

# THE makeshifts A Company of the com

acids

water

excuses

trouble

batteries

The cabinet of model G-5, illustrated here, is without a doubt one of the finest that ever housed a radio set. It is panelled entirely of the most carefully selected genuine burl Walnut. Contains a large cone-speaker of great volume and superb tone. Truly a masterpiece of the cabinet makers art.



This all electric Freshman Equaphase embodies many new features—

- four tuned circuits for selectivity.
- Equaphase system of stabilization prevents all oscillations.
- single drive just one-control.
- drum type illuminated dial for beauty—calibrated inwavelengths for efficiency.

Always Ready— Always Right

•

Your light socket supplies all the power.

\$250

Complete
Ready to Operate

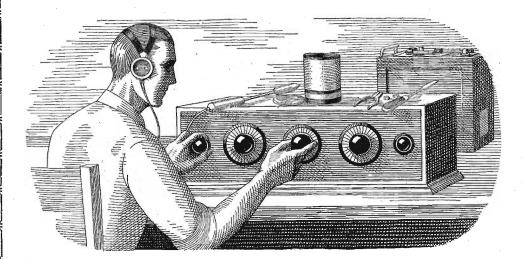
A Freshman development—licensed under patents; RCA—General Electric Co.,—Westinghouse Electric & Mfg. Co. and American Tel. & Tel. Co.

# Freshman EQUAPHASE

Sold on Convenient Terms

by Authorized Freshman Dealers Only

CHAS. FRESHMAN CO., INC., FRESHMAN BUILDING, NEW YORK CHICAGO LOS ANGELES



If all the Radio sets I've "fooled" with in my time were piled on top of each other, they'd reach about halfway to Mars. The trouble with me was that I thought I knew so much about Rodio that I really didn't know the first thing. I thought Radio was a plaything—that was all I could see in it for me.

# I Thought Radio Was a Plaything

But Now My Eyes Are Opened, and I'm Making Over \$100 a Week!

\$50 a week! Man alive, just one year ago a salary that big would have been the height of my ambition.

Twelve months ago I was scrimping along on starvation wages, just barely making both ends meet. It was the same old story—a little job, a salary just as small as the job—while I myself had been dragging along in the rut so long I couldn't see over the sides.

If you'd told me a year ago that in twelve months' time I would be making \$100 and more every week in the Radio business—whew! I know I'd have thought you were crazy. But that's the sort of money I'm pulling down right now—and in the future I expect even more. Why only today—

But I'm getting ahead of my story. I was hard up a year ago because I was kidding myself, that's all—not because I had to be. I could have been holding then the same sort of job I'm holding now, if I'd only been wise to myself. If you've fooled around with Radio, but never thought of it as a serious business, maybe you're in just the same boat I was. If so, you'll want to read how my eyes were opened for me.

WHEN broadcasting first became the rage, several years ago, I first began my dabbling with the new art of Radio. I was "nuts" about the subject, like many thousands of other fellows all over the country. And no wonder! There's a fascination—something that grabs hold of a fellow—about twirling a little knob and suddenly listening to a voice speaking a thousand miles away! Twirling it a little more and listening to the mysterious dots and dashes of steamers far at sea. Even today I get a thrill from this strange force. In those days, many times I stayed up almost the whole night trying for DX. Many times I missed supper because I couldn't be dragged away from the latest circuit I was trying out.

I never seemed to get very far with it, though. I used to read the Radio magazines and occasionally

a Radio book, but I never understood the subject very clearly, and lots of things I didn't see through at all.

So, up to a year ago, I was just a dabbler—I thought Radio was a plaything. I never realized what an enormous, fast growing industry Radio had come to be—employing thousands and thousands of trained men. I usually stayed home in the evenings after work, because I didn't make enough money to go out very much. And generally during the evening I'd tinker up a little with Radio—a set of my own or some friend's. I even made a little spare change this way, which helped a lot, but I didn't know enough to go very far with such work.

And as for the idea that a splendid Radio job might be mine, if I made a little effort to prepare for it—such an idea never entered my mind. When a friend suggested it to me one year ago. I laughed at him.

"You're kidding me," I said.

"I'm not," he replied. "Take a look at this ad."

He pointed to a page ad in a magazine, an advertisement I'd seen many times but just passed up without thinking, never dreaming it applied to me. This time I read the ad carefully. It told of many big opportunities for trained men to succeed in the great new Radio field. With the advertisement was a coupon offering a big free book full of information. I sent the coupon in, and in a few days received a handsome 64-page book, printed in two colors, telling all about the opportunities in the Radio field and how a man can prepare quickly and easily at home to take advantage of these opportunities. Well, it was a revelation to me. I read the book carefully, and when I finished it I made my decision.

