programs; 12-12:30, news, farm; 12:30-5 pm, programs; 5 pm, studio; 6 pm, time, 6-12 pm, chain. Sun, 11 am-12 n, church; 2-7 pm, chain; 7:30-9 pm, church; 9-10 pm, chain, Pacific.

KGAR

Tucson, Ariz. 218.8m-1370kc. 100 watts. Tucson Citizen. Announcer, Harold S. Sykes. Tues, Fri, 8-9 pm. Sun, 11 am, 7:30-9 pm. Installed June, 1926. Mountain.

KGB

San Diego, Calif. 220.4m-1360kc. 250 watts. Southwestern Broadcasting Corp.

KGBU

Ketchikan, Alaska. 333.1m-900kc. 500 watts. Alaska Radio & Service Co. Announcers, James A. Britton, Lane Mowell, H. G. McCain. Slogan, "The Voice of Alaska." Daily ex Sun, 8-9:30 pm. Tues, 9:30-10:30 pm. Wed, 9:30-11 pm. Sun, 11-12:30 pm. Pacific time.

KGBX

St. Joseph, Mo. 218.8m-1370kc. 100 watts. Foster-Hall, Inc. Announcers, R. D. Foster, Geo. E. Wilson. Daily ex Sun, 7-8:30 am, 12-1:15 pm, 4:30-9 pm, 6:30-7:30 pm. Tues, 5:30-6:30, 7:30-9 pm. Thurs, Fri, 7:30-9 pm. Sun, 12-2 pm. Founded Aug. 11, 1926. Central.

KGBZ

York, Neb. 322.4m-930kc. 500 watts. Announcer, Dr. George R. Miller. Slogan, "Keep Your Hogs and Poultry Healthy." Mon, Tues, Wed, Thurs, Fri, Sat, 5, 7, 11 am; 2, 5, 8:30 pm. Thurs, 7:30 pm. music. Alternate Sun, 9-11 am, 3-6 pm, service. Opened August, 1926. Central.

KGCA

Decorah, Iowa. 236.1m-1270kc. 50 watts. Sun, 10 am-11:30 am. Daily, 12:30 pm-1:30 pm. Chas. W. Greenley.

KGCB

Enid, Okla. 218.8m-1370kc. 100 watts. Champlin Refining Co. Daily ex Sun, 10:30 am, 12:15 pm, 6:30 pm. Central.

KGCI

San Antonio, Texas. 218.8m-1370kc. 100 watts. Libero Radio Sales.

KGCM

Concordia, Kan. 211.1m-1420kc. 50 watts. Concordia Broadcasting Co. Daily ex Sun, 12:30-1:30 pm, 7-9. Founded August, 1926. Central.

KGCR

Brookings, S. D. 247.8m-1210kc. 100 watts. Cutler's Radio Broadcasting Service, Inc.

KGCU

Mandan, N. D. 249.9m-1200kc. 100 watts. Mandan Radio Assn. Announcers, H. L. Dahners, C. E. Bagley. Daily ex Sun, 7-8:30 am, 10-11, 12-1:30 pm, 6:30-8. Mon, 11 pm-1:30 am. Sun, 11-12 n, 4:30-6:30 pm. Mountain. Founded 1925.

KGCX

Vida, Mont. 211.1m-1420kc. 10 watts. First State Bank of Vida. Announcer, E. E. Krebsbach. Daily ex Sun, 12:15-1:15 pm. Sun, 10:30-12 n. Mountain. Founded Oct. 1, 1926.

KGDA

Dell Rapids, S. D. 218.8m-1370kc. 15 watts. Home Auto Co. Sun, 10-11 am, 1:30-5 pm. Tues and Fri, 2-3 pm. Central.

KGDE

Fergus Falls, Minn. 249.9m-1200kc. 50 watts. Jaren Drug company. Daily ex Sun, 12:30 pm, musicale; 1:15, news, weather, markets; 4, 5, 7-7:30. Sun, 10:30-3 pm, 6-8. Licensed Sept. 15, 1926. Central.

KGDM

Stockton, Calif. 260.7m-1156kc. 50 watts. Peffer Music Co. Daily ex Sun, 10 am-1 pm, 2-4 pm. Pacific. Founded Jan. 1, 1927.

KGDY

Oldham, S. D. 249.9m-1200kc. 15 watts. J. Albert Loesch.

KGFE

Los Angeles, Calif. 230.6m-1300kc. 1000 watts. Trinity Methodist church. Announcer, E. C. Huckabee. Sun, 8 am-8 pm. Tues, Wed, Thurs, 6-11 pm. Pacific. Founded Dec. 26, 1926.

KGKE

Yuma, Colo. 249.9m-1200kc. 50 watts. 7 am-7 pm. Beehler Electrical Equipment Co.

KGER

Long Beach, Calif. 218.8m-1370kc. 100 watts. C. Merwin Dobyns. Daily, 8-mid. Special Dx program, mid to 3 am. Pacific. Founded Dec. 19, 1926.

KGEW

Fort Morgan, Colo. 249.9m-1200kc. 100 watts. City of Fort Morgan. Announcer, Glenn S. White. Daily ex Sat, Sun, 5:15-6:30 pm. Tues, Wed, Thurs, Fri, 8-10 pm. Sun, 11-12:15 n. Mountain. Founded Jan. 15, 1927.

KGEZ

Kalispell, Mont. 228.9m-1310kc. 100 watts. Flathead Broadcasting Assn. Announcer, John E. Parker. Daily ex Sun, 12-1 pm, 6-6:30. Tues, Thurs, 8-9 pm. Sun, 11 am-12 n. Mountain. Founded Feb. 20, 1927.

KGFF

Alva, Okla. 211.1m-1420kc. 100 watts. Earl E. Hampshire. Irregular schedule.

KGFG

Oklahoma City, Okla. 218.8m-1370kc. 100 watts. Full Gospel Church.

KGFH

Glendale, Calif. 299.8m-1000kc. 250 watts. Frederick Robinson. Slogan, "Keeping Glendale Folks Happy." Daily ex Sun, 9-12 n. Mon, Wed, Fri, Sat, 5-1 am. Pacific. Founded Feb. 7, 1927.

KGFI

San Angelo, Texas. 228.9m-1310kc. 100 watts. San Angelo Broadcasting Co. Daily ex Sun, 12 n, 3 pm, 8-10 pm. Sun, 10:45 am, 7:45 pm, sermons. Central.

KGFJ

Los Angeles, Calif. 211.1m-1420kc. 100 watts. Ben S. McGlashan. Slogan, "Keeping Good Folks Joyful." Daily 24 hours. Pacific. Founded Jan. 18, 1927.

KGFK

Hallcock, Minn. 249.9m-1200kc. 50 watts. Kittson County Enterprise. Tues, Wed, Fri, 7:30-9:30 pm. Mon, Wed, Fri, 12:15-1:15 pm. Central.

KGFL

Raton, N. M. 218.8m-1370kc. 50 watts. N. L. Cotter.

KGFW

Ravenna, Neb. 211.1m-1420kc. 50 watts. Otto F. Sovthman. Announcer, R. H. McConnell. Slogan, "Catering to the Home Folks." Daily ex Sun, 9-10 am, 12:30-1:30 pm, 6:30-7:30. Central.

KGFX

Pierre, S. D. 516.9m-580kc. 200 watts. 6 am-6 pm. Dana McNeill. Daily ex Sun, 12:15 pm, news, weather. Central.

KGGF

Ficher, Okla. 296.9m-1010kc. 500 watts. Dr. D. L. Connell. Daily ex Thurs, 12 n-1 pm, 6-9:30 pm. Central. On air Sept. 1, 1927.

KGGH

Shreveport, La. 228.9m-1310kc. 50 watts. Bates Radio & Elec. Co. Announcer, G. A. Houseman. 2-4 pm, 7:30-10:30 pm. Central. Founded Sept. 15, 1927.

KGGM

Albuquerque, N. M. 218.8m-1370kc. 100 watts. Jay Peters.

KGHA

Pueblo, Colo. 249.9m-1200kc. 50 watts. George H. Sweney and N. S. Walpole.

KGHB

Honolulu, H. I. 227.1m-1320kc. 250 watts. Radio Sales Co. Announcer, Gaylord Byron. Mon, Tues, Wed, Fri, 9-10 am, 11:30-1 pm, 3:30-5, 6-10. Thurs, 9-10 am, 11:30-1 pm, 3:30-5, 6-7. Sat, 9-10 am, 11:30-1 pm, 3:30-5, 6-12 mid. Sun, 10-12 n, 6-10 pm, 157½ meridian, 2½ hours earlier than Pacific. Founded Sept. 28, 1927.

KGHD

Missoula, Mont. 211.1m-1420kc. 50 watts. 6 am-8 pm. Elmore-Nash Broadcasting Corp.

KGHF

Pueblo, Colo. 227.1m-1320kc. 250 watts. Curtis P. Ritchie, Joe E. Finch. Slogan, "The Voice of Pueblo." Announcer, J. Fitzpatrick. Daily, 8 am-1:30 pm, 4-11 pm. Mountain.

KGHG

McGhee, Ark. 228.9m-1310kc. 50 watts. Chas. W. McCollum.

KGHI

Little Rock, Ark. 199.9m-1500kc. 500 watts. Berean Bible Class.

KGHL

Billings, Mont. 315.6m-950kc. 500 watts. 7-12 mid. Northwestern Auto Supply Co., Inc.

KGHX

Richmond, Texas. 199.9m-1500kc. 50 watts. Ft. Bend County School Board.

KGIO

Idaho Falls, Idaho. 227.1m-1320kc. ~250 watts. Jack W. Duckworth, Jr.

KGIO

Twin Falls, Idaho. 227.1m-1320kc. 250 watts. Stanley M. Soule.

KGIR

Butte, Mont. 220.4m-1360kc. 250 watts. Symons Broadcasting Co. Announcer, R. H. Gemberling. Daily ex Sun, 8 am-12 n; 4-6 pm, 7-8 pm. Tues, Thurs, 8 pm-mid. Sat, 8 pm-2 am. Sun, 9-11 am, 3-5 pm.

KGIW

Trinidad, Colo. 211.1m-1420kc. 100 watts. Trinidad Creamery Co.

KGJF

Little Rock, Ark. 336.9m-890kc. 250 watts. First Church of the Nazarene. Daily ex Sunday, 10:30 am-12 n, 2:30-5 pm, 7:30-8:30 pm. Sun, 11 am, 6-12 pm. First Church of the Nazarene.

KGKB

Brownwood, Texas. 199.9m-1500kc. 100 watts. Eagle Pub. Co.

KGKL

San Angelo, Texas. 218.8m-1370kc. 100 watts. KGKL, Inc.

KGKO

Wichita Falls, Texas. 526m-570kc. 250 watts. The Wichita Falls Broadcast Co. Announcer, Jerry Hurt. Daily, 8-10 am, 12:1-1:30 pm, 5-6 pm, 7-10 pm. Sun, 11-12:30, 3-6, 7:30-9.

KGO

Oakland, Calif. 379.5m-790kc. 10,000 watts. Gen. Elec. Co. Announcer, Howard I. Milholland. Daily ex Sun, 9:30-10:30 am, 11:30-1 pm, 1, stocks; 4-5, orchestra; 10:30-11:30 am, Tues, Wed, Fri. Daily ex Sun, 4-5 pm, orchestra; 5-5:30, talks; 5:30-6, stock news; 6-7 pm, musical features. Mon, 7-9:30. Tues, 7-10 pm. Wed, 7-11 pm. Thurs, 7-10 pm. Fri, 7-12, Sat, 7-12 mid. Sun, 11 am, service; 3-5 pm, 6:30-8, 9-9:30, Pacific.

KGRC

San Antonio, Texas. 218.8m-1370kc. 100 watts. Eugene J. Roth. Announcer, L. G. Weber. Daily, 9-10 am, 2-3 pm, 6-7 pm, 8-9 pm. Wed, Sat, 10-11 pm. Sun, 9-11 am, 1-2 pm. Central. Opened Jan. 31, 1927.

KGRS

Amarillo, Texas. 212.6m-1410kc. 1000 watts. Gish Radio Service. Daily ex Sun, 6:30 am, 10, 11:45, 6:30. Mon, Wed, Fri, 9 pm. Sun, 9-11 am, 2-5 pm. Central.

KGTT

San Francisco, Calif. 211.1m-1420kc. 50 watts. Glad Tidings Temple and Bible Institute. Daily ex Sun, 9-11 am, music; 12:30-1 pm, Scripture study; 1-2, shopping hour; 2-4, classical and foreign recordings; 4-4:30, children's recordings; 4:30-6, request programs; Wed, Thurs, 8-10 pm, studio programs and church services. Sun, 2:30-3 pm, Sunday school; 3-5 pm, 7:30-10 pm, church services. Pacific. Founded Nov., 1925.

KGU

Honolulu, Hawaii. 319m-940kc. 500 watts. Marion A. Mulroney. Announcer, Homer Tyson. Daily, 12-1 pm. Mon, Wed, Fri, 10:30-11 am. Daily ex Sat, Sun, 5-6 pm. Mon, Tues, Thurs, 7:30-9:30 pm. Fri, 8-9:30 pm. Sat, 2-4:30 pm, sports. Sun, 7-9:30 pm. 157½ meridian, 2½ hours earlier than Pacific. Founded May 11, 1922.

KGW

Portland, Ore. 483.6m-620kc. 1000 watts. Oregonian Publishing Co. Announcer, Paul Connet. Slogan, "KGW, Keep Growing Wiser." Daily, 2-2:20, stock quotations. Mon, 7:15 am-2:20 pm, 6-11 pm. Tues, 8 am-1 pm, 2-4 pm, 6-12 pm. Wed, 7:15-7:30 am, 8 am-4 pm, 5:30-12 mid. Thurs, 9:15 am-12:30 pm, 2-4 pm, 6-12 pm. Fri, 7:15-7:30 am, 9:30-11, 5:30-12 pm. Sat, 8 am-2:20 pm, 5-12 pm, Sun, 11 am-12:30 pm, 1:30-11 pm. Pacific.

KGY

Lacey, Wash. 249.9m-1200kc. 50 watts. St. Martin's College. Announcer, Sebastian Ruth. Slogan, "Out Where the Cedars Meet the Sea." Sun, Tues, Thurs, 8:30-9:30 pm. Pacific. Opened April 5, 1922.

KHJ

Los Angeles, Calif. 333.1m-900kc. 1000 watts. Don Lee. Daily ex Sun, 8 am, 9, time; 12:30, news; 1:30-12 pm, Sun, 8:30 am, concert; 10:30, service; 1-12, Pacific.

KHQ

Spokane, Wash. 508.2m-590kc. 1000 watts. Louis Wasmer, Inc. Announcer, C. P. Underwood. Slogan, "Tells the World." Daily ex Sun, 7 am-12 mid. Sun, 10:30 am-10:30 pm. Pacific.

KIAF

Sitihpoc, Minn. 422.3m-710kc. 500 watts. Steele Co. Slogan, "Far from the Madding Crowd." Mon, Wed, Fri, 7-8 pm. Sun, 2-3 pm. Central.

KICK

Red Oak, Iowa. 211.1m-1420kc. 100 watts. Red Oak Radio Corp. Announcer, Oliver Reiley. Daily ex Sun, 7:30-8:30 am, n-1 pm, 7-9 pm, Wed, 7 pm-1 am. Founded 1923. Central.

KIDO

Boise, Idaho. 239.9m-1250kc. 1000 watts. Boise Broadcast Station. Announcer, C. G. Phillips. Slogan, "The Voice of Idaho." Daily, 7:30 am-8:45 pm. Founded Oct., 1921. Mountain.

KJBS

San Francisco, Calif. 272.6m-1100kc. 100 watts. Julius Brunton & Sons Co. Announcers, Gordon Brown, R. J. Smith. Daily ex Sun, 7 am-5:30 pm. Sun, 9 am-5:30 pm. Pacific. Founded Jan., 1925.

KJR

Seattle, Wash. 309.1m-970kc. 5000 watts. Northwest Radio Service Co. Daily ex Sun, 7 am-12 mid. Sun, 10 am-11 pm. Pacific. Opened July 2, 1920.

KKP

Seattle, Wash. 218.8m-1370kc. 15 watts. City of Seattle. Daily, 10 pm. Pacific. Opened Dec., 1926.

KLCN

Blytheville, Ark. 232.4m-1290kc. 50 watts. Edgar G. Harris.

KLRA

Little Rock, Ark. 215.7m-1390kc. 500 watts. Arkansas Broadcasting Co.

KLS

Oakland, Calif. 208.2m-1440kc. 250 watts. Warner Bros. Radio Supplies. Daily 11:30 am-2:30 pm. Sun, 10 am-12 n.

KLX

Oakland, Calif. 340.7m-880kc. 500 watts. Oakland Tribune. Announcer, Charles Lloyd. Slogan, "Where Rail and Water Meet." Daily ex Sun, 7 am-11 pm. Sun, 5-6 pm. Pacific. Founded Nov. 20, 1922.

KLZ

Denver, Colo. 535.4m-560kc. 1000 watts. Reynolds Radio Co. Announcer, R. C. Thompson. Slogan, "Pioneer Broadcasting Station of the West." Daily ex Sun, 9 am-mid. Sun, 2-5 pm, 6-mid. Mountain. Founded 1919 as 9ZAF.

KMA

Shenandoah, Iowa. 322.4m-930kc. 1000 watts. May Seed & Nursery Co. Announcer, Earl E. May. Daily ex Sun, 6-7:30 am, 9:30-11 am, 12:30-2 pm, 3:30-5 pm; 6:30-8:30. Mon, 6:30-mid. Wed, Fri, 10-11:30 pm. Sun, 8-9 am, 12:15-3 pm, 4-6, 7-11. Central. Founded Jan., 1925.

KMBC

Kansas City, Mo. 315.6m-950kc. 1000 watts night, 2500 watts day. Midland Broadcast Central. Announcers, Arthur B. Church, Dick Smith, Kenneth Kral, George Biggar, Ted Malone, Dr. Frank Criley. Daily ex Sun, 7-7:30 am, morning health program; 7:30-8, educational; 9-9:30, entertainment features; 9:40-10, the morning mail; 10-10:30, home-makers hour; 10:40-11:30, program features, organ; 12-10:1 pm, Dinnerbell program; 3:30-5, matinee program, town crier; 6-7 dinner music; 8-10 Columbia chain. Tues, Thurs, Sat, 6:30-7 am, devotional service; 10 pm-1 am, entertainment features. Sun, 7:30-9 am, Bible study; 9:30-11 am, Church services; 2-6 pm, Columbia chain; 6-7 pm, Vespers; 7-10 pm, Columbia chain; 10-11 pm, studio service. Founded April, 1922. Central.

KMED

Medford, Ore. 228.9m-1310kc. 50 watts. W. J. Virgin. Daily ex Sun, 9:30 am-1:30 pm; 5:30-6:15 pm; Mon, Tues, Thurs, Fri, 8-10 pm. Sun, 11 am-12 n. church; 8-9 pm, church. Pacific. Founded Dec. 22, 1926.

KMIC

Inglewood, Calif. 267.7m-1120kc. 500 watts. J. R. Fouch. Daily, 8-10 am, 12-2 pm. Mon, Tues, Wed, Fri, 5-12 pm. Thurs, Sat, 5-8 pm, 10:30-12 pm. Pacific. Founded Jan. 10, 1927.

KMJ

Fresno, Calif. 249.9m-1200kc. 100 watts. Fresno Bee. Announcer, Dick Willet. Daily ex Sun, 5-11 pm. Pacific. Founded Oct. 1, 1922.

KMMJ

Clay Center, Neb. 405.2m-740kc. 1000 watts. M. M. Johnson Co. Daily ex Sun, 6 am-12:15 pm; weather, 7 am-7:15; agricultural talk, 9:30 am, and 12 noon, live stock market. Founded 1925. Central.

KMO

Tacoma, Wash. 223.7m-1340kc. 500 watts. KMO, Inc. Announcer, Carl E. Haymond. Daily ex Sun, 6:45 am-12 n. Mon, Wed, Fri, 5-8:30 pm. Tues, Thurs, Sat, 8:30-12:30 am. Sun, 6-9:30 pm. Pacific. Founded Aug. 25, 1926.

KMOX-KFQA

St. Louis, Mo. 275.1m-1090kc. 5000 watts. The Voice of St. Louis. Announcer, George Junkin. Daily ex Sun, 6:30 am, setting up exercises; 7:30 am, organ; 9 am, shoppers' Ramblers program; 9:40, market reports, talks, music; 12 n, farm flash; 1 pm, orchestra; 2, bid and offer market; 2:30, studio program; 5, market summary; 5:30, Lady Bee, the story book lady; 5:45, nursery and orchard talks; 6, children's club; 6:30, Melody Maids. Mon, Tues, Wed, Thurs, Fri and Sun, Columbia chain; 10 pm, Daily News; 10:10, Amos and Andy. Monday, 10:20, Skouras Monday Night Club; 11:40-1 am, dance music. Sat, 6:30-10 studio programs. Sun, 2-4, Columbia chain; 4-4:30 studio program; 4:30-5 Columbia chain; 5-8, studio programs.

KMTR

Hollywood, Calif. 526m-570kc. 1000 watts. KMTR Radio Corp. Daily, 6-9 am, 1-3 pm, 6-10 pm, 11 pm-1 am. Pacific. Installed June, 1925.

KNX

Hollywood, Calif. 285.5m-1050kc. 5000 watts. Western Broadcast Co. Announcer, "Town Crier." Daily ex Sun, 6:45 am, exercises; 8, prayer; 8:58, time; 9, news; 10, Town Crier; 10:30, economics; 1:30 pm, book talk; 2-4, 4:55, markets; 5, 5:30, music; 5:45, Town Crier; 6:30, dinner music. Mon, Tues, Wed, Thurs, Fri, 7-1 am. Sat, 7-2 am. Sun, 10-12:30 pm, church service; 12:45-1:45, 2-4, 6:30-9, 9-10:30. Installed Oct. 11, 1924. Pacific.

KOA

Denver, Colo. 361.2m-830kc. 12,500 watts. General Elec. Co. Announcers, Freeman Talbot, Ralph Freese, Everett E. Foster, Julian H. Riley. Daily ex Sat, Sun, 11 am, NBC, 11-45 studio. Mon, 12-1:15 pm, time signals, stocks, Aladdin, 5:30 pm, stocks; 6, band; 6:30, NBC; 7, studio; 7:30, NBC; 9:05, G. E. Hour; 10-12, NBC. Tues, 12-1:15 pm, time signals, stocks, Aladdin; 2:30, bridge; 3:30, matinee; 5, NBC; 6, NBC; 6:30, farm question box; 7, NBC; 9, answers to financial questions; 9:05, NBC. Wed, 12-12:30, time signals, stocks, Aladdin; 6, stocks; 9-11, studio; 11-12, NBC. Thurs, 8:45 am, NBC; 12-12:15, time signals, stocks; 12:15-1:15, NBC; 3:30, matinee; 5:30 stocks; 6, NBC; 6:30 Brown Palace; 7, NBC; 8:30, Extension services; 9, Reese Quartet. Fri, 9-10, NBC; 10-11, shopping hour; 12-1:15, time signals, stocks, Aladdin; 2-3, NBC; 5:30, stocks; 6, NBC; 8:30, answers to financial questions; 9:05, NBC; 10, studio; 11-12, NBC. Sat, 12-1:30, time signals, stocks, Aladdin; 1:30-2:30, NBC; 5-9, NBC. Sun, 12-1:30, time signals, stocks, Aladdin; 1:30-2:30, NBC; 5-9, NBC; 9, Sunday School; 9:30-10:30, dance. Founded Dec 15, 1924. Mountain.

KOAC

Corvallis, Ore. 535.4m-560kc. 1000 watts. Oregon State Agricultural College. Announcer, Dr. D. V. Poling. Mon, Tues, Wed, Thurs, Fri, Sat, 12-1 pm, 2:30-4 pm, 7-8. Pacific. Founded Dec, 1922.

KOB

State College, N. M. 254.1m-1180kc. 10,000 watts. N. M. College of Agr. and Mech. Arts. Announcer, Marshall Beck. Slogan, "The Sunshine State of America." Daily 11:55-1 pm, time, weather, markets, road reports, news, music. Daily ex Sun, 7:30-9 pm, 9, weather, time. Founded 1920. Mountain.

KOCW

Chickasha, Okla. 211.1m-1420kc. 100 watts. Okla.-Chickasha Broadcasting Co. Slogan, "The Friendly Station in a Friendly Town." Daily ex Sun, 9-10 am, 12-1 pm. Sat, 6-12 mid. Sun, 10:50-12 n, 7:30-8:30, service. Central. Founded Nov, 1922.

KOH

Reno, Nev. 218.8m-1370kc. 100 watts. Jay Peters, Inc. Daily ex Sun, 10 am-3 pm, 5:30 pm-8:30 pm. Sun, 11 am-2:30 pm, 6 pm-9 pm.

KOIL

Council Bluffs, Iowa. 238m-1260kc. 1000 watts. Mona Motor Oil Co. Announcer, Nate Caldwell. Daily ex Sun, 6-9 am, markets, news, weather, musical; 11 am-2 pm, markets, road reports, musical, Aunt Sammy; 5 pm-12 mid, musical, Columbia Chain. Sun, 10-11 am, 1 pm-12 mid, musical, Columbia Chain. Central. Founded July 10, 1925.

KOIN

Portland, Ore. 319m-940kc. 1000 watts. KOIN, Inc. Announcer, Ash Kirkham. Daily ex Sun, 10 am, 11 am, 12 n, 3, 5:15, 6, 7, 8-9, 9-10, Sat, 11-1 am, Tues, Thurs, 10-11 pm. Mon, Wed, Fri, 10-11:30 pm. Sun, 3-4:30 pm, 6-7 pm, 7:50, 9. Pacific. Founded April, 1926.

KOL

Seattle, Wash. 236.1m-1270kc. 1000 watts. Seattle Broadcasting Co. Announcers, Henry Ehlers, Frank Coombs. Mon, Tues, Wed, Thurs, 6:45 am to mid. Fri, Sat, 6:45 am-1 am. Pacific. Founded May, 1922.

KOMO

Seattle, Wash. 325.9m-920kc. 1000 watts. Fisher's Blend Station, Inc. Announcers, George Godfrey, Art Lindsay, James Harvey, Bob Verling. Daily ex Sun, 10 am, inspirational; 10:15, health exercises; 10:30, recipes; 12 n, U. S. Farm Talks; 5 pm, Kiddies' Court of Storyland; 5:30, stocks; 5:45, news; 6-12:30 am, music. Sun, 11 am-11 pm. Pacific. Founded Dec 31, 1926.

KORE

Eugene, Ore. 211.1m-1420kc. 100 watts. Eugene Broadcast Station.

KOW

Denver, Colo. 215.7m-1390kc. 500 watts. The Associated Industries Broadcasting. Daily ex Thurs, 7-9 pm. Sun, 11-12 n, 6-7 pm, 7:30-9. Mountain.

KPCB

Seattle, Wash. 247.8m-1210kc. 100 watts. Pacific Coast Biscuit Co. Announcer, L. D. Greenway. Daily ex Sun, 9:30-9:50 am, recipe; 7:30-8:30 pm. Mon, Wed, 5:30-6 pm, 6, sports. Tues, 8:30-10 pm, Fri, 8:30-9:30 pm, Sat, 8:30-9:30 pm. Pacific. Founded April 1, 1927.

KPJM

Prescott, Ariz. 199.9m-1500kc. 50 watts. Miller & Klahn. 12-1 pm, 6-9 pm, news, sports.

KPLA

Los Angeles, Calif. 526m-570kc. 1000 watts. Pacific Development Radio Co. Announcer, Allen Fairchild. Daily, 7-11 am, 6-10 pm. Pacific. Founded March, 1927.

KPO

San Francisco, Calif. 440.9m-680kc. 5000 watts. Hale Bros. and the Chronicle. Announcer, Curtis Peck. Slogan, "The Voice of San Francisco, The City by the Golden Gate." Daily ex Sun, 6:45-8 am, exercises; 8, music; 9:30-10:30, utility features; 12 n, time, weather, music, Tues, Wed, Thurs, Fri, 2 pm, Thurs, Fri, 12:30 pm, club programs. Daily ex Sun, 4:30-12 mid. Sun, 9:45 am-1 pm, church; 3-9:30 pm. Pacific.

KPOF

Denver, Colo. 340.7m-880kc. 500 watts. Pillar of Fire, Inc. Slogan, "And the Lord Went Before Them in a Pillar of Fire." Sun, 9-10 am, studio church service. Tues, Fri, 7:30-9 pm, music and lecture. Thurs, 6:45-7:20 am, Bible class, Sat, 7:15-8:15 pm, Young People's hour. Mountain.

KPPC

Pasadena, Calif. 249.9m-1200kc. 50 watts. Pasadena Presbyterian Church. Announcer, Frederick T. Swift, Jr. Sun, 9:45 am-12:45 pm, 6:45-9 pm. Wed, 7-9 pm. Founded Dec 25, 1924. Pacific.

KPQ

Seattle, Wash. 247.8m-1210kc. 100 watts. Archie Taft and Louis Wasmer. Sun, Thurs, Sat, 7 am-4 am, Mon, Wed, Fri, 4:30-12. Sun, 8 am-11 pm.

KPRC

Houston, Texas. 325.9m-920kc. 1000 watts. Houston Post-Dispatch. Slogan, "Kotton Port Rail Center." Announcers, Alfred P. Daniel, Ted Hills and I. S. Roberts. Daily ex Sun, 7 am, 10:30 am, time; 11, weather, markets; 12 n, entertainment; 2-4 pm, 6-1 am. Sun, 11 am, services; 12:30 pm-mid, entertainment. Founded May 8, 1925. Central.

KPSN

Pasadena, Calif. 315.6m-950kc. 1000 watts. Pasadena Star-News. Announcer, P. C. Pryor. Daily ex Sun, 12 n, music; 12:15, news; 6, news. Sun, 10:30-12:30 am. Installed Nov. 23, 1925. Pacific.

KPWF

Westminster, Calif. 201.6m-1490kc. 50,000 watts. Pacific Western Broadcasting Federation.

KQV

Pittsburgh, Pa. 217.3m-1380kc. 500 watts. Double-day-Hill Elec. Co. Announcer, Paul J. Miller. Daily ex Sun, 9-10 am, 1:30-5 pm, Mon, Wed, Fri, 6-9 pm, 11-12. Tues, Thurs, Sat, 6-7:30 pm, 11-12. Sun, 1-2 pm, 5-8, Eastern.

KQW

San Jose, Calif. 296.9m-1010kc. 500 watts. First Baptist church. Daily ex Sun, 10 am-12:30 pm, music; 12:30-1, market reports; 1-5, music; 5-5:30, children's hour; 5:30-6, Aunt Sammy; 6-6:20, U. S. D. A.; 6:20-6:50, market reports; 6:50, Farmers' exchange; 7, news, weather, markets; 7:20, farm topics; 7:30, mail bag; 7:40, talk; 7:55, riddles; 8-9:30, program; 9:30-10, crop digest; Sun, 10:15 am-7:30 pm, church. Pacific.

KRE

Berkeley, Calif. 218.8m-1370kc. 100 watts. First Congregational Church of Berkeley. Pacific School of Religion. Daily ex Sat, Sun, 12:30-1 pm. Sun, 11 am. Pacific.

KRGV

Harlingen, Texas. 238m-1260kc. 500 watts. Harlingen Music Co.

KRLD

Dallas, Texas. 288.3m-1040kc. 10,000 watts. KRLD, Inc. Announcer, Arthur W. Stowe. Daily ex Sun, 8:30-10 am, 11-11:30 am, 12:15-1:45 pm, 2:30-3 pm, 3:30-4 pm, 5-6 pm, 7-8 pm, 9-10 pm, 11-mid, Sat, 11 pm-3 am. Sun, 9:30 am-n, 3-6 pm, 7-8 pm, 9:30-11 pm. Central. Founded Oct. 30, 1926.

KRMD

Shreveport, La. 228.9m-1310kc. 50 watts. Airplan Radio Shop. Daily ex Sun, 8:30-10:30 am. Sun, 8:30 am.

KRSC

Seattle, Wash. 267.7m-1120kc. 50 watts. Radio Sales Corp. Announcer, Robert E. Priebe. Daily, sunrise to sunset. Pacific.

KSAC

Manhattan, Kan. 516.9m-580kc. 500 watts nights, 1000 watts days. Kansas State Agricultural College. Announce, Lisle L. Longsdorf. Daily ex Sat, Sun, 8-9 am, 9-10 am, 12:30-1:30 pm, 4:30-5:30 pm, 6:30-8 pm. Central. Founded Dec. 1, 1924.

KSBA

Shreveport, La. 206.8m-1450kc. 1000 watts. Shreveport Broadcasting Assn. Announcer, W. G. Patterson. Daily ex Sun, 9:15 am, 12:15 pm, 2:15, markets, weather, news; 6 pm, 11 pm, studio program. Sun, 11 am, 7:30 pm. Central. Founded March 14, 1922.

KSCJ

Sioux City, Ia. 225.4m-1330kc. 1000 watts. The Sioux City Journal. Announcer, C. W. Corkhill. Daily ex Sun, 7 am-8:50, markets, weather, 9:30-1 pm, news, music; 3-7 pm, music, educational; 8-9, Sun, 10:30 am, 2 pm, 8. Central. Opened April 4, 1927.

KSD

St. Louis, Mo. 545.1m-550kc. 500 watts. Pulitzer Pub Co. Announcers, W. F. Ludgate, R. L. Coe. Daily ex Sun, 9:40 am, 10:40, 11:40, 12:40, 1:40, 3:40. Mon, Fri, Sat, 7:11:30 pm. Tues, 7-9:30 pm, 10-11 pm. Wed and Fri, 9-9:15 am; 9:50-11 am, 11:45-12:15, Wed, 7-10:30 pm. Thurs, 7-10 pm. Sun, 12:30-1:30 pm, 4:30-9:15 pm. Central. Founded June 24, 1922.

KSEI

Pocatello, Idaho. 333.1m-900kc. 250 watts. KSEI Broadcasting Assn. Announcer, W. J. O'Connor. Daily ex Sun, 11 am-12 m, 3-4 pm, 6-8, 9-11. Sun, 9-11 pm. Mountain. Opened Jan, 1925.

KSL

Salt Lake City, Utah. 265.3m-1130kc. 5000 watts. Radio Service Corp. of Utah. Announcers, Roscoe Grover, Ted Kimball. Daily ex Sun, 6:30-11 am, 12n-1 pm, 2 pm, 2 pm-12 m. Sun, 12n-11:30 pm. Mountain.

KSMR

Santa Maria, Calif. 249.9m-1200kc. 100 watts. Santa Maria Valley Railroad Company. Announcer, Sydney C. Peck. Daily ex Sat, Sun, 11-1, 2:30-3:30, 6-7, 8-9:30. Sat, 11-2, 6-7, 8-9. Pacific. Founded Dec. 3, 1925.

KSO

Clarinda, Iowa. 217.3m-1380kc. 500 watts. Berry Seed Co. Announcer, Joe Faassen. Slogan, "Keep Serving Others." Daily ex Sun, 6:30-8 am, 10:30-11, 11:45-1 pm, 3-4, 6:30-8 pm, 9-10 pm. Sun, 11-12 n, 2:30-3:30 pm. Founded Nov. 2, 1925. Central.

KSOO

Sioux Falls, S. D. 270.1m-1110kc. 1000 watts. Sioux Falls Broadcast Assn. Announcer, Randall Ryan. Slogan, "A Friendly Station in a Friendly City." Daily ex Sun, 6 am-6 pm. Sun, 9:30 am-6 pm. Limited time nights. Central. Founded 1922.

KSTP

St. Paul-Minneapolis, Minn. (tr. Wescott, Minn.). 255.1m-1460kc. 10,000 watts. The National Battery Station. Slogan, "The Call of the North." Daily ex Sun, 7 am, 7:05 am-12 mid. Sun, 3 pm, 6-11. Central. Founded May, 1924.

KTAB

Oakland, Calif. 545.1m-550kc. 500 watts. Pickwick Stages Station. Announcers, Mel Le Mon, Irving Krick, W. G. Hobart. Slogan, "Knowledge, Truth and Beauty." Daily ex Sun, 6:45-1:30 pm, 4 pm-2 am. Sun, 9:45-12:30 pm, 1 pm-9 pm. Pacific. Opened August 1, 1925.

KTAP

San Antonio, Texas. 211.1m-1420kc. 100 watts. Robert B. Bridge, Alamo Broadcasting Co. Slogan, "Kum to America's Playground." Daily ex Sun, 7-8 am, 11-12, 1-2 pm, 3-4, 6-7, 9-12. Sun, 5-7 pm, 9-12. Central. Founded September 15, 1927.

KTAT

Fort Worth, Texas. 241.8m-1240kc. 1000 watts. Texas Air Transport Broadcast Co. Announcer, Alva R. Willgus. Daily ex Sun, 10:30-11:30 am, 12:30-1:30 pm, 2:15-3, 7:30-8:30, 9:30-11. Wed, 10:30-11:30 am, 12:30-1:30 pm. Sun, 11-12 n, 2-4 pm, 7:30-11. Central.

KTBI

Los Angeles, Calif. 230.6m-1300kc. 1000 watts. Bible Inst. of Los Angeles. Announcer, H. P. Herdman. Mon to Fri, 8 am-2:30 pm, Mon, Fri, Sat, 7-10 pm. Sun, 6-7, 8-10 pm. Pacific. Founded September, 1922.

KTBR

Portland, Ore. 230.6m-1300kc. 500 watts. M. E. Brown. Announcer, M. E. Brown. Daily ex Sun, 6-7 pm, dinner program, markets. Mon, Thurs, Sat, 8-12. Mon, 9-12 mid. Sun, 10 am-12:15 pm, 2-4 pm, 7:30-10 pm, church services. Pacific. Opened Sept. 23, 1925.

KTHS

Hot Springs National Park, Ark. 374.8m-800kc. 10,000 watts. The Hot Springs Chamber of Commerce. Announcer, G. C. Arnoux. Slogan, "Kum to Hot Springs." Daily ex Sun, 12-1 pm. Mon, Wed, Thurs, Sat, 9 pm-mid. Mon, 5:30-6 pm. Tues, Fri, 5:30-9 pm. Sun, 11 am-12:30 pm, 6-7:30 pm, 8:30-10 pm. Installed December 20, 1924. Central.

KTM

Santa Monica, Calif. 384.4m-780kc. 500 watts. Pickwick Broadcasting Corp. Daily and Sun, 6-8 am; 1-5 pm; 8-12 m. Pacific.

KTNT

Muscatine, Iowa. 256.3m-1170kc. 5000 watts. Norman Baker. Slogan, "Dedicated to and the Voice of the Farmer." Announcers, Norman Baker, Wm. MacFadden, Charles Salishury, Rene Bellows, Phil Hoffmann, Walter Mohsen, Fonda Jarvis. Daily ex Sun, 6 am-11 am, n-5, 11:15 pm-12:15 Sun, 12-1 pm, 2:30-4:30. Central. Founded 1924.

KTSA

San Antonio, Texas (tr. Woodlawn Hills) 232.4m-1290kc. 1000 watts night, 2000 watts daytime. Lone Star Broadcast Co. Daily ex Sun, 7-9 am, 10-10:30 am, 12:30-7 pm. Mon, 7:30-9 pm, Tues, 8-10 pm. Wed, Thurs, 8-11 pm, Fri, 7:30-8:30 pm, Sat, 8:30-12 pm. Sun, 11 am, church, 1:30-2:30 pm, 6-10 pm.

KTUE

Houston, Texas. 211.1m-1420kc. 5 watts. Uhalt Electric. Announcer, Walter Ivanhoe Zaboroski. Daily ex Sun, 2-3 pm, 7-10 pm. Sun, 2-3 pm. Central.

KTW

Seattle, Wash. 236.1m-1270kc. 1500 watts. First Presbyterian Church. Announcer, J. D. Ross. Slogan, "Hear Ye, Hear Ye, the Gospel." Sun, 11-12:30 pm, 3-4:30, 7-9:30, church service, Pacific.

KUJ

Longview, 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. 215.7m-1390kc. 1000 watts. University of Arkansas. W. S. Gregson. Daily ex Sun, 12:30-2 pm, 5-5:55 pm. Mon, 7-9 pm. Wed, 7-9 pm. Central. Founded 1923.

KUOM

Missoula, Mont. 526m-570kc. 500 watts. University of Montana. Mon, Thurs, 8-10 pm, Sun, 9:30-10:45 pm. Mountain. Founded 1924.

KUSD

Vermillion, S. D. 336.9m-890kc. 500 watts night, 750 day. University of South Dakota. Announcer, Bill Knight. Slogan, "South Dakota University for South Dakotans." Mon, Wed, Fri, 8-9 pm. Central.

KUT

Austin, Texas. 267.7m-1120kc. 500 watts. University of Texas. Announcer, J. G. Adams. Mon, Wed, 8 pm, Fri, 8 pm. Founded 1925. Central.

KVI

Tacoma, Wash. 233.7m-1340kc. 1000 watts. Puget Sound Radio Broadcasting Co. Daily ex Sun, 12-9 pm. Sun, 11 am-12:30 pm, 1-5. Pacific.

KVL

Seattle, Wash. 218.8m-1370kc. 100 watts. Arthur C. Dailey, Calhoun Hotel. Mon, Wed and Fri, 12-4 pm, 5-12 pm. Tues, Thurs, Sat, 12-6 pm. Sun, 4:30-7, 9:30-12 pm. Pacific. Founded July 13, 1926.

KVOO

Tulsa, Okla. 263m-1140kc. 5000 watts. Southwestern Sales Corp. Announcers, Francis Laux, Frank Bayne, Harry K. Richardson. Daily ex Sun, 10-11 am; 11:45, markets; 12-1 pm; 2:30 pm, markets; 3-4 pm, 5:30-9 pm. Sun, 9:15 am-10 pm. Central. Opened January, 1925.

KVOS

Bellingham, Wash. 249.9m-1200kc. 100 watts. Mt. Baker Station.

KWBS

Portland, Ore. 199.9m-1500kc. 15 watts. Schaeffer Radio Co. Daily ex Sun, 9-12 am, 6-11 pm. Sun, 11-12 midnight.

KWCR

Cedar Rapids, Iowa, 228.9m-1310kc. 100 watts. H. F. Paat, Slogan, "The Voice of Cedar Rapids." Daily ex Sun, 6:30-8 am, 11:30-1 pm, 5-6:30 pm. Mon, Wed, Fri, Sat, 10:30-11:30, organ programs. Mon, Wed, Fri, 9-11 pm. Sun, 9-11 am, 4-8 pm, 9:30-10:30 pm. Central. Founded July 29, 1922.

KWEA

Shreveport, La. 247.8m-1210kc. 100 watts. William Erwin Antony, Daily, 24 hours.

KWG

Stockton, Calif. 249.9m-1200kc. 100 watts. Portable Wireless Telephone Co. Announcer, George J. Turner. Slogan, "Voice of the San Joaquin Valley." Daily ex Sun, 8-9 am, 4-5 pm, news, concert, markets; 5-6, 6-7:30, 8-10, concert. Sun, 7:30-9:30, service; 9:30-10:30, organ. Pacific.

KWJJ

Portland, Ore. 282.8m-1060kc. 500 watts. Wilbur Jerman, Slogan, "The Voice From Broadway." Daily ex Sun, 1-6 pm, 6-8, 8-10:30. Wed, 10:30-12 mid, 12-1, Sun, 12-1 pm. Pacific. Founded July 25, 1925.

KWK

St. Louis, Mo. 222.1m-1350kc. 1000 watts. Greater St. Louis Broadcasting Co. Announcers, Thomas Patrick Convey, George Wood, Bob Thomas, John McDowell. Daily ex Sun, 6:30 am-mid. Sun, 12 n-11:30 pm. Central.

KWKC

Kansas City, Mo. 218.8m-1370kc. 100 watts. Wilson Duncan Studios. Announcer, Elmer Hodges. Slogan, "Keep Watching Kansas City." Tues, Wed, Thurs, Fri, 7 pm, 9. Central. Founded 1925.

KWKH

Shreveport, La. 352.7m-850kc. 20,000 watts. Henderson Iron Works & Supply Co. Mon, Wed, Fri, Sat, 9:30 pm-12. Tues, Thurs, 8 pm-12. Sun, 7:45 pm-12. Central. Founded January 8, 1925.

KWLC

Decorah, Iowa. 236.1m-1270kc. 50 watts. Luther College.

KWSC

Pullman, Wash. 215.7m-1390kc. 500 watts. State College of Washington. Announcer, Harvey Wikson. Mon, Wed, Fri, 3:30-5 pm. Tues, 11 am-1 pm. Mon, Wed, 7:30-10 pm. Sun, 4-5 pm. Pacific. Founded 1922.

KWTC

Santa Ana, Calif. 199.9m-1500kc. 100 watts. Dr. John Wesley Hancock. Mon, Thurs, 5-10 pm. Tues, Wed, Fri, 5-7:30 pm. Sat, 5-9 pm. Pacific. Founded November 15, 1926.

KWWG

Brownsville, Texas. 238m-1260kc. 500 watts. Chamber of Commerce.

KWYO

Laramie, Wyo. 499.7m-600kc. 500 watts night. 1000 day. Bishop N. S. Thomas. Announcer, S. E. Edwards. Daily, noon-2 pm. Sun, 11-12:30. Mountain. Founded Nov., 1925.

KXA

Seattle, Wash. 526m-570kc. 500 watts. American Radio Tel. Co. Daily ex Sun, 10 am-12 mid. Sun, 9:55 am-12:30 pm, 7-9 pm.

KXL

Portland, Ore. 239.9m-1250kc. 500 watts. KXL Broadcasters. The Portland Telegram. Announcer, A. R. Truitt. Slogan, "The Voice of Portland." Daily ex Sun, 6 am-1 am. Sat, 6 am to Sun, 11:30 pm. Pacific. Founded December 13, 1926.

KXO

El Centro, Calif. 249.9m-1200kc. 100 watts. E. R. Irey and F. M. Bowles. Daily ex Sun, 7-8 am, 11 am-1 pm. Sat-Sun, 5:45-6 pm. Sun, 10 am-2 pm. Pacific.

KXRO

Aberdeen, Wash. 211.1m-1420kc. 75 watts. KXRO, Inc.

KYA

San Francisco, Calif. 243.8m-1230kc. 1000 watts. Pacific Broadcasting Corp. & American Broadcasting Co. Announcer, Edward Ludes. Daily ex Sun, 7 am-12 mid. Sun, 9 am-11 pm. Pacific. Founded December 18, 1926.

KYW-KFKX

Chicago, Ill. 293.9m-1020kc. 5000 watts night, 2500 day. Westinghouse Elec. & Mfg. Co., Herald and Examiner. Announcer, Gene Rouse, Bob Boniel, Barney McArthur, Stanley Houston, D. L. Gross. Daily ex Sun, 8:45 am-1 am, 5:30, Uncle Bob. Sun, 10:40 am-11 pm. Central.

KYWA

Chicago, Ill. 293.9m-1020kc. 5000 watts. Westinghouse Elec. & Mfg. Co.

KZIB

Manila, P. I. 260m-1153kc. 20 watts. I. Beck, Inc. Daily, 6:30-8 pm. Wed, 7:30-10:30 pm.

KZM

Hayward, Calif. 218.8m-1370kc. 100 watts. Western Radio Institute (Hotel Oakland) Announcer, Elbert Cowan. Daily ex Sun, 6:30-7:30 pm. Sun, 8-10 pm. Pacific. Founded June 29, 1921.

KZRO

Manila, P. I. 413m-726kc. 1000 watts. Radio Corp. of the Philippines.

NAA

Washington, D. C. 434.5m-690kc. 1000 watts. United States Navy Dept. Daily and Sun, 10:05 am, 10:05 pm, weather; noon, 10 pm, time. Daily ex Sun, 3:45 pm, weather, Fri, 7:45-8 pm. Eastern.

WAAD

Cincinnati, Ohio. 211.1m-1420kc. 25 watts. Ohio Mechanics' Institute. Sat, 9:45 pm, Eastern.

WAAF

Chicago, Ill. 325.9m-920kc. 500 watts. Chicago Daily Drivers Journal. Announcer, Carl Ulrich. Daily ex Sun, 8:45 am, 10:30, 11, 12:30 pm. Daily ex Sun, Sat, 1 pm, 4:30 pm. Central. Founded May 22, 1922.

WAAM

Newark, N. J. 239.9m-1250kc. 2000 watts day, 1000 watts night. I. R. Nelson Company. Announcer, Jack Van Riper, Lynn Willis, James Cosier. Daily ex Sun, 7-9 am, 10-12 am; Daily ex Mon, 2-4:30 pm. Mon, 10-12 pm; Tues, Thurs, Sat, 6-9 pm; Wed, Fri, 9-12 pm; Sun, 11-12:30 pm. Eastern. Experimental call 2XBA 65.18m. Founded February, 1922.

WAAT

Jersey City, N. J. 280.2m-1070kc. 300 watts. Bremer Broadcasting Corp. Announcer, J. B. Bayley. Slogan, "The Voice at the Gate of the Garden State." Daily ex Sun, 10 am to sunset and after midnight. Sun, 8:30-3:15 pm, 4:30 pm to sunset after midnight. Eastern. Founded 1921.

WAAW

Omaha, Neb. 454.3m-660kc. 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, 12:45, 1:15, 1:30, 4-6 pm. Founded 1921. Central.

WABC

New York, N. Y. 348.6m-860kc. 5000 watts. Atlantic Broadcasting Corp. Daily ex Sun, 10:30 am to mid or 1 am. Sun, 10:50 am-11:30 pm. Eastern.

WABF

Kingston, Pa. 208.2m-1440kc. 250 watts. Markle Broadcasting Corp. Announcer, F. J. Markle. Slogan, "The Voice of Wyoming Valley." Daily 12-1:15 pm. Daily ex Sun, 6-10 pm. Eastern.

WABI

Bangor, Me. 249.9m-1200kc. 100 watts. First Universalist church. Slogan, "The Pine Tree Wave." Announcer, Prof. W. Creamer Jr. Sun, 10:30 am, 7:30-9 pm. Eastern. Founded 1923.

WABY

Philadelphia, Pa. 228.9m-1310kc. 50 watts. John Magaldi, Jr.

WABZ

New Orleans, La. 249.9m-1200kc. 100 watts. The Coliseum Place Baptist church. Announcer, Charles E. Page. Slogan, "The Station With a Message." Thurs, 8-9 pm, Sun, 11-12:15 pm, 7:30-9, church service. Central. Founded January, 1924.

WADC

Akron, Ohio. 237.1m-1320kc. 1000 watts. Allen Theater Broadcasting Station. Announcer, George F. Houston. Daily ex Sun, 3-4 pm, 5-6 pm. Daily ex Tues, 11 am-12 n, Mon, Wed, Thurs, 7-11 pm. Tues, 10 am-12 n, 7-12 mid. Wed, Thurs, Fri, 10-10:30 am, Fri, 6:45-11 pm. Sun, 10:30-11:45 am, 12:30-1-30 pm, 3-5, 5:30-6, 7:30-11 pm. Eastern. Founded March, 1925.

WAFD

Detroit, Mich. 199.9m-1500kc. 100 watts. Albert B. Parfet Co. Announcer, Owen F. Uridge. Eastern. Founded Jan., 1925.

WAGM

Royal Oak, Mich. 228.9m-1310kc. 50 watts. Robert L. Miller. Announcer, Fred Stanton. Slogan, "The Little Station With the Big Reputation." Daily ex Sun, 9 am-12:30 pm. Mon, 6:30 pm-12 mid. Wed, 6-9 pm. Thurs, 10-12 mid. Friday, 6-10 pm. Sat, 2-4 pm. Central. Founded Oct. 3, 1925.

WAIU

Columbus, Ohio. 468.5m-640kc. 5000 watts. American Insurance Union. Daily ex Sat, Sun, 9:30 am-1 pm, 5:30-8 pm. Sat, 9:30 am-1 pm. Sun, 10:30 am, 3-4 pm, 5-8:30 pm. Eastern. Founded April, 1922.

WALK

Willow Grove, Pa. 199.9m-1500kc. 50 watts. Albert A. Walker.

WAPI

Birmingham, Ala. 263m-1140kc. 5000 watts. Alabama Polytechnic Institute. Announcer, W. A. Young. Installed 1922. Central.

WASH

Grand Rapids, Mich. 236.1m-1270kc. 250 watts. Baxter Laundries, Inc. Announcers, Hugh Hart, "Uncle Jerry," Richard Smith. Daily ex Sat, Sun, 12:30-1:30 pm, 5-6 pm. Daily ex Thurs, Sun, 7-8 pm, Sun, 10-11:30 am, 2-4 pm, 7-8:30, Wed, 12:30-3:30 pm. Central. Founded March 13, 1925.

WBAA

W. Lafayette, Ind. 214.2m-1400kc. 500 watts. Purdue University. Announcer, J. W. Stafford. Mon, Fri, 7 pm, special program. Central. Founded 1920.

WBAK

Harrisburg, Pa. 209.7m-1430kc. 500 watts. Pennsylvania State Police. Announcer, A. E. Poorman. Daily ex Sun, 10:30 am, 1:30-4 pm. Mon, Wed, 7 pm. Eastern. Founded 1919.

WBAL

Baltimore, Md. 282.8m-1060kc. 10,000 watts. Consolidated Gas, Elec. Light & Power Co. Announcer, Stanley W. Barnett. Slogan, "The Station of Good News." Daily ex Sun, Sat, 3-5 pm, 6-11 pm. Sat, 6:30-11 pm. Sun, 1-10:30 pm. Eastern. Founded Nov. 1, 1925.

WBAP

Fort Worth, Tex. 374.8m-800kc. 10,000 watts. Fort Worth Star-Telegram. Announcer, "The Hired Hand." Daily ex Sun, 8, 9, 10, 11, 1 pm, 2, 3, 4, 5, "Port of Missing Men." Mon, Wed, Thurs, Sat, 6-9 pm. Tues, Fri, 9-12 mid. Sun, 7:30-8:30 pm, 10-12. Central. Founded, April, 1922.

WBAR

Sisht, Wis. 270.1m-1110kc. 500 watts. Koop Radio Co. Slogan, "The Station of Northern Wisconsin."

WBAY

Nashville, Tenn. 201.2m-1490kc. 5000 watts. WBAY Broadcasters. Announcer, Fred Waldrum. Daily ex Sun, 9-11 am, 4-5:15 pm. Mon, Tues, Wed, 6:30-9:30 pm. Thurs, 9:30 pm-mid. Fri, 9:30 pm-1 am. Sat, 9:30 pm-2 am. Sun, 10 am-n, church services; 7-7:30 pm, Bible study; 7:30-9 pm, church. Founded Feb. 24, 1924. Central.

WBAX

Wilkes-Barre, Pa. 247.8m-1210kc. 100 watts. John H. Stenger, Jr., W. J. Kennedy, E. J. Speicher, Homer E. Davis, Carl J. Walski. Slogan, "In Wyoming Valley, Home of the Anthracite." Tues, 6-11 pm. Thurs, 6 pm-2 am. Sat, 6-7 pm. Sun, 6-9 pm. Eastern. Founded May, 1922.

WBBC

Brooklyn, N. Y. 214.2m-1400kc. 500 watts. Brooklyn Broadcasting Corp. Announcer, Bob Fram. Mon, 4-6 pm, 10-12 pm. Tues, 11 am, 6-7:30 pm. Wed, 1:30-4 pm, 9-10:30 pm. Thurs, 11:30 am-1:30 pm, 7:30-9 pm. Fri, 4-6 pm, 10-12 pm. Sat, 9:11 am, 7:30-9 pm. Sun, 9-10:30 am, 1:30-4 pm, 6-7 pm, 9-10 pm.

WBBL

Richmond, Va. 218.8m-1370kc. 100 watts. Grace Covenant Presbyterian Church. Founded Feb., 1924.

WBBM

Chicago, Ill. (Tr. at Glenview.) 389.4m-770kc. 25,000 watts. Atness Investment Co. Announcer, Pat Flannigan. Daily, 7-8:30 am, 10-10:30 am, 11-12:30 pm, 3-6 pm, 12 mid-2 am. Mon, Wed, Fri, Sat, 8-10 pm. Tues, Thurs, 10 pm-mid. Sun, 7:30 pm-9:30 pm. Central. Founded 1922.

WBBR

Rossville, N. Y. 230.6m-1300kc. 1000 watts. Peoples Pulpit Assn. Announcer, Victor F. Schmidt. Mon, 10 am-12 n, 2-4 pm. Tues, 12-2 pm, 6-8 pm. Wed, 10 am-12 n, 9-12 pm. Thurs, 1-3 pm, 8-10 pm. Fri, 2-4 pm, 6-8 pm. Sat, 8:30-11 am, 5-9 pm. Sun, 10-11 am, watchtower chain program. Eastern. Founded Feb., 1924.

WBBW

Norfolk, Va. 249.9m-1220kc. 100 watts. Ruffner Junior High School. Announcer, Lee M. Kline. Slogan, "The School You'd Like to Go To." Eastern. Founded Feb. 26, 1924.

WBBY

Charleston, S. C. 249.9m-1200kc. 75 watts. Washington Light Infantry. Slogan, "Seaport of the Southeast." Eastern.

WBBZ

Ponca City, Okla. 249.9m-1200kc. 100 watts. C. L. Carrell. Announcer, Morton Harvey. Daily ex Sun, 6:30-8 am, 10:30-11:30 am, 12-1:15 pm, 5:30-6 pm, 6:30-8:30 pm. Sat, 6:30-7:45 pm. Sun, 11-1 pm, 6-8 pm.

WBCM

Bay City, Mich. 212.6m-1410kc. 500 watts. Bay City Broadcasting Assn. Announcer, S. F. Northcott. Daily ex Sun, 12 n-1 pm, 4-4:30 pm, 7-10 pm. Sat, 9 pm-2 am. Sun, 11 am, services; 4-5 pm, concert. Eastern. Founded June 15, 1925.

WBET

Medford, Mass. 220.4m-1360kc. 500 watts. Boston Transcript Co. Announcers, Gerard H. Slattery, Wayne H. Latham, Richard D. Grant. Slogan, "The Boston Evening Transcript—New England's Leading Family Daily." Mon, 12:15-11 pm. Tues, Wed, Thurs, Fri, 4:45-11:30 pm. Sat, 6-11 pm. Sun, 11 am-1:15 pm. Eastern. Opened Feb. 28, 1927.

WBIS

Boston, Mass. 243.8m-1230kc. 500 watts night, 1000 watts day. Boston Information Service. Announcer, Grace Lawrence. Daily ex Sun, 8-9:30 am, 2-4 pm. Eastern. Founded Jan. 29, 1927.

WBMH

Detroit, Mich. 228.9m-1310kc. 100 watts. Braun's Music House. Announcers, Ray A. Miller, O. F. Gabbert, Jr. Tues, 8-11:30. Wed, 9-11:30. Thurs, 7:30-10. Fri, 10-11:30. Sat, 8:30-11:30. Eastern. Founded Jan. 11, 1927.

WBMS

Fort Lee, N. J. 206.8m-1450kc. 250 watts. WBMS Broadcasting Corp. Slogan, "The Voice of Bergen County." Sun, 12-2 pm, 5:45-7:30 pm. Mon, 12-3 pm. Tues, 8-10 am, 6-9 pm. Wed, 3-6 pm. Thurs, 10-12 am, 9 pm-2 am. Fri, 12-3 pm. Sat, 8-10 am, 6-9 pm. Eastern.

WBNY

New York, N. Y. 222.1m-1350kc. 250 watts. Baruchmore Corp. Eastern. Founded 1925.

WBOQ

Richmond Hill, N. Y. 348.6m-860kc. 5000 watts. Atlantic Broadcasting Co.

WBOW

Terre Haute, Ind. 228.9m-1310kc. 100 watts. Banks of Wabash Broadcasting Assoc.

WBRC

Birmingham, Ala. 322.4m-930kc. 500 watts. Birmingham Broadcasting Co. Announcer, Dud Connolly. Daily ex Sun, 12 n-3 pm, 7-11 pm. Sun, 11 am, church; 7:30 pm, church; 9-11 pm, music. Central. Founded May 18, 1925.

WBRE

Wilkes-Barre, Pa. 228.9m-1310kc. 100 watts. Liberty State Bank and Trust Co. Announcer, Louis G. Baltimore. Mon, Fri, 12:30-1:15 pm, 6:30-12. Wed, 12:30-1:15 pm, 6:30-11:30. Sun, 9-12 mid. Eastern.

WBRL

Tilton, N. H. 209.7m-1430kc. 500 watts. Booth Radio Laboratories. Tues, Thurs, Sat, 9 am-12 pm. Sun, 10 am-12 n, 3-5 pm, 7-9 pm. Eastern.

WBSO

Babson Park, Mass. 384.4m-780kc. 250 watts. Babson's Statistical organization. Announcer, Ross Wood. Daily ex Sat & Sun, 3:30-4:30 pm. Daily, 12-12:30 am. Eastern. Founded January, 1927.

WBT

Charlotte, N. C. 277.6m-1080kc. 5000 watts. C. C. Coddington, Inc. Announcer, Donnell O'Connor, Fritz Hirsch. Daily ex Sun, 12:30 pm, Mon, Sat, 6:30-12 mid, Tues, Wed, Thurs, Fri, 7-12 mid. Sun, 10 am-11:15 pm. Eastern.

WBZ

Springfield, Mass. 302.8m-990kc. 15,000 watts. Westinghouse Elec. & Mfg. Co. Radio Station of New England. Announcers, Aidan Redmond, Bernard W. Burdick. Mon, 11-1:30 pm, Tues, 10 am-11 pm, Wed, 10 am-11:30 pm, Thurs, 10 am-11:30 pm, Fri, 10-11:30 pm, Sat, 11 am-10:45 pm. Sun, 11 am-11:30 pm. Installed Sept, 19, 1921. Eastern.

WBZA

Boston, Mass. 302.8m-990kc. 500 watts. Westinghouse Elec. & Mfg. Co. Same programs as WBZ.

WCAC

Mansfield, Conn. 499.7m-600kc. 250 watts. Connecticut Agricultural College. Announcer, Daniel E. Noble. Slogan, "From the Nutmeg State." Mon, 7:30-8 pm. Wed, 7-7:30 pm. Eastern. Founded June, 1923.

WCAD

Canton, N. Y. 245.6m-1220kc. 500 watts. (1000 watts 6 am-6 pm.) St. Lawrence University. Announcer, Ward C. Priest. Slogan, "The Voice of the North Country." Daily, 12:30 pm, weather reports, talks, music, time. Wed, 4-5 pm. Eastern. Founded Dec. 7, 1922.

WCAE

Pittsburgh, Pa. 245.8m-1220kc. 500 watts. Gimbel Brothers. Daily ex Sun, 6:45-8 am, exercises, 11:10-12:15, 12:15 pm-1, concert; 4-12 mid. Sun, 9 am-12:30 pm, 1:30 pm-10:45 pm. Eastern.

WCAH

Columbus, Ohio. 209.7-1430kc. 250 watts. Commercial Radio Service. Daily ex Sun, 10 am-7 pm. Tues, Thurs, Sat, 7 pm-9 pm. Mon, 10 pm-11:30 pm. Wed, Fri, 9 pm-11:30 pm. Sun, 12-2 pm, 6-7 pm, 9-10:30 pm. Eastern. Founded April, 1921.

WCAJ

Lincoln, Nebr. 508.2m-590kc. 500 watts. Nebraska Wesleyan University. Announcer, J. C. Jensen. Daily, 10 am, convocation exercises; 4:30 pm, weather and education features. Sun, 11 am, services; 2 pm, vesper. Daily ex Sun, 7:30 am, morning service, radio service, Tues, 8 pm, educational program; 9:30 pm, musical program. Founded Oct., 1921. Central.

WCAL

Northfield, Minn. 239.9m-1250kc. 1000 watts. Dept. of Physics, St. Olaf College. Announcer, Hector Skifter. Slogan, "The College on the Hill." Daily ex Sun, Thurs, 9:45 am, Mon, 7-8:30 pm. Wed, 9-9:30 pm. Sun, 8:30-9:30 am, 3-4 pm. Central. Founded 1922.

WCAM

Camden, N. J. 234.2m-1280kc. 500 watts. City of Camden. Announcer, J. A. Howell. Mon, 2-5 pm, 7:30 to midnight. Tues, Thurs, 2-3 pm. Wed, 2-5 pm, 7-8 pm. Fri, 2-5 pm, 9-12 pm. Sun, 10:45 am-12:15 pm, 3-5 pm. Eastern. Founded Oct. 26, 1926.

WCAO

Baltimore, Md. 499.7m-600kc. 250 watts. Monumental Radio, Inc. Announcer, Wm. L. Atkinson. Daily ex Sun, 7 am-1 pm, 5:30-11 pm. Sun, 10:50 am, services; 3-7 pm, 8:30-11 pm. Eastern. Founded May 17, 1922.

WCAP

Asbury Park, N. J. 234.2m-1280kc. 500 watts. Chamber of Commerce. Announcer, Thomas F. Burley, Jr. Mon, Tues, Thurs, Sat, Sun, 10 am-12 n. Sun, 1-3 pm, 8-12 pm. Mon, 6-7 pm. Tues, 4-12 pm. Wed, 6-7:30 pm. Thurs, 3-12 pm. Fri, 6-9 pm. Sat, 1-8 pm. Eastern. Founded July 1, 1927.

WCAT

Rapid City, S. D. 249.9m-1200kc. 100 watts. South Dakota State School of Mines. Announcer, J. O. Kammerman. Daily ex Sun, 9:30 am, 12:30 pm, weather reports. Mountain. Founded 1920.

WCAU

Philadelphia, Pa. (tr. Byberry). 256.3m-1170kc. 5000 watts. Universal Broadcasting Co. Announcers, Stan Lee Broza, Norman Brokenshire. Daily ex Sun, 9 am-mid. Sun, 10 am-mid. Eastern. Founded May, 1922.

WCAX

Burlington, Vt. 249.9m-1200kc. 100 watts. University of Vermont. Slogan, "The Voice of the Green Mountains." Eastern.

WCAZ

Carthage, Ill. 280.2m-1070kc. 50 watts. Carthage College. Daily ex Sat, Fri, 2-3 pm. Sun, 11:40-12:15 pm. Central.

WCBA

Allentown, Pa. 208.2m-1440kc. 250 watts. B. Bryan Messelman. Announcers, Clarence Dreisbach, Don Rayburn, Chas. Melson. Daily ex Sun, 7:30-9:15 am. Mon, 6:30-8:30 pm, Wed, 6:30-11 pm, Fri, 6:30-12 pm. Sun, 10 am, 5:30-12 pm. Eastern.

WCBD

Zion, Ill. 277.6m-1080kc. 5000 watts. Wilbur Glenn Voliva. Announcer, J. H. DePew. Slogan, "Where God Rules, Man Prospers." Founded May, 1923. Central.

WCBM

Baltimore, Md. 218.8m-1370kc. 100 watts. Baltimore Broadcasting Co. Francis Dice, announcer. Daily, 12-1:30 pm, 6-7:30 pm. Tues, Thurs, Sat, 9:30-11:15. Sun, 6-8. Eastern. Founded March 25, 1923.

WCBS

Springfield, Ill. 247.8m-1210kc. 100 watts. Harold L. Dewing, Charles H. Messer. Slogan, "Home of Abraham Lincoln." Mon, 7-9:30 pm, Tues, Wed, Thurs, Fri, 7-10:30 pm. Sun, 10:45-12 n, 12:30-2 pm, 6-7, 7:30-8. Central. Founded April 8, 1923.

WCCO

Minneapolis-St. Paul, Minn. (Tr. at Anoka.) 370.2m-810kc. 7500 watts. Washburn-Crosby Co. Announcers, L. J. Seymour, J. Snyder, K. C. Titus, A. B. Sheehan, K. W. Husted, F. F. Laws. Slogan, "Service to the Northwest." Daily ex Sun, 7 am, music; 9 am, Radio University; 9:15 am, program for day, news; woman's hour; 9:50, weather, markets; 11:30, markets; 12, music; 1:30, weather, markets; 3, markets; 5:45, livestock. Mon, 6:30 pm, dinner music; 7:30, orchestra; 8:30, Romeo and Juliet; 9, Show Boat; 10, weather; 10:05, orchestra, Tues, 7-8, orchestra and male quartet; 8-10, Columbia chain, 10, weather; 10:05, Izaak Walton. Wed, 6-8, music; 8:30-10, Columbia; chain; 10, weather; 10:30, dance program; 11:30, organ. Thurs, 6, dinner music; 7-7:15, talks; 7:30, music; 8:30, Columbia; 9:12, theater; 10:20, weather and dance music. Fri, 7, Columbia; 8, tenor solo; 8:30, Radio play; 9, Columbia; 9:30, quartet; 10, weather; 10:05, music. Sat, 6:15 pm, music; 8-9, music; 10, weather, dance program. Sun, 7:15-10:15 pm. Founded Oct. 1, 1924. Central.

WCDA

New York, N. Y. (Tr. at Cliffside Park, N. J.) 222.1m-1350kc. 250 watts. Italian Educational Broadcasting Co. Mon, Wed, 1:30-3 pm; Tues, 4:30-9 pm; Thurs, 5 pm-9 pm; Fri, 12-4 pm; Sat, 6-9 pm. Sun, 8 pm-mid. Eastern.

WCFL

Chicago, Ill. 309.1m-970kc. 1500 watts. Chicago Federation of Labor. Announcer, Harold O'Halloran. Slogan, "The Voice of Farmer and Labor." Daily ex Sun, 7-9 am, 12-1 pm, 1-2, television; 3-8 pm. Sun, 11 am-12:30 pm, 3-8 pm. Central.

WCGU

Coney Island, N. Y. 214.2m-1400kc. 500 watts. U. S. Broadcast Corp. Eastern.

WCLE

Long Beach, N. Y. 199.9m-1500kc. 100 watts. Arthur Fasko.

WCLO

Kenosha, Wis. 249.9m-1200kc. 100 watts. C. E. Whitmore. Announcer, James Boutelle. Daily ex Sun, 10 am-11:30 pm. Founded Aug. 4, 1925. Central.

WCLS

Joliet, Ill. 228.9m-1310kc. 100 watts. 'WCLS, Inc. Slogan, "Will County's Largest Store." Central. Founded June, 1925.

WCMA

Culver, Ind. 214.2m-1400kc. 500 watts. Culver Military Academy. Announcer, C. F. McKinney. Sun, 11:30 am-12:30, chapel service. Central. Founded 1925.

WCOA

Pensacola, Fla. 267.7m-1120kc. 500 watts. Municipal Broadcasting Station. Announcer, John E. Brenkel. Slogan, "Wonderful City of Advantages." Daily ex Sun, 10:30 am, 12-1 pm, 12:30 pm, Mon, Wed, Fri, 8 pm. Sun, 12:30 pm, 7:25. Central. Founded February 2, 1926.

WCOC

Columbus, Miss. 340.7m-880kc. 500 watts. Crystal Oil Co. Announcers, T. C. Billups, Miss Alice Smith. Slogan, "Wireless Crystal Oil Company." Daily, 12-1 pm, 5-6 pm. Tues, Fri, 8-10 pm. Central. Founded February 26, 1927.

WCOH

Yonkers, N. Y. 247.8m-1210kc. 100 watts. Westchester Broadcasting Corp.

WCRW

Chicago, Ill. 247.8m-1210kc. 100 watts. Clinton R. White. Announcers, Fred K. Weston, Al John, Miss Josephine. Slogan, "For Your Entertainment." Daily ex Sun, 11:30-1 pm. Daily, 6-7, 9-10 pm. Central. Founded May, 1926.

WCSE

Portland, Me. (tr. Portland). 319m-940kc. 500 watts. Congress Square hotel. Slogan, "Sunrise Gateway of America." Announcer, L. T. Pitman. Mon, 10-11:30 am, 12-1:30 pm, 2:30-4:30, 5:30-11. Tues, 10-11:30, 12-1:30 pm, 2:30-4:30, 5:30-12. Wed, 10-11:30 am, 12-12:30 pm, 5:30-11. Thurs, 9:15-11:30 am, 12 n-1 pm, 5:30-10:30. Fri, 10-11:30 pm, 12-12:30 pm, 3-5:15, 5:30-8, 9-11. Sat, 11-11:30 am, 12-12:30 pm, 4-5, 5:30-11. Sun, 9:30-12 n, 1:30-3 pm, 4-9:15. Eastern. Founded June, 1925.

WCSS

Springfield, Ohio. 217.3m-1380kc. 500 watts. Wittenberg College. Announcer, Vaughn Gayman, Norman Zuck. Mon, Wed, Fri, 7-9 pm. Tues, 12 n, 7-8 pm. Thurs, 7-9 pm. Fri, 7-8 pm. Sat, 2-4:30 pm. Athletic activities also broadcast. Eastern. Founded Dec., 1921.

WCX

Detroit, Mich. 399.8m-750kc. 5000 watts. The Detroit Free Press. Announcer, Neal Tomy. Club, "Red Apple Club." See WJR schedule. Eastern. Founded May, 1922.

WDAE

Tampa, Fla. 483.6m-620kc. 1000 watts. Tampa Daily News. Announcer, Bruce Lum. Slogan, "Florida's Most Reliable Station." Eastern. Founded 1921.

WDAF

Kansas City, Mo. 491.5m-610kc. 1000 watts. Kansas City Star. Announcer, H. Dean Fitzer. Club, "Nighthawks." Daily ex Sun, 9:30 am, 11:30, 1:15 pm, grain quotations. Daily ex Sun, 8 am, Bible lesson; 12-1:15 pm, Aunt Sammy, farm school; 2-4, matinee; 5:30-6, school of the air; 6-10, musical; 11-11:45, Nighthawk frolic. Sun, 12:30-1 pm, 2-3, 7:30, 9-10. Founded June 5, 1922. Central.

WDAG

Amarillo, Texas. 212.6m-1410kc. 1000 watts. J. Laurence Martin. Daily ex Sun, 9-10 am, 12:45-2:15 pm, 7:30-9 pm. Tues, 9:30-10 pm. Sun, 7:30-9:30 pm. Central. Founded May 16, 1922.

WDAH

El Paso, Texas. 228.9m-1310kc. 100 watts. Trinity Methodist church. Wed, 7:30-8:30 pm. Sun, 9:30-12 n, 7:30-9 pm. Founded Spring 1924. Mountain.

WDAY

Fargo, N. D. 234.2m-1280kc. 1000 watts. WDAY, Inc. Announcer, Earl Reineke. Daily ex Sun, 7-9:30 am, musical program, 12 n-1 pm, 3-4 pm, markets, Mpls. grain markets, 10 am, 11 am, 12 n-2 pm, St. Paul Live Stock market, 8:30 am, 10 am, 12:30 pm, Fargo Live Stock market; 5:45 pm, USDA farm feature; 10 am, 2 pm, 11 pm, 2 am, Evening musical features, Mon, 8-10 pm, Tues, 8-10:15 pm. Wed, 8:30-10. Thurs, 9-12. Fri, 7-8. Sat, 7-10 pm. Sun, 11 am-12, 2-5 pm. Central. Founded May, 1922.

WDBJ

Roanoke, Va. 322.4m-930kc. 500 watts day, 250 watts night. Richardson Wayland Elec. Corp. Announcers, J. W. Johnson, Harold Gray, C. E. Stone, Hermon P. Black, R. P., Jordan. Slogan, "Roanoke Down in Old Virginia." Daily ex Sun, 10-11, organ; 12:30-1:30 pm, music; 5:30-6, music, news, weather; 7-7:30 pm, organ. Tues, 7:45-11 pm. Wed, 7:45, studios, Thurs, 7:45-10:30 pm. Fri, 7:45-9 pm. Sat, 7:45-mid. Sun, 11 am-12, church, 9-10 pm. Eastern. Founded May, 1924.

WDBO

Orlando, Fla. 483.6m-620kc. 1000 watts. Orlando Broadcasting Co. Announcer, Harold Danforth. Slogan, "Down Where the Oranges Grow." Daily ex Sun, 8 am, Thurs, 12:45-2 pm, 5-7 pm. Mon, Wed, Fri, 9-10 pm, 11-12. Tues, 7:45-9 pm, 10-11 pm. Sat, 7:45-9 pm. Sun, 11-12:30 pm, 4-5 pm, 7-9 pm. Founded 1921. Eastern.

WDEL

Wilmington, Del. 267.7m-1120kc. 250 watts night, 350 day. WDEL, Inc. Daily, 10 am-2 pm, 6-10 pm. Sun, 3:30-5 pm, 7:30-10 pm. Eastern. Founded 1922.

WDGY

Minneapolis, Minn. 215.7m-1390kc. 1000 watts. Dr. George Young. Daily, 3-6 pm. Mon, Wed, Fri, 8-11:30 pm. Tues, Thurs, Sat, 7-10:30 pm. Sun, 10:30 am-12 noon, 6-7 pm, 7:30-9 pm. Central. Founded 1923.

WDOD

Chattanooga, Tenn. 234.2m-1280kc. 500 watts. Chattanooga Radio Co., Inc. Announcer, Frank S. Lane. Daily ex Sun, 10:30 am-1:15 pm. Mon, Tues, Wed, Thurs, Fri, Sat, 6:30-10 pm. Sun, 11 am, 7-9 pm. Sat, 6:30-10 pm. Central. Founded 1925.

WDRC

New Haven, Conn. 225.4m-1330kc. 500 watts. Doolittle Radio Corp. Announcer, F. M. Doolittle. Daily ex Sun, 10-11 pm, 6:45-10. Sun, 11 am, 3:30-5 pm. Eastern. Founded Dec., 1922.

WDSU

New Orleans, La. 236.1m-1270kc. 1000 watts. Daily 10 am, 5:30-11 pm. Joseph H. Uhalt.

WDWF

Cranston, R. I. 247.8m-1210kc. 100 watts. Dutee W. Flint, Inc. Slogan, "Community Service." Daily ex Sat, 3:30 pm, 8 pm. Eastern.

WDZ

Tuscola, Ill. 280.2m-1070kc. 100 watts. James L. Bush. Daily ex Sun, 9 am, 9:30, 10, 10:30, 11, 11:30, 12 n, 12:30, 1, 1:15, 1:30, 2:45 pm, grain markets, livestock markets. Central. Founded March, 1921.

WEAF

New York, N. Y. (tr. at Bellmore). 454.3m-660kc. 50,000 watts. National Broadcasting Co., Inc. Slogan, "The Voice to the Millions." Daily ex Sun, 6:45 am-mid. Sun, 12-11:15 pm. Eastern. Founded July 25, 1922.

WEAI

Ithaca, N. Y. 236.1m-1270kc. 500 watts. Cornell University.

WEAM

Plainfield, N. J. 218.8m-1370kc. 100 watts. W. J. Butfield.

WEAN

Providence, R. I. 545.1m-550kc. 250 watts. The Shepard Stores. Announcers, Edmund Chisham, Fred Long, David Stackhouse, June Abbott, Jane Day, Beau Brummel. Slogan, "We Entertain a Nation." Daily, 8 am-12:30 next am, Polar Bears, Woman's Institute, Dandies of Yesterday, Ted and Gang, music, news, weather reports, concert Columbia Chain. Sun, 10 am-12 mid. Eastern. Founded 1922.

WEAO

Columbus, Ohio. 545.1m-550kc. 750 watts. Ohio State University. Announcer, Robert Coleman. Daily, 9:45-10:45 am, 12:30-1:15 pm, 4-4:45 pm. Tues, Wed, Thurs, Fri, 6:30-9 pm. Sat, 9:45-10:45 am, 12:30-1 pm. Eastern. Founded 1922.

WEAR

Cleveland, Ohio. 280.2m-1070kc. 1000 watts. WTAM-WEAR, Inc. Daily ex Sat, Sun, 11:35 am-4 pm. Sat, 11:35-1:30 pm. Eastern. Opened Jan. 15, 1926.

WEBC

Superior, Wis. Duluth, Minn. 234.2m-1280kc. 1000 watts. Head-of-the-Lakes Broadcasting Co. Announcer, Sam Riley. Slogan, "At the Head of the Lakes." Daily ex Sun, 6:50-9 am, 12-1 pm, 5:45-10:15 pm. Tues, 10:15 pm-1:30 am. Sun, 10:40-12 noon, 1-2:30 pm, 4-7 pm, 7:45-9 pm. Central. Founded 1924.

WEBE

Cambridge, Ohio. 247.8m-1210kc. 100 watts. Roy W. Waller. Slogan, "The Voice of Southeastern Ohio." Daily ex Sun, 12-1 pm. Mon, Fri, 6-7 pm. Sun, 10:30 am-7 pm. Eastern. Founded July, 1924.

WEBQ

Harrisburg, Ill. 247.8m-1210kc. 50 watts. First Trust & Savings Bank. Announcer, Dr. H. J. Raley. Slogan, "The Voice From Egypt." Mon, Wed, Fri, 7:30-8, 9-11 pm. Tues, Thurs, Sat, 7:30-9 pm. Sun, 10:45-12, 7-8. Central. Founded. Sept. 1, 1923.

WEBR

Buffalo, N. Y. 228.9m-1310kc. 200 watts. H. H. Howell, Announcers, E. J. Hinckley, Lowell Kitchen. Slogan, "We Extend Buffalo's Regards." Daily 22 hours as the All Night and Day Station. Eastern. Founded Oct. 8, 1924.

WEBW

Beloit, Wis. 499.7m-600kc. 350 watts. Beloit College. Announcer, Arthur Weimer. Sun, 4:30 pm. Central. Founded Oct. 26, 1924.

WEDC

Chicago, Ill. 247.8m-1210kc. 100 watts. Emil Dene-mark Broad. Station. Central.

WEDH

Erie, Pa. 211.1m-1420kc. 30 watts. Erie Dispatch-Herald. Daily ex Sun, 11-1:30 pm, 6-11 pm. Sun, 11-12:30, 4-10:30 pm.

WEEI

Boston, Mass. 508.2m-590kc. 500 watts. Edison Electric Illuminating Company. Announcers, Robert Burren, Carlton H. Dickerman, Edward Gisburne, Frederick Hawkins. Slogan, "The Friendly Voice." Daily ex Sun, 6:45-8 am, exercises; 8-8:45, musicale; 10-11:15, home service features; 11-12:12, "Billy" Williams and "The Friendly Five"; 12:12-15, news; 12:15-12:45 pm, "Billy" Williams and "The Friendly Five"; 12:45-1, market and garden reports; 2-3, 3-4, Metropolitan Dutch Girls; 4-4:10, news; 4:10-4:45, A & P Afternoon Tea, varied musical; 5:30-6:45, service features and music; 6-7, Big Brother Club; 7-11, local and New York features from Red Network NBC. Sun, 10:55-12:15, church; 12:15, symphony; 1-4, concert; 4-5:30, Dr. Cadman; 5:30, musical; 6:30, band; 7-20, news; 7:30, symphony concert; 9:15, Awater-Kent. Eastern. Founded Sept. 29, 1924, succeeding WTAT.

WEHS

Evanston, Ill. 228.9m-1310kc. 100 watts. Victor C. Carlson. Announcer, Jessie Robinson. Sun, 5-6 pm, 7-9 pm. Tues, 4-8 pm. Wed, 4-6, Thurs, 4-6, 7-9 pm. Fri, 4-6, 8-9:30, Sat, 4-6, 7-9 pm. Central. Founded February, 1924.

WELK

Philadelphia, Pa. 218.9m-1370kc. 100 watts. Howard R. Miller. Slogan, "The Voice of the Elks." Mon, Wed, 1 pm-7 pm. Tues, Thurs, Fri, Sat, 1 pm-12:30 am. Sun, 9:30 pm-12:30 am. Eastern. Founded June, 1922.

WEMC

Berrien Springs, Mich. 508.2-590kc. 1000 watts. Emanuel Missionary College. Announcer, John E. Petzer. Willard Shadel. Daily ex Sun, 7:30-9 am, 12-1 pm, 2:30-4:30 pm. Sun, 9:30-11 am, 2-4:30 pm. Slogan, "The Radio Lighthouse." Central. Founded April 1, 1923.

WENR

Chicago, Ill. 344.6m-870kc. 25,000 watts (50,000 experimentally). Great Lakes Radio Broadcasting Co. Slogan, "The Voice of Service." Central.

WEPS

Gloucester, Mass. 249.9m-1200kc. 100 watts. Matheson Radio Co., Inc.

WEVD

Woodhaven, N. Y. 230.6m-1300kc. 500 watts. Debs Memorial Radio Fund. Eastern. Founded Oct. 1, 1927.

WEW

St. Louis, Mo. 394.5m-760kc. 1000 watts. 6 am-6 pm. St. Louis University. Announcer, M. Drum. Daily ex Sun, 9 am, 10, 12, reports. Mon, Tues, 4 pm, lecture. Wed, 4 pm, students' hour, music, reading. Thurs, 5 pm, musical. Fri, 4 pm, Library Hour. Sun, 9:35 am, 11, 2 pm, 4. Founded April 26, 1921. Central.

WFAA

Dallas, Texas. 288.3m-1040kc. 5000 watts. Dallas News and Dallas Journal. Adams Colthoun. Slogan, "Working for All Alike." Daily, 7:30-8:30 am, 9:05-9:15 am, 10-11 am, 11:30-12 n, 1:45-2:30 pm, 3-3:30 pm, 4-5 pm, 6-7 pm, 8-9 pm, 10-11 pm. Central. Founded June 26, 1922.

WFAN

Philadelphia, Pa. 491.5m-610kc. 500 watts. Key-stone Broadcasting Co. Hotel Lorraine. Daily ex Sun, 11 am-12:30 pm, 1:30-3 pm, 4:30-6:30 pm. Tues, Thurs, Sat, 7:30-mid. Sun, 3:30-9 pm. Eastern.

WFBC

Knoxville, Tenn. 249.9m-1200kc. 50 watts. First Baptist church. Sun, 9:30-10:30 am, Bible class; 10:45 am, 7-7:30, Children's Hour; 7:30 pm, services; 4 pm, sacred music. Central. Founded 1924.

WFBE

Cincinnati, Ohio. 249.9m-1200kc. 100 watts. Hotel Park View. Announcer, Clark Waskom. Daily ex Sun, 12-1 pm. Mon, 5:30 pm, 9, 11, 12:30. Tues, 5:30 pm, 8:30, 9, 12:30. Wed, 6-8:30 pm, 9, 10, 11-12:30. Thurs, 6 pm, 8, 10, 10:30, 11, 12:30. Fri-5:30 pm, 6:30. Sat, 3-4 pm, 6-8, 9-10, 11, 2:30. Sun, 1-2 pm, 6:30-7:30 pm, 11, 12:30. Central.

WFBC

Altoona, Pa. 228.9m-1310kc. 100 watts. The Wm. F. Cable Co. Announcer, Roy F. Thompson. Slogan, "The Original Gateway to the West." Daily ex Sun, Mon, 11:45 am; 12 n, 3 pm, 7, 7:30, 8, 8:30, 10. Sun, 10:45 am, 3:30 pm, 7:30. Eastern. Founded Aug. 28, 1924.

WFBJ

Collegeville, Minn. 218.8m-1370kc. 100 watts. St. John's University. Announcer, Hilary Doerfler. Slogan, "In the Heart of the Landscape Paradise." Mon and Wed, 4-5 pm, Tues, Thurs, 6:45-7:15 pm. Fri, 8:30-9:30 pm. Central. Founded October, 1924.

WFLB

Syracuse, N. Y. 333.1m-900kc. 1000 watts. Onon-daga company. Announcer, Charles F. Phillips. Daily ex Sun, 3-4 pm, 6:20-12 mid. Sun, 2-12 mid. Eastern. Opened Nov. 19, 1924.

WFBM

Indianapolis, Ind. (tr. at Perry Township). 243.8m-1230kc. 100 watts. Indianapolis Power and Light Company. Announcer, John Tubby. Slogan, "The Crossroads of America." Central.

WFBR

Baltimore, Md. 236.2m-1270kc. 250 watts. Baltimore Radio Show, Inc. Announcer, S. R. Kennard. Daily ex Sun, 7 am-1 pm, 3-5 pm, 5:30 pm-mid. Sun, 11 am-12:30 pm, 3-5 pm, 8-11 pm. Founded Oct. 1, 1924.

WFDF

Flint, Mich. 228.9m-1310kc. 100 watts. Frank D. Fallain. Announcer, Fred L. McKittick. Daily, 6:30-10 pm, Dinner Hour Ensemble and features. Wed, 9:30-10:30 pm, Buick Motor Bank. Sun, 6:30 pm, dinner hour music; 7:30 pm, Bible narrations; 8 pm, church services; 9 pm, Gospel study; 9:30 pm, Radio drama.

WFI

Philadelphia, Pa. 535.4m-560kc. 500 watts. Straw-bridge & Clothier. Announcer, John Vandersloot. Daily, 6:45-8 am. Daily ex Sun, 9:45 am, 1 pm, 3, 6:15, 7:30 pm. Daily ex Sun, Mon, 7:30 pm. Tues, 8-11:30 pm. Thurs, Sat, 8 to 11:30 pm. Sun, 10:20 am, 7:30, 4:30 pm, 9:15-11:15 pm. Eastern. Founded March 18, 1922.

WFIW

Hopkinsville, Ky. 319m-940kc. 1000 watts. Acme Mills, Inc. Announcer, D. E. "Plug" Kendrick. Daily ex Sun, 12-1 pm, 5-8 pm. Mon, Wed, Fri, Sat, 8-11 pm. Sun, 9:30-12 am. Central. Founded Feb. 12, 1927.