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

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

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

Now I'm making, as I told you before, over \$100 a week. And I know the future holds even more, for Radio is one of the most progressive, fastest-growing businesses in the world today. And it's work that I like—work a man can get interested in.

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

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

Take another tip—No matter what your plans are, no matter how much or how little you know about Radio—clip the coupon below and look their free book over. It is filled with interesting facts, figures, and photos, and the information it will give you is worth a few minutes of anybody's time. You will place yourself under no obligation—the book is free, and is gladly sent to anyone who wants to know about Radio. Just address J. E. Smith, President, National Radio Institute, Dept. 1P, Washington, D. C.

J. E. SMITH, President,
National Radio Institute,
Dept. 1P, Washington, D. C.

Dear Mr. Smith:

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

Name	
Address	
Town	Ċ to to



# An entirely NEW type by FARRAND

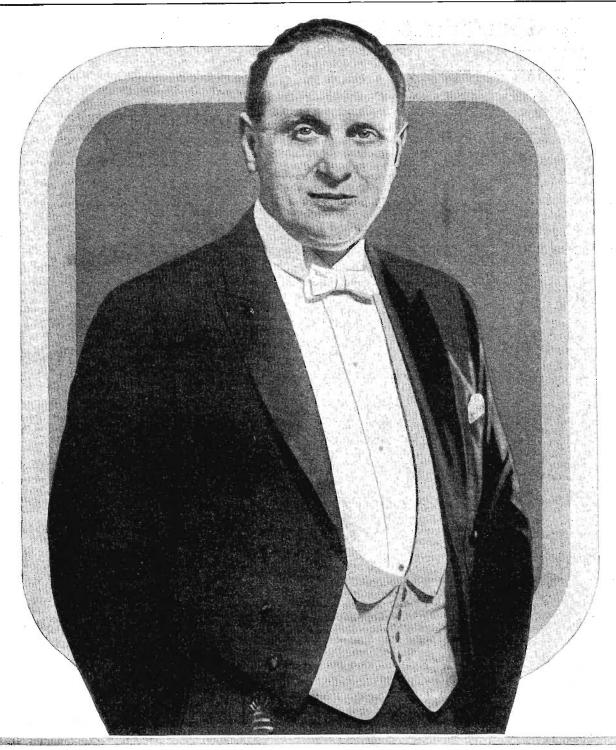
The wanted BASS tones captured as never before!

Another Farrand advancement—the Farrand Concert Speaker—attaining a new, deep-reaching tonal radius, with all the pleasing treble retained as heretofore—virtually next year's model presented today! See and hear it, at your dealer's—and be thrilled by its matchless, all-around performance.

The unusual outward beauty of the Farrond Concert Speaker, together with its superlative performance, will increase your desire to own one. Designed in the

manner of a fine portrait frame, exquisitely wrought of richly finished walnut veneer, its artistry offers instant appeal. Height, 22 inches, overall.

# S. L. Rothafel - Leader of "Roxy's Gang"



WHEN the Radio made its appearance one of the greatest forces for good the world has ever known came into being. Probably no single medium of communication now holds so much significance as our invisible network of information, education and entertainment that covers every corner of the globe. In a very few years the Radio has developed from an experimental method of signaling—and for amateurs, a mere toy—into a public instrument of such limitiess scope that a contemplation of its future makes you hold your breath in awe.

The foregoing paragraph may seem rather formal, but it is a statement of fact, and when we say the Radio future makes you hold your breath in awe we mean that you and I and whole communities are

### ROXY SAYS

going to be so linked up in it that perhaps even our very habits may be changed. This is no idle talk either. Even nations may be much affected by the

either. Even nations may be much affected by the Radio.
Indeed, already we hear of a case in Sweden. One section of the country is in a "blind spot" so that the natives cannot hear the Swedish stations. However, they can hear the English stations very well. As a result of this, the cblidren as they grow up are learning the English language faster than they are their mother tongue. This is bound to have a

profound influence on the youth of that district when they reach maturity.

This power of the Radio to play an important part in the lives of individuals and nations has been brought home to many of us very forcefully. It has seemed to me to be one of the very pleasantest activities one could imagine.