WFJC

Akron, Ohio. 206.8m-1450kc. 500 watts. W. F. Jones Broadcasting, Inc. Announcer, Jerry McKiernan. Mon, Fri, 1-3 pm, 6-9:30 pm. Tues, Wed, Thurs, Sat, 12-3 pm, 9:30-12 mid. Sun, 1-4 pm, 9-12. Eastern.

WFKD

Frankford, Pa. 228.9m-1310kc. 50 watts. Foulk-rod Radio Eng. Co. Eastern.

WFLA-WSUN

Clearwater, Fla. 333.1m-900kc. 1000 watts night, 2500 watts day. Chamber of Commerce. Announcer, Walter Tison. Daily ex Sun, 7:45-12 mid. Founded Dec. 25, 1925. Eastern.

WGAL

Lancaster, Pa. 228.9m-1310kc. 15 watts. Lancaster Elec. Supply & Construction Co. Announcers, J. E. Mathiot, Luther J. Mathiot. Slogan, "World's Gardens at Lancaster." Eastern.

WGBC

Freeport, N. Y. 247.8m-1210kc. 100 watts. Harry H. Carman. Sun, 10 am-12 pm. Mon, 11 am-3 pm, 9-11 pm. Tues, Thurs, 7-9 pm. Wed, 9 am-12 n. Sat, 11 pm-1 am. Eastern. Founded Dec. 13, 1924.

WGBC

Memphis, Tenn. 209.7m-1430kc. 500 watts. First Baptist church. Announcer, A. L. Cowles. Sun, 9:30 to 11 am, 7:30 pm. Central. Opened 1925.

WGBF

Evansville, Ind. 475.9m-630kc. 500 watts. Evansville on the Air, Inc. Announcer, Martin Hausen. Slogan, "The Gateway to the South." Daily, 7 am-5 pm. Sun, Tues, Thurs, Sat, 7 pm-12 mid. Central. Founded October, 1923.

WGBI

Scranton, Pa. 340.7m-880kc. 250 watts. Scranton Broadcasters, Inc. Daily, 10-12:30 pm, 6 pm. Sun, 10 am, 6 pm, 9 pm. Eastern.

WGBS

New York, N. Y. (tr. at Astoria). 254.1m-1180kc. 500 watts. Gimbel Brothers. Announcer, Dailey Paskman. Eastern. Founded Oct. 26, 1924.

WGCM

Gulfport, Miss. 247.8m-1210kc. 100 watts. Frank L. Kroulik. announcer. Daily, 11:30-12:30 pm. Tues, Fri, 8-10:30 pm. Sun, 3-5 pm. Gulf Coast Music Co.

WGCP

Newark, N. J. 239.9m-1250kc. 500 watts. Paramount Broadcasting & Artists Service, Inc. Announcer, Irving Porter. Daily ex Sun, 3:30-6 pm. Mon thru Fri, 6-8 pm. Tues, Sat, 10-12 mid. Wed, Thurs, 8-10 pm. Sun, 12 n-3:30 pm. Eastern. Founded March, 1922.

WGES

Chicago, Ill. 220.4m-1360kc. 500 watts. Guyon's Paradise Ballroom. Announcer, Fred L. Jeske. Founded August, 1920. Central.

WGH

Newport News, Va. 228.9m-1310kc. 100 watts. Virginia Broadcasting Co. and Hampton Roads Broadcasting Corp. Inc. Announcers, E. Ellsworth Bishop, E. Douglas Evans, Malvern Lee Powell. Slogan, "World's Greatest Harbor."

WGHP

Mt. Clemens, Mich. 241.8m-1240kc. 750 watts. George Harrison Phelps, Inc. Announcers, Corley W. Kirby, Robert Child. Eastern. Founded Oct. 19, 1925.

WGL

Fort Wayne, Ind. 243.8m-1230kc. 500 watts. Allen-Wayne Co. Fred C. Zieg. Slogan, "The Home Sweet Home Station." Founded 1924. Central.

WGN

Chicago, Ill. (tr. at Elgin). 416.4m-720kc. 25,000 watts. Chicago Tribune. Announcers, Quin Ryan, Frank Dahm, J. R. Tyson, Tommy Coates, George Pidot, John Griggs, Pat Barnes. Central.

WGR

Buffalo, N. Y. 545.1m-550kc. 1000 watts. W. G. R., Inc. Roger T. Baker, Wm. G. Cook, announcers. Daily ex Sun, 6:45-8 am, 10:45-11, 11:15-11:30, 11:45-12 n, 12, stocks; 2-4:30 pm. Tues, Thurs, 8-11 pm. Mon, Wed, Fri, 8-12 mid. Sun, 10:45-12 n, 1:30-5 pm, 6-7, 9:15-9:45. Mon, Thurs, 7-1 am. Eastern. Founded May 21, 1922.

WGST

Atlanta, Ga. 336.9m-890kc. 500 watts. Georgia School of Technology. Announcer, J. O. Turner. Slogan, "The Southern Technical School With National Reputation." Mon, 9:30-10:30 pm. Thurs, 7-8 pm. Central. Founded January, 1924.

WGY

Schenectady, N. Y. 379.5m-790kc. 50,000 watts. General Electric Company. Announcer, Kolin Hager. Slogan, "Good Evening to You All." Founded 1922.

WHA

Madison, Wis. 526m-570kc. 750 watts. Univ. of Wis. Central. Founded 1920.

WHAD

Milwaukee, Wis. 267.7m-1120kc. 250 watts. Marquette University. Cy Foster, Dick Macaulay. Sun, Mon, Tues, Wed, Thurs, Fri, 4:30-5, 7:30-8, Wed, Fri, 8-9. Central. Founded Oct., 1921.

WHAM

Rochester, N. Y. 260.7m-1150kc. 5000 watts. Strongberg-Carlson Tel. Mfg. Co. Announcers, E. H. Warren, F. W. Reynolds, W. Fay, L. C. Stark, Frank Kelly. Slogan, "This Is Rochester—Where Quality Dominates." Daily ex Sun, 9-11 am, 6-11. Tues, 2:30-4 pm. Sun, 10:30-12 n, 2-11 pm. Eastern. Founded July 11, 1922.

WHAP

New York, N. Y. 230.6m-1300kc. 1000 watts. Defenders of Truth Society, Inc. Announcer, Franklin Ford. Mon, 6-8 pm. Wed, 6:30-9 pm. Fri, 8-12 pm. Sat, 8:30-11 pm. Sun, 9-10:15 pm. Eastern. Founded May 1925.

WHAS

Louisville, Ky. 365.6m-820kc. 6500 watts. Courier-Journal and Louisville Times Co. Announcer, Ford Bond. Daily ex Sun, 12-1 pm, farm news, markets; 1-1:30, luncheon music; 3-15-4:30, markets, matinee musicale; 4:30, police bulletins, weather. Mon, 6-6:30, Children's Club. Wed, 1:30-2:30, R C A Hour. Mon, Tues, Thurs, 6:30-11 pm. Wed, Fri, Sat, 6-11 pm. N B C contract, dance music. Sun, 10 am, church services; 12:30-1:30, N B C; 3-4:30, sermon; 4:30-5:30, vespers; 6:30-10:30, N B C program. Founded July, 1922. Central.

WHAZ

Troy, N. Y. 230.6m-1300kc. 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. F. I. students. Mon, 8-12 mid. Tues, 12 mid-1 am. Founded June 22. Eastern.

WHB

Kansas City, Mo. 315.6m-950kc. 1000 watts day, 5000 watts night. Sweeney Auto & Electrical School. Announcer, John T. Schilling. Slogan, "Heart of America." Central. Founded April, 1922.

WHBC

Canton, Ohio. 249.9m-1200kc. 10 watts. St. John's Catholic church. Slogan, "Ignorance Is Our Greatest Foe." Sun, 2:30-3 pm. Central. Founded Feb., 1925.

WHBD

Bellefontaine, Ohio. 218.8m-1370kc. 100 watts. First Presbyterian church. Sun, 10:45 am, 7:30 pm. Eastern. Founded February, 1925.

WHBF

Rock Island, Ill. 247.8m-1210kc. 100 watts. Beardsley Specialty company. Announcer, C. L. Beardsley. Slogan, "Where Historic Blackhawk Fought." Daily ex Sun, 12-2 pm, 6-8 pm. Mon, Wed, 9-11 pm. Sat, 2:30-5 pm, 11 pm-1 am. Central. Founded February, 1925.

WHBL

Sheboygan, Wis. 212.6m-1410kc. 500 watts, 6 am-6 pm, C. E. Broughton. Daily ex Sun, 12-1 pm, 3:30-5 pm, 6-8 pm. Founded 1925.

WHBP

Johnstown, Pa. 228.9m-1310kc. 100 watts. Johnstown Automobile Co. Announcer, J. C. Tully. Slogan, "The Voice of the Friendly City." Daily, 9 am, 12 n, 5 pm. Wed, 8 pm. Thurs, 9 pm. Sat, 2-9 pm. Eastern.

WHBQ

Memphis, Tenn. 218.8m-1370kc. 100 watts. Broadcasting Station WHBQ, Inc. Founded March, 1925.

WHBU

Anderson, Ind. 247.8m-1210kc. 100 watts. Citizen's Bank. Announcer, A. L. McKee. Slogan, "Radio Voice of Anderson."

WHBW

Philadelphia, Pa. 199.9m-1500kc. 100 watts. D. R. Kienle. Tues, Fri, 6 pm-12:15 am. Sun, 7:30-10:30 pm. Eastern.

WHBY

West De Pere, Wis. 249.9m-1200kc. 100 watts. St. Norbert's College. Green Bay-De Pere Broadcasting Station. Daily, 10-11:30 am, 12-1 pm, 6-8 pm, markets, time, weather. Sun, 10-11 am, services; 5-6 pm, religious program. Central. Founded Jan., 1925.

WHDI

Minneapolis, Minn. 214.7m-1390kc. 500 watts. Wm. Hood Dunwoody Industrial Institute. Announcers, M. R. Bass, A. P. Upton. Slogan, "Northwest Leading Trade School." Mon, 8-9 pm. Wed, 8:30 pm. Fri, 9-10 pm. Daily ex Sun, 6:30-9:30 am, time. Central. Founded May 22, 1922.

WHDL

Tupper Lake, N. Y. 211.1m-1420kc. 10 watts. George F. Bissell.

WHEC

Rochester, N. Y. 208.2m-1440kc. 500 watts. 6 am-6 pm. Hickson Electric company, Inc. Slogan, "The All Day Broadcasting Station." Daily ex Sun, 7 Sun, 10:30-12 n, 4:30-5:30 pm, 7:30-10 pm. Eastern. am-12 mid. Sun, 10:30-12 n, 4:30-5:30 pm, 7:30-10 pm. Eastern. Founded January, 1924.

WHFC

Chicago, Ill. 228.9m-1310kc. 100 watts. Goodson & Wilson, Inc. Central.

WHK

Cleveland, Ohio. 215.7m-1390kc. 1000 watts. Radio Air Service Corp. Slogan, "Cleveland's Pioneer Broadcasting Station." Sun, 10 am-1:30 am. Mon, 10 am-12 mid. Tues, 9:15 am-1 am. Wed, 9:45 am-1 am. Thurs, 9:15 am-12 mid. Fri, 9:45 am-1 am. Sat, 10 am-2 am. Eastern. Founded 1921.

WHN

New York, N. Y. 296.9m-1010kc. 250 watts. Marcus Loew Booking Agency. Announcers, Perry Charles, George Nobbs. Slogan, "The Voice of the Great White Way." Eastern. Founded March, 1922.

WHO

Des Moines, Iowa. 299.8m-1000kc. 5000 watts. Bankers Life Co. Announcers, Dick Whitney, Walter Workman. Mon, Wed, Fri, 8 am-5 pm. Tues, Thurs, Sat, 5 pm-12 mid. Sun, 8 am-5 pm, 5-12 pm, alternate. Central. Founded 1924.

WHPP

New York, N. Y. 211.1m-1420kc. 10 watts. Bronx Broadcasting Co. Daily, 9 am-1 pm. Tues, Sat, 7 pm, midnight.

WIAS

Ottumwa, Iowa. 211.1m-1420kc. 100 watts. Poling Electric Co. Announcer, Thomas J. Doonan. Daily ex Tues, 12-1, 2:30-3:30, 5-6 pm. Sun, 11-12:30. Central. Founded June 12, 1922.

WIBA

Madison, Wis. 247.8m-1210kc. 100 watts. The Capital Times Strand theater. Announcer, Kenneth E. Schmitt. Slogan, "Four Lakes City." Mon, 8-11 pm. Wed, 7-11 pm. Fri, 6-7 pm. Sat, 9-11 pm. Sun, 10:45-12 n. Central. Founded June, 1924.

WIBG

Elkins Park, Pa. 322.4m-930kc. 50 watts. St. Paul's Protestant Episcopal church. Announcer, W. Le Roy Anspach. Sun, 10:55 am, 3:55 pm. Eastern. Founded 1925.

WIBM

Jackson, Mich. 218.8m-1370kc. 100 watts. C. L. Carroll. (Portable.)

WIBO

Chicago, Ill. (tr. at Des Plaines). 526m-570kc. 5000 watts. Nelson Brothers Bond and Mtg. Co. Announcers, Walter Preston, "Stu" Dawson. Central. Founded May 20, 1925.

WIBR

Steubenville, Ohio. 211.1m-1420kc. 50 watts. Thurman A. Owings. Announcer, Robert Merryman. Daily ex Sun, 4-5 pm, 8-10 pm. Sun, 10:30 am-12:15 pm, 4-5 pm, 7:30-8:45 pm. Founded January, 1924. Eastern.

WIBS

Elizabeth, N. J. 206.8m-1450kc. 250 watts. New Jersey Broadcasting Corp. Announcers, Capt. H. J. Lepper, J. H. Lepper. Sun, 10:30 am-12, 3:30-5:45 pm. Mon, 8:30-10 am, 6-9 pm. Tues, 11 am-12, 1-3 pm. Wed, 11 am-1 pm, 9-12 mid. Thurs, 3-5 pm. Fri, 8:30-10 am, 5-8 pm. Sat, 12 n-3 pm, 9-10:30 pm. Founded June, 1925.

WIBU

Poynette, Wis. 228.9m-1310kc. 100 watts. The Electric Farm. Central. Founded July 10, 1925.

WIBW

Topeka, Kan. 230.6m-1300kc. 1000 watts night, 2500 day. Capper Publications. Announcer, Joe Nickell. Daily ex Sun, 6-8, 10:10-11; 12:15-1:25, 1:30-2, 3-4, 5:30-7, 8:30-10. Fri, Sat, 11-12 pm. Sun, 10:40-1:25, 5:20-7. Central. Founded 1926.

WIBX

Utica, N. Y. 249.9m-1200kc. 100 watts night, 300 day. WIBX, Inc. Daily ex Sun, 7 am-8:30 pm. Daily ex Sun, Wed, 6:30-10 pm. Sun, 10:30-12 n, 2-4 pm, 8-10. Eastern. Founded 1923.

WIBZ

Montgomery, Ala. 199.9m-1500kc. 15 watts. A. D. Trum.

WICC

Easton, Conn. 252m-1190kc. 500 watts. The Bridgeport Broadcasting Station, Inc. Announcers, Edw. Hall, Art Withlandly, Walter Ryan, George Dana, Leonard Andrews. Slogan, "The Voice That Serves." Daily, 7:30 am to 1½ hours after sunset. Sun, 8:30 am to 1½ hours after sunset. Eastern. Founded October, 1925.

WIL

St. Louis, Mo. 211.1m-1420kc. 1000 watts. Missouri Broadcasting Co. Announcers, "Bill" Ellsworth, L. A. Benson, C. W. Benson. Mon, 10 am-9 pm. Tues, 11:15 am-9 pm. Wed, 10 am-1 am. Thurs, 9 am-1 am. Fri, 11:15 am-1 am. Sat, 10 am-4 am. Sun, 9:30 am-1 am. Central. Founded Sept., 1922.

WILL

Urbana, Ill. 336.9m-890kc. 500 watts daytime, 250 watts night. University of Illinois. Announcer, J. C. Bayles. Daily ex Sun, 5-6 pm, 7:30-8 pm, music and 10 min. educational talk. Central. Founded 1922.

WILM

Wilmington, Del. 199.9m-1500kc. 100 watts. Delaware Broadcasting Co. Daily 9 am, 10-11 pm.

WINR

Bay Shore, N. Y. 247.8m-1210kc. 100 watts. Radiotel Mfg. Co.

WIOD

Miami Beach, Fla. 241.8m-1240kc. 1000 watts. Isle of Dreams Broadcasting Co. Announcer, Jesse H. Jay. Slogan, "Wonderful Isle of Dreams."

WIP

Philadelphia, Pa. 491.5m-610kc. 500 watts. Gimbel Bros. Announcer, E. A. Davies. Slogan, "Watch Its Progress." Daily ex Sun, 9:30-11 am, 12:30-1:30 pm, 3-4 pm, 6:30-7:30 pm. Mon, Wed, Fri, 7:30 pm-12 mid. Sun, 10 am-3:30 pm, 9 pm-12 mid. Eastern. Founded November, 1921.

WISN

Milwaukee, Wis. 267.7m-1120kc. 250 watts. Evening Wisconsin Co. Managed by Wisconsin News. Central. Founded Sept. 21, 1922.

WJAD

Waco, Texas. 241.8m-1240kc. 1000 watts. Frank P. Jackson. Daily ex Sun, 9:30-10:30 am, 11:30-12:30 pm, 6-7:30. Sun, 1-2 pm, 6:30-7:30. Central. Founded July 22, 1922.

WJAG

Norfolk, Nebr. 282.8m-1060kc. 500 watts. (500 watts 7 am-7 pm.) Norfolk Daily News. Announcer, Karl Stejan. Slogan, "The World's Greatest Country Daily and Home of Printer's Devil." Daily, 2:30-8:30 am, 12:15 pm, 2 pm, 3-5 pm, 6:30-7:30 pm, orchestra. Sun, 1 pm, 2 pm, 3 pm, music, orchestra. Central. Founded 1922.

WJAK

Kokomo, Ind. 228.9m-1310kc. 50 watts. Kokomo Tribune. Don Hall, announcer. Mon, Wed, Fri, 10 am, organ. Mon, 7:30 pm, music. Wed, Thurs, 5:30, concert. Wed, 6:30 pm, bible class; 7:30, Bridge. Fri, Sat, 7:30 pm. Founded September, 1921, Central.

WJAR

Providence, R. I. 336.9m-890kc. 250 watts. The Outlet Co. Announcers, J. A. Reilly, John T. Boylc. Slogan, "The Southern Gateway of New England." Daily ex Sun, Tues and Fri, 1:05-2 pm. Mon, 10:15-11:30 am, 6:15-11:15 pm. Tues, 10:11:30 am, 4-5 pm, 6:45-12 mid. Wed, 9:30-11:30 am, 6:45-11:15 pm. Thurs, 10:15-11:30 am, 6:45-10 pm. Fri, 9:30-12:15 pm, 4:30-5:30 pm, 6:15-10:15 pm. Sat, 10:45-11:30 am, 6:15-11:15 pm. Sun, 1:30-2 pm, 3-5:30 pm, 5:55-10:45 pm. Eastern. Founded Sept. 6, 1922.

WJAS

Pittsburgh, Pa. 232.4m-1290kc. 1000 watts. Pittsburgh Radio Supply House, Pickering's Studio. Announcer, Howdy Clark. Slogan, "World's Jolliest Aerial Station." Daily ex Sun, 7-9 am, 10 am-3:30 pm, 6:30-11 pm, Sun, 11-12 am, 2-11 pm. Eastern. Founded Aug. 4, 1922.

WJAX

Jacksonville, Fla. 238m-1260kc. 1000 watts. City of Jacksonville. Daily ex Sun, 11:57 am-1 pm. Daily ex Sun and Wed, 6 pm-mid. Wed, 6:30-10:30 pm. Sun, 11 am-n, 6:30-8:30 pm, 10-11 pm. Eastern. Founded Nov. 26, 1925.

WJAY

Cleveland, Ohio. 206.8m-1450kc. 500 watts. Cleveland Radio Broadcasting Corp. Announcer, James Walsh. Slogan, "On the Schofield Building." Eastern. Founded Jan. 7, 1927.

WJAZ

Mt. Prospect, Ill. 202.6m-1480kc. 5000 watts. Zenith Radio Corp. Announcer, George G. Smith. Daily, 8-10 pm, Sun, 7:30-9:30. Founded 1922. Central.

WJBC

La Salle, Ill. 249.9m-1200kc. 100 watts. Hummer Furniture Co. Announcer, John Hemmingway. Slogan, "Better Home Station." Daily ex Sun, 7:30-8 am, 9-9:30, 12:30-2 pm, 6-7, 7-8. Sun, 10-11 am, 12:30-2 pm. Founded May 4, 1925. Central.

WJBI

Red Bank, N. J. 247.8m-1210kc. 100 watts. Robert S. Johnson. Founded Sept. 15, 1925.

WJBK

Ypsilanti, Mich. 218.8m-1370kc. 50 watts. Ernest Goodwin. Announcer, H. T. Augustus. Mon, 9-11 pm. Thurs, 10-12 mid. Sun, 10-11:20 am, 7:30-8:30 pm. Eastern. Founded Oct. 27, 1925.

WJBL

Decatur, Ill. 249.9m-1200kc. 100 watts. William Gushard Dry Goods Co. Announcer, W. H. Wiley. Central. Founded Sept. 24, 1925.

WJBO

New Orleans, La. 218.8m-1370kc. 100 watts. Valdemar Jensen. Central. Founded 1922.

WJBT

Chicago, Ill. 389.4m-770kc. 25000 watts. Paul Rader and Chicago Gospel Tabernacle. Announcer, Don Hastings. Sun, 10 am-7:30 pm, 9:30 pm-mid. Central. Founded 1926.

WJBU

Lewisburg, Pa. 247.8m-1210kc. 100 watts. Bucknell University. Announcer, John Weber. Slogan, "In the Heart of the Keystone State." Fri, 8 pm. Eastern. Founded 1925.

WJBW

New Orleans, La. 249.9m-1200kc. 30 watts. C. Carlson, Jr. Tues, Fri, 7-8 pm. Sun, 9-11 pm. Daily, 1:30-2:30.

WJBY

Gadsden, Ala. 247.8m-1210kc. 50 watts. Gadsden Elec. Refrigeration Co. Slogan, "The Choice of the Majority." Announcer, Joe McCormack. Central.

WJJD

Chicago, Ill. 265.3m-1130kc. 20,000 watts. Loyal Order of Moose and Palmer House Station. Slogan: "The Voice of State Street." Announcers, Ellen Rose Dickey, Hugh Aspinwall. Daily, 7 am-8:30 pm. Central.

WJKS

Gary, Ind. 220.4m-1360kc. 500 watts. Thomas J. Johnson and Frances Kennedy Radio Corp. Announcer, Sandy Meek. Daily, 11 am-4 pm, 7 pm-8:45 pm. Mon, Tues, Wed, Sat, 11 pm-1 am. Thurs, Fri, Sun, 11 pm-mid. Central. Founded Aug. 16, 1927.

WJLR

Detroit, Mich. (tr. at Pontiac). 399.8m-750kc. 5000 watts. 8x A. O. 32 m. WJLR, Inc. Slogan, "The Good Will Station." Announcers, Leo Fitzpatrick, John F. Patt, Neal Tomy, John B. Eccles, Gordon Higham, John K. Harper. Daily, 9 am-12 mid. Eastern. Founded August, 1925.

WJSV

Mt. Vernon Hills, Va. 205.4m-1460kc. 10,000 watts. Independent Pub. Co. Announcer, T. A. Robertson. Daily ex Sun, 12:30-1:30 pm. Daily ex Sat, Sun, 7 pm-11:30 pm. Sat, 7 pm-1:30 am. Sun, 7 pm-10:30 pm.

WJZ

New York, N. Y. (tr. at Bound Brook). 394.5m-760kc. 30,000 watts. R. C. A. Managed by National Broadcasting Co. Announcers, Milton J. Cross, Mable Sherris, Norman Sweetser, Curt Peterson. Daily ex Sun, 7:30 am-mid. Sun, 9-10 am, 1-11:15 pm.

WKAQ

San Juan, Porto Rico. 336.7m-890kc. 500 watts. Radio Corporation of Porto Rico. Announcer, Joaquin Agusti. Slogan, "The Island of Enchantment, Where the World's Best Coffee Grows." Wed, 7:30-9 pm. Fri, 9-11 pm. Eastern. Founded Dec. 3, 1922.

WKAR

East Lansing, Mich. 288.3m-1040kc. 500 watts. Michigan State College. Announcer, Keith Himebaugh. Daily ex Sun, 12-12:30 pm, weather, markets, agricultural topics. Eastern. Founded 1922.

WKAV

Laconia, N. H. 228.9m-1310kc. 100 watts. Laconia Radio club. Sun, 11 am. Eastern. Founded Oct. 1, 1922.

WKBB

Joliet, Ill. 228.9m-1310kc. 100 watts. Sanders Brothers. Al Sanders, announcer. Sun, 2-3 pm, religious, educational. Mon, 9-11 pm, local events. studio program. Wed, 9-12 pm, orchestra. Sat, 9-11, orchestra and studio program. Central.

WKBC

Birmingham, Ala. 228.9m-1310kc. 100 watts. R. B. Broyles. Mon, Tues, Wed, Thurs and Fri, 6-8 pm. Sat, 5:30-9 pm. Central. Founded June, 1926.

WKBE

Webster, Mass. 249.9m-1200kc. 100 watts. K & B. Electrical Co. Tues, Thurs, 8-10 pm. Wed, 7:30-8:30 pm. Sat, 2-4 pm. Eastern. Founded Feb. 27, 1925.

WKBf

Indianapolis, Ind. 214.2m-1400kc. 500 watts. Noble B. Watson. Announcer, Carl Watson. Daily ex Sun, 10 am, 10:30, 10:40, 5 pm, 7, 7:10. Daily ex Sun, 12 n. Mon, 7:30 pm, 8:30, 9. Tues, 8:30-10:30 pm, Thurs, 7:30-12 pm, Fri, 8-12 pm, Sat, 10-12 pm. Sun, 9 am, Watch Tower; 2:30, 3:30, 7:30 pm. Central. Founded October, 1925.

WKBH

La Crosse, Wis. 217.8m-1380kc. 1000 watts. Callaway Music Co. Announcer, Arthur J. Hecht. Daily ex Sun, 7:30 am, 10, Aunt Sammy; 12 n. weather, U. S. Farm talks; 5:30-7 pm, 8-9 pm. Wed, Sat, 10-11 pm. Sun, 10:30 am, 4 pm. Central. Founded 1924.

WKBI

Chicago, Ill. 228.9m-1310kc. 50 watts. Fred L. Schoenwolf. Daily ex Sun, 9-10 am, 1-4 pm, Mon, 7-9 pm. Tues, 8-10 pm. Wed, 8-9 pm, Thurs, 9-11 pm, Fri, 9:30-12 mid. Sun, 12:15 am-5 am. Central. Founded August, 1926.

WKBN

Youngstown, Ohio. 526m-570kc. 500 watts. Radio Electric Service Co. Announcers, Arthur Brock, Warren F. Williamson, Jr. Daily ex Sun, 7:30 am, exercises. Tues, 5:45 pm, Thurs, Sat, 6 pm. Eastern. Founded September 1926.

WKBO

Jersey City, N. J. 206.8m-1450kc. 250 watts. Camith Corp. Announcers, H. F. Bidwell, Donald Fischer. Mon, 10-12 n, 9-12. Tues, 3-6 pm. Wed, 8-10 am, 6-9 pm. Thurs, 12-3 pm. Fri, 10-12, 8-10 pm. Sat, 3-6 pm, 8:30-12. Sun, 2-3:30, 9:30-12 mid. Eastern. Founded September 11, 1926.

WKBP

Battle Creek, Mich. 211.1m-1420kc. 50 watts. Battle Creek Enquirer and News.

WKBQ

New York, N. Y. 222.1m-1350kc. 250 watts. Standard Cahill Co., Inc. Announcer, Allan Cahill. Mon, 12-1:30, 6-mid. Tues, 12-4:30 pm. Thurs, 3-5:30 pm. Fri, 6-7 pm. Sat, 12-6 pm. Sun, 6-8 pm. Eastern. Founded September, 1926.

WKBS

Galesburg, Ill. 228.9m-1310kc. 100 watts. Permil N. Nelson. Announcer, Paul W. Palmquist. Slogan, "The Voice of Galesburg." Mon, Wed, Fri, 9:30-11:30 am, 12:30-1:30 pm, 6:30-11 pm. Tues, Thurs, 9:30-11:30 am, 12:30-1:30 pm, 6:30-9 pm, 10-11 pm. Sat, 9:30-11:30 am, 12:30-1:30 pm, 2-3 pm, 6:30-9 pm, 10-12 pm. Central. Founded October, 1926.

WKBV

Brookville, Ind. 199.9m-1500kc. 100 watts. Knox Battery & Electric Co. Wed, 7:30-9 pm. Fri, 7-9 pm. Sun, 7-9 pm. Central.

WKBW

Amherst, N. Y. 204m-1470kc. 5000 watts. Churchill Evangelistic Assn., Inc. Daily ex Sun, 3-4 pm, 6:30-10. Sun, 9:30 am, 10:30, 3 pm, 7-9, 10:15-12 mid. Eastern. Founded 1926.

WKBZ

Ludington, Mich. 199.9m-1500kc. 50 watts. "The Voice of Western Michigan." K. L. Ashbacher. Daily ex Sun, 10-11 am, 12-1 pm. Mon, 8-10 pm. Sun, 10:30-12 n, 7-9. Central. Founded Nov. 23, 1926.

WKEN

Buffalo, N. Y. 288.3m-1040kc. 1000 watts. WKEN, Inc. Announcer, Walter L. Amidon. Daily daylight broadcasting. Eastern. Founded Fall, 1925.

WKJC

Lancaster, Pa. 249.9m-1200kc. 100 watts. Kirk Johnson & Co. Announcers, M. W. Gehman, L. H. Bailey. Daily ex Sun, 11-12 n. Daily, 6-8:30 pm. Sun, 10:45-12 n, 7:30-10:30 p.m. Eastern. Founded November, 1921.

WKRC

Cincinnati, Ohio, 545.1m-550kc, 500 watts, Kodel Elec. & Mfg. Co. Eastern. Founded May, 1924.

WKY

Oklahoma City, Okla., 333.1m-900kc, 1000 watts. WKY Radiophone Co. Daily, 6:30 am-11:45 pm. Sun, 11 am-11 pm. Central.

WLAC

Nashville, Tenn., 201.2m-1490kc, 5000 watts. Life and Casualty. Daily ex Sun, 6-9 am, 12-3 pm. Mon, Tues, Wed, 9-12 pm. Thurs, Fri, Sat, 6-9 pm. Sun, 4:30-5:30 pm, 6-7, 9-10 pm. Central. Opened Nov. 24, 1926.

WLAP

Louisville, Ky., 249.9m-1200kc, 30 watts, Virginia av. Baptist Church, Sun, 10:45 am, 7:30-8:45 pm. Central. Founded 1922.

WLBC

Muncie, Ind., 228.9m-1310kc, 50 watts, Donald A. Burton.

WLB

Minneapolis, Minn., 239.9m-1250kc, 1000 watts, U. of Minnesota. Announcer, Gordon C. Harris. Tues, 6:30-8:30 pm. Wed, 7-9 pm. Fri, 6:30-7:30 pm. Sat, 8-10 pm. Central. Opened 1921.

WLBF

Kansas City, Mo., 211.1m-1420kc, 100 watts, Everett L. Dillard. Slogan, "Where Listeners Become Friends." Central. Founded Nov. 13, 1926.

WLBG

Petersburg, Va., 249.9m-1200kc, 100 watts, R. A. Gamble.

WLBH

Farmingdale, N. Y., 211.1m-1420kc, 30 watts, Jos. J. Lombardi. Announcer, H. J. Martin. Eastern.

WLBL

Stevens Point, Wis., 333.1m-900 kc, 2000 watts, 6 am-6 pm. Wisconsin Dept. of Markets. Slogan, "Wisconsin, Land of Beautiful Lakes." Central.

WLBO

Galesburg, Ill., 228.9m-1310kc, 100 watts, Frederick A. Trebbe, Jr. Central. Founded Jan. 16, 1927.

WLBV

Mansfield, Ohio, 247.8m-1210kc, 100 watts, Mansfield Broadcasting Association. John F. Weimer. Daily ex Sun, 6-7 pm. Mon, 9-11 pm. Wed, 9-11 pm. Sat, 9-11 am. Sun, 10:30-11:30 am, 7:30-10 pm. Central. Founded Jan. 1, 1927.

WLBW

Oil City, Pa., 238m-1250kc, 500 watts, Radio Wire Program Corp. Announcers, Frank Proudfoot, Cyril King, George Sutherland, Leigh Ore, Eastern. Founded 1926.

WLBX

Long Island, N. Y., 199.9m-1500kc, 100 watts, John N. Brahry. Mon, Wed, Fri, 12-1 pm, 6-8 pm. Tues, Thurs, 12-1 pm, 10-mid, Sat, 12-2 pm, 9-mid, Sun, 11 am-1 pm, 6-7 pm.

WLBZ

Bangor, Me., 483.6m-620kc, 250 watts night, 500 watts day, Maine Broadcasting Co. Announcers, Jack Atwood, Henry C. Wing. Slogan, "This is the Maine Station." Daily, 10 am-12:30, 5:30-mid, Sun, 10 am, Watch Tower; 11 am, church services; 2:30 pm, concert.

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., 211.1m-1420kc, 100 watts night, 250 watts day, Lexington Air Station. Announcers, Gerald Harrison, Carl S. Wheeler. Daily ex Sat and Sun, 8-11 am, 5-11 pm. Eastern. Founded October, 1926.

WLBI

Chicago, Ill. (tr. at Elgin), 416.4m-720kc, 25,000 watts, Liberty Magazine, Announcers, Quinn Ryan, Tommy Coates. See WGN. Central. Founded 1925.

WLIT

Philadelphia, Pa., 535.4m-560kc, 500 watts, Lit Bros. Eastern. Founded March 18, 1923.

WLOE

Boston, Mass. (tr. Chelsea), 199.9m-1500kc, 100 watts, Boston Broadcasting Co. Announcers, Ted Hill, Jimmy Godfrey. Daily ex Sun, 9 am-2 pm, 4-12 pm. Eastern.

WLS

Chicago, Ill. (tr. at Crete), 344.6m-870kc, 5000 watts, Prairie Farmer, Announcer, Harold Safford. Daily ex Sun, 7-10 am, 10:30-11:15 am, 11:45 am-5 pm. Mon, Thurs, Fri, 5:30-11 pm. Tues, Wed, 5:30-9 pm. Sat, 5:30-mid, Sun, 12:20 pm-2:30 pm, 6-8 pm. Central. Founded April 6, 1924.

WLSI

Providence, R. I., 247.8m-1210kc, 100 watts, Duttee W. Flint, Inc. Slogan, "Community Service." Announcer, H. Holmquist. Daily ex Sat, 3:30 pm, 8 pm. Eastern. Founded January, 1925.

WLTH

Brooklyn, N. Y., 214.2m-1400kc, 500 watts, Voice of Brooklyn, Inc. Eastern.

WLW

Cincinnati, Ohio (tr. at Mason), 428.3m-700kc, 5000 watts, The Crosley Radio Corp. Daily, 6:30 am-1:30 am. Eastern. Founded 1921.

WLWL

New York, N. Y. (tr. at Kearney), 272.6m-1100kc, 5000 watts, The Paulist League, Announcer, Bartholomew Sheehan. Slogan, "For God and Country." Mon, Tues, Wed, Thurs, Fri, Sat, 6-8 pm. Sun, 3:15-4:30 pm, 8-9:15 pm. Eastern.

WMAC

Cazenovia, N. Y. (tr. at Cazenovia), 526m-570kc, 250 watts, Clive B. Meredith. Thurs, 12 n. farm program; 8 pm, popular studio. Founded 1922. Eastern.

WMAF

South Dartmouth, Mass., 220.4m-1360kc, 500 watts, Round Hills Radio Corp.

WMAK

Buffalo, N. Y. (tr. at Martinsville), 333.1m-900kc, 750 watts (tr. Tonawanda), WMAK Broadcasting Systems, Inc. Announcers, William Fay, Robert Steigl, Robert Young. Founded Sept. 22, 1922.

WMAL

Washington, D. C., 475.9m-630kc, 250 watts, M. A. Leese Radio Co. Eastern.

WMAN

Columbus, Ohio, 247.8m-1210kc, 50 watts, First Baptist church, Announcer, Ed Anderson. Sun, 10:30-11:45 am, 7:30-8:45 pm. Eastern. Founded September, 1922.

WMAQ

Chicago, Ill., 447.5m-670kc, 5000 watts, The Chicago Daily News, Announcers, Bill Hay, George Simons. Daily ex Sun, 6 am-2 am, Sun, 10:45 am-11 pm. Central. Founded April 13, 1922.

WMAZ

St. Louis, Mo., 249.9m-1200kc, 100 watts, Kings-highway Presbyterian church, Announcer, Fred Seago. Slogan, "May Every By-Way Hear Kings-highway." Sun, 11 am, 8 pm. Central.

WMAZ

Macon, Ga., 336.9m-890kc, 500 watts, Mercer University, Announcer, E. K. Cargill. Daily ex Sun, 1-3 pm, 6:30-8:30 pm. Sun, 11:30 am-12:45; PC church, 1-3 pm. Eastern. Founded 1925.

WMBA

Newport, R. I., 199.9m-1500kc, 100 watts, LeRoy J. Beebe.

WMBC

Detroit, Mich., 211.1m-1420kc, 100 watts, Michigan Broadcasting Co. Daily, 4-11 pm. Sat, 4 pm-1 am. Eastern. Founded 1925.

WMBD

Peoria Heights, Ill., 208.2m-1440kc, 500 watts night, 1000 watts day, Peoria Heights Radio Laboratory. Daily ex Sun, 12 n-12 mid, Sun, 11-12:30, church services, afternoon concert.

WMBF

Miami Beach, Fla., 535.4m-560kc, 500 watts, Fleetwood Hotel, Announcer, Paul Whitehurst. Daily, 9-11 am, 12-2 pm, 5-6 pm, 9-11 pm. Eastern. Founded 1924.

WMBG

Richmond, Va., 247.8m-1210kc, 100 watts, Havens and Martin. Announcers, H. W. Jones, W. H. Wood. Daily ex Sun, 6-9, Sun, 11-12:30 pm, 8-9:30, Eastern.

WMBH

Joplin, Mo., 211.1m-1420kc, 100 watts, Edwin Aber. Announcer, E. D. Aher. 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, 8:30-10:30, Sun, 10:50-12 n, 6, 7:30. Central.

WMBI

Chicago, Ill., 277.6m-1080kc, 5000 watts, Moody Bible Institute. Slogan, "The West Point of Christian Service." Announcer, Wendell P. Loveless. Daily ex Sun, 7-7:40 am, 10:30-11:30 am, 12:30-1:30 pm, 3-4 pm. Sun, 2-3:30 pm. Mon, Wed, Thurs, Fri, 4-4:30 pm, Fri, 12-1 am. Central. Founded July 28, 1926.

WMBJ

Wilkesburg, Pa., 199.9m-1500kc, 100 watts, Rev. John W. Sproul.

WMBL

Lakeland, Fla., 228.9m-1310kc, 100 watts, Benford's Radio Studios, Daily ex Sun, 9:30-10 am, 1:15-2 pm, 7-9 pm. Sun, 11-12 n, 7:30-8:30, Eastern.

WMBM

Memphis, Tenn., 199.9m-1500kc, 10 watts, Seventh Day Adventist church.

WMBO

Auburn, N. Y., 218.8m-1370kc, 100 watts, Radio Service Laboratories, Daily ex Sat, Sun, 12-1:30 pm, 3-4 pm. Mon, Wed, 6-7:30 pm. Tues, Thurs, 5:30-8 pm. Sat, 7:45-8:15 pm. Sun, 9:30-11 am, 3-4 pm, 6-7:30 pm.

WMBQ

Brooklyn, N. Y., 199.9m-1500kc, 100 watts, Paul J. Gollhofer.

WMBR

Tampa, Fla., 247.8m-1210kc, 100 watts, F. J. Reynolds. Daily ex Sun, 11 am-12 pm, 2-4 pm, 6-11 pm. Eastern.

WMBs

Harrisburg, Pa., 209.7m-1430kc, 500 watts, Mack's Battery Co. Announcer, W. S. McCachren. Slogan, "The Voice of the Susquehanna." Daily ex Sun, 7-9 am, 11 am, 1 pm, 5-11:30 pm. Sat, 11:30 pm, 3 am. Eastern. Founded March 1, 1924.

WMC

Memphis, Tenn., 384.4m-780kc, 500 watts, The Commercial Appeal, Announcer, Francis S. Chamberlin. Slogan, "Station WMC, Memphis." "Down in Dixie." Daily ex Sun, 12 n. Mon, 7-10 pm, N.B.C.; Tues, 9:50 am, 7 pm, N.B.C.; 7:30 music, Sun, 11 am, services; 8:30, concert; 6:20, N.B.C.; 8, N.B.C.; 9:15, N.B.C. Founded Jan. 20, 1923. Central.

WMCA

New York, N. Y. (tr. at Hoboken), 526m-570kc, 5000 watts, Hotel McAlpin, Announcer, Harry Mack. Slogan, "Where the Searchlight Flashes and the White Way Begins." Daily ex Sun, 8:30 am-6 pm, 8 pm-12 mid, Sun, 9:30 am-5 pm, 6-8 pm, 9:15-11:30 pm. Eastern.

WMES

Boston, Mass., 199.9m-1500kc, 50 watts, Mass. Educational Society, Announcer, John R. Jones. Sun, 10:45-12 n, 1:55-2:30 pm, 7:45-9, Eastern. Founded Aug. 1, 1927.

WMMN

Fairmont, W. Va., 336.9m-890kc, 500 watts, Holt Rowe Novelty Co. Daily ex Sun, 3-4 pm. Mon, Wed, Fri, 11-n. Tues, Thurs, Sat, 10:30 am-12 n. Mon, 7-10 pm. Tues and Fri, 7-9 pm. Wed, 8-10, mid-2 am. Thurs, 8:30-10:30 pm. Sat, 7 pm-1 am. Sun, 10:30 am-n, 2-5 pm, 7:30-9:30 pm.

WMPC

Lapeer, Mich., 199.9m-1500kc, 100 watts, First Methodist Protestant church, Daily ex Sat, Sun, 9-10 am, 4-6 pm. Daily ex Sat, 12-1 pm. Daily ex Wed, Sat, 9:30 pm. Sun, 10-12 n, 12-1 pm, 4-5:30, 7:30-12, Central. Founded Dec, 6, 1926.

WMRJ

Jamaica, N. Y., 211.1m-1420kc, 10 watts, Peter J. Prinz. Tues, Thurs, 7:30-12 mid, Sat, 12-2:30 am. Sun, 12-5:30 pm. Eastern. Opened July 9, 1926.

WMSC

New York, N. Y., 222.1m-1350kc, 250 watts, Madison Square Garden, Announcer, Horace E. Beaver. Mon, 3-6 pm. Tues, 9-12 pm. Wed, 3-9 pm. Thurs, 12-3 pm, 9-12 pm. Fri, 8:30-11, Sat, 9-12 pm. Eastern.

WMT

Waterloo, Iowa, 249.9m-1200kc, 250 watts, Waterloo Broadcasting Co. Announcers, Raymond L. Hill, Harold E. Clark. Daily ex Sun, 8:45-11:15 am, 1:30, 3:30, 5:30, 8 pm. Sun, 9 am, 4, 6, 7:30 pm. Central. Founded July 29, 1922.

WNAC

Boston, Mass., 243.8m-1230kc, 500 watts night, 1000 watts day, The Shepard Stores, Announcers, Ben Hadfield, E. Lewis Dunham, Joseph Lopez, Jean Sargent. Eastern. Founded July 31, 1922.

WNAD

Norman, Okla., 296.9m-1010kc, 500 watts, University of Oklahoma, Announcer, Bill Cram. Slogan, "Voice of Soonerland." Mon, Thurs, 7:15-9 pm. Wed, 9-10 pm. Sat, 2-5 pm. Sun, 3:15-4:15 and 4-5 (alternating). Central. Founded September, 1922.

WNAT

Philadelphia, Pa., 228.9m-1310kc, 100 watts, Lennig Bros. Co. Daily ex Sun, 9-10:30 am. Tues, 5-12 pm. Wed, 7:30-10 pm. Sat, 1-4 pm, 7:30 pm-mid, Eastern. Founded 1921.

WNAX

Yankton, S. D., 526m-570kc, 1000 watts, Gurney Seed & Nursery Co. Daily ex Sun, 6 am-8 pm. Sun, 10:30 am-8 pm. Central. Founded 1921.

WNBf

Binghamton, N. Y., 199.9m-1500kc, 50 watts, Howitt-Wood Radio Co., Inc. Daily ex Sat and Sun, 12 n-1:30 pm. Mon, Thurs, 7-11 pm. Tues, Wed, Fri, 7-11:30 pm. Sat, 12 n-2 pm, 7 pm-mid, Sun, 11 am-1 pm, 5-11 pm. Eastern.

WNBH

New Bedford, Mass., 228.9m-1310kc, 100 watts, New Bedford Hotel, Announcer, I. Vermilya. Mon, 6-10:30 pm. Tues, Thurs, 7-8 pm. Wed, 6-10 pm. Fri, 6-10:30 pm. Sun, 11-12:15 pm, 7:30-9 pm. Eastern. Founded 1923.

WNBj

Knoxville, Tenn., 228.9m-1310kc, 50 watts, Lonsdale Baptist Church. Thurs, Sun, 9:45 am, 10:45, 5-6 pm, 7, Central.

WNBQ

Washington, Pa., 249.9m-1200kc, 15 watts, John Brownlee Spriggs. Slogan, "Where the Hills of Penn. Greet the Western Lea." Daily ex Sun, 2-4 pm, 9-11 pm. Sun, 11 am, 7 pm, services. Eastern.

WNBQ

Rochester, N. Y., 199.9m-1500kc, 15 watts, Gordon P. Brown.

WNBW

Memphis, Tenn., 209.7m-1430kc, 500 watts, Popular Radio Shop, Announcer, Mrs. John Ulrich. Daily ex Sun, 10 am-11 am, 2-4 pm, 6-10 pm. Sun, 4:30-7 pm. Central. Opened Feb. 28, 1927.

WNBW

Carbondale, Pa., 249.9m-1200kc, 5 watts, Home Cut Glass and China Co.

WNBX

Springfield, Vt., 249.9m-1200kc, 10 watts, First Congregational Church Co.

WNBZ

Saranac Lake, N. Y., 222.4m-1290kc, 10 watts, Smith and Mace. Daily, all day. Eastern.

WNJ

Newark, N. J., 206.8m-1450kc, 250 watts, Radio Investment Co., Inc. Eastern.

WNOX

Knoxville, Tenn., 535.4m-560kc, 1000 watts, Sterchi Bros. Central. Founded 1921.

WNRC

Greensboro, N. C., 208.2m-1440kc, 500 watts, Wayne M. Nelson. Daily ex Sat, Sun, 12:30-3 pm. Sun, 11:15 am and 8 pm, services. Eastern. Founded March 24, 1926.

WNYC

New York, N. Y., 526m-570kc, 500 watts, New York Municipal Radio Station, Slogan, "Municipal Broadcasting Station of the City of New York." Eastern. Founded July 8, 1924.

WOAI

San Antonio, Texas, 252m-1190kc. 5000 watts. Southern Equip. Co. (Evening News-Express). Announcer, J. G. Cummings. Slogan, "The Winter Playground of America, Where the Sunshine Spends the Winter." Daily ex Sun, 10 am, weather, markets, news; 12-12:45, Farm and Home hour; 2:30, 3:30, music; 4:30, 5:45, markets, news, sports. Mon, 5:30-6, 7-7:30, 8:30-9:30, N.B.C. Tues, 3:30-4, 7-10:30, N.B.C. Wed, 8-9:30, N.B.C. Thurs, 9:45-10 am, Hands of History; 6-7 pm, organ; 7-9:30, N.B.C. Fri, 10-11 am, R. C. n. School program; 9-9:30, N.B.C. Sat, 1:30-2:30 pm, R. C. n. Demonstration hour; 8-10, N.B.C. Sun, 11 am, 12:30-1, 5-5:30, 7-7:15, 8:15-9:15, N.B.C. Central. Founded summer 1922.

WOAN

Lawrenceburg, Tenn. 499.7m-600kc. 500 watts. Vaughn School of Music. Announcer, Y. M. Cornelius. Sun, 11-12 n. Daily, 12-1 pm, 7-8 pm. Tues, Thurs, 11-12 pm. Central.

WOAX

Trenton, N. J. 234.2m-1280kc. 500 watts. F. J. Wolff. Slogan, "Trenton Makes; the World Takes." Daily, 12-2 pm. Wed, Sat, 8-12 pm. Sun, 7:45-10 pm. Eastern. Founded March 2, 1923.

WOBT

Union City, Tenn. 228.9m-1310kc. 15 watts. Pittsforth Radio Music Shop. Daily ex Sun, 9:30-10:30 am, 3:30-4:30 pm. Sun, 4-5 pm. Eastern.

WOBV

Charleston, W. Va. 516.9m-580kc. 250 watts. Charleston Radio Broadcasting Corp. Announcer, Wally Fredericks. Daily ex Sun, 10:30-12, 1:30-3 pm. Mon, Wed, Fri, 7-9 pm. Tues, Thurs, Sat, 9-11 pm. Sun, 5-6:30 pm. Eastern.

WOC

Davenport, Iowa. 299.8m-1000kc. 5000 watts. The Palmer School of Chiropractic. Announcers, Peter MacArthur, Edgar Twanley. Slogan, "Where the West Begins and in the State Where the Tall Corn Grows." Mon, Wed, Fri, 5 pm-mid. Tues, Thurs, Sat, 7:30 am-5 pm. Sun, 10:45 am-5 pm, alternating 5 pm-10:45 pm. Founded May 1922.

WOCL

Jamestown, N. Y. 247.8m-1210kc. 25 watts. A. E. Newton. Slogan, "We're on Chautauqua Lake." Announcer, Bob Page. Tues, 6-9 pm. Wed, 6-7:30 pm. Fri, 6-9 pm. Sat, 2:30 pm, sports. Sun, 10:30 am, bible students' lectures; 7:30 pm, Christian Science service. Eastern.

WODA

Paterson, N. J. 239.9m-1250kc. 1000 watts. O'Dea Temple of Music. Slogan, "A Voice From the Silk City." Founded April 13, 1925. Eastern.

WOI

Ames, Iowa. 535.4m-560kc. 3500 watts. Iowa State College. Announcer, A. G. Woolfries. Daily ex Sun, 6:30 am, 7:15, 9, 9:10, 9:30, 10, 10:30, 12:20 pm, 12:30, 12:40, 12:45, 1:15, 1:30. Founded April, 1922. Central.

WOKO

Mt. Beacon, N. Y. 208.2m-1440kc. 500 watts. Hudson Valley Broadcasting Co. Slogan, "The Voice From the Clouds." Daily, 10-11 am, 6-8 pm. Sat, 9-11 pm. Sun, 11 am, 12:30 pm, 3:30. Eastern. Founded March, 1924.

WOL

Washington, D. C. 228m-1310kc. 100 watts. American Broadcasting Co. Daily ex Sun, 7:30 am-12 n, 5:45-8 pm, 10 pm-mid. Sun, 10 am-1:30 pm; 5-9:15 pm. Founded 1924. Eastern.

WOMT

Manitowoc, Wis. 247.8m-1210kc. 100 watts. The Mikadow theater. Announcer, F. M. Kadon. Daily ex Sun, 11:45 am-1:10 pm, 5:45-7, Sun, 10:30-12 am. Fri, 7-8 pm. Central. Founded July, 1926.

WOOD

Grand Rapids, Mich. 236.1m-1270kc. 500 watts. Walter B. Stiles, Inc. Mon, Tues, Wed, Thurs, Fri, 9-10:30 am, 3:30-4:30 pm, 6-7 pm, 8-11 pm. Sat, 9-10:30 am, 3:30-4:30 pm, 6-7 pm. Sun, 4-5 pm, 9-10 pm. Central.

WOQ

Kansas City, Mo. 491.5m-610kc. 1000 watts. Unity School of Christianity. Announcer, Rex G. Bettis. Daily ex Sun, 11-11:30 am. Wed, 10:30-11:30 pm. Thurs, 6-7 pm. Fri, 9-10 pm. Sun, 11 am-12:30 pm. Daily ex Sun, 11-11:30 am. Wed, 10:30-11:45 pm. 2:30-3:45, 8-9:15 pm, 10-11 pm. Central. Founded 1921.

WOR

Newark, N. J. (Tr. at Kearney.) 422.3m-710kc. 5000 watts. L. Bamberger & Co. Announcers, John B. Gambling, Lewis Reid, Meredith Page, Hugh Walton, Roger Bower. Daily ex Sun, 6:45-8 am, 9-2 pm, 2:30-12, Sun, 2-11 pm. Founded 1922. Eastern.

WORD

Batavia, Ill. 202.6m-1480kc. 5000 watts. Peoples Pulpit Association. Announcer, J. P. Holmes. Slogan, "Watchtower Station WORD." Daily ex Sun, 10-11 am, 7-8 pm. Sun, 10 am-n, 1-7:30 pm. Central. Founded December, 1924.

WOS

Jefferson City, Mo. 475.9m-630kc. 500 watts night, 1000 day. Missouri State Marketing Bureau. Announcers, Jack Heiny. Slogan, "Watch Our State." Daily ex Sun, 9 am, 10, 10:30, 11, 12 n, 1 pm, 2, markets, stocks, weather. Mon, Tues, Wed, Thurs, Fri, 6:45 pm; markets; 7:15, news. Fri, 4 pm, children's hour. Mon, Wed, 8 pm. Fri, 8:15 pm. Central. Founded 1922.

WOW

New York, N. Y. 265.3m-1130kc. 1000 watts. International Broadcasting Corp. Daylight until 6 pm.

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 am, 9:15, 11:15, 1 pm, 5, markets. Programs daily at 8:15 am, 9:30 am, 11 am, 11:20 am, 12 n, 1 pm, 2 pm, 3 pm, 5 pm, 6 pm, 7 pm, 8 pm, 9 pm, 10 pm, 11pm, mid. Central. Founded April 2, 1923.

WOWO

Fort Wayne, Ind. 258.5m-1160kc. 10,000 watts. Main Auto Supply Co. Announcers, Al Becker, Don Kruse, Howard Ackley, A. H. Kuckein. Daily ex Sun, 11 am-2 pm, 3-5 pm, Sat, Sun, 8-10 pm. Mon, 9:30-11 pm. Tues, Thurs, 6-11 pm. Wed, 8:30-11 pm. Fri, 9-11 pm. Central. Founded April, 1925.

WPAP

Palisade, N. J. 296.9m-1010kc. 250 watts. Palisade Amusement Park. Announcer, Perry Charles. Eastern.

WPAW

Pawtucket, R. I. 247.8m-1210kc. 100 watts. Shortenberg & Robinson Co. Announcer, H. E. Stafford XYZ. Slogan, "The City of Diversified Industries." Eastern. Opened January, 1924. Reopened August, 1926.

WPCC

Chicago, Ill. 526m-570kc. 500 watts. North Shore Congregational Church. Announcer, Ralph E. Briggs. Daily ex Sun, 4-5 pm, Wed, 11 pm. Sun, 10:30 am-12:30 pm, 4 pm-mid. Central. Founded July, 1924.

WPCH

Hoboken, N. J. 370.2m-810kc. 500 watts. Concourse Radio Corp. 10 am-7 pm daily. Sun, 9:30 am-7 pm. Eastern.

WPG

Atlantic City, N. J. 272.6m-1100kc. 5000 watts. Municipality of Atlantic City. Slogan, "World's Playgrounds." Daily ex Sun, 1-2, 4-6 pm, 6:45-12 mid. Sun, 3:15 pm, 4:15 pm, 5:15, 9:15, 10:30. Eastern. Founded Jan. 3, 1924.

WPRC

Harrisburg, Pa. 249.9m-1200kc. 100 watts. Wilson Printing & Radio Co. Wed, 9-11 pm. 2nd and 4th Sun, 11 am, 1:30 pm, 7:30 pm, 9 pm, 1st and 3rd Sun, 9 pm. Eastern. Opened September 30, 1925.

WPSC

State College, Pa. 243.8m-1230kc. 500 watts. Pa. State College. Announcers, D. M. Cresswell, D. D. Henry. Slogan, "The Voice of the Nittany Lion." Mon, Tues, Wed, Thurs, Fri, 12:45 pm, Sat, 2 pm. Sun, 11 am. Eastern. Founded Nov., 1921.

WPSW

Philadelphia, Pa. 199.9m-1500kc. 50 watts. Philadelphia School of Wireless Telegraphy. Slogan, "First Wireless School in America." Eastern. Founded 1908.

WPTF

Raleigh, N. C. 440.9m-680kc. 1000 watts. Durham Life Ins. Co. Announcer, George L. Sutherland. Slogan, "We Protect the Family." Daily ex Sat, Sun, 9:30-10:30, 11-11:30, 12-1, 3-4, 5:45-8:15. Sun, 11-12:30, 1-2, 7:30-8:30. Sat, 9:30-10:30, 11-11:30, 12-1 pm. Eastern. Founded October 1, 1927.

WQAM

Miami, Fla. 241.8m-1240kc. 1000 watts. Miami Broadcasting Co. Announcer, Frederick W. Mizer. Slogan, "The Most Southern Broadcasting Station in the U. S." Daily ex Sun, 11:50 am-1 pm, 5-9 pm. Sun, 9-12 n, 7-9 pm. Eastern. Founded February 1, 1922.

WQAN

Scranton, Pa. 340.7m-880kc. 250 watts. Scranton Times. Announcer, T. V. Neelon. 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. 296.9m-1010kc. 250 watts. Calvary Baptist Church. Announcer, G. R. Windham. Slogan, "The First Church Owned and Operated Broadcasting Station in the World." Founded 1922. Eastern.

WQBC

Utica, Miss. 220.4m-1360kc. 300 watts. Utica Chamber of Commerce, Inc. Daily, 8 am-2:15 pm. Tues, Fri, 7-10 pm. Sun, 12:30-1:30 pm. Central.

WQBJ

Clarksburg, W. Va. 249.9m-1200kc. 65 watts. John Raikes.

WQBZ

Weirton, W. Va. 211.1m-1420kc. 60 watts. J. H. Thompson.

WRAF

La Porte, Ind. 249.9m-1200 kc. 100 watts. Radio Club, Inc. Announcer, Charles Middleton. Slogan, "The Voice of the Maple City." Daily ex Sun, 9-10 am, music; 12:15-12:30, news; 5:30-8, music. Fri, Sat, 8-9:30 pm. Sun, 10:45 am-12:15 pm, 4:15-5:15 pm, 7-12 mid. Sun, 11 am, 3-4, 7. Eastern. Founded June 5, 1923.

WRAC

Erie, Pa. 218.8m-1370kc. 50 watts. Economy Light Co. Announcer, H. E. Flath. Slogan, "The Gateway to Cloverland." Eastern. Founded 1924.

WRAW

Reading, Pa. 228.9m-1310kc. 100 watts. Avenue Radio & Elec. Shop. Slogan, "The Schuylkill Valley Echo." Announcer, C. M. Chafey. Daily ex Sun, 7:30-9:30 am, 12 n-1 pm. Tues, 8-11:30 pm. Thurs, 7-12 mid. Sun, 11 am, 3-4, 7. Eastern. Founded June 5, 1923.

WRAX

Philadelphia, Pa. 239.9m-1020kc. 250 watts daylight. Berachah Church, Inc. Announcers, Walter S. Smalley, Herbert Hogg. Eastern. Founded 1923.

WRBI

Tifton, Ga. 228.9m-1310kc. 20 watts. Kent's Furniture and Music Store.

WRBJ

Hattiesburg, Miss. 199.9m-1500kc. 10 watts. Woodruff Furn. Co. Daily ex Sun, 12-1 pm. Mon, Wed, Fri, 8-10 pm. Central.

WRBL

Columbus, Ga. 249.9m-1200kc. 50 watts. Roy E. Martin.

WRBQ

Greenville, Miss. 247.8m-1210kc. 100 watts. J. Pat Scully. Daily, 12-1 pm, weather, markets, music; 6-8 pm, music. Sat, 12 am, frolic.

WRBT

Wilmington, N. C. 218.8m-1370kc. 50 watts. Wilmington Radio Assn.

WRBU

Gastonia, N. C. 247.8m-1210kc. 100 watts. A. J. Kirby Music Co.

WRBW

Columbia, S. C. 228.9m-1310kc. 100 watts. Paul S. Pearce. Daily ex Sun, 1-2 pm. Sun, 11 am-1 pm, 2-6:30 pm.

WRBX

Roanoke, Va. 322.4m-930kc. 250 watts. Richmond Development Corp.

WRC

Washington, D. C. 315.6m-950kc. 500 watts. National Broadcasting Co. Announcer, George F. Ross. Slogan, "The Voice of the Capitol." Eastern.

WREC

Whitehaven, Tenn. 499.7m-600kc. 500 watts. 4XA. 62.125m. 5000 watts. WREC, Inc. Announcer, Hoyt B. Wooten. Daily ex Sun, 6-9 pm. Sun, 3-5:30 pm. Central. Founded Sept., 1923.

WREN

Lawrence, Kan. 245.8m-1220kc. 1000 watts. Jenny Wren. Announcers, Vernon H. Smith, Ernest Pontius. Daily ex Sun, 6:30-11 am, 2:30-4 pm, 6-10:30 pm. Sun, 8 am-9:30 pm. Central. Founded February, 1927.

WRHM

Minneapolis, Minn. 239.9m-1250kc. 1000 watts. Rosedale Hospital, Inc. Announcer, Troy S. Miller. Central.

WRJN

Racine, Wis. 218.8m-1370kc. 100 watts. Racine Broadcasting Corp. Announcers, H. J. Newcomb, Dick Mann. Daily, 12-1 pm, 7 pm. Sun, 12-1:30. Central. Founded Dec. 1, 1926.

WRK

Hamilton, Ohio. 228.9m-1310kc. 100 watts. S. W. Doran. Mon, Wed, Fri, 1-2 pm, 6:45-10. Tues, Thurs, 1-2 pm, 6:45-2 am. Sat, 1-2 pm, 2:30-5, 6:45-2:50 am, 10:30. Eastern. Founded 1919.

WRNY

New York, N. Y. (Tr. at Coytesville, N. J.) 296.9m-1010kc. 250 watts. Experimenter Pub. Co. Mon, Fri, 2:30-9 pm. Tues, 10 am-1 pm, 3-11 pm. Wed, 12:30 pm, 4 pm, 9:30 pm-1 am. Thurs, 10 am-1:30 pm. Sat, 10 am-1:30 pm, 8 pm-1 am. Sun, 2-10:30 pm. Eastern. Founded June 12, 1925.

WRR

Dallas, Texas. 234.2m-1280kc. 500 watts. City of Dallas. Announcer, John Thorwald. Slogan, "City of Achievements." Daily ex Sat, Sun, 11 am-12:45 pm. Mon, Thurs, 6-11 pm. Tues, Wed, Fri, Sat, 6-10:30 pm. Sat, 11 am-12:30 pm, 2:30-3:30 pm. Sun, 11-12 n, 1:30-4:30 pm, 7-10:30 pm. Central.

WRUF

Gainesville, Fla. 204m-1470kc. 5000 watts. University of Florida. Announcers, Bobby Griffin, Chas. Lee. Daily, 10 am, Homemakers hour; 1 pm, noon time program; 6-11 pm, variety program. Sat, mid to 2 am, frolic. Sun, 1 pm-2:30 pm.

WRVA

Richmond, Va. 270.1m-1110kc. 5000 watts. Larus & Bro., Co., Inc. Slogan, "Down Where the South Begins." Announcer, J. Robert Beadles. Daily ex Sun, 11 am-3 pm, 6 pm-mid. Sun, 11 am-1 pm, 7:30-11 pm. Eastern. Opened Nov. 2, 1925.

WSAI

Cincinnati, Ohio. (Tr. at Mason.) 374.8m-800kc. 5000 watts. Crosley Radio Corp.

WSAJ

Grove City, Pa. 228.9m-1310kc. 100 watts. Grove City College. William L. Harmon, activities. Irregular schedule. Founded April, 1920.

WSAN

Allentown, Pa. 208.2m-1440kc. 250 watts. Allentown Call Pub. Co. Announcer, Charles Walp. Mon, Tues, Thurs, Sat, Eastern.

WSAR

Fall River, Mass. 206.8m-1450kc. 250 watts. Doughty & Welch Elec. Co., Inc. Announcers, Barton G. Albert, Leonard A. McGrath. Daily, 11-1 pm, 5:30-7:30 pm. Founded Jan., 1923. Eastern.

WSAZ

Huntington, W. Va. 516.9m-580kc. 250 watts. McKellar Electric Co. Announcer, F. B. Smith. Daily, 12-1:30 pm. Mon, Wed, Fri, 3-7, 9-12 pm. Sat, 3-9 pm. Sun, 10 am-1 pm, 7:30-9. Eastern. Founded January, 1927.

WSB

Atlanta, Ga. 405.2m-740kc. 1000 watts. Atlanta Journal. Announcer, Lamdin Kay. Slogan, "The Voice of the South." Daily ex Sun, 10 am, markets and weather forecast; 12 noon, Montgomery Ward's Farm and Home hour; 2:30, correct time, closing reports, weather forecast, news, music; 5 pm-10:45 pm, N.B.C. chain programs. Central.

WSBC

Chicago, Ill. 247.8m-1210kc. 100 watts. World Battery Co. Daily, 10-11:30 am, 1:30-3:30 pm, 5-6 pm, 8-9 pm, 11 pm-1 am. Central.

WSBT

South Bend, Ind. 243.8m-1230kc. 500 watts. South Bend Tribune. Announcer, C. G. Livengood. Tues, 6-8, Wed, 6-6:30, 10-11. Thurs, 6-6:30, 8-10, 11-12. Fri, 6-6:30, 8-11. Sat, 10-11. Sun, 10:45-12 n. Founded April, 1922. Central.

WSEA

Portsmouth, Va. 384.4m-780kc. 500 watts. Radio Corp. of Virginia. Founded Jan. 7, 1927.

WSGH-WSDA

Brooklyn, N. Y. 214.2m-1400kc. 500 watts. Amateur Radio Specialty Co. Announcer, E. C. Rhodes. Daily ex Sun, 4 pm, 12 mid. Suu, 12:30-3 pm. Eastern. Opened Nov 3, 1926.

WSIS

Sarasota, Fla. 296.9m-1010kc. 250 watts. Financial Journal. Announcer, Jack Dadsweil. Eastern. Founded 1920.

WSIX

Springfield, Tenn. 247.8m-1210kc. 100 watts. 638 Tire and Vulc. Co. Announcer, George H. Lawrence. Central. Founded Jan. 7, 1927.

WSM

Nashville, Tenn. 461.3m-650kc. 5000 watts. National Life and Accident Insurance Co. Announcers, George Hay, Jack Keele, Harry Stone. Daily ex Sun, 11:45 am-1:30 pm. Mon, Tues, Wed, Thurs, 5:30-11 pm. Fri, 5:30-10 pm. Sat, 6:15-12 mid. Sun, 11 am-1 pm, 3-4:30, 5-10:45. Founded Oct. 5, 1925. Central.

WSMB

New Orleans, La. 227.1m-1320kc. 500 watts. Saenger Theaters, Inc., and The Maison Blanche Co. Announcer, C. R. Randall. Daily ex Sun, 12:30-1:30 pm, 6-7. Mon, Wed, Thurs, Sat, 9:30-10:30 pm. Fri, 10-11 am. Founded April 21, 1925. Central.

WSMD

Salisbury, Md. 228.9m-1310kc. 100 watts. Tom F. Little. Announcer, H. A. Beach. Slogan, "Voice of the Eastern Shore." Daily, 7-9 am, 11 am-1 pm, 6-9 pm. Eastern. Opened January, 1923.

WSMK

Dayton, Ohio. 526m-570kc. 200 watts. S. M. Krohn, Jr. Slogan, "The Home of Aviation." Central.

WSPD

Toledo, Ohio. 223.7m-1340kc. 500 watts. The Toledo Broadcasting Co. Announcers, Victor Taylor, Harry Hansen, Dwight Northrup, Merrill Pheatt. Slogan, "The Gateway to the Sea." Eastern.

WSRO

Middletown, Ohio. 211.1m-1420kc. 100 watts. Middletown Broadcasting Co. Announcer, Harry W. Fahrlauder. Central. Founded 1923.

WSSH

Boston, Mass. 211.1m-1420kc. 100 watts. Tremont Temple Baptist Church. Announcer, Raymond B. Meader. Fri, 7:30-9 pm. Sun, 10 am, 6:30 pm. Eastern. Founded June 8, 1924.

WSUI

Iowa City, Iowa. 516.9m-580kc. 500 watts. Univ. of Iowa. Announcer, Carl Menzer. Daily ex Sun, 9 am, 10 am. Daily, 12 n, 6 to 6:30 pm. Mon, 8:30-9:30, mid. Tues and Thurs, 11-12 am. Fri, 11 am-12:30 pm. Sun, 9:15, 9:45. Founded Feb. 12, 1924. Central.

CANADA, CUBA, MEXICO

Canada

CFAC

Calgary, Alta., Can. 434.5m-690kc. 500 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, 7-9 pm. Wed, 3:30-4:30 pm, 7:30-9 pm. Thurs, 7 pm-9 pm, 9:30-10:30, 12. Fri, 3:30-4:30 pm, 8:30. Sun, 11 am, 7 pm. service.

CFBO

St. John, N. B. 336.9m-890kc. 50 watts. C. A. Munro, Ltd.

CFCA

Toronto, Ont., Can. 356.9m-840kc. 500 watts. Toronto Star. Announcer, Gordon W. McClain. Daily ex Sun, 12:30 pm, 6 pm, weather, stocks. Mon, 6:30-10 pm. Tues, 6:30-12 pm. Wed, 6:30-11 pm. Thurs, 6:30-7:30 pm. Fri, 6:30-11 pm. Sat, 7-11 pm. Sun, 11 am, 7 pm, church services; 6-8:30 pm, musical program. Eastern. Founded March, 1922.

CFCF

Montreal, P. Q., Can. 291.1m-1030kc. 1650 watts. Canadian Marconi Co. Announcer, W. Dundas Simpson. French announcer, C. A. Charlebois. Daily ex Sun, 12:35-2 pm, 3-4 pm. Mon, Wed, Fri, 10:45-12:35 pm, 4:45-6:30 pm, 7-1 am. Tues, Sat, 4:45-6 pm. Eastern.

CFCH

Iroquois Falls, Ont. 499.7m-600kc. 250 watts. Abitibi Power and Paper Co., Ltd.

CFCN

Calgary, Alta., Can. 434.5m-690kc. 1800 watts. W. W. Grant, Ltd. Slogan, "Voice of the Prairies." Mountain.

CFCO

Chatham, Ont. 247.8m-1210kc. 25 watts. Western Ontario "Better Radio" Club.

CFCT

Victoria, B. C., Can. 475.9m-630kc. 500 watts. The Victoria Broadcasting Assn. Announcer, Cliff Deaville. Daily ex Sun, 8-8:30 am, 6-8 pm. Wed, 8-10 pm. Fri, 5:30-9 pm. Sat, 9:30-10 pm. Tues, Thurs, Fri, 11-12 pm.

CFCY

Charlottetown, P. E. I. 312.3m-960kc. 100 watts. Island Radio Co.

WSUN-WFLA

St. Petersburg, Fla. 333.1m-900kc. 1000 watts night, 2500 watts day. City of St. Petersburg. Announcer, J. Dudley Saumenig. Slogan, "The Sunshine City." Tues, Thurs, Sat, 12-1, 2-4 pm, 7-12. Eastern. Founded Nov. 1, 1927.

WSVS

Buffalo, N. Y. 218.8m-1370kc. 50 watts. Seneca Vocational School. Announcer, David Warnhoff. Slogan, "Watch Seneca Vocational School." Mon, 9:30-10 am. Tues, 9:30-10 am. Wed, 9:30-10 am. 8-9:30 pm. Thurs, 9:30-10 am. Fri, 9:30-10 am. 8-9:30 pm. Eastern. Founded Nov. 9, 1925.

WSYR

Syracuse, N. Y. 526m-570kc. 250 watts. Clive B. Meredith. Slogan, "Voice of Central New York." Daily ex Sun, 8:30 am-mid, Sun, 2 pm-9 pm. Eastern. Founded 1922.

WTAD

Quincy, Ill. 208.2m-1440kc. 500 watts. Illinois Stock Medicine Broadcasting Corp. Slogan, "The Voice of Agriculture." Daily ex Sun, 11:30-12:45 pm, 3-4 pm, 7-9 pm. Sun, 7:15-8 pm, 10 pm-2 am. 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 am, 10:30, 11:15, 12 n, 12:30, 12:35, 1 pm, 6:30, 7, 7:30, 8, 8:30, 9, 10, 11. Tues, 10:30 am-1:15 pm, 6:30 pm-12:15 am. Sat, 10:45, 12:30, 1 pm, 6:15-11:15 pm. Sun, 1:30, 3, 4, 5:30, 6-11 pm. Eastern. Founded May 1, 1924.

WTAM

Cleveland, Ohio. 280.2m-1070kc. 3500 watts. WTAM-WEAR, Inc. Announcer, J. E. Richards. Slogan, "The Voice From the Storage Battery." Mon, Tues, Sat, 10:15-11:35 am. Wed, Thurs, Fri, 9:30-11:35 am. Sun, 1:30 pm-mid. Daily ex Sun, 5:30 pm-mid. Founded Sept. 26, 1923. Eastern.

WTAQ

Eau Claire, Wis. 225.4m-1330kc. 1000 watts. Gillette Rubber Co. Announcer, C. S. Van Gorden. Slogan, "Where Tires Are Quality."

WTAR-WPOR

Norfolk, Va. 384.4m-780kc. 500 watts. WTAR Radio Corp. Announcer, Blayne R. Butcher. Daily, 7:30-9:30 am, 12:30-1:30 pm, 4:30-11 pm. Sun, 10-11 am, 4-10 pm. Eastern. Founded Sept. 21, 1923.

WTAW

College Station, Texas. 267.7m-1120kc. 500 watts. Agricultural and Mechanical College of Texas. Founded 1922. Central.

WTAX

Streator, Ill. 247.8m-1210kc. 50 watts. Williams Hardware Co., Radio Division. Wed, Fri, 8-10:30 pm. Central.

WTAZ

Richmond, Va. 247.8m-1210kc. 1500 watts. W. Reynolds, Jr., and T. J. McQuire.

WTBO

Cumberland, Md. 211.1m-1420kc. 50 watts. Cumberland Elec. Co.

WTFI

Toccoa, Ga. 206.8m-1450kc. 500 watts. Toccoa Falls Institute. Announcer, Kelly Barnes. Eastern. Founded Oct. 4, 1927.

WTHS

Atlanta, Ga. 228.9m-1310kc. 100 watts. Atlanta Technological H. S.

WTIC

Hartford, Conn. (499.7m-600kc. 250 watts. Temporary assignment.) 282.8m-1060kc. 50,000 watts. Permanent location. The Travelers Insurance Co. Slogan, "The Insurance City." Daily, 6:25-11 pm. Sun, 1:30-9:15 pm. Founded Feb. 10, 1925. Eastern.

WTMJ

Milwaukee, Wis. (Tr. at Brookfield.) 483.6m-620kc. 1000 watts. Milwaukee Journal. Announcers, Russell Winnie, Larry Teich, Gilbert Allis, Mert Blackburn. Slogan, "Voice of Wisconsin, Land of Lakes." Mon, Tues, Wed, Thurs, Fri, Sat, 10 am-mid. Sun, 8:30-11 pm. Central. Founded July 25, 1927.

WWAE

Hammond, Ind. 249.9m-1200kc. 100 watts. Dr. Geo. F. Courier.

WWJ

Detroit, Mich. 325.9m-920kc. 1000 watts. The Detroit News. Announcers, E. L. Tyson, F. P. Wallace, Fred W. Jencks. Daily ex Sun, 9:30 am, tonight's dinner, 9:50, woman's hour, 10:30, weather; 11:15, N.B.C.; 11:55, time; 12 n, orchestra; 12:40, farm flashes; 1, organ; 3, program; 4, weather; 5, orchestra; 5:45, markets; 6, organ; 6:30, dinner music; 7, news; 7:15, evening program. Sun, 10:30 am, services; 2 pm, program; 7:20-10:15, N.B.C. Eastern. Founded Aug., 1920.

WWL

New Orleans, La. 352.7m-850kc. 5000 watts. Loyola Univ. Announcers, Jean Pasquet, J. D. Bloom. Mon, Wed, Fri, Sat, 7:30-9:30 pm. Tues, Thurs, 6-8 pm. Sun, 10-11 am. Central. Founded March 31, 1922.

WWNC

Asheville, N. C. 526m-570kc. 1000 watts. Citizens Broadcasting Co., Inc. Slogan, "Radio Voice of Asheville Citizen." Announcer, G. O. Shepherd. Eastern. Founded Feb. 21, 1927.

WWRL

Woodside, N. Y. 199.9m-1500kc. 100 watts. W. H. Reuman. Sun, 1 pm, Hubert's Happy hour; 5 pm, Watch Tower hour. Wed, 9 pm, Barrett's Entertainers. Mon, Fri, 11:30 pm, Queensboro Theater program. Founded Aug. 15, 1926.

WWVA

Wheeling, W. Va. 258.5m-1160kc. 5000 watts. West Va. Broadcasting Corp. Daily ex Sun, 8, 11, 12, 2 pm, 6, Mon, 7-11 pm. Wed, 7-10:30 pm. Sat, 11-1 am. Sun, 10:30 am, 1 pm, 3, 7:30. Eastern. Founded Dec. 6, 1926.

CHLS

Vancouver, B. C. 410.7m-730kc. 50 watts. W. G. Hassell. Mon, Tues, 9-10:30 pm. Wed, 2:30-3:30, 9-9:30 pm. Sat, 9-11:30. Pacific.

CHMA

Edmonton, Alta. 516.9m-580kc. 500 watts. Christian & Missionary Alliance. Mountain.

CHML

Mount Hamilton, Ont., Can. 340.7m-880kc. 50 watts. Maple Leaf Radio Co. Eastern.

CHNC

Toronto, Can. 356.9m-840kc. 500 watts. Toronto Radio Research society.

CHNS

Halifax, N. S. 322.4m-930kc. 100 watts. Herald, Ltd. Atlantic. Founded May 12, 1926.

CHRC

Quebec, Que. 340.7m-880kc. 5 watts. E. Fontaine.

CHWC

Regina, Sask., Can. 312.3m-960kc. 500 watts. R. H. Williams & Sons, Ltd. Daily ex Sun, 12-1 pm, 5-6 pm. Mon, Wed, Sat, 8-10 pm. Mountain.

CHWK

Chilliwack, B. C. Can. 247.8m-1210kc. 5 watts. Chilliwack Broadcasting Co., Ltd. Daily ex Sun, 12-1 pm. Tues and Fri, 8-9 pm.

CJBR

Regina, Sask. 312.3m-960kc. 500 watts. Saskatchewan Co-operative Wheat Producers, Ltd.

CJCA

Edmonton, Alta., Can. 516.9m-580kc. 500 watts. Edmonton Journal, Ltd. Announcer, R. A. Rice. Slogan, "Altogether for the Journal." Daily ex Sun, 12:30-2 pm. Mon, 7-8 pm, 11:15-12:15 am. Tues, 3-5 pm, 7-8, 11:15-12:15 am. Wed, 7-1, Thurs, 7-8 pm, Fri, 5-6 pm, 7-10:30, 10:30-11:30, CNRE, Sat, 7-8, 8:30-12. First Sun, 11-1 pm, 4:30-5:30, 9-12. Other Sundays, 4:30-5:30 pm, 7-9:30. Mountain.

CJCI

Calgary, Alta. 434.5m-690kc. 250 watts. The Albertan Pub. Co., Ltd. Announcer, D. E. Daniel. Daily ex Sun, 9-10 am, 2-3 pm. Mon, 8-9 pm, 10:30 pm-mid. Wed, 11 pm-mid. Fri, 7-8:30 pm. Sat, 8-mid.

CFJC

Kamloops, B. C. 267.7m-1120kc. 15 watts. N. S. Dalgleish and Sons, Weller and Weller.

CFLC

Prescott, Ont. 296.9m-1010kc. 50 watts. Radio Association of Prescott. Daily ex Sun, 7-7:30 pm. Fri, 7-10:30 pm. Sat, 12 noon-1 pm. Sun, 11 am, 7 pm, church services. Eastern.

CFMC

Kingston, Ont., Can. 267.7m-1120kc. 20 watts. Monarch Battery Mfg. Co., Ltd.

CFNB

Fredericton, N. B. 247.8m-1210kc. 100 watts. James S. Neill & Sons, Ltd. Atlantic.

CFQC

Saskatoon, Sask., Can. 329.5m-910kc. 500 watts. The Electric Shop, Ltd. Announcer, Stan Clifton. Slogan, "The Hub City of the West Where No. 1 Northern Hard Wheat Grows." Daily ex Sun, 9-10 am, 1-2 pm, markets, reports, music. Mon, 7-10 pm. Wed, 7:30-10 pm. Thurs, Fri, 7:30-9 pm. Sun, 11 am, 7 pm, church service. Mountain.

CFRB

Toronto, Ont. 312.3m-960kc. 4000 watts. Standard Radio Mfg. Corp., Ltd. Announcer, Charles Shearer. Slogan, "Just Plug In, Then Tune In." Eastern.

CFRC

Kingston, Ont., Can. 267.7m-1120kc. 200 watts. Queen's University. Announcer, H. J. D. Minter. Inc. Oct., 1923.

CHCA

Calgary, Alta. 434.5m-690kc. 250 watts. The Western Farmer, Ltd. Announcer, D. E. Daniel. Daily ex Sun, 6-7 pm. Sun, 5-6 pm.

CHCS

Hamilton, Ont., Can. 340.7m-880kc. 10 watts. Hamilton Spectator.

CHCT

Red Deer, Alta. 356.9m-840kc. 1000 watts. Messrs. G. F. Tull and Ardern, Ltd.

CHGS

Summerside, P. E. I. 267.9m-1120kc. 50 watts. R. T. Holman, Ltd. Daily, 12:15 n, 5:15 pm. Sun, 11 am, 3:15 pm, 7 pm. Atlantic.

CJCR

Red Deer, Alta., Can. 356.9m-840kc. 1000 watts. The North American Collieries, Ltd.

CJGC

London, Ont., Can. 329.5m-910kc. 500 watts. London Free Press. Mon, Tues, Wed, Thurs, Fri, 1:30 pm, 5:45-11 pm. Eastern.

CJGX

Yorkton, Sask. 475.9m-630kc. 500 watts. The Winnipeg Grain Exchange. Daily ex Sun, 8:30 am, 10:30, 12:45 pm, 7:15. Tues, Fri, 8:30-10 pm. Mountain.

CJOR

Sea Island, B. C. 291.1m-1030kc. 50 watts. G. C. Chandler.

CJRM

Moose Jaw, Sask. 499.7m-600kc. 500 watts. James Richardson & Sons, Ltd. Daily ex Sun, 9:45-10:35 am, 11:55-2:30 pm, weather, markets. Mon, Wed, Fri, 7 pm. Sat, 10-12 mid. Sun, 9:30 am, 1:30 pm. Mountain.

CJSC

Toronto, Can. 356.9m-840kc. 500 wts. The Evening Telegram.

CJWC

Saskatoon, Sask. 329.5m-910kc. 250 watts. Radio Service, Ltd.

CKAC

Montreal, Que., Can. 410.7m-730kc. 1200 watts. La Presse. Announcer, Arthur Dupont. Mon, Fri, 1:45 pm, 4:15. weather, stocks. Tues and Thurs, 10:30 am, music, stocks; 10:45, cooking school; 10:15, news, time; 12 n, music; 4:15 pm, weather; 7, markets. Tues, Thurs, Sat, 7:15-11:30 pm. Eastern.

CKCD

Vancouver, B. C., Can. 410.7m-730kc. 50 watts. Vancouver Daily Province. Announcer, W. G. Haswell. Slogan, "Canada's Western Gateway." Daily ex Sun, 8:30-9 pm, news bulletins only. Pacific.

CKCI

Quebec, Que. 340.7m-880kc. 25 watts. Le Soleil, Ltd.

CKCK

Regina, Sask., Can. 312.3m-960kc. 500 watts. Leader Pub. Co. Announcer, A. W. Hooper. "The Queen City of the West." Mountain.

CKCL

Toronto, Can. 517.2m-580kc. 500 watts. The Dominion Battery Co., Ltd. Eastern. Founded May 5, 1925.

CKCO

Ottawa, Ont., Can. 434.5m-690kc. 100 watts. Dr. G. M. Geldert (Ottawa Radio Assn.). Announcer, Dr. O. K. Gibson. Slogans, "Ottawa's Radio Voice," "The Community Voice of Canada's Capitol." Eastern. Founded March, 1922.

CKCR

St. George, Ont., Can. 267.7m-1120kc. 50 watts. John Patterson.

CKCV

Quebec, P. Q. 340.7m-880kc. 100 watts. G. A. Vandry.

CKFC

Vancouver, B. C., Can. 410.7m-730kc. 50 watts. Chalmers United Church.

CKGW

Toronto, Ont., Can. 312.3m-960kc. 5000 watts. Gooderman & Worts, Ltd.

CKLC

Red Deer, Alta. 356.9m-840kc. 1000 watts. Alberta Pacific Grain Co., Ltd. Daily ex Sun, 11:45 am, news, markets, weather; 4 pm, musical program. Mon, Wed, Fri, 3 pm, women's program. Sun, 11 am, 7:30 pm, service; 5, organ; 9:15, studio program. Mountain.

CKMC

Cobalt, Ont. 247.8m-1210kc. 5 watts. R. L. Mac-Adam.

CKNC

Toronto, Ont., Can. 516.9m-580kc. 500 watts. Eveready Battery Station. Announcers, Hartley Currie, Gordon Calder, Ernest Bushnell. Daily ex Sun, 11:30 am-12:30 pm, 2-4 pm, 5-6 pm. Mon, Thurs, Sat, 6-mid. Sun, 11-12, 1-6 pm. Eastern. Founded May 2, 1924.

CKOC

Hamilton, Ont., Can. 340.7m-880kc. 100 watts. Wenworth, Radio Supply Co., Ltd. Announcer, L. Moore. Slogan, "The Voice of Hamilton." Eastern.

CKOW

Scarboro Station, Ont. 291.1m-1030kc. 500 watts. Nestle's Food Co. of Canada.

CKPC

Preston, Ont. 247.8m-1210kc. 10 watts. Wallace Russ. Announcer, Jas. Newell. Eastern.

CKPR

Midland, Ont. 267.7m-1120kc. 150 watts. Midland Broadcasting Station. E. O. Swan. Slogan, "Voice of Canada's Northland." Daily ex Sun, 12:25 am, 5:45 stocks, news, weather. Mon, Wed, Fri, 12:30-1 pm. Tues, Thurs, Sat, 11 am-2:30 pm, 2:30-3:30 pm. Mon, Wed, Fri, Trans Canada Chain, 8-11 pm. Thurs, 8-12 pm. Sat, Blue Bell Chain, 10-11 pm. Tues, Wed, Thurs, Fri, 6-7 pm. Tues, Fri, 12 mid-1 am. Sun, 10:45, 12:45, 7 pm. Eastern.

CKSH

St. Hyacinthe, P. Q. 296.9m-1010kc. 50 watts. Temporarily using 296.9m-1010kc. 50 watts. City of St. Hyacinthe. Sun, 4:30-6 pm.

CKUA

Edmonton, Alta. 516.9m-580kc. 500 watts. U. of Alberta. Announcer, Harold P. Brown. Sun, 3-4:30 pm, program. Mon, 3-4, homemakers; 5:30-6 pm, children; 6-7 pm, dinner hour of music; 8, program; 8:20, colleges; 8:45, lecture; 9, feature. Thurs, 3 pm, homemakers' hour; 5:30-6 pm, children; 6-7, dinner hour of music; 8-9, concert; 9 pm, farmers. Mountain.

CKWX

Vancouver, B. C. 410.7m-730kc. 100 watts. Sparks Company. Announcer, H. W. Paulson. Daily ex Sun, 8-8:30 am, 10:30-12 n, 4:30-7:30 pm. Tues, 7:30-8:30. Wed, 7:30-8:30, 9:30-12 mid. Thurs, 10:30-12 mid. Fri, 9-10:30 pm. Sat, 11:30-1 am. Pacific.

CKY

Winnipeg, Man., Can. 384.4m-780kc. 500 watts. Manitoba Tel System. Announcer, F. E. Rutland. Slogan, "Manitoba's Own Station." Central.

CNRA

Moncton, N. B., Can. 475.9m-630kc. 500 watts. Canadian National Railways. Announcer, W. V. George. Slogan, "Voice of the Maritimes." Started Nov. 8, 1924.