It seems funny to look back six years on the time when the thought first came to me of broadcasting my theater program. The idea was placed before Radio officials, with the added plan of giving a studio recital as well with members of the theater forces as soloists. They liked it, and almost before we knew it we were presenting a regular Radio feature.

(Continued on page 35)

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NUMBER 3

### COUPON BALLOT

World's Most Popular Orchestra Contest

POPULAR ORCHESTRA Editor, Radio Digest,
510 North Dearborn Street, Chicago, Ill.
The state of the s

Please credit this ballot to:	
(Orchestra's Name)	(Call Letters)
Signed	
Address	

City..... State.....

### Chicago Studios Cater to Farmer

National Midwest Net Planned for Rural Service and Chains Across Continent

Withen the National Broadcasting company studios in Chicago are company company studios. This will have its own Radio central switching point enabling programs originating in Chicago to be distributed to all parts of the Blue and Red chains. This does not mean that New York programs will be denied the Chicago stations. It merely means that more Chicago programs will be broadcast over the entire chain just as the Chicago Civic opera is being broadcast now.

The time element makes a Chicago studio a necessity for the National Broadcasting company. When the New York studios sign off the chain broadcasts at 10:30 p. m. Eastern time, it is only 9:30 p. m. Central time in Chicago and adjacent lerritory. With the completion of the Chicago studios the company will be able to give another hour of entertainment to listeners in the Central time belt.

With the New Year the National Broadcasting company plans to feature special daytime programs for the farmer. Such programs would find no listeners in the East because New York is in the industrial part of the country. Chicago, however, is in the center of the farm belt and the logical center for such broadcasts. This is one of the chief reasons for making Chicago the center of a midwest network.

Manager Is Farm Expert HEN the National Broadcasting com-

### Manager Is Farm Expert

ing Chicago the center of a midwest network.

Manager Is Farm Expert

The manager of the Chicago office, Frank E. Mullens, who is also the agricultural director of the National Broadsting company, understands the Radio farm situation because be did pioneer agricultural broadcasting for three years at KDKA and was the first to realize what daily market reports would mean to the farmer. He instigated this service at the Pittsburgh station. For a short time Mr. Mullens represented the National Broadcasting company at KPKK, Hastings, Nebraska. In selecting Mr. Mullens as director of the Chicago office the company chose a man acquainted with this section of the United States. Mr. Mullens comes from the Middle-west and received his college degree from Iowa State college where he took agricultural journalism.

The two studios being completed in the Chicago offices of the National Broadcasting company are to be built like those in Naw York. No occupant of this big building will ever hear a sound from either studio. In fact no one outside of the studios will hear a sound The walls, ceilings and floors will float upon cushions of the studios are distinct and apart from the building, structure itself. Even the plaster is treated acoustically. Each studies as a little observatory room overlocking it so that the inner visible surfaces of the studio through a sound proofed observation window.

O. E. Ranson, manager of operations and engineering for the company is in charge of the construction. Mr. Hanson is a ploneer in constructing studios. He was with WEAF when it first began broadcasting and has been in charge of the engineering side of the Radio game since the National Eroadcasting company began to operate.

### Overseas Programs Soon?

DLANS and operations are said to be ma-turing rapidly for the rebroadcast of British programs. It is possible that the first experiments may be made by the early part of fanuary. Relay stations are heing established on both shores for short wave transmission. This reception will be carried over the usual chain land wires for rebroadcast from the NEC stations. Such a program may suddenly come over the air unannounced, should atmospheric and other conditions warrant.

### NOMINATION BLANK World's Most Popular Orchestra Contest POPULAR ORCHESTRA Editor, Radio Digest, 510 N. Dearborn St., Chicago, Ill. I Nominate....(Orchestra's Name)

Address ......

City..... State,.....

### KOA Claims Most Beautiful Artist

Eunice Johnson of Digest Cover Called Prettiest Entertainer to Be Heard on the Air

Heard on the Air

DENVER is simply overwhelmed with national Radio honors. That city's Miss Agnes Davis captured the national singing contest down at New York and now comes Freeman H. Talbot, director of KOA, demanding awards for the national beauty contest. That is, supposing the was one.

"So you want a beauty for your Radio Digest cover," he said as he solemnly stalked across the sanctum and halted in front of the editor's desk.

"Sure do, Mr. Talbot."

He pulled a carefully wrapped packet from a brief case and placed it on the desk, it revealed half a dozen poses of Miss Eunice Johnson, whose smile greeted you as you opened this January issue.