CNRC

Calgary, Alta., Can. 434.5m-690kc. 1000 watts. Canadian National Railways. Mon, Thurs, 9:30-10:30 pm. Mountain.

CNRE

Edmonton, Alta. Can. 516.9m-580kc. 500 watts. Canadian National Railways. Tues, 11:15. Fri, 10:30. Mountain.

CNRM

Montreal, Que., Can. 410.7m-730kc. 1200 watts. Canadian National Railways. Announcers, J. S. McArthur, J. T. Carlyle, T. A. Marion. Eastern.

CNRO

Ottawa, Can. 434.5m-690kc. 500 watts. Canadian National Railways. Announcer, A. W. Ryan. Daily ex Sun, 2:57-3 pm, time; 3-4:30, music. Mon, Thurs, 7:30-12 mid. Eastern. On the air Feb. 27, 1924.

CNRQ

Quebec City, Can. 340.7m-880kc. 100 watts. C. N. R. Eastern.

CNRR

Regina, Sask., Can. 312.3m-960kc. 500 watts. Canadian National Railways. Mountain.

CNRS

Saskatoon, Sask., Can. 329.5m-910kc. 500 watts. Canadian National Railways. Mountain.

CNRT

Toronto, Ont., Can. 356.9m-840kc. 500 watts. Canadian National Railways. Thurs, 7:30 to mid-night. Eastern. First broadcast May 16, 1924.

CNRV

Vancouver, Can. 291.1m-1030kc. 500 watts. Canadian National Railways. Announcer, G. A. Wright. Daily ex Sat, Sun, 10-11 am. Mon, Wed, 10-11 pm. Tues, 9-12:45 am. Thurs, 10-11 pm. Fri, 7:30-12. Sun, 9-10:30 pm. Pacific.

CNRW

Winnipeg, Man., Can. 384.4m-780kc. 5000 watts. Canadian National Railways. Announcer, R. H. Roberts. Mon, 11 pm. Tues, 9 pm. Wed, 6:30 pm. Thurs, 8 pm. Fri, 6:30 pm. Sun, 5 pm, 9 pm. Central.

Cuba**CMC**

Havana, Cuba. 357m-840kc. 500 watts. Cuban Telephone Co. International Tel. and Tele. Corp. Sun, Mon, Wed, 7-12 pm. Eastern.

2CT

Havana, Cuba. 350m-855kc. 50 watts. Casimiro Pujadas.

2FG

Hershey, Cuba. 200m-999.4kc. 20 watts. Alberto A. Ferrera.

2GF

Havana, Cuba. 192m-1540kc. 5 watts. Francisco Williams.

2HP

Havana, Cuba. 205m-1460kc. 200 watts. Cristina W. Vda. Crucet.

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. Modesto Alvarez.

2MF

Madriga, Cuba. 100m-299kc. Moises Fernandez.

2MG

Havana, Cuba. 284m-1055kc. 20 watts. Manuel y Guillermo Salas Music Store. Announcer, Roger Morales. Eastern.

2MK

Havana, Cuba. 85m-349kc. 100 watts. R. V. Waters.

2MU

Havana, Cuba. 265m-1330kc. 10 watts. Ulpiano Muniz.

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. Raoul 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. Lecuona Music Co.

2XX

Havana, Cuba. 225m-1333kc. 5 watts. Antonio A. Ginard.

5DW

Matanzas, Cuba. 270m-1110kc. 100 watts. Ramon Sarria Calderon.

5EV

Colon, Cuba. 360m-833kc. 5 watts. Leopoldo V. Figueroa. Sun, 9-11 pm. Eastern.

6BY

Cienfuegos, Cuba. 260m-1153kc. 200 watts. Jose Ganduxue.

6EV

Caibarien, Cuba. 250m-1200kc. 50 watts. Maria Josefa Alvarez.

6HS

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. Slogan, "If You Hear the Koo of the Cuckoo You Are in Tune With Tuinucu." Eastern.

6LO

Caibarien, Cuba. 325m-920kc. 250 watts. Manuel A. Alvarez.

6RG

Santa Clara, Cuba. 200m-1500kc. 20 watts. Rafael Garcia Perez.

6XJ

Tuinucu, Cuba. 278m-1080kc. 100 watts. Frank H. Jones.

6YR

Camaguey, Cuba. 200m-1500kc. 20 watts. Diege Iborra.

7AZ

Camaguey, Cuba. 225m-1333kc. 10 watts. Pedro Noguera.

Mexico**CYA**

Mexico City, Mex. 265m-1130kc. 500 watts. Partido Liberal Avanzado. Mexican.

CYB

Mexico City, Mex. 270m-1110kc. 500 watts. El Buen Tono. Mexican.

CYF

Oaxaca, Oax., Mex. 270m-1110kc. Federico Zorrilla. "The Voice From South of Mexico." Mexican.

CYG

Mexico City, Mex. 300m-1000kc. 1000 watts. Secretaria de Guerra y Marina.

CYL

Mexico City, Mex. 480m-625kc. 500 watts. La Casa del Radio. Announcer, George Marron. Slogan, "The Land of Eternal Summer." Mexican.

CYR

Mazatlan, Sin., Mex. Rosseter y Cia.

CYX

Mexico City, Mex. 333m-900kc. 500 watts. Excelsior & Revista de Revistas. Announcer, Rafael Hernandez dez Dominguez. Slogan, "Land of the Aztecs." Mexican.

CYZ

Mexico City, Mex. 400m-750kc. Liga Central Mexicana de Radio. Mexican.

CZA

Mexico City, Mex. 70-500-1070 meters. Aviation Dept., War Ministry. Announcer, Ricardo S. Bravo. Mexican.

XEH

Monterrey, Mexico. 311m-964kc. 1000 watts. Tarnava & Cia. Slogan, "The Industrial Center of the Mexican Republic." Daily, 7:55-8:15. Mon, Sat, 8-9 pm. Wed, Sun, 8:30-10 pm. Mexican.

XEN

Mexico City, Mex. 410m-730kc. 1000 watts. General Electric Co. Daily ex Sun, 8-10 pm. Mon, 9-10. Ampico Hour. Tues, "El Aguila" Cigarettes. Wed, Mexican Ipana Troubadours. Thurs, R. C. A. Hour. Fri, General Electric Hour. Sat, Eveready Hour. Central.

Official Wave Lengths

Kilo- Meters cycles	Watts	Call Signal	Location	Kilo- Meters cycles	Watts	Call Signal	Location	Kilo- Meters cycles	Watts	Call Signal	Location
199.9	1,500	100	KDB Santa Barbara, Calif.	214.2	1,400	500	WBAA Lafayette, Ind.	200	WEBR Buffalo, N. Y.		
		100	KGHI Little Rock, Ark.			500	WBBC Brooklyn, N. Y.	100	WEHS Evanston, Ill.		
		50	KGHX Richmond, Tex.			500	WCGU Coney Island, N. Y.	100	WFBG Altoona, Pa.		
		100	KGKB Brownwood, Texas			500	WCMA Culver, Ind.	100	WDFD Flint, Mich.		
		100	KPJM Prescott, Ariz.			500	WKBF Indianapolis, Ind.	50	WFKD Frankford, Pa.		
		100	KUJ Long View, Wash.			500	WLTH Brooklyn, N. Y.	15	WGAL Lancaster, Pa.		
		15	KWBS Portland, Ore.			500	WSDA Brooklyn, N. Y.	100	WGH Newport News, Va.		
		100	KWTC Santa Ana, Calif.			500	WSGH Brooklyn, N. Y.	100	WHBP Johnstown, Pa.		
		100	WAFD Detroit, Mich.					100	WHFC Chicago		
		50	WALK Willow Grove, Pa.	215.7	1,390	500	KFPY Spokane, Wash.	100	WIBU Poyntette, Wis.		
		100	WCLB Long Beach, N. Y.			500	KLRA Little Rock, Ark.	50	WJAK Kokomo, Ind.		
		100	WHBW Philadelphia, Pa.			500	KOW Denver, Colo.	100	WKAV Laconia, N. H.		
		15	WIBZ Montgomery, Ala.			1,000	KUOA Fayetteville, Ark.	100	WKBB Joliet, Ill.		
		100	WILM Wilmington, Del.			1,000	WDGY Minneapolis, Minn.	10	WKBC Birmingham, Ala.		
		100	WKBV Brookfield, Ind.			500	WHDI Minneapolis, Minn.	50	WKBI Chicago		
		50	WKBZ Ludington, Mich.			500	KWSC Pullman, Wash.	100	WKBS Galesburg, Ill.		
		100	WLBX Long Island City, N. Y.			1,000	WHK Cleveland, Ohio	50	WLBC Muncie, Ind.		
		100	WLOE Boston, Mass.	217.3	1,380	500	KQV Pittsburgh, Pa.	100	WLBO Galesburg, Ill.		
		100	WMBA Newport, R. I.			500	KSO Clarinda, Iowa	100	WMBL Lakeland, Fla.		
		100	WMBJ Wilkesburg, Pa.			500	WCSD Springfield, Ohio	100	WNAT Philadelphia, Pa.		
		100	WMBQ Brooklyn, N. Y.			1,000	WKBH LaCrosse, Wis.	100	WNBH New Bedford, Mass.		
		50	WMES Boston, Mass.					50	WNBK Knoxville, Tenn.		
		100	WMPC Lapeer, Mich.	218.8	1,370	50	KFBL Everett, Wash.	15	WOBT Union City, Tenn.		
		50	WNBF Binghamton, N. Y.			50	KFEC Portland, Ore.	100	WOL Washington, D. C.		
		15	WNBQ Rochester, N. Y.			50	KFJI Astoria, Ore.	100	WRAW Reading, Pa.		
		50	WPSW Philadelphia, Pa.			100	KFJM Grand Forks, N. D.	100	WRK Hamilton, Ohio		
		10	WRBJ Hattiesburg, Miss.			100	KFJZ Fort Worth, Texas	100	WSAJ Grove City, Pa.		
		100	WWRL Woodside, N. Y.			100	KFLX Galveston, Texas	100	WSMD Salisbury, Md.		
						50	KFUR Ogden, Utah				
201.6	1,490	5,000	WBAW Nashville, Tenn.			100	KGAR Tucson, Ariz.	230.6	1,300	100	KFH Wichita, Kan.
		5,000	WLAC Nashville, Tenn.			100	KGBC St. Joseph, Mo.			500	KFJR Portland, Ore.
		1,000	WFBL Syracuse, N. Y.			100	KGCB Enid, Okla.	1,000		500	KGEF Los Angeles, Calif.
		50,000	KPWF Westminster, Calif.			100	KGCI San Antonio, Texas	500		500	KTBI Los Angeles, Calif.
202.6	1,480	5,000	WJAZ Mt. Prospect, Ill.			15	KGDA Dell Rapids, S. D.	500		500	KTBR Portland, Ore.
		5,000	WORD Batavia, Ill.			100	KGER Long Beach, Calif.	1,000		500	WBRR Rossville, N. Y.
204	1,470	5,000	KFJF Oklahoma City, Okla.			100	KGFG Oklahoma City, Okla.	500		500	WEVD Woodhaven, N. Y.
		5,000	KGA Spokane, Wash.			50	KGFL Raton, N. M.	1,000		500	WHAP Carlstedt, N. J.
		5,000	WKBW Amherst, N. Y.			100	KGGM Albuquerque, N. M.	500		500	WHAZ Troy, N. Y.
		5,000	WRUF Gainesville, Fla.			100	KGKL San Angelo, Texas	2,500		500	WIBW Topeka, Kan. (day)
						100	KGRC San Antonio, Texas	1,000		500	WIBW Topeka, Kan. (night)
						15	KKP Seattle, Wash.				
205.4	1,460	10,000	KSTP Westcott, Minn.			100	KOH Reno, Nev.	232.4	1,290	1,000	KDYL Salt Lake City, Utah
		10,000	WJSV Mt. Vernon Hills			50	KOOS Marshfield, Ore.			500	KFUL Galveston, Texas
206.8	1,450	500	WFJC Akron, Ohio	218.8	1,370	100	KRE Berkeley, Calif.			50	KLCN Blytheville, Ark.
		1,000	KSBA Shreveport, La.			100	KVL Seattle, Wash.	1,000		1,000	KTSA San Antonio, Texas
		250	WBMS Fort Lee, N. J.			100	KWKC Kansas City, Mo.	1,000		1,000	WJAS Pittsburgh, Pa.
		250	WIBS Elizabeth, N. J.			100	KZM Hayward, Calif.	10			WNBZ Saranac Lake, N. Y.
		500	WJAY Cleveland, Ohio			100	WBBL Richmond, Va.	234.2	1,280	500	WCAM Camden, N. J.
		250	WKBO Jersey City, N. J.			100	WCBM Baltimore, Md.			500	WCAP Asbury Park, N. J.
		250	WNJ Newark, N. J.			100	WELK Philadelphia, Pa.	1,000		500	WDAY Fargo, N. D.
		250	WSAR Fall River, Mass.			100	WFBJ Collegeville, Minn.	500		500	WDOO Chattanooga, Tenn.
		500	WTFI Toccoa, Ga.			500	WGL Ft. Wayne, Ind.	1,000		500	WEBC Superior, Wis.
208.2	1,440	250	KLS Oakland, Calif.			100	WHBD Bellefontaine, Ohio	500		500	WOAX Trenton, N. J.
		250	WCBA Allentown, Pa.			100	WHBQ Memphis, Tenn.	500		500	WRR Dallas, Texas
		500	WHEC Rochester, N. Y.			1,000	WHHD Calumet, Mich.				
		1,000	WMBD Peoria Hgts., Ill. (day)			100	WIBM Jackson, Mich.	236.1	1,270	1,000	KFUM Colorado Springs, Colo.
		500	WMBD Peoria Hgts., Ill. (night)			50	WJBK Ypsilanti, Mich.			50	KGCA Decorah, Iowa
		500	WNRC Greensboro, N. C.			100	WJBO New Orleans, La.	1,000		1,000	KOL Seattle, Wash.
		500	WOKO Mt. Beacon, N. Y.			100	WMBO Auburn, N. Y.	1,000		500	KTW Seattle, Wash.
		250	WSAN Allentown, Pa.			50	WRAC Erie, Pa.	500		500	KWLC Decorah, Iowa
		500	WTAD Quincy, Ill.			50	WRBT Wilmington, N. C.	250		250	WASH Grand Rapids, Mich.
209.7	1,430	500	WABK Harrisburg, Pa.			100	WRJN Racine, Wis.	250		250	WFBR Baltimore, Md.
		500	WBRL Tilton, N. H.			50	WSVS Buffalo, N. Y.	1,000		500	WSDU New Orleans, La.
		250	WCAH Columbus, Ohio	220.4	1,360	500	KFBB Havre, Mont.	500		500	WEAI Ithaca, N. Y.
		500	WGBC Memphis, Tenn.			250	KGB San Diego, Calif.	500		500	WOOD Grand Rapids, Mich.
		500	WMBS Harrisburg, Pa.			250	KGIR Butte, Mont.				
		500	WNBR Memphis, Tenn.			500	WBET Medford, Mass.	238	1,260	1,000	KOIL Council Bluffs, Iowa
211.1	1,420	100	KFIF Portland, Ore.			500	WJES Gary, Ind.			100	KRGV Harlingen, Texas.
		100	KFIZ Fond du Lac, Wis.			500	WMAF South Dartmouth, Mass.	500		500	KWWG Brownsville, Texas
		100	KFOU Holy City, Calif.	222.1	1,350	1,000	WQBC Utica, Miss.	1,000		1,000	WJAX Jacksonville, Fla.
		100	KFOU Holy City, Calif.			250	KWK New York, N. Y.	239.9	1,250	1,000	WLBW Oil City, Pa.
		50	KFXD Jerome, Idaho			250	WBNY New York, N. Y.	1,000		1,000	KIDO Boise, Idaho
		100	KFYO Abilene, Texas			250	WCDA New York, N. Y.	1,000		1,000	KFMX Northfield, Minn.
		100	KFKY Flagstaff, Ariz.			250	WKBB New York, N. Y.	500		500	KFOX Long Beach, Calif.
		10	KGCN Concordia, Kan.			250	WMSG New York, N. Y.	1,000		1,000	KXL Portland, Ore.
		10	KGCX Vida, Mont.	223.7	1,340	50	KFPW Siloam Springs, Ark.	2,000		2,000	WAAM Newark, N. J. (night)
		100	KGFF Alva, Okla.			500	KMO Tacoma, Wash.	1,000		1,000	WAAM Newark, N. J. (day)
		100	KGFI Los Angeles, Calif.			1,000	KVI Near Des Moines, Wash.	500		500	WCAL Northfield, Minn.
		50	KGFW Ravenna, Neb.			500	WSPD Toledo, Ohio	500		500	WGCP Newark, N. J.
		50	KGHD Missoula, Mont.	225.4	1,330	1,000	KSCJ Sioux City, Iowa	500		500	WLB Minneapolis, Minn.
		100	KGIIW Trinidad, Colo.			500	WCAC Storrs, Conn.	1,000		1,000	WODA Newark, N. J.
		50	KGTT San Francisco, Calif.			1,000	WDRC New Haven, Conn.	241.8	1,240	1,000	WRHM Fridley, Minn.
		100	KICK Red Oak, Iowa			500	WTAQ Eau Claire, Wis.			750	KTAT Fort Worth, Texas
		100	KOCW Chickasha, Okla.	227.1	1,320	250	KGHB Honolulu, H. I.			1,000	WGHP Fraser, Mich.
		100	KORE Eugene, Ore.			250	KGHF Pueblo, Colo.	1,000		1,000	WIOD Miami Beach, Fla.
		100	KTAP San Antonio, Texas			250	KGIO Idaho Falls, Idaho	1,000		1,000	WJAD Waco, Texas
		5	KTUE Houston, Texas			250	KGIO Twin Falls, Idaho	243.8	1,230	100	WQAM Miami, Fla.
		75	KXRO Aberdeen, Wash.			1,000	WADC Akron, Ohio			100	KFIO Spokane, Wash.
		25	WAAD Cincinnati, Ohio			500	WSMB New Orleans, La.			100	KFQD Anchorage, Alaska.
		30	WEDH Erie, Pa.	228.9	1,310	100	KFBK Sacramento, Calif.			1,000	KYA San Francisco, Calif.
		10	WHDL Tupper Lake, N. Y.			100	KFCB Phoenix, Ariz.			500	WBIS Boston, Mass. (night)
		100	WHPP New York, N. Y.			100	KFGQ Boone, Iowa			1,000	WBIS Boston, Mass. (day)
		100	WIAS Ottumwa, Iowa			100	KFIU Juneau, Alaska			1,000	WFBM Indianapolis, Ind.
		1,000	WIL St. Louis, Mo.			100	KFJY Fort Dodge, Iowa			1,000	WNAC Boston, Mass. (day)
		50	WIBR Steubenville, Ohio			15	KFPL Dublin, Texas			500	WNAC Boston, Mass. (night)
		50	WKBP Battle Creek, Mich.			15	KFFM Greenville, Texas			500	WPSC State College, Pa.
		100	WLBF Kansas City, Kan.			100	KFUP Denver, Colo.	245.8	1,220	1,000	WSBT South Bend, Ind.
		50	WLBH Farmingdale, N. Y.			50	KFXJ Edgewater, Colo.			500	KFKU Lawrence, Kan.
		100	WLEX Lexington, Mass. (day)			100	KFXR Okla. City, Okla.			500	WCAD Canton, N. Y.
		250	WLEX Lexington, Mass. (night)			50	KGEZ Kallspell, Mont.			1,000	WCAE Pittsburgh, Pa.
		100	WMBC Detroit, Mich.			100	KGFI San Angelo, Texas			1,000	WREN Lawrence, Kan.
		100	WMBH Joplin, Mo.			15	KGGH Shreveport, La.	247.8	1,210	100	KDLR Devils Lake, N. D.
		10	WMRJ Jamaica, N. Y.			50	KGGH McGee, Ark.			100	KFOR Lincoln, Neb.
		60	WQBZ Weirton, W. Va.			50	KMED Medford, Ore.			100	KFVS Cape Girardeau, Mo.
		100	WSRO Middletown, Ohio			50	KRMD Shreveport, La.			100	KGRG Brookings, S. D.
		100	WSRH Boston, Mass.			100	KWCR Cedar Rapids, Iowa			100	KPCB Seattle, Wash.
		50	WTBO Cumberland, Md.			50	WAGM Royal Oak, Mich.			100	KPQ Seattle, Wash.
212.6	1,410	500	KFLV Rockford, Ill.			100	WBOW Terre Haute, Ind.			100	KWEA Shreveport, La.
		1,000	KGRS Amarillo, Texas			100	WBRE Wilkes-Barre, Pa.			100	WBAX Wilkes-Barre, Pa.
		1,000	WDAG Amarillo, Texas			100	WCLS Joliet, Ill.			100	WCBS Springfield, Ill.
		500	WHBL Sheboygan, Wis.			100	WDAH El Paso, Texas			100	WCOH Greenville, N. Y.
		500	WBCM Bay City, Mich.							100	WCRW Chicago, Ill.
										100	WDWF Cranston, R. I.

Kilo- Meters	Kilo- cycles	Watts	Call Signal	Location	Kilo- Meters	Kilo- cycles	Watts	Call Signal	Location	Kilo- Meters	Kilo- cycles	Watts	Call Signal	Location
			WEBE	Cambridge, Ohio	280.2	1,070	300	WAAT	Jersey City, N. J.	374.8	800	10,000	KTHS	Hot Springs, Ark.
			WEBQ	Harrisburg, Ill.			50	WCAZ	Carthage, Ill.			10,000	WBAP	Ft. Worth, Texas
			WEDC	Chicago, Ill.			100	WDZ	Tuscola, Ill.			5,000	WSAI	Mason, Ohio
			WGBB	Freeport, N. Y.			1,000	WEAR	Cleveland, Ohio	379.5	790	10,000	KGO	Oakland, Calif.
			WGCM	Gulfport, Miss.			3,500	WTAM	Cleveland, Ohio			50,000	WGY	Schenectady, N. Y.
			WHBF	Rock Island, N. Y.										
			WHBU	Anderson, Ind.	282.8	1,060	500	KWJJ	Portland, Ore.	384.4	780	500	KELW	Burbank, Calif.
			WIBA	Madison, Wis.			10,000	WBAL	Baltimore, Md.			500	KTM	Santa Monica, Calif.
			WINR	Bayshore, N. Y.			500	WJAG	Norfolk, Neb.			250	WBSO	Wellesley Hills, Mass.
			WJBL	Redbank, N. J.			50,000	WTIC	Hartford, Conn.			500	WMC	Memphis, Tenn.
			WJBU	Lewisburg, Pa.				(Temporarily assigned to 250W, 499.7m-600kc)				500	WPOR	Norfolk, Va.
			WJBY	Gadsden, Ala.								500	WTAR	Norfolk, Va.
			WLBV	Mansfield, Ohio										
			WLCT	Ithaca, N. Y.	285.5	1,050	5,000	KNX	Hollywood, Calif.	389.4	770	5,000	KFAB	Lincoln, Neb.
			WLSI	Cranston, R. I.								25,000	WBBM	Chicago, Ill.
			WMAN	Columbus, Ohio	288.3	1,040	10,000	KRLD	Dallas, Texas					
			WMBC	Richmond, Va.			500	WFAA	Dallas, Texas	384.5	760	1,000	WEW	St. Louis, Mo.
			WMBR	Tampa, Fla.			500	WKAR	East Lansing, Mich.			30,000	WJZ	New York, N. Y.
			WOCL	Jameson, N. Y.			1,000	WKEN	Buffalo, N. Y.					
			WOMT	Manitowoc, Wis.						399.8	750	5,000	WCX	Pontiac, Mich.
			WPAW	Pawtucket, R. I.	293.9	1,020	5,000	KFKX	Chicago, Ill.			5,000	WJR	Pontiac, Mich.
			WRBQ	Greenville, Miss.			2,500	KYW	Chicago, Ill. (day)					
			WRBU	Gastonia, N. C.			5,000	KYW	Chicago, Ill. (night)	405.2	740	1,000	KMMJ	Clay Center, Neb.
			WSBC	Chicago, Ill.			5,000	KYWA	Chicago			10,000	WSB	Atlanta, Ga.
			WSIX	Springfield, Tenn.			250	WRAX	Philadelphia					
			WTAX	Streator, Ill.						416.4	720	25,000	WGN	Chicago, Ill.
			WTAZ	Richmond, Va.	296.9	1,010	500	KGGF	Pickers, Okla.			25,000	WLIB	Chicago, Ill.
249.9	1,200	50	KFHA	Gunnison, Colo.			500	KQW	San Jose, Calif.	422.3	710	5,000	WOR	Newark, N. J.
		100	KFJB	Marshalltown, Iowa			250	WHN	New York, N. Y.					
		15	KFKZ	Kirkville, Mo.			250	WSIS	Sarasota, Fla.	423.3	700	250	KFVD	Culver City, Calif.
		100	KFWC	Ontario, Calif.			500	WNAD	Korman, Okla.			50,000	WLW	Mason, Ohio
		100	KFWF	St. Louis, Mo.			250	WPAP	New York, N. Y.					
		100	KGCU	Mandan, N. D.			250	WQAO	New York, N. Y.	440.9	680	5,000	KPO	San Francisco, Calif.
		50	KGDE	Fergus Falls, Minn.			250	WRNY	New York, N. Y.			1,000	WPTF	Raleigh, N. C.
		15	KGDY	Oldham, S. D.						447.5	670	5,000	WMAQ	Chicago, Ill.
		50	KGEK	Yuma, Colo.	299.8	1,000	250	KGFH	Glendale, Calif.					
		100	KGEW	Fort Morgan, Colo.			5,000	WHO	Des Moines, Iowa	454.3	660	500	WAAW	Omaha, Neb.
		50	KGFK	Hallack, Minn.			5,000	WOC	Davenport, Iowa			50,000	WEAF	Belmont, N. Y.
		10	KGY	Lacey, Wash.						461.3	650	5,000	WSM	Nashville, Tenn.
		100	KMJ	Fresno, Calif.	302.8	930	15,000	WBZ	Springfield, Mass.					
		50	KPPC	Pasadena, Calif.			500	WBZA	Boston, Mass.	468.5	640	5,000	KFI	Los Angeles, Calif.
		100	KSMR	Santa Monica, Calif.								5,000	WAIU	Columbus, Ohio
		100	KVOS	Bellingham, Wash.	305.9	980	50,000	KDKA	Pittsburgh, Pa.	475.9	630	500	KFRU	Columbus, Ohio
		100	KWG	Stockton, Calif.								500	WGBF	Evansville, Ind.
		100	KXO	El Centro, Calif.	309.1	970	5,000	KJR	Seattle, Wash.			1,000	WMAL	Washington, D. C.
		100	WABI	Bangor, Maine			1,500	WCFL	Chicago, Ill.			500	WOS	Jefferson City, Mo. (day)
		100	WABZ	New Orleans, La.								500	WOS	Jefferson City, Mo. (night)
		100	WBBW	Norfolk, Va.	315.6	950	1,000	KFWB	Los Angeles, Calif.	483.6	620	500	KFAD	Phoenix, Ariz.
		75	WBBY	Charleston, S. C.			500	KGHL	Billings, Mont.			1,000	KCW	Portland, Ore.
		100	WBBZ	Ponca City, Okla.			2,500	KMBC	Independence, Mo. (day)			1,000	WDAE	Tampa, Fla.
		100	WCAI	Rapid City, S. D.			1,000	KMBC	Independence, Mo. (night)			1,000	WDBO	Orlando, Fla.
		100	WCAX	Burlington, Vt.			1,000	KPSN	Pasadena, Calif.			500	WLBZ	Bangor, Me. (day)
		100	WCLO	Kenosha, Wis.			1,000	WHB	Kansas City, Mo. (day)			250	WLBZ	Bangor, Me. (night)
		100	WEPS	Gloucester, Mass.			500	WHB	Kansas City (night)			1,000	WTMJ	Brookfield, Wis.
		50	WFBC	Knoxville, Tenn.			500	WRC	Washington, D. C.	491.5	610	1,000	KFRC	San Francisco, Calif.
		100	WFBE	Cincinnati, Ohio								1,000	WDAF	Kansas City, Mo.
		10	WHBC	Canton, Ohio								500	WFAN	Philadelphia, Pa.
		100	WHBY	West De Pere, Wis.	319	940	250	KFEL	Denver, Colo.			500	WIP	Philadelphia, Pa.
		100	WIBX	Utica, N. Y.			250	KFKX	Denver, Colo.			1,000	WOQ	Kansas City, Mo.
		100	WJBC	LaSalle, Ill.			500	KGU	Honolulu, T. H.			500	KWYO	Laramie, Wyo.
		100	WJBL	Decatur, Ill.			1,000	KOIN	Portland, Ore.			500	KFSD	San Diego, Calif.
		30	WJBW	New Orleans, La.			500	WCSH	Portland, Me.	499.7	600	250	WCAO	Baltimore, Md.
		100	WKBE	Webster, Mass.			1,000	WFIW	Hopkinsville, Ky.			350	WEBW	Beloit, Wis.
		100	WKJC	Lancaster, Pa.								500	WOAN	Lawrenceburg, Tenn.
		30	WLAP	Okalona, Ky.	322.4	930	500	KFWI	San Francisco, Calif.			250	WREC	Whitehaven, Tenn.
		100	WLBC	Petersburg, Va.			500	KFWM	Oakland, Calif.			500	WTIC	Hartford, Conn.
		100	WMAY	St. Louis, Mo.			500	KGBZ	York, Neb.	508.2	590	1,000	KHQ	Spokane, Wash.
		250	WMT	Waterloo, Iowa			500	KMA	Shenandoah, Iowa			500	WCAJ	Lincoln, Neb.
		15	WNBO	Washington, Pa.			500	WBRC	Birmingham, Ala.			500	WEEI	Boston, Mass.
		5	WNBW	Carbondale, Pa.			500	WDBJ	Roanoke, Va.			1,000	WEMC	Berrien Springs, Mich.
		10	WNBX	Springfield, Vt.			50	WIBC	Elkins Park, Pa.			1,000	WOW	Omaha, Neb.
		100	WPRC	Harrisburg, Pa.						516.9	580	200	KGFX	Pierre, S. D.
		100	WRAF	La Porte, Ind.								500	KSAC	Manhattan, Kan.
		50	WRBL	Columbus, Ga.	325.9	920	1,000	KOMO	Seattle, Wash.			500	WKAQ	San Juan, P. R.
		100	WWAE	Hammond, Ind.			1,000	KPRC	Houston, Texas			250	WOBV	Charleston, W. Va.
							500	WAAE	Chicago, Ill.			250	WSAZ	Huntington, W. Va.
							1,000	WWJ	Detroit, Mich.			500	WSUI	Iowa City, Iowa
252	1,190	500	WICC	Easton, Conn.								250	WTAG	Worcester, Mass.
		5,000	WOIA	San Antonio, Tex.	333.1	900	500	KGBU	Ketchikan, Ala.	526	570	250	KGKO	Wichita Falls, Texas
254.1	1,180	5,000	KEX	Portland, Ore.			1,000	KHJ	Los Angeles, Calif.			500	KMTR	Hollywood, Calif.
		10,000	KOB	State College, N. M.			250	KSEI	Pocatello, Idaho			1,000	KPLA	Los Angeles, Calif.
		500	WGBS	Astoria, L. I.			750	WFBL	Syracuse, N. Y.			500	KUOM	Missoula, Mont.
256.3	1,170	500	KEJ	Beverly Hills, Calif.			2,500	WFLA	Clearwater, Fla. (day)			500	KXA	Seattle, Wash.
		5,000	KJNT	Muscatine, Iowa			1,000	WFLA	Clearwater, Fla. (night)			750	WHA	Madison, Wis.
		5,000	WCAU	Philadelphia, Pa.			1,000	WKY	Oklahoma City, Okla.			5,000	WIBO	Chicago, Ill.
259.5	1,160	10,000	WOWO	Fort Wayne, Ind.			2,000	WLBL	Stevens Point, Wis.			500	WKBN	Youngstown, Ohio
		5,000	WWVA	Wheeling, W. Va.			750	WMAK	Martinsville, N. Y.			1,000	WNAX	Yankton, S. D.
260.7	1,150	50	KGDM	Stockton, Calif.			2,500	WSUN	Clearwater, Fla. (day)			250	WMAC	Cazenovia, N. Y.
		5,000	WHAM	Rochester, N. Y.	336.9	890	500	WSUN	Clearwater, Fla. (night)			500	WMCA	New York, N. Y.
263	1,140	5,000	KVOO	Tulsa, Okla.			250	KFNE	Shenandoah, Iowa			500	WNYC	New York, N. Y.
		1,000	WAPI	Birmingham, Ala.			500	KGJF	Little Rock, Ark.			500	WPCC	Chicago, Ill.
265.3	1,130	5,000	KFKB	Milford, Kan.			500	KUSD	Vermilion, S. D.			200	WSMK	Dayton, Ohio
		5,000	KSL	Salt Lake City, Utah			250	WGST	Atlanta, Ga.			250	WSYR	Syracuse, N. Y.
		20,000	WJJD	Mooseheart, Ill.			500	WJAZ	Providence, R. I.			1,000	WWNC	Ashville, N. C.
		1,000	WOV	New York, N. Y.			500	WMAZ	Macon, Ga.	535.4	560	1,500	KFDM	Beaumont, Texas
267.7	1,120	500	KFSG	Los Angeles, Calif.			500	WMMN	Fairmont, W. Va.			2,500	KFEQ	St. Joseph, Mo.
		500	KMIC	Inglewood, Calif.	340.7	880	500	WILL	Urbana, Ill.			1,000	KLZ	Dupont, Colo.
		50	KRSC	Seattle, Wash.			500	KFKA	Greeley, Colo.			1,000	KOAC	Corvallis, Ore.
		500	KUT	Austin, Texas			500	KLX	Oakland, Calif.			500	WLP	Philadelphia, Pa.
		500	WBAK	Harrisburg, Pa.			250	KPOF	Denver, Colo.			500	WMBF	Miami Beach, Fla.
		500	WCOA	Pensacola, Fla.			250	WCOC	Columbus, Miss.			1,000	WNOX	Knoxville, Tenn.
		250	WDEL	Wilmington, Del. (night)	344.6	870	25,000	WGBI	Scranton, Pa.			3,500	WOI	Ames, Iowa
		350	WDEL	Wilmington, Del. (day)			5,000	WQAN	Scranton, Pa.					
		250	WHAD	Milwaukee, Wis.						545.1	550	500	KFDY	Brookings, S. D.
		250	WISN	Milwaukee, Wis.	348.6	860	5,000	WABC	New York, N. Y.			500	KFJM	Grand Forks, N. D.
		500	WTAW	College Station, Texas.			5,000	WBOQ	New York, N. Y.			500	KFUO	St. Louis, Mo.
270.1	1,110	1,000	KSOO	Sioux Falls, S. D.			250	KFQZ	Hollywood, Calif.			500	KFYR	Blismarck, N. D.
		5,000	WRVA	Richmond, Va.	352.7	850	500	KWKH	Shreveport, La.			500	KSD	St. Louis, Mo.
272.6	1,100	5,000	KJBS	San Francisco, Cal.			500	WWL	New Orleans, La.			500	KTAB	Oakland, Calif.
		5,000	WLWL	New York, N. Y.								250	WEAN	Providence, R. I.
		5,000	WPG	Atlantic City, N. J.	361.2	830	12,500	KOA	Denver, Colo.			750	WEAO	Columbus, Ohio
275.1	1,090	5,000	KFAQ	St. Louis, Mo.			1,000	WHDH	Glouster, Mass.			1,000	WGR	Buffalo, N. Y.
		5,000	KMOX	St. Louis, Mo.								500	WKRC	Cincinnati, Ohio
277.6	1,080	10,000	WBT	Charlotte, N. C.	365.6	820	6,500	WHAS	Louisville, Ky.					
		5,000	WCBD</											

State and City Index With New Waves

Alabama

	Call	Meters	Kc.	Watts
Birmingham	WAPI	263	1,140	500
	WBRC	322.4	930	500
	WKBC	228.9	1,310	10
Gadsden	WJBY	247.8	1,210	50
Montgomery	WIBZ	199.9	1,500	15

Arizona

Flagstaff	KFXV	211.1	1,420	100
Phoenix	KFAD	483.6	620	500
	KFCB	228.9	1,310	100
Prescott	KFJM	199.9	1,500	100
Tucson	KGAR	218.8	1,370	100

Arkansas

Blytheville	KFCN	232.4	1,290	50
Fayetteville	KUOA	215.7	1,390	1,000
Hot Springs	KTHS	374.8	800	10,000
Little Rock	KGHI	199.9	1,500	100
	KGJF	336.9	890	250
	KLRA	215.7	1,390	500
McGehee	KGHG	228.9	1,310	50
Siloam Springs	KFPW	223.7	1,340	50

California

Berkeley	KRE	218.8	1,370	100
Beverly Hills	KEJK	256.3	1,170	500
Burbank	KELW	284.4	780	500
Culver City	KFVD	428.3	700	250
El Centro	KXO	249.9	1,200	100
Fresno	KMJ	249.9	1,200	100
Holy City	KFOU	211.1	1,420	100
Glendale	KGFH	298.8	1,000	250
Long Beach	KFOX	239.9	1,250	1,000
	KGER	218.8	1,370	100
Hayward	KZM	218.8	1,370	100
Hollywood	KFQZ	352.7	850	250
	KMBB	315.6	950	1,000
	KMTR	526	500	500
	KNX	285.5	1,050	5,000
Inglewood	KMIC	267.7	1,120	500
Los Angeles	KFI	468.5	640	5,000
	KFSG	267.7	1,120	500
	KGEF	230.6	1,300	1,000
	KGFJ	211.1	1,420	100
	KHJ	333.1	900	1,000
	KPLA	526	570	1,000
Oakland	KTBI	230.6	1,300	500
	KFWM	322.4	930	500
	KGO	379.5	790	7,500
	KLS	208.2	1,440	250
	KLX	340.7	880	500
	KTAB	545.1	550	500
Ontario	KFWC	249.9	1,200	100
Pasadena	KPPC	249.9	1,200	50
	KPSK	315.6	950	1,000
Sacramento	KFSK	228.9	1,310	100
San Diego	KFSD	439.7	500	500
San Francisco	KERC	491.5	610	1,000
	KFWI	322.4	930	500
	KGB	220.4	1,360	250
	KGTT	211.1	1,420	50
	KJBS	272.6	1,100	100
	KPO	440.4	680	5,000
	KYA	243.8	1,230	1,000
San Jose	KQW	296.9	1,010	500
Santa Ana	KWTC	199.9	1,500	100
Santa Barbara	KDB	199.9	1,500	100
Santa Maria	KSMR	249.9	1,200	100
Santa Monica	KTH	384.4	780	500
Stockton	KGDM	260.7	1,150	50
	KWG	249.9	1,200	100
Westminster	KPWF	201.6	1,490	50,000

Colorado

Colorado Springs	KFUL	236.1	1,270	1,000
Denver	KFEL	219	940	250
	KFPF	228.9	1,310	100
	KFXF	319	940	250
	KLZ	535.4	600	1,000
	KOA	361.2	830	12,500
	KOW	215.7	1,390	500
	KPOF	340.7	880	500
Edgewater	KFXJ	228.9	1,310	50
Fort Morgan	KGEV	249.9	1,200	100
Greeley	KKQ	340.7	880	500
Gunnison	KFWA	249.9	1,200	50
Pueblo	KGHA	249.9	1,200	50
	KGHF	227.1	1,320	250
Trinidad	KGIW	211.1	1,420	100
Yuma	KGEK	249.9	1,200	50

Connecticut

Easton	WICC	252	1,190	500
Hartford	WTHC	499.7	600	250
Storrs	WCAC	499.7	600	250
New Haven	WDRG	225.4	1,330	500

Delaware

Wilmington	WDEL	267.7	1,120	250
	WILM	199.9	1,500	100

District of Columbia

Washington	NAA	434.5	690	1,000
	WMAL	475.9	630	250
	WRC	315.6	950	500
	WOL	228	1,310	100

Florida

Clearwater	WFLA	333.1	900	1,000
Gainesville	WRFU	204	1,470	5,000
Jacksonville	WJAX	238	1,260	1,000
Lakeland	WMBL	228.9	1,310	100
Miami	WABC	241.8	1,240	1,000
Miami Beach	WIOD	241.8	1,240	1,000
	WMBF	535.4	560	500
Orlando	WDBO	483.6	620	1,000
Pensacola	WCOA	267.7	1,120	500
Sarasota	WSIS	296.9	1,010	250
St. Petersburg	WSUN	333.1	900	1,000
Tampa	WDAB	483.6	620	1,000
	WMBR	247.8	1,210	100

Georgia

Atlanta	WGST	336.9	890	500
	WSB	405.2	740	1,000
Columbus	WRBL	249.9	1,200	50
Macon	WMAZ	336.9	890	500
Toccoa	WTFI	206.8	1,450	500

Idaho

Boise	KIDO	239.9	1,250	1,000
Jerome	KFXD	211.1	1,420	50
Idaho Falls	KGIO	227.1	1,320	250
Pocatello	KSEI	333.1	900	250
Twin Falls	KGIQ	227.1	1,320	250

Illinois

Carthage	WCAZ	280.2	1,070	50
Chicago	KFKX	293.9	1,020	5,000
	KYW	293.9	1,020	2,500
	KYWA	239.9	1,020	5,000
	WAAF	325.9	920	500
	WBBM	389.4	770	25,000
	WCFL	309.1	970	1,500
	WCRW	247.8	1,210	100
	WEDC	247.8	1,210	100
	WENR	344.6	870	25,000
	WGES	220.4	1,360	500
	WGN	416.4	720	15,000
	WHFC	228.9	1,310	100
	WIBO	526	570	5,000
	WJAZ	202.6	1,480	5,000
	WJJD	265.3	1,130	20,000
	WKBI	228.9	1,310	50
	WLBI	416.4	720	15,000
	WLS	344.6	870	5,000
	WMAQ	447.5	670	5,000
	WMBI	277.6	1,080	5,000
	WORD	202.6	1,480	5,000
	WPCC	526	570	500
	WSBC	247.8	1,210	100
Decatur	WJBL	249.9	1,200	100
Evanston	WEHS	228.9	1,310	100
Galesburg	WLB	228.9	1,310	100
	WLBO	228.9	1,310	100
Harrisburg	WEBQ	247.8	1,210	50
Joliet	WCLS	228.9	1,310	100
	WKBB	228.9	1,310	100
La Salle	WJBC	249.9	1,200	100
Peoria Heights	WMBD	208.2	1,440	500
Quincy	WTAD	208.2	1,440	500
Rockford	KFLV	212.6	1,410	500
Rock Island	WHBF	247.8	1,210	100
Springfield	WCBS	247.8	1,210	100
Streator	WTAX	247.8	1,210	50
Tuscola	WTD	280.2	1,070	100
Urbana	WILL	336.9	890	500
Zion	WBCD	277.6	1,080	5,000

Indiana

Anderson	WHBU	247.8	1,210	100
Brookville	WKBV	199.9	1,500	100
Culver	WCMA	214.2	1,400	500
Evansville	WGBF	475.9	630	500
Ft. Wayne	WGL	218.8	1,370	500
	WOWO	258.5	1,160	10,000
Gary	WJKS	220.4	1,360	500
Hammond	WWAE	249.9	1,200	100
Indianapolis	WFMB	243.8	1,230	1,000
	WKBF	214.2	1,400	500
Kokomo	WIAF	228.9	1,310	50
La Porte	WRAF	249.9	1,200	100
Muncie	WLBC	228.9	1,310	50
So. Bend	WSBT	243.8	1,230	500
Terre Haute	WBOW	228.9	1,310	100
West Lafayette	WBAA	214.2	1,400	500

Iowa

Ames	WOI	535.4	560	3,500
Boone	KFGQ	228.9	1,310	100
Cedar Rapids	KWCR	228.9	1,310	100
Clarinda	KCSO	217.3	1,380	500
Council Bluffs	KOIL	238	1,260	1,000
Davenport	WOC	299.8	1,000	5,000
Decorah	KCCA	236.1	1,270	50
	KWLC	236.1	1,270	50
Des Moines	WHO	299.8	1,000	5,000
Fort Dodge	KFIY	228.9	1,310	100
Iowa City	WSUI	516.9	580	500
Marshalltown	KFJB	249.9	1,200	100
Muscatine	KTNT	256.3	1,170	5,000
Ottumwa	WIAS	211.1	1,420	100
Red Oak	KICK	211.1	1,420	100
Shenandoah	KPNE	336.9	890	500
	KMA	336.9	890	500
Sioux City	KSCJ	225.4	1,330	1,000
Waterloo	WMT	249.9	1,200	250

Kansas

Concordia	KGCN	211.1	1,420	50
Lawrence	KFKU	245.6	1,220	1,000
	WREN	245.6	1,220	1,000
Manhattan	KSAC	516.9	580	500
Millford	KFKB	265.3	1,130	5,000
Topeka	WIBW	230.6	1,300	1,000
Wichita	KFH	230.6	1,300	500

Kentucky

Hopkinsville	WFIW	319	940	1,000
Louisville	WHAS	365.6	820	6,500
	WLAP	249.9	1,200	30

Louisiana

New Orleans	WABZ	249.9	1,200	100
	WDSU	236.1	1,270	1,000
	WJBO	218.8	1,370	100
	WJBW	249.9	1,200	30
	WSMB	227.1	1,320	500
	WWL	352.7	850	500
Shreveport	KGGH	228.9	1,310	50
	KRMD	228.9	1,310	50
	KSBA	206.8	1,450	1,000
	KWEA	247.8	1,210	100
	KWKH	352.7	850	5,000

Maine

Bangor	WABI	249.9	1,200	100
	WLBS	483.6	620	250
Portland	WCSH	319	940	500

Maryland

Baltimore	WBAL	282.8	1,060	10,000
	WCAO	499.7	600	250
	WCBM	218.8	1,370	100
	WFBF	236.2	1,270	250
Cumberland	WTBO	211.1	1,420	50
Salisbury	WSMD	228.9	1,310	100

Massachusetts

	Call	Meters	Kc.	Watts
Boston	WBIS	243.8	1,230	500n 1,000n
	WBZA	302.8	990	500
	WEII	508.2	590	500
	WLOE	199.9	1,500	100
	WMES	199.9	1,500	50
	WNAC	243.8	1,230	500n 1,000n
	WSSH	211.1	1,420	100
Fall River	WSAR	206.8	1,450	250
Gloucester	WBPS	243.8	1,230	100n
	WHDH	361.2	830	1,000
Lexington	WLEX	211.1	1,420	100n 250n
Medford	WBET	220.4	1,360	500
New Bedford	WNBH	228.9	1,310	100
South Dartmouth	WMAF	220.4	1,360	500
Springfield	WTNH	230.2	1,200	15,000n
Webster	WKBE	24.9	1,200	100
Wellesley Hills	WBOS	284.4	780	250
Worcester	WTAG	516.9	580	250

New Mexico

	Call	Meters	Kc.	Watts
Albuquerque	KGGM	218.8	1,370	100
Raton	KGFL	218.8	1,370	50
State College	KOB	254.1	1,180	10,000

New York

Auburn	WMBO	218.8	1,370	100
Bay Shore	WINR	247.8	1,210	100
Binghamton	WNBF	199.9	1,500	50
Brooklyn	WBBC	214.2	1,400	500
	WLTH	214.2	1,400	500
	WMBQ	199.9	1,500	100
	WSDA	214.2	1,400	500
	WSEB	214.2	1,400	500
Buffalo	WGBR	228.9	1,310	200
	WGR	545.1	550	750
	WKBN	204	1,470	5,000
	WKEN	288.3	1,040	1,000
	WMAK	333.1	900	750
	WSVS	218.8	1,370	50
Canton	WCAD	245.6	1,220	500
Cazenovia	WM	526	1,350	250
Coney Island	WCGU	214.2	1,400	500
Farmingdale	WLHB	211.1	1,420	30
Freeport	WGBB	247.8	1,210	100
Ithaca	WEAI	236.1	1,270	500
	WLCI	247.8	1,210	50
Jamaica	WMRJ	221.1	1,420	10
Jamestown	WOCL	247.8	1,210	25
Long Beach	WCLB	199.9	1,500	100
Long Island	WLBB	199.9	1,500	100
New York City	WABC	348.6	860	5,000
	WBNA	222.1	1,350	250
	WCDA	222.1	1,350	250
	WEAF	454.3	650	50,000
	WGBS	254.1	1,180	500
	WHAP	230.1	1,300	1,000
	WHN	296.9	1,010	250
	WHPP	211.1	1,420	10
	WJZ	394.5	760	30,000
	WKBO	222.1	1,350	250
	WLWL	272.6	1,100	5,000
	WMCA	526	570	500
	WMSG	222.1	1,350	250
	WNYC	526	570	500
	WOV	265.3	1,130	1,000
	WRNY	296.9	1,010	500
Peekskill	WOKO	208.2	1,440	500
Richmond Hill	WBQO	348.6	860	5,000
Rochester	WHAM	260.7	1,150	5,000
	WHEC	208.2	1,440	500
	WNBO	199.9	1,500	15
Rossville	WBRR	230.6	1,300	1,000
Saranac Lake	WBZ	232.4	1,290	10
Schenectady	WGY	379.5	790	50,000
So. Yonkers	WCOH	247.8	1,210	100
Syracuse	WFBL	333.1	900	750
	WSYR	526	570	250
Troy	WHAZ	230.6	1,300	500
Upper Lake	WHDL	211.1	1,420	10
Utica	WIBX	249.9	1,200	100
Woodhaven	WEVD	230.6	1,300	500
Woodside	WWRL	199.9	1,500	100

North Carolina

Asheville	WWNC	526	570	1,000
Charlotte	WBT	277.6	1,080	10,000
Gastonia	WRBQ	247.8	1,210	100
Greensboro	WNRC	208.2	1,440	500
Raleigh	WPTF	440.9	680	1,000
Wilmington	WRBT	218.8	1,370	50

North Dakota

Bismarck	KFYR	545.1	550	500
Devils Lake	KDLR	247.8	1,210	100
Fargo	WDAY	234.2	1,280	1,000
Grand Forks	KFCJ	218.8	1,370	100
Mandan	KGFM	249.9	1,200	100

Ohio

Akron	WADC	227.1	1,320	1,000
	WFJC	206.8	1,450	500
Bellefontaine	WHBD	218.8	1,370	100
Cambridge	WEBE	247.8	1,210	100
Canton	WHBC	249.9	1,200	10
Cincinnati	WAAD	211.1	1,420	25
	WFBE	249.9	1,200	100
	WKRC	545.1	550	500
	WLW	428.3	700	50,000
	WSA1	374.8	800	5,000
Cleveland	WEAR	280.2	1,070	1,000
	WHK	215.7	1,390	1,000
	WJAY	206.8	1,450	500
	WTAM	280.2	1,070	3,500
Columbus	WAIU	468.5	640	5,000
	WCAH	209.7	1,430	250
	WEAO	545.1	550	750
	WMAN	247.8	1,210	50
Dayton	WSMK	526	570	200
Hamilton	WRK	228.9	1,310	100
Mansfield	WLWB	247.8	1,210	100
Middletown	WSRO	211.1	1,420	100
Springfield	WCSD	217.3	1,380	500
Steubenville	WIBR	211.1	1,420	50
Toledo	WSPD	223.7	1,340	500
Youngstown	WKBN	526	570	500

Oklahoma

Alva	KGFF	211.1	1,420	100
Chickasha	KOCV	211.1	1,420	100
Enid	KGCB	218.8	1,370	100
Norman	WNAD	296.9	1,010	500
Oklahoma City	KFJF	204	1,470	5,000
	KFXR	228.9	1,310	100
	KGFG	218.8	1,370	100
	WKY	333.1	900	1,000
Picher	KGGF	296.9	1,010	500
Ponca City	WBBZ	249.9	1,200	100
Tulsa	KVOO	263	1,140	5,000

Oregon

Astoria	KFJI	218.8	1,370	50
Corvallis	KOAC	535.4	560	1,000
Eugene	KORE	211.1	1,420	100
Marshfield	KOOS	218.8	1,370	50
Medford	KMED	228.9	1,310	50
Portland	KEX	254.1	1,180	5,000
	KFEF	218.8	1,370	50
	KFIF	211.1	1,420	100
	KFJR	230.6	1,300	500
	KGW	483.6	620	1,000
	KOIN	319	940	1,000
	KTBR	230.6	1,300	500
	KWBS	199.9	1,500	15
	KWJJ	282.8	1,060	500
	KXL	239.9	1,250	500

Pennsylvania

	Call	Meters	Kc.	Watts
Allentown	WCBA	208.2	1,440	250
	WSAN	208.2	1,440	250
Altoona	WFBG	228.9	1,310	100
Carbondale	WNBW	249.9	1,200	5
Elkin's Park	WIEG	322.4	930	50
Erie	WEDH	211.1	1,420	30
	WRAK	218.8	1,370	50
Frankford	WFKD	228.9	1,310	50
Grove City	WSAJ	228.9	1,310	100
Harrisburg	WBAK	209.7	1,430	500
	WRS	209.7	1,430	500
	WPRC	249.9	1,200	100
Johnstown	WHBP	228.9	1,310	100
Lancaster	WGBL	228.9	1,310	15
	WKJC	249.9	1,200	100
Lewisburg	WJBU	247.8	1,210	100
Oil City	WLBW	233.4	1,260	500
Philadelphia	KFUL	256.3	1,170	5,000
	WCAU	218.9	1,370	100
	WFAN	491.5	610	500
	WFI	535.4	560	500
	WHBW	199.9	1,500	100
	WIP	570	610	500
	WLIT	535.4	560	500
	WNAT	228.9	1,310	100
	WPSW	199.9	1,500	50
	WRAX	239.9	1,020	250
Pittsburgh	KDKA	305.9	980	50,000
	KQV	217.3	1,380	500
	WCAE	245.8	1,220	500
	WJAS	232.4	1,290	1,000
Reading	WRAP	228.9	1,310	100
Scranton	WGBI	340.7	880	250
	WQAN	340.7	880	250
State College	WPSG	243.8	1,230	500
Washington	WNBQ	249.9	1,200	15
Wilkes-Barre	WBAK	249.9	1,200	100
	WBRE	228.9	1,310	100
Willow Grove	WALK	199.9	1,500	50

Texas

	Call	Meters	Kc.	Watts
Abilene	KFYD	211.1	1,420	100
Amarillo	KGRS	212.6	1,410	1,000
	WDAG	212.6	1,410	1,000
Austin	KUT	267.7	1,120	500
Beaumont	KFDM	535.4	560	500
Brownsville	KWVG	238	1,260	500
Brownwood	KGKB	199.9	1,500	100
College Station	WTAW	267.7	1,120	500
Dallas	KRLD	288.3	1,040	10,000
	WFAA	288.3	1,040	500
	WRS	234.2	1,280	500
Dublin	KFPL	228.9	1,310	15
El Paso	WDAH	228.9	1,310	100
Fort Worth	KFJZ	218.8	1,370	100
	KTAT	241.8	1,240	1,000
	WBAP	374.8	800	10,000
Galveston	WFLX	247.8	1,210	100
	KFUL	232.4	1,290	500
Greenville	KFFM	228.9	1,310	15
Harlingen	KRGV	238	1,260	100
Houston	KPRC	325.9	920	1,000
	KTUE	211.1	1,420	5
Richmond	KGHX	199.9	1,500	50
San Angelo	KGFI	228.9	1,310	15
	KGKL	218.8	1,370	100
San Antonio	KGCI	218.8	1,370	100
	KGCR	218.8	1,370	100
	KTAP	211.1	1,420	100
	KTSA	232.4	1,290	1,000
	WOAI	252	1,190	5,000
Waco	WJAD	241.8	1,240	1,000
Wichita Falls	KGKO	526	570	250

Utah

Ogden	KFUR	218.8	1,370	50
Salt Lake City	KDYL	232.4	1,290	1,000
	KSL	265.3	1,130	5,000

Vermont

Burlington	WCAX	249.9	1,200	100
Springfield	WNBX	249.9	1,200	10

Virginia

Mount Vernon Hills	WJSV	205.4	1,460	10,000
Newport News	WGH	228.9	1,310	100
Norfolk	WBBW	249.9	1,220	100
	WPOR	384.4	780	500
	WTAR	384.4	780	500
	WLBG	249.9	1,200	100
Richmond	WBBL	218.8	1,370	100
	WMBG	247.8	1,210	100
	WRVA	270.1	1,110	5,000
	WTAP	247.8	1,210	150
Roanoke	WDBJ	322.4	930	500
	WRBZ	322.4	930	250

Washington

Aberdeen	KXRO	211.1	1,420	75
Bellingham	KVOS	249.9	1,200	100
Everett	KFBC	218.8	1,370	50
Lacey	KGY	249.9	1,200	100
Longview	KUJ	199.9	1,500	10
Pullman	KWSC	215.7	1,390	500
Seattle	KFWO	211.1	1,420	100
	KJR	309.1	970	5,000
	KKP	211.1	1,420	15
	KOL	236.1	1,270	1,000
	KOMO	325.9	920	1,000
	KPCB	247.8	1,210	100
	KPO	247.8	1,210	100
	KRSC	267.7	1,120	50
	KTW	236.1	1,260	1,000
	KVL	218.8	1,370	100
	KXA	526	570	500
Spokane	KFIO	243.8	1,230	100
	KEPY	215.7	1,390	500
	KGA	204	1,470	5,000
	KHQ	508.2	590	1,000
Tacoma	KMO	223.7	1,340	500
	KV1	223.7	1,340	1,000

West Virginia

Charleston	WOBV	516.9	580	250
Fairmont	WMNN	336.9	890	500
Huntington	WSAZ	516.9	580	250
Weirton	WQBZ	211.1	1,420	60
Wheeling	WWVA	258.5	1,160	5,000

Wisconsin

Beloit	WEBW	499.7	600	350
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Foreign Wave Lengths Table

Europe					South Africa				
Wave	Frequency, Kilo-cycles	Power, Watts	Location	Call Signals	Wave	Frequency, Kilo-cycles	Power, Watts	Location	Call Signals
158	1,899	600	Beziars, France		368	815	1,500	Cape Town	
187.5	1,600	250	Sundsvall, Sweden		406.5	738	1,500	Durban	
196	1,530	250	Karlskrona, Sweden		443.5	676	500	Johannesburg	JB
198	1,515	1,500	Blarritz, France		Australia-Tasmania				
200	1,500		Fecamp, France		249.9	1,200	1,000	Prospect, S. Australia	5KA
201.3	1,490	250	Jönköping, Sweden		255	1,176	500	Melbourne, Victoria	3DB
202.7	1,480	250	Kristinehamn, Sweden		267.7	1,120	500	Sydney, N. S. Wales	2UW
204.1	1,470	250	Gavle, Sweden		275.1	1,090	250	Bathurst, N. S. Wales	2MK
216.3	1,387	250	Halmstad, Sweden		280.2	1,070	1,500	Sydney, N. S. Wales	2KY
217.4	1,380	250	Luxembourg		283.3	1,040	100	Newcastle, N. S. Wales	2HD
220.4	1,361	250	Karlstad, Sweden		293.9	1,020	250	Sydney, N. S. Wales	2UE
222.2	1,350	300	Strasbourg, France		293.9	1,020	100	Toowoomba, Queensland	4GR
229.1	1,309	250	Umea, Sweden		313	958	500	Parkside, S. Australia	5DN
229.4	1,308	150	Halsingborg, Sweden		315.6	950	100	Sydney, N. S. Wales	2BE
230.5	1,301	250	Boras, Sweden		319	940	3,000	Sydney, N. S. Wales	2GB
236.2	1,270	500	Stetin, Germany		358	850	5,000	Melbourne, Victoria	3UZ
238	1,260	1,500	Bordeaux, France	PTT	370.2	810	5,000	Melbourne, Victoria	3LO
238.1	1,260	250	Kiruna, Sweden		384.4	770	5,000	Brisbane, Queensland	4QG
239.5	1,253	1,000	Nimes, France		394.5	760	5,000	Adelaide, S. Australia	5CL
240	1,250	400	Viborg, Finland		442	678	5,000	Sydney, N. S. Wales	2FC
241.9	1,240	4,000	Murnberg, Germany		481	620	3,000	Melbourne, Victoria	3AR
243.7	1,231	500	Trondhjem, Norway		516.9	580	3,000	Hobart, Tasmania	7ZL
246	1,219	500	Nice-Juan les Pins, France		1,250	239	5,000	Perth, Western Australia	6WF
249.7	1,201	1,500	Toulouse, France		Argentina				
250	1,200	250	Munster, Germany		252	1,190	1,000	Buenos Aires	LOO
252.1	1,190	250	Eskilstuna, Sweden		260.7	1,150	500	Buenos Aires	LOQ
252.3	1,189	700	Uleaborg, Finland		285.7	1,050	5,000	Buenos Aires	LOS
253	1,185	125	Säffle, Sweden		302.8	990	1,000	Buenos Aires	LOW
253.8	1,182	500	Bradford, Great Britain	2LS	315.8	949	1,000	Buenos Aires	LOY
254.2	1,180	250	Cassel, Germany		329.5	910	1,000	Buenos Aires	LOZ
260.9	1,150	800	Montpellier, France		344.8	870	1,000	Buenos Aires	LOV
262.2	1,140	2,000	Linz, Austria	PTT	365.5	820	1,000	Buenos Aires	LOX
266.9	1,124	500	Kalmar, Sweden		375.5	790	1,000	Buenos Aires	LOT
272.7	1,100	250	Rennes, France		399.8	750	1,000	Buenos Aires	LOP
273	1,098	1,000	Kiel, Germany		425	705	1,000	Buenos Aires	
275.2	1,090	1,000	Malmö, Sweden		Brazil				
277	1,083	1,000	Kosice, Czechoslovakia		399.8	750	1,000	Rio de Janeiro	SOIA
277.8	1,080	1,500	Lille, France		437	500		Rio de Janeiro	SOB
279	1,075	400	Klagenfurt, Austria		450	500		Sao Paulo	SOQ
283	1,060	4,000	Hudiksvall, Sweden		Ceylon				
287	1,040	350	Danzig	6FL	800	375	1,750	Colombo	
289.8	1,035	2,000	Bremen, Germany		Chile				
291.3	1,030	1,500	Sheffield, Great Britain	5NG	239.9	1,250	100	Temuco	CMAC
293.8	1,021	500	Oslo, Norway		285.5	1,050	100	Santiago	CMAC
294.1	1,020	250	Lyons, France		308	973	100	Santiago	CMAD
297	1,010	100	Innsbruck, Austria		340	881	100	Santiago	CMAC
297	1,010	250	Uddevalla, Sweden		360	832	1,000	Santiago	CMAC
297	1,010	100	Liege, Belgium		480	624	1,000	Santiago	CMAB
297	1,010	100	Limoges, France	5SX	China				
297.3	1,009	700	Stoke, Great Britain	6ST	338	885	500	Shanghai	KRC
297.4	1,002	2,000	Dundee, Great Britain	2DE	Chosen				
297.7	1,001	450	Hull, Great Britain	6KH	344.6	870	1,000	Keipo	JODK
300	1,000	500	Jyväskylä, Finland		Haiti				
304.2	988	400	Varberg, Sweden	6LV	361.2	830	1,000	Port au Prince	HHK
304.6	988	1,000	Liverpool, Great Britain	EAJ8	India				
306.1	980	1,000	San Sebastian, Spain	Vitus	350	857	350	Rangoon, Burma	2HZ
309.3	970	125	Hanover, Germany		357.1	840	3,000	Bombay	7BY
312.5	960	1,000	Paris, France		370.4	810	3,000	Calcutta	7CA
316.7	947	2,000	Bratislava, Czechoslovakia		Japan				
317.4	945	1,500	Konigsberg, Germany	2BE	345	867	10,000	Tokyo	JOAK
319.1	940	1,000	Björneborg, Finland		353	849	10,000	Hiroshima	JOFF
323.2	928	4,000	Belfast, Great Britain	5NO	380	789	10,000	Kumamoto	JOBK
324.3	925	1,000	Zagreb, Yugoslavia	PTT	400	750	10,000	Osaka	JOBK
326.1	920	1,000	Newcastle, Great Britain	2RN	New Zealand				
330.4	906	4,000	Edinburgh, Great Britain	6BM	306	960	500	Christchurch	3YA
333.3	900	500	Reykjavik, Iceland		333	901	500	Auckland	1YA
334.4	897	1,500	Naples, Rome	1NA	420	714	5,000	Wellington	2YA
337.4	889	750	Copenhagen, Denmark		463	647	250	Dunedin	4YA
340.1	882	500	Paris, France		Peru				
343.2	874	1,500	Huizen, Holland	EAJ1	360	831	1,500	Lima	OAX
344.8	870	1,500	Posen, Poland		Venezuela				
348.9	860	500	Barcelona, Spain		375	800	1,000	Caracas	AYRE
353	850	1,000	Prague, Czechoslovakia	5WA	North Africa				
355.8	843	500	Cardiff, Great Britain	2LO	305	984	2,500	Radio Casa-Blanca, Morocco	
361.4	830	2,000	Graz, Austria		353	850	2,000	Algiers	PTT
366.8	818	4,000	London, England		416	721	10,000	Rabat, Morocco	TNV
370.4	810	500	Leipzig, Germany		1,850	162	2,000	Tunis	
			Bergen, Norway						

Stations on Cleared Waves

Call Letters	Location	Wave Length	Freq. in Kiloc.	Call Letters	Location	Wave Length	Freq. in Kiloc.	Call Letters	Location	Wave Length	Freq. in Kiloc.
WAU—Columbus, Ohio		468.5	640	KTHS—Hot Springs, Ark.		374.8	800	WMBI—Chicago, Ill.		277.6	1,080
KFI—Los Angeles, Calif.		468.5	640	WPCH—New York, N. Y.		370.2	810	KMOX—KFQA—St. Louis, Mo.		275.1	1,090
WSM—Nashville, Tenn.		461.3	650	WCCO—Minneapolis, Minn.		370.2	810	WPG—Atlantic City, N. J.		272.6	1,100
WEAF—New York, N. Y.		454.3	660	WHAS—Louisville, Ky.		365.6	820	WLWL—New York, N. Y.		272.6	1,100
WAAW—Omaha, Nebr.		454.3	660	KOA—Denver, Colo.		361.2	830	KJBS—San Francisco, Calif.		272.6	1,100
WMAQ—Chicago, Ill.		447.5	670	KWKH—Shreveport, La.		352.7	850	WRVA—Richmond, Va.		270.1	1,110
WPTF—Raleigh, N. C.		440.9	680	WWLH—New Orleans, La.		352.7	850	KSOO—Sioux Falls, S. Dak.		270.1	1,110
KPO—San Francisco, Calif.		440.9	680	KFOZ—Hollywood, Calif.		352.7	850	WOV—New York, N. Y.		265.3	1,130
WLW—Cincinnati, Ohio		428.3	700	WABC—WBOQ—New York, N. Y.		348.6	860	KFKB—Milford, Kans.		265.3	1,130
KEVD—Culver City, Calif.		428.3	700	WLS—Chicago, Ill.		344.6	870	KSL—Salt Lake City, Utah.		275.3	1,130
WOR—Newark, N. J.		422.3	710	WENR—WBCN—Chicago, Ill.		344.6	870	WAPI—Birmingham, Ala.		263	1,140
WGN—WLIB—Chicago, Ill.		416.4	720	WCFL—Chicago, Ill.		309.1	970	KVOO—Tulsa, Okla.		263	1,140
WSB—Atlanta, Ga.		405.2	740	KJRH—Seattle, Wash.		309.1	970	WHAM—Rochester, N. Y.		260.7	1,150
KMMJ—Clay Center, Nebr.		405.2	740	KDKA—Pittsburgh, Pa.		305.9	980	KGDM—Stockton, Calif.		260.7	1,150
WJR—WCX—Detroit, Mich.		399.8	750	WBZ—WBZA—Boston, Mass.		302.8	990	WWVA—Wheeling, W. Va.		258.5	1,160
WJZ—New York, N. Y.		394.5	760	WHG—Des Moines, Iowa.		298.8	1,000	WOWO—Ft. Wayne, Ind.		258.5	1,160
WEW—St. Louis, Mo.		394.5	760	WOC—Des Moines, Iowa.		298.8	1,000	WCAU—Philadelphia, Pa.		256.3	1,170
KFAB—Lincoln, Nebr.		389.4	770	KGFH—Glendale, Calif.		299.8	1,000	KNTN—Muscatine, Iowa		253.3	1,170
WBWM—WJBT—Chicago, Ill.		389.4	770	KYVW—KFKX—Chicago, Ill.		293.9	1,020	WICE—Easton, Conn.		252	1,190
WGO—Schenectady, N. Y.		379.5	790	WFBM—Indianapolis, Ind.		285.5	1,050	WOAI—San Antonio, Texas.		252	1,190
KGY—Oakland, Calif.		379.5	790	KNX—Hollywood, Calif.		285.5	1,050	WJSV—Mt. Vernon Hills, Va.		20.4	1,460
WSAI—Cincinnati, Ohio		374.8	800	WBT—Charlotte, N. C.		277.6	1,080	KSTP—St. Paul, Minn.		205.4	1,460
WBAP—Ft. Worth, Texas.		374.8	800	WCBD—Zion, Ill.		277.6	1,080				



William S. Hedges is one of the oldest Radio editors in the United States and is head of the NAB.

WILLIAM S. HEDGES, Radio editor of the Chicago Daily News, was elected president of the National Association of Broadcasters recently. The annual meeting of the association was held in Washington, the work of the last year being reviewed and plans for the future were formulated.

Hedges has been active in Radio circles and is the author of the industry plan for compliance with the provisions of the amended Radio law. At one time he was chairman of the joint committee representing the NAB, the Radio Manufacturers Association and the Federated Radio Trades Association, which was responsible for the presentation of the industry plan before the Federal Radio Commission last spring.

He has represented WMAQ, the Chicago Daily News station, in the broadcasters' association ever since the formation of that organization six years ago.

Mike Aids Jolson

(Continued from page 78)

discovery that after a perfect wax had been cut to find a microphone, too long exposed to the damp night air, had sputtered and the whole thing had to be done over again.

Not only that, but the friends and acquaintances who tried to persuade Jolson not to go on with the story; that vitaphone was still unproven and that his appearance in an early picture might ruin his popularity on the stage where his fame and success had been built up.

IT was a nervous time around the studio. Once a scene was being recorded (perhaps you remember it in the picture) where Jolson comes to the tabernacle to sing "Kol Nidre" in place of his father, who lay ill at home. For atmosphere in this scene the greatest care was taken to see that every detail was correct. The extras in the synagogue scene were all orthodox Jews, many with traditional beards and carrying their own prayer shawls, not deigning to use those from the property room.

Jolson sang "Kol Nidre" again and again. Finally a wax was cut that was satisfactory and the scene struck. As

the extras were leaving many were seen to wipe away tears that had been brought to their eyes by the mammy singer's interpretation of this song of their race. From a dark corner where he had been watching the action, Jack Warner stepped into the light and shook Jolson's hand.

"I think it's going to be a good picture, Al," he said.

It was more than a good picture. When first shown in New York the "Jazz Singer" definitely sounded the knell of the old-time silent picture. It enthralled its hearers. Here was a new Jolson, an actor, as well as a singer.

Exhibitors who had scoffed at the thought of pictures that talked began a mad scramble to get the necessary equipment to show "The Jazz Singer" and other pictures of Jolson that Warner Bros. promised to deliver. It broke records everywhere, a sensation where shown whether in the talking or silent version. Jolson, instead of being at the height of his popularity, was just being discovered. The picture went to London, where crowds of unheard of size attended the showings. The amount of money the picture has grossed will not be known until it is finally put on the shelf, still far in the future. However, it can be said without contradiction that few, if any, pictures ever produced have exceeded its record so far.

RADIO and the talking picture were developed. The National Broadcasting Company wanted to show the people of the United States the possibilities of this medium of entertainment. The extension of their networks to the far West was planned, as well as to the South, but telephone facilities were not sufficient to take care of the more exacting demands of broadcasting. The Bell Telephone Company set to work to build lines where needed so that a test at least could be made to determine the feasibility of the project. The cost of such a test was tremendous. In addition, the NBC wanted the attention of every person within range of a Radio receiver so that the possibilities of this system of program extension could be brought home sharply.

Do you remember the Dodge Brothers Hour? Twenty minutes in New York with Paul Whiteman, Will Rogers from Hollywood, Al and Dorothy Stone in Chicago and Al Jolson in New Orleans, with just two minutes of the time in Detroit. A long time ago, you say. Just a little over one year. Today, nearly thirty programs transverse the continent weekly and the total is due to go up.

"Radio taught me one thing," said Al Jolson after the Dodge Brothers' program in which he admittedly made a mistake in one of his gags. "That is, the public as a whole wants clean entertainment and a joke that is a riot in New York may be just the opposite for millions of others. I've been sending that girl flowers ever since trying to make up for it."

In April, 1927, Jolson returned from Europe to act as master of ceremonies for the opening of Warner Bros. theater in Hollywood, where Warner's Radio station KFWB is now located, fulfilling a promise he had made to Sam Warner that he would be present for the opening. It was the first test also of KFWB's equipment for broadcasting from a stage, now admittedly the best that has been developed for such broadcasts. Not only did Jolson broadcast that night but has done so regularly since, his only appearance in the East, however, being on the initial program for Vitaphone on the Columbia Broad-

casting System. He probably will appear again on this program sometime in March, presumably from the West Coast this time.

UPON his return for the theater opening Warner Bros. presented their star with a sleek, black Rolls-Royce limousine to express their feeling for the part he had played in making Vitaphone known, and at the same time Jolson prepared for the second talking picture he was to make.

"The Jazz Singer" upset the picture industry. Its success started the talkies on their way and Hollywood was talkie mad when Jolson started on the production of "The Singing Fool," the title selected for his second picture. This was to be directed by Lloyd Bacon, son of the great stage actor, Frank Bacon, star of "Lightnin'."

Again Jolson was faced with a crisis. His critics, such as they were, intimated that "The Jazz Singer" and Jolson as a screen actor might prove to be a one-time shot, and that perhaps he had better return to the stage where his success was certain. Jolson and Bacon determined to top "The Jazz Singer" with "The Singing Fool."

Although Hollywood is over-run with child actors, who together with fond mamas and papas storm the casting offices daily, but few finds among children for screen work are ever found. One such was Frankie Lee, the little crippled boy in "The Miracle Man" of ten years ago and, of course, Jackie Coogan. The story of "The Singing Fool" required the services of a child about three years of age with a wistful, pathetic expression that could be used to advantage in several scenes with Jolson.

Following the customary procedure the director requisitioned the casting office for the boy and that office, in turn, working through the great Hollywood clearing house for extras, the Central Casting Bureau, put out a call for child actors.

As was expected, the office was swamped with applicants, each anxious to place his or her child in Jolson's new picture. To Joe Marks, casting director at Warner Bros., fell the task of sifting out of the hundreds of children a few to show to Director Bacon and Al Jolson so that they might decide who would fit the part best.

The selection took days, but no child appeared who seemed to fit into the part. One morning, however, as a new batch of applicants were milling around the casting office waiting for it to open, Marks happened to glance out of the window. On the outskirts of the crowd he saw a woman holding a child in her arms, a pale-looking little fellow with bobbed hair and dressed in a sailor suit.

"What made you dash out into that crowd and pick on that particular youngster?" someone later asked him after Davey Lee's part in the picture was assured. "Well, I don't know," Marks replied. "It just seemed to me that was the kid that Jolson would like to have."

Casting director Marks, with the mother trailing behind, walked over to the set where Jolson was making up for the day's work.

"Al," Marks called to him. "I think I've got the boy for you." And he set Davey on the stage floor. Jolson picked him up and sat him on his knee.

"What is your name?" he asked the child.

"My muvver calls me Sonny Boy," Davey replied. "What is yours?"

"Sonny Boy!" "Why—er—my name is Uncle Al."

"I like you, Uncle Al," and Jolson nodded to the casting director.

After the day's shooting was over Jolson had a long talk over long distance phone with New York, and in the days that followed many more long conversations followed. During that month Jolson's telephone bill at the studio was more than a thousand dollars, practically all of which was for calls to New York, where Bud De Sylva, Jolson's friend and famous song writer, listened as Jolson hummed snatches of a tune over the wire and told him of "Sonny Boy" David Lee. The result was the song "Sonny Boy," one of the biggest hits of the year.

"The Singing Fool" more than justified the efforts that Bacon and Jolson put into it. It opened at the Winter Garden in New York, the same showhouse where Jolson made his name as the world's greatest entertainer, which had been leased by Warner Bros. to present their Vitaphone talking pictures. No theatrical attraction in history ever opened to a more distinguished first night audience and none has ever had the advance sale that "The Singing Fool" had during the first two months of its run at the historic showhouse of the Schubert productions.

Again figures are not available on what "The Singing Fool" will make as a box office attraction. Due to the greater number of houses wired for talking pictures, it undoubtedly will gross more than "The Jazz Singer," and there is every indication that it may make an all-time record for a picture, eclipsing the records set by the great spectacle films.

By the time this appears in print Jolson will be working on his third Vitaphone picture. Like the two predecessors it has a marvelous box office title, "Mammy." No one knows what the story is, but your guess is as good as the next fellow's, and by mid-summer you will be able to go to your favorite theater and see and hear the master of mammy singers in "Mammy." It ought to be another hit.

It is not correct to say that Jolson put the talking picture over. Undoubtedly it would have gone over with or without him. It is probably true, however, that Jolson and "The Jazz Singer" put the talking picture in its present fine position a great deal sooner than would have been possible without him.

In his next picture, instead of working on two small soundproof stages, Jolson has at his disposal, if necessary, the most modern plant in the history of motion pictures, a plant that has been rebuilt almost entirely in the past year. It includes seven great sound stages, centralized recording equipment of the latest type, a staff of the best musicians in the country and so on down the line to a pressing plant where the discs themselves that give forth Jolson's voice are made. Should that not be sufficient, Jolson and his company could drive out a mile or so over Cahuenga Pass and into the San Fernando Valley where an equivalent equipment on First National Pictures lot is available.

Those two plants represent not only an investment of many millions of dollars in equipment for the making of singing-talking films but the best brains of the world in their respective lines.

It is an assured fact that "Mammy" will be a better picture technically than any of its forerunners.

Those of you who sit up late at night to get distant stations may occasionally tune in on Warner Bros. station KFWB, the Radio station of the motion picture industry, Hollywood, Calif. Occasionally on its 950-kilocycle wave

you may hear the voice of Al Jolson, singing from the stage of the theater in whose building KFWB is located, or from KFWB's studios.

In addition, plans are under way to send some transcontinental broadcasts from Hollywood to the East, one or more of which will feature Jolson with his songs and that unforgettable personality that registers whether it be from the stage, on the discs or over the air. Perhaps we may induce him to introduce his wife, the former Ruby Keeler, over the air and hear the clever taps of her shoes as she goes through a routine for listeners scattered the length and breadth of the continent.

And that finishes the story of Al Jolson, leaving the writer free for a moment to look up the length of rain-spanked Hollywood Boulevard before returning to the more prosaic work of checking up on the thousand details for tomorrow's broadcast, to assure listeners of nothing less than a smoothly run program. Oh, yes. One little item for the technical minded reader. The sound films you see and hear are made with exactly the same kind of microphones and amplifiers used by the better broadcasting station. Signing off until next issue.

Paris-American Radio

(Continued from page 28)

that of the Parisian newspaper, Le Petit Parisien, situated in the heart of the business district of the French capital. An interesting note is that the manager of the paper is Madame Paul Dupuy, widow of the late senator, and an American by birth.

THE studio of Le Petit Parisien, one of the best equipped in France, is situated on the roof. It consists of one large room, divided by heavy draperies, with a broad outside terrace giving a view of the city. French studios are usually cold affairs, lacking the hospitable social atmosphere of an American station, but on election night Le Petit Parisien resembled a brilliant social gathering, in which the artists, all in evening dress, and many of them direct from performances in other centers, sat about and applauded each other after the "mike" had been turned off.

Broadcasting from the Petit Parisien was further made simple by the fact that the program manager and announcer, M. John Douglas Pollack, is a Frenchman who boasts Scotch blood well back in his veins, and who speaks both languages as a native. He has, furthermore, studied at McGill University in Canada, and has toured the United States from coast to coast. For some time he was at the General Electric works in Schenectady, as well as with the Westinghouse, and for all these reasons, many people think him an American. Mr. Pollack recently represented the French stations at the International Radio Union in Geneva. He regularly announces musical numbers from the Petit Parisien station in both French and English.

Mr. Pollack was at the microphone as usual on the occasion of the election night broadcasting, and with him was the fourteen-piece studio orchestra, under the direction of M. Francis Casadesus. This orchestra has won a reputation for its accompaniment of opera and opera-comique stars who sing on the Petit Parisien programs, as well as for its instrumental numbers, and so could not have been better chosen for this particular night.



John T. Schilling is the smiling, congenial announcer and director of WHB, well known Kansas City station. John T. broadcasts an infectious smile, and possesses the happy and carefree personality that persuades the listener to turn an attentive dial.

ANOTHER very important French co-operation made this American broadcast a success. The Compagnie Radio L. L., which manufactures very fine superheterodynes, installed fifty of these sets in various hotels, restaurants, clubs, etc., about Paris, sending an operator with each to insure perfect functioning, and about each set clustered a group of exiles who felt less bitterly than they had expected their distance from home.

The largest of the groups was to be found in the Hotel Bohy, in the very shadow of the offices of the Chicago Tribune. Here three sets had been installed in order to take care of the members of the American Club of Paris, and of members of the American Legion Paris Post. This was the first occasion on which these two large men's bodies had met in such a fashion, and among them on election night might be counted Norman Armour, counsellor of the American Embassy; Brigadier General Harts, military attaché at the Embassy; Percy Peixotto, president of the American Club; Captain Lhopital, aide-de-camp of Marshal Foch; Major General William Johnson; Judge Ira Wadhams; Jo Davidson, the sculptor, and a host of other well-known personalities in the American Colony of Paris.

At the same time, in addition to these stag parties at the Hotel Bohy, mixed groups were meeting elsewhere about town. In the beautiful lounge of the Claridge Hotel on the Avenue des Champs-Elysees was installed a receiving set; also at the Grand Hotel, the Lutetia, the Commodore, the Royal Haussmann, and several others. Night clubs and bars, such as Johnny's Bar, College Inn, the Perroquet, Luigi's, Zelleys, Butler's Pantry, and a dozen other places popular all year around with citizens from the United States, served special American dinners while the guests awaited the commencement of the broadcasting.

And all over the continent, mind you, wherever a handful of Americans might be found together, eager ears strained

(Continued on page 108)

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Paris-American Radio

(Continued from page 106)

toward the loud speakers, as the American newspaper began its unique broadcasting event.

THE lot of reading the returns fell to J. Douglas Cook, dramatic critic on the Tribune. Mr. Cook has been in France for four years, coming from San Francisco, and as he is studying for opera in Paris now, he found himself in quite an unaccustomed role before the microphone. Recent concerts at the Hotel Plaza Athenae and the chic Restaurant Langer had, however, prepared him for his unseen audience, who though he could not see them, he could rest assured were giving him whole-hearted attention.

The first bulletin which Mr. Cook read was timed 6:10 New York. It was then 11:50 in Paris. From that time on, until the early, or rather fairly late, hours of the morning, the tenor stayed at his post, giving a bulletin on an average of every ten minutes. The cable company sent the messages over a direct line to the Petit Parisien, where they were typed out by the Tribune stenographer—and at the Tribune office, where a loud speaker had been installed. The reports were likewise taken down from Mr. Cook's announcements.

Meanwhile, promptly at 11, the American entertainment program had begun, and this continued until the station signed off at about 4 o'clock in the morning. The first stars were the popular Morgan Trio. These three young sisters—the harpist, Virginia, is only 17—have been touring the continent for four years. Until recently they gave only private performances, but they have been so cordially received that this past year they gave a public concert tour in Egypt and on the Riviera, where they played at the house of the Duke of Connaught and before Princess Mary. Even before coming to Europe, however, Miss Frances Morgan, the violinist, Miss Marguerite Morgan, the pianist, and their young sister were known to the American public, for they had given private concerts in the United States. Broadcasting was not new to them, as studios in Boston and in London had diffused their work. They began with a fantasy of American airs which they had arranged themselves, and playing individually and as a trio they gave a long program.

One of the early performers was Samuel Dushkin, who is probably too well known to need an introduction, as he has frequently been violin soloist in symphony concerts broadcast in the United States. Mr. Dushkin had completed a concert tour of England, Ireland and Scotland, and was on his way to Germany, Italy and Spain. Next season is to bring him back to the United States. On the election night program Mr. Dushkin rendered exquisitely Blair Fairchild's "Legend of Violin and Orchestra" with the Petit Parisien orchestra, which could hardly await the turning off of the microphone to applaud him.

ASEMI-AMERICAN, if one may call her so, the Norwegian singer, Madame Eide Norena, who was attached to the Chicago opera for the past two years, and who is now engaged at the National Opera of Paris, sang a number of operatic selections, and in addition Ole Bull's Shepherdess' Song, and other American airs. For some of these she was accompanied by Herbert Carrick, the brilliant American pianist who has toured America for five years as accompanist and soloist with Reinald Werrenrath. Mr. Carrick has since made

his London concert debut on December 6, at Wigmore Hall, with Mme. Sarah Fischer, the Canadian singer now engaged at the Opera-Comique in Paris, and will shortly make his debut in the French capital. Mr. Carrick is one of the old friends of the American Radio public, for he was the first pianist to play on the Atwater Kent hour, accompanying Mr. Werrenrath.

Two excellent men singers on the American Night program are to be included. One, Otkar Dobes, long a resident of Paris, was basso on the American Quartet of Paris which was recently disbanded because some of the members returned to the United States. He is now solist at the American Church on the Rue de Berri. Dobes is that delightful information man of the American Express whom Bruce Reynolds calls "Dobes who knows it all." When Will Rogers was in Paris he might be found at the Dobes' desk at almost any hour. Dobes had previously broadcast in Paris, and on this particular night his program included the Kutemoff Blues. On the Road to Mandalay, and The Flea Song from Faust. M. Andre Bernard, a young Frenchman who has sung at the New Orleans Opera, and who is also a student of singing in Paris, closed the classical program with a delightful tenor group.

Interspersed with this amazing group of artists were constant selections played by the Petit Parisien orchestra—Dixie, The Stars and Stripes Forever, MacDowell's Woodland Sketches, Dvorak's New World Symphony, etc.

It is not hard to imagine the joy of the exiled listeners-in as this American program progressed. Announcements were in English, the songs they knew and loved; returns were given to them promptly by a reputable American newspaper, and those who have lived long abroad felt indebted to the Chicago Tribune which rendered this splendid service.

After 2 o'clock, the classical numbers were replaced by livelier features, which would have kept one from falling asleep even if the returns themselves were not sufficient to drive away drowsiness. The boys from Harry's New York bar, where one of the receiving sets was entertaining a capacity crowd, came over to the studio with their jazz, and the French air was filled with American Blues for another two hours.

Credit for the planning of the American Election Night program must be given to the staff of the European Edition of the Chicago Tribune. Although this was the first time the Radio had been used by an American newspaper abroad to herald a great event, the European Edition of the Chicago Tribune was well acquainted with the organization of such a stunt since eight years earlier it had rented the Marigny theatre on the Champs-Elysees where an "open house" was held for Americans and bulletins were flashed on the screen.

Dressing to Your Personality

(Continued from page 81)

the costume. When the frock is printed the accessories may match the dominant color. A navy blue frock, for example, patterned in beige and lighter blue might have a navy hat and shoes and beige hose and suede gloves which exactly match. If you are partial to colored shoes you should select them a shade darker than the coat or frock. Your costume should never consist of two neutral colors like grey and tan. If grey is your basic color, shades of lavender or blue offer a charming contrast while tan can always be smartly combined with brown and orange.



Joseph Gallichio, Director WMAQ Orchestra.

The woman who is planning her wardrobe for the new season, finds that prints are particularly strong and the reason is not hard to find, for prints combine vivid and neutral colors in such a way that the whole forms a delightful harmony. There are prints for all women and for all occasions. Brilliant splashes of color in bold designs for sportswear—small figures on dark ground for street wear—odd geometrics or stylized flowers for afternoon, and the most delicate of pastel floral patterns for evening.

There is a type of print, for instance, that is particularly attractive for the older woman whose curves are beginning to annoy her. This fabric consists of odd-shaped figures of various sizes scattered over a neutral ground in an irregular manner.

Incidentally, the older woman, as a rule, does not know herself. She concentrates, usually, on the contours of her figure, forgetting two things which are at least equally important. The most noticeable point of neglect is the throat. A collar which is arranged to be high at the back and rather close in front is flattering and hides the unavoidable age neck lines in a much better fashion than a high tight collar would. A light scarf for afternoon or evening wear is a graceful way of concealing the neck and giving a softening line to the face. Winter coats are kind to the older woman since their large fur collars come right up to the point of the chin, but spring coats can be just as becoming with modish scarves worn in a number of carefully casual ways.

The older woman frequently does not realize that she cannot wear the type of shoes the younger and slender woman wears. If her ankles are inclined to be thick or her body at all ungainly she should certainly not wear high heels. Shoes that are too small draw attention to the ankles and give an unsteady balance which tends to throw the body out of line, and high heels make for a stiff uncertain gait which is very awkward.