"I brought them here myself, and if she isn't the most beautiful young lady on the air today anywhere all this side of Kingdom Come then there isn't any such thing as beauty. That's my challenge, She came within one of being "Miss Denver for Atlantic City in the Rocky Mountain News contest, but one of the judges got faint when she stepped up and didn't vote."

Another beauty was in the process of engraving when Miss Johnson came trip-

vote."

Another beauty was in the process of engraving when Miss Johnson came tripping in on Mr. Talbot's toes. The editor didn't faint so he was able to present her to you this very January day. Do you agree with Mr. Talbot? Are there any other directors willing to take his challence?

Miss Johnson is still in her teens, but she sings and talks to her audience like an old timer.

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NBC Midwest Studios for Farmer		
Marcella		
New Years for Radio		
WBAP Seven Aces Lead Orchestras		
Bureau of Standards Working for Better Radio		
Two Pages of Pictures		6 and 7
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What Was Accomplished by the International Radio Conference? A survey

What Was Accomplished by the International Radio Conference? A survey of what happened after the smoke (cigar) rolled away by an eye witness. Significant facts for peace of nations. The next Radio Digest.

Tune in Hawaii and Enjoy a Radio Hula Hula. Special pictures and story direct from islands of perpetual springtime, for the next Radio Digest.

How to Make and other Interesting Features for the Radio fan who likes wires and screws with his wireless.

World's Largest Gallery of Radio Artists and Personalities found in every issue of Radio Digest ILLUSTRATED. Two full pages of pictures besides the feature story pictures.

Watch the Developments of the World's Most Popular Orchestra contest. It's getting hot. Votes are coming by the thousands in every mail. Another one of

getting hot. Votes are coming by the thousands in every mail. Another one of Radio Digest's enterprises to bring the listeners and artist into closer relationship. Vote for your favorite. Ballots in every issue,

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

### Newsstands Don't Always Have One Left

Every Month New Wave Changes in the Official

# Radio Digest

BE SURE OF YOUR REGULAR COPY BY SUBSCRIBING NOW

### SEND IN THE BLANK TODAY

Publisher Radio Digest, \$10 N. Dearborn St., Chicago, Illinois,	

Please find encl	osed check M	. O. for	Three Dol-
lars (Four, Fore	elgn) for One	Year's	Subscription
to Radio Diges	t Illustrated		

Name	
	······································
City	State

### SHORT WAVES

By Marcella

Frank's Hobby Chickens; Eddie and Fannie Mystery Solvod; How WTAM Got Harold; Where Is Harry Snodgrass; WOC Au-nonner Affects Hearts; Fat Prefers Mike to Kleig Lights; Ford and Glonn Come Home; Chester Marries.

RACIOUS! How the time does fly! Here
it is 1928 and this etherial would of
ours is almost eight years old. Of
course, most of us didn't tune in much before 1924 or 1925, but WWJ did open in
1920. Just Imagine! Wouldn't you miss
not hearing your favorite announcer's
voice on the air? Here's to a wonderful
new Radio year!

My dears, I've got a terribly big ploce of news. You never can guess it. Ford and Glenn are coming bark to WLS. Or course, the first of the month they will take a little trip. You can't expect that pair to settle down long. They will visit WSB. WFAA and WMC. But they will be back.

Now here's the surprise of Marcella's life. You remember how Chester Gaylord gave me to understand he was heartwhole and fancy free and rather indifferent to girls! If it had not been for the kindness of "A Listener" I would still be believing it. But she sent me a picture of the girl Chester married last month. Her name is Oiga E. Mitchell and she looks awfully sweet. Don't you hope they will be terribly happy?



After everybody had asked me about Frank Lane and I had written I can't tell you how many letters and had decided that Frank must be a cranky old bachelor of fifty winters or more. I received the love-flest letter from WDOD of Chattanooga and discovered that all my other letters are still direulating somewhere between KVOO and WDOD and never reached him at all. Ho we'ver, let Frank spenk for himself. "I am just a boy from the wide open spaces, claiming Oklahoma as my home. I have seen twenty-two summers and the same amount of winters, Went to work for KFRU at Bristow, Okhahoma, when that station opened in 125 and stayed with them when the call letters changed to KVOO. Was with them about two and one-half years. I came to WDOD at Chattanooga in June of this year as director and announcer. As far as my looks are concerned. I will let my pleture speak for me, for it flatters me very much. My hobby is chickens; however, of the feathered variety, because I am promoting a truit and poolity farm in Oklahoma, which so far has been mostly promotion." Doesn't he sound like a regular he-man, Marion.

I just love to write to Matty of KYW. He always has a come-back of some sort or other. Here he claims that my letter to him asking all about Eddie and Fannie arrived on his birthday. Many happy returns, Matty dear. Here's his letter. Vou wanted to know about Eddie, Fannie Bless their hearts. I am not sure that they wish the Radio audience to know it, but they are man and wife. Very much married. Eddie bows to the slightest wish of the frau and she in turn bles and tags along with her Beau Brummel Eddie where er and anon be may go. Thus, where one is seen, a second glance locates the other—and so the story goes. I never was good at giving much detail about facial appearance. Anyway the easiest way home is the most direct—so—they look kindly. I have not examined their hair but presume it is all right. As for their eyes, they run rich in friendliness. Eddle and Pannie are pluch-hitters for Uncle Bob when the big Boy is steppling out amongst his Radiochildren." Thanks a lot Matty.



children." Thanks a lot, Matty.

Miss South Richmond certainly knows her Radio stars. This attractive young Haroid Gallagher who announces midnight programs at WTAM is a witty young man of Irish extraction. That's why he says so many funny things. Did you ever notice how fast he talks sometimes?
That certainly comes in handy for Haroid when he is announcing a foothall game. He is only twenty-one years old and he is not married as yet, nor even interested. Oh, Haroid! I can't believe that! He says he is just bound up in his work. It seems that Mr. Gallagher has been with three broadcasting stations and still has never changed stations. Doesn't that sound queer? Well he was with WIAX which turned into WEAR which now belongs to WTAM. There you are; the stations he works for change hands and call letters but they always throw in Haroid with the rest of the works.

# SEVEN ACES TOP ORCHESTRA DECK

### "HAPPY NEW YEAR" PROSPECT FOR 1928

RADIO LEADERS BELIEVE NEW SURPRISES IN STORE

Scientific Discoveries Expected to Make Better Transmission and Clarify Reception

WHAT of the Radio year 1928?

WHAT of the Radio year 1928?
One, Two, Three, Four—the hand of time creeps around the twelve months of the year—and where will Radio be when it comes to rest on 1929?
Many active leaders of 1927 have already expressed the opinion that the new year will witness many important and surprising achievements. Some of our neighbors across the sea are particularly optimistic. Comments by Marconi and Eckersley are published on page 10 in this issue. Inventors, broadcasters, manufacturers, artists, and perhaps listeners are hoping for the new and wonderful surprises that Radio seems to release from an ineximansible storehouse from time to time.

"I hope some of the cats and dogs that fight and wail on the hetrodyne fence will be exterminated tor one thing," writes a weary fan from Virginia.

weary fan from Virginia.
"It can't be done in a day," writes another contributor from Minnesota, "the commission tackled a giant and made as creditable an attack as could be expected. They have found out some things that cannot be done by peaceful overtures, perhaps in 1928 they will get a stronger grip and press a little harder."

Grannling With Carlo

in 1928 they will get a stronger grip and press a little harder."

Grappling With Giant

But while constituted authority is grappling with the Giant Chaos the manufacturer and the research man have been delving into the hidden mysteries, and bringing out new accessories, new controls and conveniences to protect the listener from the malign influences of weather and langling waves.

"What does the manufacturer consider as an outstanding achievement of 1937, and what does he expect for 1923." was asked of Mr. Powel Crosley, Jr.

"I think the outstanding achievement of 1927 was the development of the AC tube," he replied promptly. "It has brought the ordinary household alternating current right down to the householder's pet receiver. A small and convenient transformer now replaces storage battery, charger or trickle-charger to make the ordinary type vacuum tube do its duty. The AC tubes have more rugged filaments or henters. Taken directly from the lamp socket they have greater emission, and greater ability to perform efficiently with broader latitude for volume without distortion. This is just one phase of manulanges that will mean larger replacements and generally better reception in 1928."

Broadcast Public Service

"What do you consider as outstanding

ments and generally better reception in 1928."

Broadcast Public Service

"What do you consider as outstanding achievements of 1921 and the promise for 1928?" was asked of Miss Judith C. Waller, director of the Chieago Daily News station, WallaQ. She replied:

"As I look back the Mississippi flood stands out as a milestone of service on the part of WMAQ, and of course many other broadcasting stations throughout the nation. When we called on our listeners for add for the sufferers the response was simply astounding. Within a month from the first appeal one hundred thousand dollars had poured into our station for relief. We had received \$114,000, considerably more than a tenth of the quota for the whole city of Chicago. Contributions from our listeners for various causes totaled \$150,000.