A moderate shaped heel on shoes that are snug but not tight will help the general lines of the figure and not make the feet conspicuous. The hemline of the skirt has a bearing on this question, too. It should be neither even nor extravagantly dipping but just irregular enough to be becoming and modish.

Vacation Plans

YOU can see easily that this family is in the throes of a momentous controversy. But it's one in which all concerned are going to win out.

We can tell you confidentially that sister is strong for spending the annual vacation in Yellowstone National Park with the bears, antelope, chipmunks, woodchucks, pelicans, the geysers, wonderful colored pools and terraces and the thousand and one things that make Yellowstone unique in all the world. The boys are having a hard time deciding between a Wyoming Dude Ranch and the switchback mountain trails of Glacier National Park—but there's a strong note of "horseback" in their calculations. Mother leans toward a summer lodge in Rocky Mountain National Park—a haven of rest in the clean, upbuilding air of Colorado's mile-high mountain world.



Wherever your summer vacation plans take you . . . if it's West . . . *The Burlington* can serve you well.

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Russell Ewart, WOC "Graham Cracker."

Jenkins Television

(Continued from page 51)

wash in a drying wind; and diminutive Jacqueline does athletic dances with her clever partner, Master Fremont.

"Perfect?" No, and the receiver looks no more like the ultimate structure will than the old "one-lung" horseless carriage of twenty-five years ago looked like the eight-cylinder limousine of today.

But the ten thousand pioneering amateurs we are nightly entertaining with our picture broadcasts are the Radio picture engineers of tomorrow, for they are building up a technical experience which will be of inestimable value in the art later on.

After the day's work is done these youngsters rush home, bolt a hurried dinner, and then race away to the Radio shack to tune in on our pantomime broadcasts. Exactly the same thrill which came to them with their first crystal set and headphone, now comes again when they pick their first motion pictures out of the air; pictures radiated into invisible space, from miles and miles away, and put together by their homemade receiver.

MANY of these amateurs have attained such quality of picture that they have moved their apparatus into the living room, where the whole family circle may join in the fun.

Incidentally, it is rather a surprise to those who see these silhouette movies for the first time to find them so entertaining; but the explanation is that in movies the story is told in the action, and half-tone quality is not necessary to an enjoyment of them. The public is not usually critical of first efforts, in any new thing; the novelty alone entertains for awhile.

From many letters we get, apparently the greatest anxiety of our audience, or should I say, *optience*, is that we will eventually get tired and stop broadcasting. To those of them who are listening to me tonight may I say that I have no intention of stopping our broadcast of pantomime pictures, for home entertainment. On the contrary, we are putting up a powerful station a few miles outside of Washington to make their picture reception easier and the pictures better, and each broadcast from now on will contain at least one picture story.

The half-tones in regular movie film, and in broadcasting from living subjects and scenes, require a broader band.

This was recognized by the federal Radio commission, and bands one hundred kilocycles wide have been assigned for such work. The new, more powerful broadcast station we are building outside of Washington is for this width of band, and we shall broadcast for fireside entertainment pictures selected from those shown in theatres.

Our present transmission on 6,420 k.c. was undertaken principally to learn the possibilities and the limitations of this new entertainment; to build up a Radio-movies technique, and to insure later the availability of Radiovisors giving larger and brighter pictures, pictures which can conveniently be watched by the whole family and friends of the family circle.

Already Radiomovies are giving pleasure to thousands of Radio amateurs and short wave Radio fans. Ultimately this pantomime story-teller will come to our fireside with appropriate sounds and speech, as a fascinating teacher and entertainer, without language, literacy, or age limitation—an itinerant visitor to the old homestead with photoplays, the opera, and a direct vision of world activities.

Fan Mail Startles Coe Glade

(Continued from page 55)

Glade put into the part of the cruel, madcap Gypsy girl and the new shadings of interpretation that she carried through triumphantly despite her first appearance in the role with an opera company of the high standards of the Chicago Civic group. Still others noted that her performance added fire to the remainder of the cast, and became a large influence in one of the most excellent performances of the favorite work of the season.

Miss Glade's voice, in her first Radio appearance, proved to be admirably adapted to broadcasting. It is a general rule in Radio studios, that contraltos or mezzo-sopranos and baritones broadcast more effectively than sopranos or tenors, but there is an additional quality in Miss Glade's voice that carries warmth and emotion through the microphone in an unusually intimate manner, as was shown by studio tests and the letters of approval and congratulation.

Although this was her first season with the Chicago Civic Opera company, Miss Glade has made a special study of Carmen during former engagements with the San Carlo Opera company, and this, with the roles of Amneris in "Aida" and Siebel in "Faust" were among those which led to her engagement by a major organization. She demonstrated her preparation and her own ideas as to the role in her first appearance, partly in her deft execution of the incidental Spanish dances and partly in the innovations she introduced into the expression of the extremes of Carmen's temperament.

One of Miss Glade's departures from the stereotyped Carmen was the absence of a Spanish comb in her hair during the first act.

"Carmen was in her working clothes at that time," she explained, "whereas in later acts she was dressed up to charm the grand suitors she acquired. I do not believe in wearing something supposed to be typically one thing or another just to carry an impression of a character or a nationality. That is cartooning. Most people believe that Spanish girls wear high combs on all occasions just as they believe, from cartoons of vaudeville characters that all Germans have fat stomachs and smoke long pipes; that all Englishmen have drooping moustaches and monocles and that all Frenchmen

have pointed moustaches and goatees and wear funny, high silk hats. The real portrayal of a character, I hope, lies in correctness of costume as well as in correct singing and acting."

Miss Glade admires the part of Carmen and the entire opera immensely. "It is so human and so simple," she declared. "It is a portrayal of just the sort of emotions that one observes in daily dramas in every city and in every walk of life and therefore touches every member of an audience in every country. Carmen is truly a universal opera."

"As for the part itself, I love roles of wicked women and I am glad I am a contralto because contraltos always have the wicked parts and they are much more interesting than those of innocent girls. They are more intriguing and require more study and consequently enlist deeper attention from the audiences. Carmen is the most unmoral woman character in opera. I cannot think of any more wicked woman in opera than Carmen unless it be Delilah in Samson and Delilah, whose machinations were cruel merely for cruelty's sake."

He Entertains 40,000,000 Fans

(Continued from page 54)

things early in a career, and continuing along the same line as knowledge broadens," the executive has declared.

MR. AYLESWORTH has been likened to the "spirit of Radio," partly because of his extreme youth for such a big position, but still more for his quickness of decision and keen insight into the depths of any problem that may be presented.

He once commented on the fact that he, who started in the old business, law, is now in the newest business, Radio. And all without any conscious effort on his part. It all came about through his devotion to the job at hand, he will tell you—if he can be persuaded to talk about himself at all.

Usually he prefers to talk of other things—most any other thing—in a crisp and interesting manner. He has the knack of holding his hearers, and those with whom he comes in contact affirm that his persuasive voice is potent in winning people to his side.

His popularity is boundless among the personnel of the National Broadcasting company, and there is not a member of the entire organization who hesitates to enter his office when he has a suggestion to offer or a request to make. And Mr. Aylesworth's ear is usually available for any such hearing. Although among the busiest of the big executives, he manages to retain a personal contact with members of the company and with practically all his associates, both personal life and the business world.

"Deac" Aylesworth is known as a "good mixer." His unflinching good humor and willingness to enter into the spirit of any group makes him a popular favorite at any social function he may attend. He is regarded as a home lover and spends much time about the family fireside with his wife and two children, Barton, 18, and Dorothy, 10.

These children are his particular pride and joy, and he devotes a great deal of attention to them. Both inherit from their father pleasing singing voices and the ability to play the piano rather well. The children are the normal, healthy youngsters of 1929, and Mr. Aylesworth doesn't care "if they both grow up to be Radio announcers."

Film on Teeth—*Don't let it rob you of a fascinating smile*



The Film

How to remove film—the question millions are asking. Now a special film-removing dentifrice is urged by dentists. Please accept a free 10-day supply

that is found by dental research to discolor teeth and foster serious tooth and gum disorders

"ISN'T there something I can do?" wrote a young woman recently. "I am so sensitive about my 'yellow' cloudy teeth. I brush them for hours only to meet with failure."

Today, three months later, she writes, "My teeth are as sparkling white and lovely as those I used to envy. . . . How awfully near I came to never knowing it. Everyone should accept the free test you offer."

Millions do not know

A tragic story with a happy ending. . . . There are thousands like this charming girl whose winning personalities are shadowed by unattractive teeth.

Now science has discovered, 9 times in 10, the cause of "discolored" teeth is a dingy film that coats them. It is your greatest enemy to loveliness. It is a dangerous enemy to health, too, for film is held responsible for decay, pyorrhea, bleeding gums and other troubles. Your dentist knows how true this is.

You must fight film

Feel for film with your tongue—a slippery, sticky coating. Food and smoking stain that film. Germs by the millions breed in it. . . . germs of many different kinds.

Film hardens into tartar. And germs with tartar are the chief cause of pyorrhea. Film is also the basis of decay.

The special way to remove it

Ordinary brushing ways are not successful. You must employ the scientific method that first curdles film. Light brushing then can easily remove it in safety to enamel. Old ways may be discarded.

As children's teeth appear you marvel at their whiteness. Yours may once again regain that color. May take on a brilliance that is actually amazing. Lustreless, dull teeth are known to be unnatural.

Test FREE for 10 days

Perhaps unattractive teeth have cost you too much in society and business. You must not delay another day in testing this method.

Get a full-size tube wherever dentifrices are sold, or send coupon below to nearest address for free 10-day tube to try.

FREE
10-DAY
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Mail
Coupon to
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Dept. S-29,
1104 S. Wabash Ave.,
Chicago, Ill., U. S. A.

Name.....

Address.....

City.....

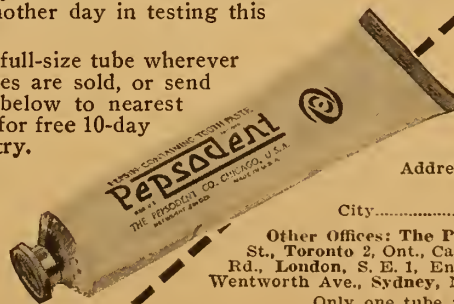
Other Offices: The Pepsodent Co., 191 George St., Toronto 2, Ont., Can.; 42 Southwark Bridge Rd., London, S. E. 1, Eng.; (Australia), Ltd., 72 Wentworth Ave., Sydney, N. S. W.

Only one tube to a family

3082

Pepsodent

The Special Film-Removing Dentifrice





Miss Ada Day, who keeps a smiling face at all times, as Beauty Lecturer at WBBM, Chicago.

Saving the Left-Overs

(Continued from page 82)

Add 1 small onion chopped finely.
Add gravy to hold meat together.
Butter individual molds.
Line molds with cooked rice, pressing the rice firmly against the sides of the mold.
Fill center of molds with beef.
Cover with rice.
Steam 45 minutes.
If desired, the molds may be set in a pan of hot water and placed in a moderate oven for 30 minutes.
Turn out on serving platter.
Cover with hot tomato sauce.

Carrot and pea salad is a colorful dish and is also a tasty one.

Carrot and Pea Salad

Dissolve 1 package orange flavored gelatin in 2 cups boiling water.
Let cool until thick like a syrup.
Cut 1 pimento in strips.
Grate 3 medium size carrots.
Drain leftover peas of their liquor.
Coat inside of mold with gelatin.
Arrange pimento strip from center of mold to edge.
Line mold with the grated carrot, pressing well against sides.
Add peas.
Fill mold with gelatin.
Let become solid.
Serve on crisp lettuce leaves with mayonnaise.

Stale sponge cake may be crumbled and served with a custard poured over it, topped with a spoonful of whipped cream, and decorated with a bit of jelly, or it may be utilized as in the following recipe.

Stale Sponge Cake With Lemon Sauce
Steam stale sponge cake in upper part of double boiler.

Serve with a lemon sauce made as follows:

Mix $\frac{1}{2}$ cup sugar,
 $\frac{1}{8}$ teaspoon salt,
 $1\frac{1}{2}$ tablespoons cornstarch.
Add 1 cup boiling water slowly.

"HANDSOME is as handsome does" would aptly apply to Miss Ada Day, beauty adviser over WBBM. Miss Day recently invited a temperamental vaudeville star to give a little beauty talk to the listeners. The actress literally took complete command of the studio. She ordered everybody out and directed that the gallery curtains be drawn so visitors could not see her. She gave curt commands to the studio director, ordered Miss Day to pick up the papers thrown on the floor and if there had been a studio cat she doubtless would have enjoyed a good kick at it. Miss Day smiled through it all—and when it was all over enjoyed a real laugh.

Stir constantly.

Let boil 5 minutes.

Remove from stove.

Add 3 tablespoons lemon juice,

2 tablespoons butter,

1 well beaten egg yolk.

Jazz vs. Old-Time Melodies

(Continued from page 37)

to accept the opinion of those who regard the foremost proponents of jazz as merely tone mechanicians. Jazz, they contend, is not legitimate musical expression, but rather foolish clowning and an attempt to burlesque the serious and fixed forms of music.

Herbert Hoover, when secretary of commerce several years ago, stated that the Radio business could not subsist if restricted to a jazz diet, and a recent attempt to analyze the hold that jazz has in the hearts and minds of the people revealed the fact that it occupies second position.

Classical music and the so-called better forms of musical expression have first choice among Radio audiences, while the old-time airs follow in third place. An effort to determine at one time the songs that held first place in the affections of thirty prominent men disclosed the fact that the following numbers, not one of which can be considered as having been tainted with jazz, were in high favor: The End of a Perfect Day, The Glow Worm, Dixie, Traumeri, Handel's Largo, My Wild Irish Rose, Sidewalks of New York, On the Road to Mandalay, Mother Macbree, Carry Me Back to Old Virginia, Swanee River, La Paloma, and selections from the operas Aida, Tales of Hoffmann and Lucia de Lammermoor.

All of which presents the question: "What do people like, and what sort of melodies are popular?"

Here most popular song writers shake their heads, and admit the futility in answering the question.

IRVING BERLIN, who years ago wrote a song, Dorando, the theme of which was based on the athletic prowess of a marathon racer, followed it with a succession of hits, and today he is regarded as the most successful writer of popular songs in the United States.

Stories of Berlin's early days as a songster in the Bowery of New York when he sang for amusement have been related time and again. He taught himself to play on the piano, and now even as in those old days he is a painstaking craftsman when a new song is in the offing.

That Berlin strives for originality in writing his songs is apparent; his tunes are shaped for the great, common average in human life, and they are written in such a manner that most any person with a voice can sing them. In most of Irving Berlin's songs one can always depend on heart interest, and a theme that appeals to the masses.

Around in 1911 or 1912, Irving Berlin wrote Alexander's Ragtime Band, and the song swept the country, percolating down through the dance halls, to the mechanical pianos and hand organs. Orchestras played and replayed it; it was in the air, and everybody sang and hummed the tune.

Other songs of Berlin had a tremendous sale, one being Everybody's Doing It, another, When That Midnight Choo Choo Leaves for Alabam', and In My Harem. During the war Berlin wrote Oh, How I Hate to Get Up in the Morning, a comic song; Yip! Yip! Yaphank! and I've Got My Captain Working for Me Now.

These songs, in many respects, compare favorably with others written at the time of the World War. That Berlin caught the military spirit of the day is apparent, and the fact that he was an officer at Camp Upton, and first of all a rookie in the ranks, gave him the color and background necessary to write these numbers.

What'll I Do, All by Myself, Say It With Music and Sunny Days have been composed by Berlin since those early days when he turned out his first numbers, and musical comedies and light operas have featured his songs.

Music and lyrics are a means of expression for Berlin; he doesn't split hairs over the fine points of either when he writes a song, assuming that he is writing for all people. The ice man, newsboy, henpecked husband, colored strutter, oriental dancer, jazz boy and the men and women who make up the great human herd are not only the audience and clients of Berlin in featuring his songs, but they are the subjects that he injects into his songs.

Having come to this country from Russia when a youngster and started life as a newsboy, later graduating into the ranks of the singing waiters, Berlin has seen something of life. The commonplace has played an important part in his existence, and this fact accounts for the simplicity of his song themes, and the tremendous following he has in the song writing world.

What Berlin may lack in knowledge of musical technic and song construction, which together with his handicap of knowing very little about harmony, is more than offset by his understanding of the human family and his ability to analyze its likes and dislikes in the matter of heart stirring melodies.

GUS EDWARDS who made a small fortune from his song, School Days, once told the writer that the simple and commonplace themes were the best for songs, because they were understandable and appealed to the greatest number of people.

(Continued on page 114)



...Yet 4 Weeks Later He Swept Them Off Their Feet!

IN a daze he slumped to his seat. Failure . . . when a good impression before these men meant so much. Over the coffee next morning, his wife noticed his gloomy, preoccupied air.

"What's the trouble dear?"

"Oh . . . nothing. I just fumbled my big chance last night, that's all!"

"John! You don't mean that your big idea didn't go over!"

"I don't think so. But, Great Scott, I didn't know they were going to let me do the explaining. I outlined it to Bell—he's the public speaker of our company! I thought he was going to do the talking!"

"But, dear, that was so foolish. It was your idea—why let Bell take all the credit? They'll never recognize your ability if you sit back all the time. You really ought to learn how to speak in public!"

"Well, I'm too old to go to school now. And, besides, I haven't got the time!"

"Say, I've got the answer to that. Where's that magazine? . . . Here—read this. Here's an internationally known institute that offers a home study course in effective speaking. They offer a free book entitled *How to Work Wonders With Words*, which tells how any man can develop his natural speaking ability. Why not send for it?"

He did. And a few minutes' reading of

this amazing book changed the entire course of John Harkness' business career. It showed him how a simple and easy method, in 20 minutes a day would train him to dominate one man or thousands—convince one man or many—how to talk at business meetings, lodges, banquets and social affairs. It banished all the mystery and magic of effective speaking and revealed the natural Laws of Conversation that distinguish the powerful speaker from the man who never knows what to say.

Four weeks sped by quickly. His associates were mystified by the change in his attitude. He began for the first time to voice his opinions at business conferences. Fortunately, the opportunity to resubmit his plan occurred a few weeks later. But this time he was ready. "Go ahead with the plan," said the president, when Harkness had finished his talk. "I get your idea much more clearly now. And I'm creating a new place for you—there's room at the top in our organization for men who know how to talk!"

And his newly developed talent has created other advantages for him. He is a sought-after speaker for civic banquets and lodge affairs. Social leaders compete for his attendance at dinners because he is such an interesting talker. And he lays all the credit for his success to his wife's suggestion—and to the facts contained in this free book—*How to Work Wonders With Words*.

* * *

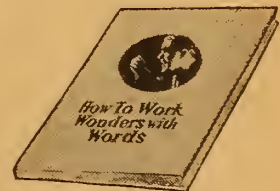
For fifteen years the North American Institute has been proving to men that ability to express one's self is the result of training, rather than a natural gift of a chosen few. Any man with a grammar school education can absorb and apply quickly the

natural Laws of Conversation. With these laws in mind, the faults of timidity, self-consciousness, stage-fright and lack of poise disappear; repressed ideas and thoughts come forth in words of fire.

Send for This Amazing Book

Have you an open mind? Then send for this free book *How to Work Wonders With Words*. Over 65,000 men in all walks of life—including many bankers, lawyers, politicians and other prominent men—have found in this book a key that has opened a veritable floodgate of natural speaking ability. See for yourself how you can become a popular and dominating speaker! Your copy is waiting for you—free—simply for the mailing of the coupon.

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Can Get...
**A Business
of Your Own
This New Way!**

SEND your name and address for an amazing **FREE** book which gives facts that will surprise you about Modern Photography. It tells of an amazingly easy way to start your own business quickly, with very little capital. It also shows how hundreds of other men and women are making real money in spare time taking pictures.

**Many Earn \$35 to \$90 a Week
in Spare Time**

In this day of pictures, photographers are making more than ever before. But just ordinary photography is not enough. In this book you are told how such men as Hughes of Kentucky made \$97 in two days, how Sager of Pennsylvania earned \$700 during spare time in a few months. Our method is so simple and easily grasped that you can make money even while learning.

Look into the new opportunities in Photography—and see why newspapers, magazines and photogravure sections use thousands of photos a month, and pay big prices for them. Business firms are constantly in the market for photos to be used in catalogs, booklets and advertising. Portrait work pays big.

FREE Book Tells How

Just mail the coupon for this **FREE** book. It explains how our thorough Course in Modern Professional Photography enables you to quickly learn this fascinating, profitable work in your own home.

It will pay you to discover the opportunities that exist today in Modern Photography—how you can establish your own business, or make big spare time money, or earn while learning. Scores of invaluable money making ideas—every branch of photography described! And the book is sent absolutely **FREE**! Just mail the coupon this minute for your copy.

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Please send me free and without obligation my copy of your startling new book *Opportunities in Modern Photography* and full information regarding your course.

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All Flags Fly at WGH

(Continued from page 63)

master the studio piano, Malvern Lee Powell is heard over the microphone of WGH on every program. Wide and varied experience in musical circles provides much help in the announcement of musical programs in a manner to elicit the desired display of esprit de corps between announcer and performer. Mr. Powell is a member of the Rhythm Ragers orchestra, and presides at the studio piano whenever it is necessary to provide the material for that unanticipated break.

Miss Jacqueline Marston, while a member of the staff as studio pianist, carries also additional burdens. She is widely known for her accomplished manner of execution not only as a pianist but as the organist of the large Estes organ which weekly furnishes inspiring music to the congregation of the Phoebus (Va.) Methodist Episcopal church.

Of course the world knows that Newport News is the summer capital of the Eastern social whirl, and during the season it is not uncommon for the WGH studio to receive visitors whose names are listed among the elite of the nation. The listener at these times may sometimes wonder as to the true identity of some mysterious entertainer whose voice or instrument comes over the air after an introduction somewhat vague or the mention of a name that obviously is a pseudonym.

WGH through its broadcasts lives up to an atmosphere of modest distinction. There is no blast and blare but a dignity and assurance that dominates and makes one feel he is in good company while listening to WGH programs. Perhaps the closest touch to the gay and giddy comes with the Rhythm Ragers orchestra, mentioned above.

For those unacquainted with WGH there are plenty of ardent fans who will vouch that it is a good station to place on your log once you've got it pegged on the dial.

Jazz vs. Old-Time Melodies

(Continued from page 112)

And, Arnold Johnson, pianist extraordinary and a jazz band director of the first rank has contended for many years that good songs are the product of inspiration as well as a generous amount of perspiration.

Johnson wrote Sweetheart, All for You, Oh, and The Lovelight in Your Eyes and has been a Pacific coast Radio feature during recent months.

Arnold Johnson, while young in years, is one of the oldest and best known directors of syncopated bands. He and his jazz unit usually are en route with a musical comedy, and if ever a complete and comprehensive history of jazz music is written, Johnson will be recognized as the man who fired Paul Whiteman from his band because the latter could not fake, and the result was the beginning of original arrangements on the part of Whiteman and Grofe with the subsequent presentation of popular numbers according to his (Whiteman's) own ideas.

Gus Kahn and Egbert Van Alstyne both regard the lyrics as the real business at hand in writing a song. Kahn, of course, is a lyric writer, first, last and always, and even when a boy in Chicago while employed at Picks juggling crockery and silverware, he was drafting lyrics and humming melodies to fit the lyrics.

Van Alstyne, on the other hand, is a

melody writer; for years he teamed up with Harry Williams, and in a little more than a decade this pair turned out some of the best known song successes of Tin Pan Alley.

Van Alstyne's first and greatest song success was In the Shade of the Old Apple Tree, and although this number has sold to the number of two million copies it is still selling, and perhaps has only one real rival, that being the old standby, After the Ball, written years ago by Charles K. Harris.

Van Alstyne and Williams wrote Cheyenne, San Antonio, Navajo, I'm Afraid to Go Home in the Dark, Won't You Come Over to My House, Who are You With Tonight, and It Looks Like a Big Night Tonight in addition to a string of others.

VAN ALSTYNE collaborated with Kahn in writing Memories, and he had a hand in writing When I Was a Dreamer, Pretty Baby, Your Eyes Have Told Me So, with both Kahn and Walter Blaufuss sharing the honors of their production.

When not playing golf and hurrying to football games, Kahn is drafting a set of lyrics. Within the last six months he wrote the lyrics for Eddie Cantor's Whoopee and the musical comedy, Nobody's Girl, and who lives today with music in his soul—at least that of a popular vein—who is not familiar with Yes, Sir, That's My Baby, Your Eyes Have Told Me So, My Buddy, Charlie's My Boy, Carolina In the Morning, My Isle of Golden Dreams, Chloe and Beloved, all of which have lyrics from the pen of Gus Kahn.

To speak of jazz and compare syncopated music with the rhythms of yesterday, one should refer to Creole Belles, the ragtime hit of 1901, and the composer of this number, J. Bodewalt Lampe, who was active at WMBB, Trianon, Chicago, for several years.

The financial return on this number to Jerome H. Remick, may never be known, but Lampe once told the writer he received about \$1,000 for Creole Belles. Such a figure would probably be regarded as a pittance when compared with the return that came to this number after the copyright had been transferred to the Detroit publisher.

Creole Belles was the greatest of cake walk tunes, and although it was not exploited until some little time after it was written, it seemed to strike a responsive chord, and in a short time cake walk writers were as plentiful as composers of blues are today.

Harry Von Tilzer, a contemporary of Lampe, has always been an advocate of songs that were clean from every angle. Von Tilzer has to his credit a number of songs; he has been a prolific writer, and has been in the business for more than a quarter of a century.

Turning back over old-time popular song programs such familiar titles are recorded as I'd Leave My Happy Home for You, When the Harvest Days are Over Jesse Dear, Wait Till the Sun Shines Nellie, Down on the Farm and many others, and Von Tilzer, has played a hand—and a good one at that—in the production of these and similar numbers.

IT IS the human interest in these songs that have put them over, and most of them have been recorded and revamped for present day needs during the last decade. It takes time for a song to take hold, but once it gains favor and pulls at the heart strings, both the song and its sponsors are on the high roads to fame and fortune.

Some years ago an Iowa dance or-

(Continued on page 116)

Electrical Experts are in Big Demand!
—L.L. Cooke!

I Will Train You at Home to fill a Big-Pay Job!



Look What These Cooke Trained Men Are Earning



Makes \$700 in 24 Days in Radio

"Thanks to your interesting Course I made over \$700 in 24 days in Radio. Of course, this is a little above the average but I run from \$10 to \$40 clear profit every day, so you can see what your training has done for me."

FRED G. McNABB, 843 Spring St., Atlanta, Georgia



\$70 to \$80 a week for Jacquot

"Now I am specializing in Auto Electricity and battery work and make from \$70 to \$80 a week and am just getting started. I don't believe there is another school in the world like yours. Your lessons are a real joy to study."

ROBERT JACQUOT, 2005 W. Colorado Ave., Colorado Springs, Colo.



\$20 a Day for Schreck

"Use my name as a reference and depend on me as a booster. The biggest thing I ever did was answer your advertisement. I am averaging better than \$500 a month from my own business now. I used to make \$18.00 a week."

A. SCHRECK, Phoenix, Arizona



\$3,500 a Year for Beckett

"When I began with you I was just a common laborer, going from one job to another, working for anything I could get, and that wasn't much. Now my salary is \$3,500 a year and the Company furnishes me with an automobile."

C. O. BECKETT, 108 Maple Heights, New Lexington, Ohio

It's a shame for you to earn \$15 or \$20 or \$30 a week, when in the same six days as an Electrical Expert you could make \$70 to \$200—and do it easier—not work half so hard. Why then remain in the small-pay game, in a line of work that offers no chance, no big promotion, no big income? Fit yourself for a real job in the great electrical industry. I'll show you how.

Be an Electrical Expert Earn \$3,500 to \$10,000 a Year

Today even the ordinary Electrician—the "screw driver" kind—is making money—big money. But it's the trained man—the man who knows the whys and wherefores of Electricity—the Electrical Expert—who is picked out to "boss" the ordinary Electricians—to boss the Big Jobs—the jobs that pay \$3,500 to \$10,000 a Year. Get in line for one of these "Big Jobs." Start by enrolling now for my easily learned, quickly grasped, right-up-to-the-minute, Spare-Time Home-Study Course in Practical Electricity.

Age or Lack of Experience No Drawback

You don't have to be a College Man; you don't have to be a High School Graduate. As Chief Engineer of the Chicago Engineering Works, I know exactly the kind of training you need, and I will give you that training. My Course in Electricity is simple, thorough and complete and offers every man, regardless of age, education, or previous experience, the chance to become, in a very short time, an "Electrical Expert," able to make from \$70 to \$200 a week.

No Extra Charge for Electrical Working Outfit

With me, you do practical work—at home. You start right in after your first few lessons to work at your profession in the regular way and make extra money in your spare time. For this you need tools, and I give them to you—5 big complete working outfits, with tools, measuring instruments, and a real electric motor—5 outfits in all.

Your Satisfaction Guaranteed

So sure am I that you can learn Electricity—so sure am I that after studying with me, you, too, can get into the "big money" class in electrical work, that I will guarantee under bond to return every single penny paid me in tuition, if, when you have finished my Course, you are not satisfied it was the best investment you ever made. And back of me in my guarantee, stands the Chicago Engineering Works, Inc., a two million dollar institution, thus assuring to every student enrolled, not only a wonderful training in Electricity, but an unsurpassed Student Service as well.

Get Started Now—Mail Coupon

I want to send you my Electrical Book and Proof Lessons, both Free. These cost you nothing and you'll enjoy them. Make the start today for a bright future in Electricity. Send in Coupon—NOW.

**L. L. Cooke, Chief Engineer
Chicago Engineering Works
2150 Lawrence Ave.,
Dept. 284,
Chicago**



MAIL COUPON FOR MY FREE BOOK

Name.....

Address.....

Occupation.....

5 big outfits given to you — no extra charge



The "Cooke" Trained Man is the "Big Pay" Man

SAY FELLOWS GET INTO ELECTRICITY

LEARN TO
EARN
60 TO \$200
A WEEK



H. C. LEWIS, Pres.

I have a sure quick
easy way to get
into Electricity. NOT
BY CORRESPONDENCE

I train you on real
electrical machinery
as you should be
trained so you are
capable of earning
60 a week and up.

YOU DON'T NEED AN
ADVANCED EDUCATION
AND YOU DON'T NEED
PREVIOUS EXPERIENCE

LEARN, BY DOING. I

train you in 90 days.
Then I back you for
life with Free emp-
loyment services, and
I'll help you get a
part time job if you
want to EARN WHILE
LEARNING. my big
56 page book tells
the whole story. IT'S
FREE. send coupon
below, I'll mail you
a copy and tell you
about my special 1/2
price tuition offer and
my offer of railroad
fare.

H. C. Lewis

Mr. H. C. Lewis, Pres. Dept. 49-90
COYNE ELECTRICAL SCHOOL
500 So. Paulina St., Chicago, Ill.

Dear Mr. Lewis: Without obligation send me your
big free catalog and all details of Free Employ-
ment Service, Radio, Aeroplane and Automotive
Electrical Courses and how many "earn while
learning." I understand I will not be bothered by
any salesman.

Name

Address

City..... State.....

Rural Types Popular

(Continued from page 26)

the village dressmaker and a gossip de luxe. To the right sits Judge Whipple, the politician, who is waking up from one of his periodic naps.

Two characters are absent, one being Fred Tibbetts, the barber, whose middle name is loquacity, and the Italian gardener both of whom have been added to the cast since this picture was made.

Brown started out in life to become an architect, but soon discovered that lure of the stage and, later, the mike surpassed any ambitions he had in the field of skyscraper construction or cathedral building.

Brown and his Real Folks are NBC stars, just the same as Gus and Louie, two characters who figure in a new comedy village broadcast from Schraderstown, another NBC feature.

The quaint and yet trenchant humor of the small town, together with bits of human interest dialogue, are the stock in trade of Gus and Louie. They join a brass band, hire out as farm hands, put in a course of sprouts in the village garage and perform other odd jobs that demand big hands, big feet and plenty of good intentions.

All right, boys, tune up the fiddle with the pitch pipe; wipe the chaff off your mouth harp and let's go!

Outside of the burlesque it should be remembered that some of the most successful individual stations in the country are the so-called farm stations. In play or in reality there is an enviable sincerity about the character who abides in the country, according to this accepted type. The farmer lives close to Mother Nature. All the subtleties and false fronts with which the city man comes in hourly contact throughout the day are spared the man who walks free and unmolested on his own broad acres. Matt Thompkins is bringing an old character into new light. The rural programs are going over big.

Jazz vs. Old-Time Melodies

(Continued from page 114)

chestra playing a one-night engagement in Moberly, Mo., picked up a haunting melody that seemed to grow better with each successive rendition. It was a soft, dreamy and plaintive tune; one that lingered in the mind and heart, and tantalized the feet of dance fans.

The Hawkeye band played and re-played the number; in time it was published, and the Missouri Waltz by Frederick Knight Logan, had a following that has been unsurpassed during the last score of years.

The new songs turned out hot from the factories of Tin Pan Alley have their day, but few of the number ever come back to popular favor, and those that do are in a minority. Jazz tunes are snapped out to the public, but only at intervals does a number catch the public fancy and retain its hold.

Radio has brought to the mike many of the old time tunes; the phonograph and mechanical roll have perpetuated many of them for posterity, but Radio with countless musical organizations at its command has done as much, if not more, than any other agency to bring back and popularize the old time melodies.

Jazz tunes are of a day, possibly a week and sometimes a month, but the old tunes are for generations, and they will continue in high favor in the generations to come.

Who Else Wants to Win Success in Advertising?



Many Earn
**\$4,000 to
\$15,000
Yearly!**

If you are tired of dull, routine work, with little chance for advancement—if you want to break into a big field teeming with opportunities for interesting work, good pay and rapid promotion—then get into Advertising now, by this new easy method. Why place a limit on your weekly pay check? Cash in on your ambition, ability and ideas. Advertising may be your opportunity. Find out how you can now qualify, at home, during your spare time—in a few short months, for a good position just as hundreds of others are doing.

Free Book Tells the Whole Story

Our new free book, *How to Win Success in Advertising*, is crammed full of valuable information you want to know about Advertising and its many opportunities. For 31 years the Page-Davis School has been training men and women in Advertising. Many of our graduates now hold responsible positions paying handsome salaries. This interesting free book tells how they won success—and how you can do it. Our practical method gets definite results quickly. We guide you in developing your ideas—moulding them into compelling, forceful, action-getting Advertising. No text books used whatsoever—all practical advertising work.

Send for this book today. Everything sent free and prepaid. Many a man and woman has found this the beginning of a successful career. It may mean the turning point for you. Write at once.



Send
for
this

FREE

SEND ME YOUR BOOK

PAGE-DAVIS SCHOOL OF ADVERTISING
Dept. 2862 3601 Michigan Ave., Chicago

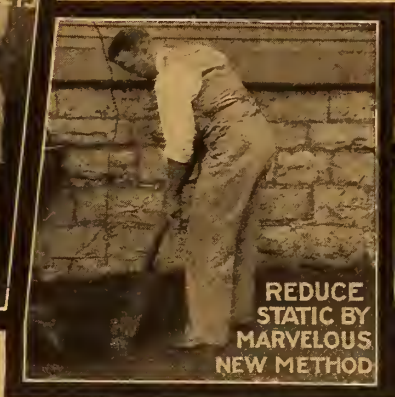
Please send me your free booklet, *How to Win Success in Advertising*. Also send me full particulars regarding your home study Course in Modern Advertising. I am not obligated.

Name

Street

City..... State.....

Send Coupon Below for FREE Radio Idea Book



5 Easy Ways to Make \$3.00 an hour in Your Spare Time in RADIO

Each of these plans, developed by the Radio Association of America, is a big money-maker. Set owners everywhere want to get rid of static, to have their sets operate from the electric light socket, the tone improved, and the volume increased, and transformed into single-dial controls. Phonograph owners want their machines electrified and radiofied. If you learn to render these services, you can easily make \$3.00 an hour for your spare time, to say nothing of the money you can make installing, servicing, repairing, building radio sets, and selling supplies.

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 by joining the Association.

Join the Radio Association of America

A membership in the Association offers you the easiest way into Radio. It will enable you to earn \$3.00 an hour upwards in your spare time—train you to install, repair and build all kinds of sets—start you in business without capital or finance an invention—train you for the \$3,000 to \$10,000 big-pay radio positions—help secure a better position at

bigger pay for you. *A membership need not cost you a cent!*

The Association will give you a comprehensive, practical, and theoretical training and the benefit of its Employment Service. You earn while you learn. Our cooperative plan will make it possible for you to establish a radio store. You have the privilege of buying radio supplies at wholesale from the very first.

ACT NOW—If You Wish the No-Cost Membership Plan

To a limited number of ambitious men, we will give Special Memberships that may not—need not—cost you a cent. To secure one, write today. We will send you details and also our book filled with dollars-and-cents radio ideas. It will open your eyes to the money-making possibilities of Radio.

Radio Association of America
4513 Ravenswood Ave., Dept. RD-1, Chicago, Ill.

Earned Over \$500.00 In His Spare Time

Frank J. Deutsch, Penn.: "I have made over \$500 out of Radio in my spare time. Yours is a great plan for ambitious men."

A Radio Engineer In One Year

Claude DeGraves, Canada: "I knew nothing about Radio when I joined the Association a year ago. I am now a member of the engineering staff of the DeForest Company and my income is 225% greater than at the time I joined."

Doubles Income In 6 Months

W. E. Thon, Chicago: "You have an excellent plan. Six months after I enrolled I secured the managership of large Radio store and doubled my income."

Radio Association of America

Dept. RD-1, 4513 Ravenswood Ave., Chicago, Ill.

Gentlemen: Please send me by return mail full details of your Special Membership Plan, and also copy of your Radio Idea Book.

Name.....

Address.....

City..... State.....

ELECTRICAL ENGINEERING

BOOKS SENT FREE

New Edition Containing 100 Pages on

A-C RADIO!

8 FLEXIBLE MAROON VOLUMES

4300 pages, 3200 illustrations, deluxe gold stamped binding, Index in each book, general index in Vol. 8. Covers every subject in Electricity—Light, Power, Transmission, Generators, Motors, Switchboards, Radio, Telephone House, Wiring Railways, etc.

We're glad to send a set to your home to examine and use as your own for 15 days—to show you that here is the most up-to-date and complete work on Electricity ever published. Written by CROCKER of Columbia U.—MILLIKAN of Calif. "Tech."—HARRISON of General Electric and 26 other noted Electrical Engineers. Starts off with elementary Electricity in simple, non-technical language for the beginner and includes every Engineering branch for use of experts on the job.

Complete Electrical Reading Course

Electricity, the biggest industry in the world, continues to grow the most rapidly. And it offers better jobs, bigger salaries and a brighter future than any other field. Every dollar, every hour invested in learning Electricity will come back to you a thousand-fold. Learn in spare time with these books at one-fifth the cost of trade courses. Outline for organized study, quiz-questions and a year's free consulting membership in the American Technical Society included without extra cost, if you mail coupon immediately.

Look it up!

Thousands of these sets are used as REFERENCE books by men employed in electrical, building construction and allied lines. The JIFFY INDEX puts the answers to 20,000 questions right at your finger tips.

AMERICAN TECHNICAL SOCIETY

Dept. E-2324
Drexel Ave. & 58th St., Chicago

American Technical Society

Dept. E-2324, Drexel Ave. & 58th St., Chicago

Please send for 15 days' free trial 8-volume set of Electrical Engineering just off the press, subject to return if I wish to. (I pay the few cents express charges on receipt of books, you pay express if returned.) If I decide to keep them, I will pay \$2.00 after 15 days trial, then \$3.00 a month until \$34.80, special advertising price, is paid, after which books become my property. Year's Consulting Membership to be included free.

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Employed by.....

Employer's Address.....



Barawik's New Wholesale Radio Catalog

Barawik's New Wholesale Radio Catalog for agents is now ready. Eight million radio sets and two billion in sales make radio one of the greatest and most profitable businesses today. Get into this new, rich field. Take orders for radio sets, speakers, cabinets, supplies—auto tires, accessories, electrical and sporting goods, Holiday merchandise, etc. A legitimate business. You please the buyer with every sale. Everybody is a prospect—farmer, laborer, business man. You buy from us at wholesale and get retailer's full profit. Deal with long-established, big, reliable house. Samples furnished wholesale. Write today for Radio Guide—free to agents.

BARAWIK CO. 141-A CANAL ST., CHICAGO, U.S.A.

Radio Digest

Goes in the Home of the Radio Listener who *knows* what he wants it for, knows he can get what he wants, and is willing to pay the price—a kind of person that should interest the advertiser.

WAPI on the Air for Alabama

(Continued from page 45)

ham to become assistant manager and announcer for the station there.

The Alabama Polytechnic Institute, though owners (sole) of WAPI, desired to make the station of service to the entire state, hence its officials offered the facilities of the station to all the leading educational institutions in the state to broadcast meritorious programs of entertainment.

Judging by fan mail received since the formal opening of WAPI as Alabama's only super power station, it has already taken its place among the premier stations of the country. The operating staff of the station during the first two months of broadcasting was increased to almost double the number employed at the beginning.

Cupid had to play his part in the activities of WAPI prior to its opening Dec. 31st. J. M. Wilder, who was a graduate of the Alabama Polytechnic Institute and was chosen as resident engineer for the new station at Birmingham, fell a victim to the charms of a young lady of Auburn, and they were married Nov. 22. At the time Walter N. Campbell accepted the position with WAPI, he was engaged to be married to a young lady of Nashville. Unwilling to go alone to Birmingham, Mr. Campbell finally succeeded in persuading his fiancée to go with him. They were married Dec. 12 and left the next day on a short honeymoon, returning to Birmingham to make their home.

FEW station managers have made a place for themselves so quickly in the cultural life of a community as Walter N. Campbell of WAPI. In addition to his dignified announcing, his early morning inspirational talks are filled with a spirit of happiness and a belief in mankind. Mr. Campbell is in demand for talks at various civic clubs of the city.

Jesse L. Drennen, Jr., is the 13-year-old son of Mr. and Mrs. Jesse L. Drennen of Birmingham. Recently he made his debut over Station WAPI. Mr. Drennen has never studied voice, but is a product of the Birmingham Public Schools, where music is a part of the curriculum. Young Drennen has taken leading roles in several operettas and at Lakeview School where he is a pupil, singing John Alden in the Thanksgiving play of 1928, On Plymouth Rock, and he has taken a leading role in The Old District School, another musical offering at the school. He has sung in various Birmingham churches.

Sara Hunt Vann is the organist and choir director of the First Presbyterian Church. Mrs. Vann plays the Rushton Memorial Carrillon at the First Presbyterian church and is the only woman carrillonneur in the south and one of the two in the world.

Mrs Vann is a well known Theatre Organist, having been in the employ of the Marcus Loew Company for a period covering five years. She is hostess at WAPI.

Walter N. Campbell, manager of WAPI, Birmingham's new station, was formerly connected with WLAC of Nashville.

William Nappi, is the owner and director of William Nappi and His Orchestra which broadcasts over WAPI of Birmingham.

With Mr. Campbell at the helm this energetic Birmingham station has every prospect for a broad and virile influence throughout the Central South. It pierces through some of the toughest Radio fields in the metropolitan centers of the north.



I Said "Goodbye" to It All After Reading This Amazing Book -Raised My Pay 700%

When a man who has been struggling along at low-pay suddenly steps out and commences to earn real money—\$5,000 to \$10,000 a year—he usually gives his friends quite a shock. But such things happen much more frequently than most people realize. Not only one, but HUNDREDS have altered the whole course of their lives after reading the amazing book illustrated at the right.

Where Shall We Send Your Copy Free?

As an example of what this book has done, the career of R. B. Hansen of Akron, Ohio, is just a typical case. Not long ago he was a foreman in a factory at a salary of \$160 a month. One day this remarkable volume, "Modern Salesmanship," fell into his hands. Today Mr. Hansen has reaped the rewards that this little volume placed within his reach. His salary runs well into the 5-figure class—actually exceeding \$10,000 a year!

Another man, Wm. Shore of Neenach, California, was a cowboy when he sent for "Modern Salesmanship." Now he is a salesman making as high as \$525 in a single week. O. D. Oliver of Norman, Oklahoma, read it and jumped from \$200 a month to over \$10,000 a year!

There was nothing "different" about any of these men when they started. Like many others, they subscribed to the foolish belief that successful salesmen are born with some "magic gift." But "Modern Salesmanship" showed them that nothing could be farther from the truth! Salesmanship has certain fundamental rules and laws—laws that you can master as easily as you learned the alphabet.

City and traveling sales positions are open all over the country. For years, thousands of leading firms have called on the N. S. T. A. to supply them with salesmen. Employment service is free to both employers and members.

SEE FOR YOURSELF why this FREE BOOK has been the deciding factor in the careers of so many men who are now making \$10,000 a year. No obligation. Just fill out and clip the blank below. Mail it now!

National Salesmen's Training Association
N. S. T. A. Bldg. Dept. S-711 Chicago, Ill.

National Salesmen's Training Assn.,
Dept. S-711, N. S. T. A. Bldg., Chicago, Ill.

Without cost or obligation, you may send me the free book, "Modern Salesmanship."

Name.....
Address.....
City..... State.....
Age..... Occupation.....

KVOO From Cowboy Land

(Continued from page 44)

Among them are the Eveready Hour, Seiberling Singers, Stetson Parade, Ipana Troubadors, Clicquot Club Eskimos, RCA Demonstration Hour, Cities Service Cavaliers and the Atwater Kent Hour, as well as several others. More chain programs are broadcast by KVOO than by any station south of Kansas City.

There are three announcers. J. Francis Laux has been with the station about thirteen months and has rapidly risen to prominence among Radio voices of the southwest.

Barney Breen is another stage star who decided on a Radio career. He is best known as Uncle Barney of the KVOO ABC Safety Club. This organization claims a roll of over seven thousand youngsters in thirty-two states. He also announces studio programs and entertains.

Harry K. Richardson, the third announcer, has been connected with Radio stations throughout the southwest for eight years. Before coming to KVOO he served as Radio editor of The Daily Oklahoman at Oklahoma City. In addition to announcing, he directs publicity for The Voice of Oklahoma.

Ann Tieche is program director. Hers is the job of seeing that KVOO presents first class entertainment. No artists are ever permitted to face the mike without first submitting to exhaustive auditions to determine whether they possess the necessary personality for a Radio appearance.

The musicians KVOO maintains on its salaried staff are too numerous to mention. Two dance orchestras and a twenty-four piece symphony are used almost daily, as well as more than thirty soloists.

The technical division is composed of five engineers under the direction of Ted Lowe.

In addition there is a department for the production of continuity directed by Jimmie Clark.

All in all, the KVOO staff from manager to telephone operator contains 116 members. Needless to say, it is the largest broadcast group of any single station in the southwest and one of the largest in the United States.

And what's more, it's on a paying basis, too. A great majority of the time the station is on the air is devoted to commercial programs.

Special attention is paid to the agricultural schedule every week day at 6:30 p. m., when there is a thirty minute broadcast from the KVOO remote control studio, located on the campus of Oklahoma Agricultural and Mechanical College at Stillwater.

Studio programs are proportioned in accordance with the Radio audience's wishes. All fan mail is checked carefully so that if any certain type of entertainment should gain in popularity, or vice versa, steps can be taken accordingly. A fixed scale has been prepared by which the KVOO program schedule is governed.

Not a day has passed without KVOO being on the air since its installation more than four years ago.

Its been growing since the day it was founded and is still growing. That's the whole story in a nutshell. And with the new 5,000 watt transmitter, The Voice of Oklahoma, will talk out loud in spots where formerly it was only a whisper.

They still may call Oklahoma the Cowboy State but there is nothing wild or woolly about KVOO with its highly artistic programs.

GROW—YES GROW



*Eyelashes
and Eyebrows
like this in
30 days*

By Lucille Young

America's most widely known Beauty Expert for fifteen years. Beauty Adviser to over a million women.

Now Eyelashes and Eyebrows can be made to grow. My new discovery MUST accomplish this, or its cost will be refunded in full. Over 10,000 women have made the test. I have the most marvelous testimonials. Read a few here. I have attested before a notary public, under oath, that they are genuine and voluntary.

The most marvelous discovery has been made—a way to make eyelashes and eyebrows actually grow. Now if you want long, curling, silken lashes, you can have them—and beautiful, wonderful eyebrows.

I know that women will be wild to put my new discovery to test. I want them to—at my risk. While everything else has failed, my search of years has at last disclosed the secret.

So now I say to women that no matter how scant the eyelashes and eyebrows, I will increase their length and thickness in 30 days—or not accept a single penny. There are no strings attached to my guarantee! No "ifs," "ands," or "maybes!" New growth or no pay. And you are the sole judge.

Proved Beyond the Shadow of a Doubt

Not just a few, but over ten thousand women have proved that my wonderful discovery works. I have from these women some of the most startling testimonials ever written. I print a few of them on this page. And I have sworn to their genuineness before a notary public. Please note the first testimonial—an amazing statement that my discovery actually produced hair on the forehead, for a "dip," as well as growing eyelashes and eyebrows.

What My Discovery Means to BEAUTY

To fringe the eyes with long, curling, natural lashes—to make the eyebrows intense, strong, silken lines! Think of it. All the mysterious, alluring charm of veiled eyes, the witchery and beauty only one woman in a hundred now possesses in full. But now you, every one, can have this beauty—impart to loveliness this greatest of all single charms.

Results Noticeable in a Week

In one week—sometimes in a day or two—you notice the effect. You merely follow simple directions. The eyelashes become more beautiful—like a silken fringe. The darling little upward curl shows itself. The eyebrows become sleek and tractable—with a noticeable appearance of growth and thickness. You will have the thrill of a lifetime—know that all you have to do is carry out use of my discovery the allotted time.

An Entirely New, Scientific Principle

For years, I have sought my discovery—tried thousands upon thousands of ways. But they were the ways others have tried. I, like others, failed utterly. Then I made a discovery, found that the roots of the eyelashes and eyebrows were marvelously responsive to a certain rare ingredient—found that this ingredient must be applied in an entirely new way. There is a secret about my discovery—but no mystery. It accomplishes its remarkable results just as nature does for those women who possess beautiful eyelashes and eyebrows. I know I have now given women the wish of their hearts—made the most astounding beauty discovery yet recorded.

You Can Have Proof at My Sole Risk

Remember . . . in 30 days I guarantee results that will not only delight, but amaze. If your eyelashes and eyebrows do not actually grow, if you are not wholly and entirely satisfied, you will not be out one penny. The introductory price of my discovery is \$1.95. Later the price will be regularly \$5.00.

Send No Money With Order

Send no money . . . simply mail coupon. When package arrives, pay postman only \$1.95 plus a few cents postage. Use my wonderful discovery for full 30 days. Then if not delighted, return it and I will refund your money without comment. Mail coupon today to

Lucille Young

Lucille Young Building, Chicago, Ill.

Read These Amazing Testimonial Letters

Dear Miss Young: I have just used your Eyelash and Eyebrow Beautifier and have received good results. Furthermore, while I was applying it to my eyes, I thought I'd put it on my forehead at the side, to make a dip. I continued to do so and was astonished one day when I saw that there actually was hair on my forehead. I will have a natural dip on my forehead.

Lurette Pinze,
1952 Cudaback Ave.,
Niagara Falls, N. Y.

Dear Lucille Young: I am more than pleased with your Eyebrow and Eyelash Beautifier. My eyelashes are growing thick, long, and luxurious. Miss Flora J. Coriveau,
9 Pinette Ave., Biddeford, Me.

Dear Miss Young: I certainly am delighted with the Eyebrow and Eyelash Beautifier. I notice the greatest difference and so many people I come in contact with remark how silky and long my eyelashes appear to be.

Millie Heffelfinger,
240 W. "B" St., Carlisle, Pa.

Lucille Young: I have been using your Eyelash and Eyebrow Beautifier Method. It is surely wonderful.

Pearl Provo,
2954 Taylor St., N. E.,
Minneapolis, Minn.

Dear Friend: A million or more thanks to you Miss Young. I am greatly pleased. My eyebrows and lashes are beautiful now. I will praise you to all my friends and I do not need to speak that praise—my appearance tells the tale. Naomi Ostot, 5437 Westminster Ave., W. Phila., Pa.

My Dear Friend: Your eyelash and eyebrow beautifier is simply marvelous. The longer I use it the better the results. Frances Raviart, R. D. No. 2,
Box 179, Jeanette, Penn.



Lucille Young, 8933 Lucille Young Bldg. Chicago, Ill.
Send me your new discovery for growing eyelashes and eyebrows. On arrival I will pay postman only \$1.95, plus a few cents postage. If not delighted, I will return it within 30 days and you will at once refund my money without question.

Name _____
St. Address _____
City _____ State _____

Screen Stars, Actresses, Society Women, and Professional Beauties please note. You are vitally interested in this discovery.

If you prefer, send \$1.95 with this coupon and I will pay the postage.

There's money for you in RADIO



Wonderful opportunity for ambitious men to win success in this fast-growing profession

THE Radio industry is expanding so rapidly that trained men are at a premium. There is a constant, urgent demand for operators — factory superintendents — engineers — service men — designers — salesmen.

There is no better way for you to succeed in this fascinating business than to study the Radio Course of the International Correspondence Schools. This course is new and complete. It was written by practical authorities in this field. It is endorsed by leading radio experts and radio manufacturers.

Mr. R. E. Thompson, president of the R. E. Thompson Manufacturing Company (makers of the famous Thompson Neutrodyne Radio Set), says:

"I was once a student of the International Correspondence Schools myself and I am familiar with your methods and texts. I recommend them to any young man who is sincerely seeking to improve himself in position and salary."

Quincy J. Workman, of Scranton, Penna., writes that he has "nearly doubled his salary" since he took up the I. C. S. Radio Course. He is now manager of the Radio Department in a large store.

This same course enabled John M. Paynter, of the U. S. Lighthouse Service, Charleston, S. C., to get a position as Radio Operator and Ship's Electrician. Scores of other men in radio factories, laboratories and stores report similar progress.

You, too, can get in on the ground floor if you act quickly. But don't delay too long. Mark and mail the coupon today and let us tell you all about the I. C. S. Radio Course and what it can do for you.

Mail the Coupon for Free Booklet

International Correspondence Schools
Box 8275-S, Scranton, Penna.

Without cost or obligation, please send me all the facts about the new I. C. S. course in
RADIO

Name.....

Street Address.....

City.....State.....

FREE 1929 WHOLESALE RADIO CATALOG

Dealers — Set-Builders — Write today for this 1929 Wholesale Catalog containing hundreds of money-saving "specials." Over 2,000 items. Complete lines of Radio Sets, Cabinets, Tubes, A and B Eliminators, Speakers, Parts at prices that mean BIG SAVINGS.

COMPLETE TELEVISION SECTION
Latest television equipment, A. C. Sets, Short Wave Receivers, Dynamic Speakers, also listed.

BENSON-ALLEN INC.
Dept. 38 456 So. State St. Chicago

64 PAGES OF BARGAINS

SCORES OF MONEY SAVING BARGAINS

WONDERFUL DISCOVERY. Sunken letters guide your hand. Correct your penmanship in one week. Big improvement in one hour. Positive proof sent free. Write, C. J. Ozment, 17, St. Louis, Mo.

Chic Cosmetics Accent Eyes (Continued from page 80)

the rich shades of blue, violet, lavender and orchid.

However, the smart woman of today goes farther than this in her care of the eyes. She knows that her brows are too light or too straggly, or that her lashes fail to give depth to her eyes. She notices the straggly hairs growing along her brows and over her nose. She understands the line of her brows and knows that these two lines of hair above her eyes do a great deal to make her face lovely or otherwise.

In the makeup of the eye, the first step is to pluck the brows in the proper shape. This you must do watching your face carefully. It may be that you need a prominent line. Whether this is thick or a slender delicate one depends upon your ensemble of features. How long the eyebrow is also depends upon the general shape. A round face calls for a long thin line. Only the petite woman can wear the short brow.

A good darkener is next used on the brows, black for the black haired woman and brown for the blonde and red haired. If your hairs are uneven and ragged, the darkener will train them to stay in place, especially if you use the liquid variety. Always put more on toward the nose and less toward the corners of the eyes. Please make a difference between your daytime and evening makeup. Under artificial lights a more theatrical effect is possible.

The lashes may be curled without any possibility of pain or danger, so simple are the lash curlers of today. And is there anything that makes the eye more languorous and lovely than curling the lashes? After they are curled, it is a simple matter to darken them. You do not need to worry about hurting the eyes with these products. Every manufacturer these days strives to make his beauty article pure and absolutely harmless.

Brilliance may be added to the eyes with shadow. This is put on the upper lid, blue eyeshadow for blue eyes and brown for brown. Many women make the mistake of dusting light powder on the upper lid. This takes away from the eyes and is not pretty. If you are not using eyeshadow, leave the upper lid alone.

Mme. Circe will have an article in the Radio Digest every issue. If you have any beauty problems you would like to ask her advice about, write to Mme. Circe, care of the Radio Digest, 510 N. Dearborn Street, Chicago.

America Hears WHAS

(Continued from page 66)

tion a large number of individual soloist and instrumentalists are features of the night bills.

The WHAS Variety Hour, a pot-pourri of vocal and instrumental numbers, is a new feature that is attracting considerable interest. Among the performers regularly appearing on this program are Ray Bahr and his music; Joe Anderson's orchestra; Harvey and Joe and the Wialana Hawaiian duo, two duos featuring the straight and steel guitars; Mildred Schneiderhan, pianist; Malda Mae Van Horn, reader, and a number of others.

A co-operative arrangement with several of the leading daily newspapers of the state has resulted in bringing before the microphones of WHAS a number of the prominent musicians from other Kentucky cities.

WHAS talent is more and more in demand for entertainment in Louisville and other Kentucky cities.

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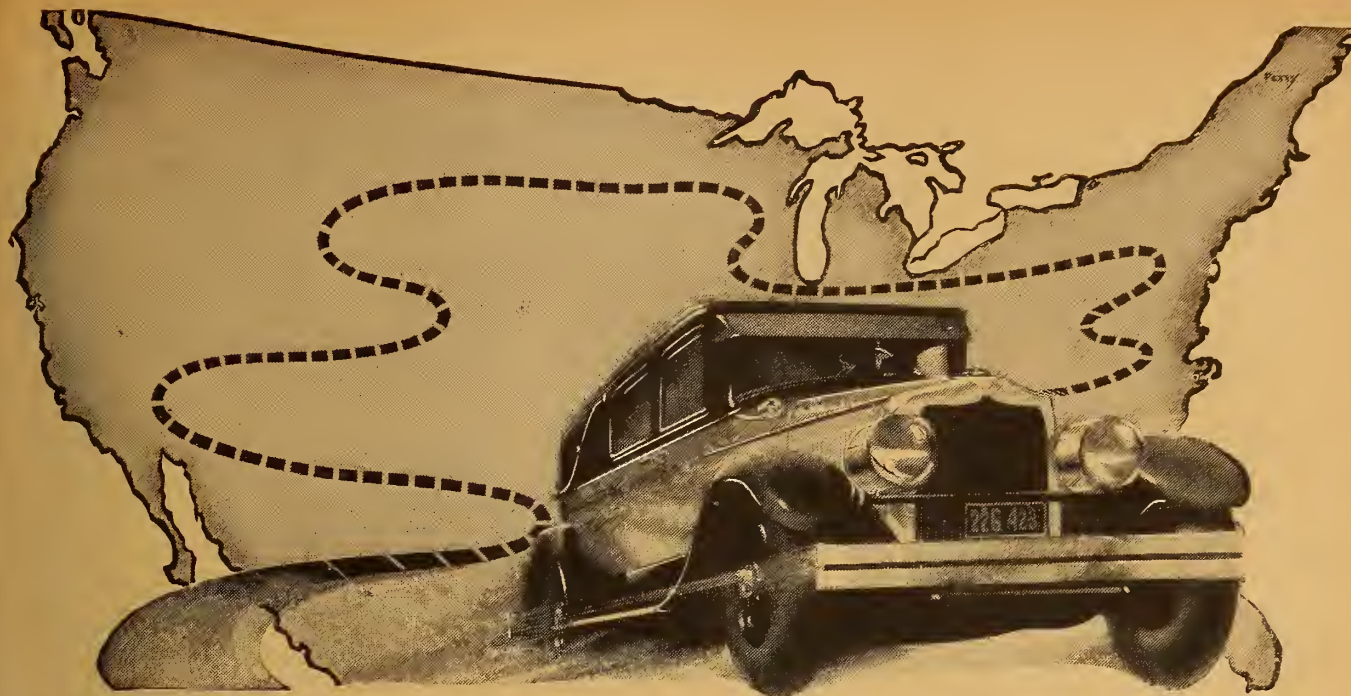
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OVER three million Stranskys have been installed on practically every make of automobile, also on trucks, tractors, stationary engines, marine engines and aeroplane. Many of them after three to eight years of constant practical tests report increased mileage, more power, and reduced carbon. Seldom has such an invention so taken America by storm. No wonder Williams made \$48 in three hours and Foster \$137.50 in a week!

HOW IT WORKS

J. A. Stransky, former candidate for Governor of South Dakota, is the inventor of this device. It is a simple little piece not much larger than a dollar coin and a 12-year-old boy can install it. It is automatic and self regulating.

It operates on a universally-recognized engineering principle that has been approved, after exhaustive tests, by experienced auto drivers, automobile dealers, and expert mechanics.

Official tests have proved that most cars waste 30% of the gasoline power through improper combustion, and we have thousands of unsolicited testimonials like the following: Ford, 20 to 40 miles on a gallon, Star, 25 to 42, Chev-

rolet, 30 to 43, Hudson, 19 to 21, Overland, 19 to 31, Nash, 19 to 22, Hupmobile, 32 to 37, Buick, 18 to 32, Studebaker, 23 to 27, Cadillac, 12 to 18—and so on. Are you getting that many miles per gallon now?

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My gas bill has been cut in half. I have removed every particle of carbon from my engine. Since I installed it, my engine runs as good as new, starts easier and quicker. I went out Saturday about three hours and secured 16 orders.
—J. A. Williams.

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No Pep in Paris Radio

(Continued from page 29)

the listener-in. The government stations, called P.T.T. (Postes, Telegraph, Telephones), have low power broadcasting apparatus. These can only be heard in the city in which they are operated. The possessors of large sets fare a little better, but the others and the listeners-in with crystal sets are absolutely helpless. The service covering sport news is particularly bad, and this is a country where there is a large number of people intensely following up all athletic and boxing events. Because of the government's monopoly of telephones and telegraphs, all news of sporting events can only be sent via government broadcasting stations. Detailed news of sports or fights are never given, as the government as broadcaster never sends a reporter to the event, relying on newspaper reports, thus simply giving points and names of winners. The lack of money has far reaching effects in curtailing the length of the programs.

The most powerful broadcasting station in Paris is called the Radio-Paris. It is only on the air about seven hours a day. Its programs end at 10:30 in the evening. The main reason given for this early finishing is that the most of the listeners-in are in the provinces, where people go to bed by 11 o'clock. The Eiffel Tower functions only three and a half hours a day and the government station (P.T.T.) about eight hours a day.

FOR THE whole of France there are only fifteen broadcasting stations, eight of which can only be heard perfectly in their own cities and environs. There are six stations in Paris. One only of these, the Radio-Paris, is powerful enough to be heard with small sets in the provinces.

Another marked difference in the temperaments of the French and American people is particularly noticeable in the response to the concerts. There are no what would be called "Radio-fans" in France. The French listeners-in do not write letters, wire or telephone their approval to the stations or express their admiration of entertainers as is common in America. Only a scant dozen letters a month are received by the biggest station in France. Thus the broadcasters in France, unlike America, have no guiding encouragement with which to aid them in making up future programs. They cannot definitely cater to their public as in America.

From what information is to hand, there seems no doubt that light operas and classical music are now more in favor than jazz. The French people are a leisurely race. They take off two hours in the middle of the day for lunch, when all business is practically suspended from the hour of 12 until 2. During these two hours a great many people listen in and eat their heavy lunches to the tunes of Wagner, Schumann and others of the masters.

One very unique thing is connection with the Radio in France was begun recently. The station Radio-Paris has been broadcasting a very vivid reconstruction of some of the eventful days of the Revolution. The best French actors of today have been taking the parts of such famous men of the past as Danton, Robespierre, Marat, etc. This station's programs recently have contained classical plays from Moliere, Racine and Corneille.

There are no complaints in France against the "loud-speaker" pest. In Paris the chief of police ruled out all the loud-speakers on the streets for

publicity or other purposes. Even wireless shops are not allowed the loud advertising of their waves outside of their premises. The owners of loud-speakers confine their activities to the hours of the day and early evening, as the French law forbids anyone to play a musical instrument or to make any disturbing noise after ten o'clock in the evening in apartment houses.

The most interesting point in connection with the growth of Radio popularity in France is that the greatest number of owners are found among the working people. Following this, the simplest of sets and cabinets are most commonly sold. The very elaborate consoles made to match period furniture are seldom seen in the shops, and the ordinary oblong box made of hardwood is the prime favorite.

It is a fact to date that the majority of Radio fans, using the word in its widest sense, make their own sets. Crystal sets are made, but for use only in large cities where powerful stations only can be heard clearly. The Radio industry is doing a very successful business. There are an abundance of small shops selling Radio accessories. In Paris you will find sometimes two small shops in one small street.

THE SETS most frequently used are the four-lamp sets; the one-lamp radio frequency; the one-lamp detector; the two-lamp radio frequency; among the expensive sets, which are still very much cheaper than in America, the superheterodynes and others of the same type are the most commonly sold.

The annual Radio Salon just closed its doors at the end of the first week in November after a very successful exhibition. The interest of the French people is undoubted, for every day the vast area of the Grand Palais, where the show was held, was filled with interested visitors. In addition to this exhibition there is held annually a Household Goods Exhibition, which includes a large Radio department. So it is evident that Radio has become popular with a great many householders in France.

Radio entertainers do not receive anything like the publicity they do in America. In the case of great stars from the Nationale theaters, their performing for the Radio is not looked upon with favor by them. They will not allow their pictures to be published with an announcement that they have been Radio entertaining. This is indicative of the difference between the two races of people. With few Radio fans sending in letters, the entertainers naturally do not know their popularity to the extent that it is known in America.

There is no doubt that as soon as the government takes a definite stand regarding the status of Radio in the land, there will be a marked change. If pressure is brought successfully to bear to make the government abandon its announced intention of monopolizing the Radio broadcasting in France, radio-phony will advance rapidly. The people now engaged in supplying the entertainments will then extend the time of their performances and improve the quality. More money will be invested in the industry when interested parties know their investments are safe from loss. Then the stations will be able to compete in excellence with America and Germany, where Radio has made great strides.

A great deal of interest has been manifested in the announcement that American programs may be transmitted by short-wave to France and rebroadcast here. Concerts would be especially appreciated. It might lead to a more general appreciation of Radio possibilities.

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LITTLE ADS in
Radio Digest
Bring BIG RETURNS

Just Glancing Through

(Continued from page 2)

ning to end which you will find featured in this Radio Digest.

* * *

SO many letters have come to Radio Digest expressing admiration for Jessica Dragonette, so many times it has happened that her name has come up in conversations concerning the Radio programs it seemed as though Miss Dragonette must have sung her way very extensively into the hearts of the Radio audience. So she was asked to write something about herself for the Radio Digest readers. Her letter is a delightful response that seems to be addressed to each individual reader—just as her song seems to come directly to each individual listener. Read it and you will love this little lady more than ever.

* * *

WE received a rather peculiar letter signed simply, "Staff, WINR." One paragraph reads as follows: "We received your Winter edition of Radio Digest but it hardly is of any interest to either our listeners or our staff. Usually the friend audience of a Radio station like to see something of their favorite announcer or favorite artist, or at least a little writeup about the station, and not finding this certainly does not please most people who buy your magazine or any other publication to find something that is interesting to them." We are sorry that WINR, 100 watts, has been neglected. We list it in the log, but it seems we have not given this station one of our eighty or so feature pages. Perhaps we should have done this. And then, we might ask, what percentage of our readers throughout the United States and Canada would be greatly interested in the staff of WINR? We do not wish to slight anyone but we must remember to please the greatest number of our readers first. However, we do write about and show pictures from a great many of the smaller independent stations, as a perusal of each number of Radio Digest will show.

Wanderlusters Find Romance

(Continued from page 62)

Klemm, program supervisor, and S. Broughton Tall, in charge of the Literary and Musical Research Department, arranged the first of these ether strolls and from the very beginning the spirit of joyousness and freedom that characterized these journeys caught and held the fancy of the Radio public so that today the WBAL Wanderlusters number thousands of Radio fans in almost every state in the Union as well as in many parts of Canada, where WBAL is one of the "regulars" dialed.

Each week there is a different "steering committee," meaning the soloists who assist in piloting the wanderlusters through the ether spaces. However, the following members of the staff are those upon whom the Radio wanderers have come to depend for the musical entertainment provided along the way: Roberta Glanville and Henriette Kern, sopranos; Maud Albert, contralto; John Wilbourn and Edward Jendrek, tenors; Walter N. Linthicum, baritone; Sol Sax, pianist; Samuel Maurice Stern, cellist, and Michael Weiner, violinist. The official "guide" of these adventures, however, is Gustav Klemm, program supervisor, under whose able direction these feature programs are presented.

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SLICK, velvety shaves forever and no more razor blades to buy! That's what you can expect from KRISS-KROSS, the amazing blade rejuvenator! Makes new blades out of old a surprising way—week after week, month after month. Gives them a sharpness they seldom possess even when brand new! No wonder experts pronounce it one of the greatest inventions ever patented!

KRISS-KROSS renews all kinds of blades (except Durham). Employs famous diagonal stroke of master barber. Eight "lucky leather grooves" do the trick in 11 seconds. Automatic, decreasing pressure. Nickel jig notifies you when blade is ready with keenest cutting edge steel can take!

Special OFFER NOW!

Right now, to introduce KRISS-KROSS stropper which is never sold in stores, I am giving with it FREE a unique new kind of razor. Really 3 razors in one! Gives sliding instead of pulling stroke. Reduces beard resistance 45%. Send for details of special offer to-day. No obligation. Just mail the coupon now.

AGENTS!

Make big money with KRISS-KROSS —\$5 to \$14 an hour and more. Many average \$300 to \$500 a month. Spare time workers often take in \$6-\$12 profit an evening. As soon as shavers see KRISS-KROSS in action, they want it. Generous commissions and profits. Get details today. Check bottom of coupon and mail today.

RHODES MFG. CO.,

Dept. S-3213, 1418 Pendleton Ave., St. Louis, Mo.

RHODES MFG. CO., Dept. S-3213
1418 Pendleton Ave., St. Louis, Mo.

Without obligation, please send me detailed explanation of KRISS-KROSS stropper which is never sold in stores. Also tell me about 3-way razor you send without charge.

Name.....

Address.....

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

() Check here if interested in becoming representative.

"How I Laughed Myself Into Success in Radio"

by Howard Clark

"I'm sitting on top of the world! My bank account is growing fatter every day . . . my home is all paid for . . . I've just ordered a new car . . . and my wife and I can at last enjoy life in real style. It sure feels great to be earning big money. And to think how it all came about!"

IT happened on a rainy Monday night. I was reading a magazine while Mary was clearing away the supper dishes. Suddenly a funny cartoon caught my eye . . . and I laughed out loud.

"Jim, you make me sick!" she cried. "How can you laugh while I'm nearly dying of weariness!"

"But Mary dear—"

"Don't dear me, you idiot!"

I was alarmed. "Great heavens, what's wrong?"

"Wrong?" she screamed, "here I drudge all day, do my own housework, wash all the clothes, take care of the baby, and worry about your meals. I never get a moment of freedom . . . and haven't a decent thing to wear even to church . . . yet you never seem to care!"

I was ashamed!

A feeling of shame swept over me. So that was why she seemed so "moody" the last few days! Like a good sport she had suffered in silence until she couldn't keep it in any longer. Poor kid!

For hours after Mary had gone to bed that night I kept staring into space. What a mess I had made of our lives . . . What a slave I had made of her.

Listlessly I kept thumbing the pages of the magazine . . . thinking . . . thinking. Was there no way out of it?

Then suddenly . . . as if by some kind act of Providence . . . I stopped before a story. It told of a fellow who had made quite a fortune in an uncrowded profession. Fascinated, I read on. It told of the brilliant opportunities in the radio industry . . . of the big incomes fellows like myself were earning . . . and of the ease with which expert radio training could be acquired. But what impressed me most was the



fact that success was practically assured by means of a new home-study laboratory method sponsored by one of America's great corporations.

With a gigantic enterprise like this behind a school I needed no greater guarantee . . . so without a second's further hesitation I tore the coupon and mailed it.

A lucky event that changed my life

It sure was my lucky day, when the first lessons came in. I never dreamed that learning radio was so easy. I didn't know the first thing about it when I started. Yet before many months were over I was able to solve many of the problems which command big pay.

Each subject was explained in simple word and picture form. It carried me along like a novel. From magnetism and electricity the lessons took me step by step through trouble-finding and repairing—through ship and shore and broadcasting apparatus operation and construction—through photoradiograms, television and beam transmission.

I didn't have to give up my regular job. I stayed right at home and learned

during my spare time. I actually learned by doing. With the lessons I received a complete, expensive storehouse of apparatus with which I was able to build radio circuits and sets of almost every description. Yet it cost me absolutely nothing extra.

As a result of this practical, technical working out of big radio problems with a fine home-laboratory, I was able to earn good money even before I had completed my course! And it wasn't long before I was able to quit my regular work entirely . . . and branch out for myself in big paying radio jobs.

Today, I have more work than I can take care of. And I often make more money in a day than I used to earn in a week.

Read this thrilling Free Book

Howard Clark's story is typical of the success which scores of other men have achieved . . . through the "big-league" training given by the home-study course of the Radio Institute of America . . . the only school in America sponsored by the Radio Corporation of America.

Radio needs you. Manufacturers, dealers, broadcasting stations, ships . . . all need trained radio experts. The pay is big. The opportunities are limitless . . . The work is thrilling! Find out all about it. The Institute has prepared an interesting, illustrated booklet telling you all you want to know about this vast industry and about the remarkable home-study course that can fit you for a brilliant radio career. Just mail the coupon below . . . the booklet is absolutely free. Radio Institute of America, 326 Broadway, New York.

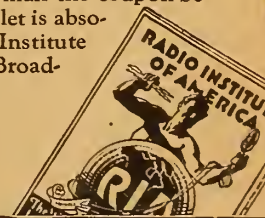
Mail this coupon

Radio Institute of America
Dept. RD-2, 326 Broadway, New York

Gentlemen: Please send me your big FREE 50-page book which tells about the great opportunities in Radio and about your famous laboratory-method of radio instruction at home.

Name.....

Address.....



One, two - Its good for you
 Three, four - They all want more
 Five, six - It comes in sticks
 Seven, eight - The flavor's great
 Nine, ten - Say it again -

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**Good -
 and Good for you.**

Wrigley's gives lasting
 enjoyment and benefit.

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On the Air Every Friday Night

Take a Trip With the "WRIGLEY SPEARMAN" to the Magic Isle
 The "WRIGLEY REVIEW" will be broadcast from WJZ, New York City, and the National Broadcasting Company, through the following local broadcasting stations:

WJAX	Jacksonville, Fla.	KDKA	Pittsburgh, Pa.
WSB	Atlanta, Ga.	WMC	Memphis, Tenn.
KYW	Chicago, Ill.	WSM	Nashville, Tenn.
WHAS	Louisville, Ky.	WRVA	Richmond, Va.
WBAL	Baltimore, Md.	KSL	Salt Lake City, Utah
WBZA	Boston, Mass.	KOA	Denver, Colo.
WBZ	Springfield, Mass.	KFI	Los Angeles, Calif.
WJR	Detroit, Mich.	KGO	} San Francisco, Calif.
KSTP	{ Minneapolis, Minn.	or KPO	
WREN	Kansas City, Mo.	KGW	Portland, Ore.
KWK	St. Louis, Mo.	KOMO	} Seattle, Wash.
WHAM	Rochester, N. Y.	or KFOA	
WBT	Charlotte, N. C.	KHQ	Spokane, Wash.
WLW	Cincinnati, Ohio.	KPRC	Houston, Texas.
WJZ	New York City	WOAI	San Antonio, Texas.
KVOO	Tulsa, Okla.		
WFAA	Dallas, Texas.		

Time of Broadcasting—Every Friday Night

9 p. m. to 10 p. m. Eastern Time
 8 p. m. to 9 p. m. Central Time
 6 p. m. to 7 p. m. Pacific Time

CLASSIFIED ADVERTISEMENTS

Rates are twenty cents a word for each insertion. Five per cent discount for four insertions. Name and address are counted. Two initials count one word. Cash must accompany order. Minimum of ten words. Objectionable and misleading advertisements not accepted.

Employment

Men

Salesmen Wanted

Screw-holding screwdriver! Amazing, brand new patented invention! Retail \$1.50. Factories, garages, electricians, auto, radio owners buy on sight! Exclusive state territory. Genuine opportunity earn big money. Free trial offer. Jiffy, 1028 Winthrop Bldg., Boston.

Agents Wanted

42 Miles on 1 Gallon of Gas—Wonderful, new, Vapor Moisture Humidifier and Carbon Eliminator. All autos. One furnished to test. Critchlow (Inventor), A-142, Wheaton, Ill.

Business Opportunities

\$8.00 BUYS DEED part oil 20 acres. Oil field opening. Free structural map. Act quick! Joe Milam, Dept. K-4, Oklahoma City, Okla.

Patents

INVENTIONS COMMERCIALIZED. Patented or unpatented. Write Adam Fisher Manufacturing Company, 555 Enright St. Louis, Missouri.

Radio

Rejuvenate old Batteries. Rebuild for \$2.98. Get our cut prices on battery molds, groups, boxes, etc. Wonderful money-making plan. Lightning Battery Co., St. Paul, Minn.

Save Money, Time, Worry—With Hoff's Radio Trouble Finder, Log and Station Book, also Dictionary, illustrated. Circular Free. Joseph Jennings, 4363 Page Blvd., St. Louis, Mo.

Three Crystals — "World Beaters" — 60c. William A. Talley, "Crystal Set Wizard," Beaudry, Ark.

Stamps

RADIO STATION stamps bought, sold and exchanged. Chas. A. Philidus, 510 East 120th St., New York, N. Y.

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Room & Bath
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 \$3 to \$5 per day
 For 2 Persons
 \$4 to \$6 per day



They Could Hardly Believe Their Own Ears— when I Switched to *Ground Wave Reception*

"IT'S no use trying to listen in tonight," said Bill as I took his hat. "Jane and I tried to get reception during dinner, but all we got was static. It's usually this way—just the night they broadcast Paul Whiteman's band or some other good program it's spoiled by howls and fading. Why own a Radio at all?" he ended up disgustedly.

"Perhaps my set will do a little better," I suggested. I had a surprise in store for him!

He looked doubtful as I turned

on the set switch. I had left my old aerial antenna attached on purpose and soon the room was filled with an ear-splitting excuse for music. Manipulation of the dials only served to make it worse, or to choke down reception until it was hardly audible. Occasionally it faded out altogether and I could picture the roof aerial swaying helplessly in the strong wind. Then the jumble and howls would start up again until my wife finally shouted above the din, "Turn that thing off—it's terrible!"

Satisfied, I laughed, and disconnecting the old aerial and ground wires I then attached the lead-in wires of my new under-ground antenna, which I had installed just before dinner. "Now, listen!" I commanded.

The Thrilling Test

As though by magic, the sweet high notes of violins, the stirring sobbing of saxophones, the clear pure notes of a clarinet brought Bill to his feet! Jane looked dumfounded. Even my wife, who had not paid much attention to my preliminary tests, was amazed. "What did you do to it?" she demanded. "I think he bewitched it," Jane accused. The music went on, clear and strong, with only a long moan or slight jumble now and then to remind us of the storm raging outside. The static was so greatly reduced that we hardly noticed it. The important thing was—we were getting one of the year's best programs with scarcely any trouble on a wild, stormy night.

"You see," I explained later to Bill, "I buried my new under-ground aerial about two feet below the ground, where wind and storms can't affect it so easily. It has certainly been proved tonight that Radio waves are just as strong in the ground as they are in the air. They call this thing 'Subwave-Aerial,' and it's insulated some way to keep out interference and noise, just like these expensive modern receivers are. It's combined with a scientific ground, so I'm sure now that I have the correct ground connection. And all this isn't costing me any more than my old aerial antenna that I've nearly broken my neck repairing after wind storms like this. And last, but not least," I finished triumphantly, "I'll never need to touch it again. It's guaranteed for 25 years."

Hardly necessary to say that Bill went home with the name and address of the Subwave-Aerial manufacturers in his pocket.

Test It Yourself—Free!

The above story illustrates the results for which the designers of Subwave-Aerial struggled for months. At last, enthusiastic reports such as this from Radio experts reproduced here proved that they had succeeded. Now you have a chance to prove the merits of this great new Radio development for yourself. Try, if possible, to pick a night when static is had and make the thrilling test. It's fun! And if you are not more than pleased with Subwave-Aerial, the test won't cost you a cent. We feel safe in saying, however, that once you've heard the amazing difference in reception and realize the wonderful convenience of this modern combined antenna and ground, you'll wonder how you ever put up with the old-fashioned, dangerous, inefficient methods. Be sure to send at once for all the interesting details on the development of Subwave-Aerial. It's the newest, most thrilling thing in the romantic world of Radio! Use the coupon below. Fill it in and mail it NOW!



**UNDERGROUND AERIAL PRODUCTS,
Suite 618, St. Clair Bldg., Dept. 823-B. W.,
St. Clair and Erie Streets, Chicago, Ill.**

**UNDERGROUND AERIAL PRODUCTS,
Suite 618, St. Clair Bldg., Dept. 823-B. W.,
St. Clair and Erie Streets, Chicago, Ill.**

Rush illustrated literature on the new Subwave-Aerial and details of your Free Test Offer.

Name

Address

City State

SUBWAVE-AERIAL Gets DX Installed 50 Feet From 60,000-Volt Power Line

Underground Aerial Products,
Suite 618, St. Clair Bldg.,
St. Clair and Erie Sts., Chicago, Ill.
Gentlemen: Regarding a test with your underground aerial, "Subwave-Aerial." On January 27, 1929, Mr. Frank Smith and I drove out near the Sanitary District power plant in a Ford sedan. We stopped about 50 feet distant from the plant's 60,000-volt transmission line and dug a small hole, into which we dropped the Subwave-Aerial. We left the two sets we brought with us in the sedan, attaching the lead-in wires of the Subwave-Aerial first to one, then the other. One set was a 5-tube Freshman—the other a single-dial Atwater Kent, Model 35. We used the Ford battery.

At 15 minutes to six we got WCCO, St. Paul, Minn. It came in loud and clear at 27 on the dial. There was not the slightest interference from the 60,000-volt power transmission line only 50 feet away. At 20 minutes after six we got Toronto, first on one set and then the other. We plainly heard the program, which was being sponsored by a Spartan Radio dealer.

It was impossible to get reception at all with an overhead aerial under the same conditions.

Yours truly,
BENNETT SMITH
HARRY R. JACKSON

FREE!**MEN! Here's
the dope you've
been looking for****HOW TO GET INTO THE
RADIO BUSINESS~***J.E.S.***Many Earn
\$50 to \$250 a Week
in Work That is
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If you're earning a penny less than \$50 a week, clip coupon now for **FREE BOOK!** New 64-page book pictures and tells all about the Radio business, hundreds of opportunities—in work that is almost romance! **YOU** can learn quickly and easily at home, through my tested, proved methods to take advantage of these great opportunities! Why go along at \$25, \$35, or \$45 a week when you can pleasantly and in a short time learn how to hold the big-pay job?

Clip Coupon for Free Book

Don't envy the other fellow who's pulling down the big cash! My proven home-study training methods make it possible for you, too, to get ready for better jobs, to earn enough money so you can enjoy the good things of life. One of the most valuable books ever written on Radio tells how—interesting facts about this great field, and how I can prepare you in your spare time at home, to step into a big-pay Radio job. **GET THIS BOOK. SEND COUPON TODAY.**



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Men at Home
for Big Radio
Jobs.**

**My Book Proves
I Can Do the
Same for
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Dear Mr. Smith:
Without obligating me in any way, send me your big **FREE BOOK**, "Rich Rewards in Radio," and all information about your practical, home-study Radio Course.



**I Give You
6 Big Outfits
of Radio Parts**

With them you can build 100 different circuits—learn the "how" and "why" of practically every type of Radio set made. This kind of training fits you to step into the good jobs—sends you out an experienced Radio expert. When you complete, my Employment Department will help you get a real big Radio job like Graduate Edward Stanko, now chief operator of Station WGR, or Frank M. Jones, 922 Guadalupe St., San Angelo, Texas, builder and operator of Station KGFI and manager of the best equipped Radio shop in the southwest, or help you start a Radio business of your own like Richard Butler, 1419 N. 17th St., Philadelphia, Pa., who made around \$500 a month compared with a small salaried, no future job as a motorman when he enrolled.

**My Radio Training is the Famous
"Course That Pays for Itself"**

Spare time earnings are easy in Radio almost from the time you enroll. G. W. Page, 1807 21st Ave. S., Nashville, Tenn., made \$935 in his spare time while taking this course. Al Johnson, 1409 Shelby St., Sandusky, Ohio, \$1,000 in four months, and he didn't know the difference between a condenser and a transformer when he enrolled. I'll give you a legal contract, backed by N. R. I. pioneer and largest home-study Radio school in the world, to refund every penny of your money if you are not satisfied, upon completing, with the lessons and instructions received. Find out what Radio offers you—get the facts. Mail coupon—**RIGHT NOW.**

ACT NOW~COUPON BRINGS MY**FREE BOOK**

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The Stars All Beautify

No Half Measures

SCREEN stars study beauty. They cannot stand out in a photo play without it. It is not merely a matter of *make-up*. The skin needs a *wake-up* first. They start with a skin that is clear, soft, clean and glowing. The rest is but added touches.

Boncilla is Hollywood's most popular beauty aid. It has been for many years. Boncilla has helped to make many a great reputation, both with male and female stars. The wonderful skins which the camera depicts are no accident. They are natural skins brought to the fullness of their beauty by Boncilla.



IRENE RICH
Making ready for her part with
Boncilla Clasmic Pack

How Irene Rich Gets That Radiant Glow

Before entering the studio, Irene Rich applies Boncilla clasmic pack. This draws out from the skin all impurities. All the dirt and grime, dead skin and hardened oil. All the remains of old make-up. It also brings the blood to the skin.

When she washes off the dried Boncilla, all the skin refuse comes with it. The skin is clean to the depths. A rosy glow appears. Then she applies Boncilla Cold Cream, and removes it. Then Boncilla Vanishing Cream as a powder base. Then the exquisite Boncilla Powder of the proper shade.

You Can Charm-Tonight

Tonight, perhaps, you appear on *your* stage, and you wish to look your best. A party, a theatre or a home evening which you wish to glorify.

Thirty minutes with Boncilla will bring you rich rewards. The new beauty will amaze you, and delight your friends. They will see a different woman.

Apply Boncilla to the face and neck. Rest while it dries. You will feel it draw from the skin all that clogs or mars it. It removes the causes of blackheads and blemishes. No dead skin, no hardened oil, no dirt or grime escapes it.

You will feel a warmth, for the blood comes to the surface to nourish and revive the skin. Then these results appear:

*A radiant glow,
An animated look,
A clean, clear skin,
A soft, smooth skin.*

Older women see other results. Often, in those 30 minutes, they seem to drop ten years.

*Lines are eradicated,
Wrinkles are combated,
Enlarged pores reduced,
Sagging muscles are firmed.*

The only way is Boncilla clasmic pack. There is nothing else like it. Nobody knows another way to bring comparable results so quickly. This is so certain that leading beauty experts the world over count Boncilla their chief beauty aid. In London, Paris, Berlin and Vienna they import it for the purpose.

Try Boncilla in justice to yourself. You will never omit it when you see the change it brings. All toilet counters supply it at 50c and \$1. Or the coupon will bring you a week's supply with the three aids which go with it. Clip it now.



IRENE RICH and WARNER BAXTER
In the new Pathé production, "Craig's Wife,"
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Cheeks Like Roses

Boncilla
CLASMIC
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RD4-29

ONE WEEK TEST

BONCILLA—Indianapolis, Ind.

Mail me a one week treatment of Boncilla with the three helps which go with it—four samples. I enclose a dime.

Name.....

Address.....

If you live in Canada, mail coupon with 10c to Canadian Boncilla Laboratories, Ltd., 77 Peter Street, Toronto.



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Head coach University of Illinois Swimming Teams, winners of many Western Conference water polo, water basketball and swimming championships. Member of 1912 National A. A. U. championship swimming and water polo team. Author of "Swimming."

**"Just the thing
for a Swimmer,"**

*says Edwin J. Manley
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"Baby Ruth candy makes a big hit with athletes in training. When eaten with or after a meal it is just the thing for a swimmer. My boys eat Baby Ruth."

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Coach Manley knows! There is nothing better than Baby Ruth to build up the reserve energy you need for a spurt at the finish. That is because Baby Ruth is a balanced ration of the very best of nourishing, energy-creating foods—pure chocolate, plump, wholesome nuts and like good things—combined in a delicious candy of dollar-a-pound quality. Baby Ruth makes training a pleasure. Whatever your favorite sport, Baby Ruth will help you play it better. Take Coach Manley's advice. *Treat yourself today.*



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