Miss Waller called attention to the fact Miss Watter called attention to the fact that each week for some time one of the forty-eight state governors had given a Radieleague to WMAQ listeners, achieving a record visiting list of governors for its station album. Sports have received a great deal of attention, football and Major J. Andrew White's broadcast of the Tunney-Dempsey fight.

### PAY \$1,000 A MINUTE FOR DODGE PROGRAM

A COST of \$1,000 per minute will probably mark the high water mark to date for Radio broadensting when the inaugural program for the Dodge Bros. supplementary chain series takes the air for one hour the evening of January 4. In fact, it is expected the cost will exceed that amount. Will Rogers will act as master of menies from Hollywood, Fred Stone will entertain from Chiengo, Paul Whiteman's band will be heard from New York and Al Jolson, New Orleans.

# HIRED HAND'S TEXAS STARS LEAD IN GOLD PLAQUE RACE

Last Hour Nominations Swell Total Candidates to 423-Maurie Sherman's Boys Nosed Out by P. Christensen, WHO

### SNAPPY KDKA "ALL SOLOIST TRIO"



### Bureau of Standards Experiments Continuously in Radio Development

DURING the past year the Landards, Department of Commerce, spent approximately \$50,000 in Radio spent approximately \$20,000 in radio experiments, according to the annual re-port of Dr. George K. Burgess, director of the bureau. In connection with Radio frequency measurements and standards and Radio wave phenomena, Doctor

URING the past year the Bureau of standards, Department of Commerce, apparatus and its standardization to the spent approximately \$50,000 in Radio inserts possible accuracy, the aim being to secure a very considerable improvement.

nighest possible accuracy, the aim being to secure a very considerable improvement over the present attainable accuracy of about 0.01 per cent. Comparisons with all important Radio laboratories abroad showed that most of their were in agreement to the order of 0.01 per cent, but it is highly desirable to establish absolute frequency values with a certainty of 0.001 por cent, and to do so will require much more research and development.

The work on Radio wave phenomena has included studies of tading and its correlation with other natural phenomena, such as terrestrial magnetism and electrical conditions on the sun. A definite connection appears to exist between solar phenomena, such as the rotation of the sun and the sun-spot cycle and Radio conditions on the carth. Methods of measuring Radio field intensity have been developed, as well as means for calibrating apparatus for these measuragements. This work is to great deal of attention, football and Major J. Andrew White's broadcast of the Tunney-Dempsey fight.

For the future permanent wires, are 
being installed for the Columbia chain. 
They are expected to be ready for operation next month. She said this service is 
being established for all Columbia stations 
to afford twenty-four hour service throughout the year. Great plans are being made 
for the national presidential conventions.

Rural Radio Growth

"What does the turn of the year in Radio 
mean to the farmer?" was asked of Edgar
L. Bill, director of WLS, a station founded 
primarily for service to the rural listener, 
and a ploneer in that field of endeavor. 
To 
this Mr. Bill replied:

"Government estimates now six months 
and Radio wave p he no me as, Doctor 
Burgess says:

"The Radio work was largely concentrated on two main problems—the line 
frequency values with a certainty of 0.001 
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the value in maintaining broadcasting and other stations on the correct frequency 
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### WORLD'S MOST POPULAR RADIO ORCHESTRAS

Leading America

West

By Districts

No. I East, Vincont Loper, WEAF. 2.173
No. 2 South, Chas. Dornberger, WTHS. 1.123
No. 3 Midwest, Paul Christensen, WHO ...1,637
No. 4 West, Rayal Fontenelle, WOW ...2,507
No. 5 Far West, Max Dohn, NBC ...2,508
No. 6 Canada, Irvin Plumu, CNRW ...1,600

DEVEN Aces, WBAP, take all.

That's the story in five words of the third round of the Radio Digest ballot competition for the world's most popular orchestra.

December saw Maurie Sherman's WLS

December saw Maurle Sherman's WLS air squadron taking the national lead. But you never can tell what's going to happen when those long, lean Texas scrappers start out for an objective.

"We knew those Fort Worth Aces were right on our tail the minute we hit the celling," said Harold Saftord of the Sears Roebuck cohorts. "But we gave them a battle and we're really just getting warmed up. Why, we heard the Hired Hond right through all Chicago's sixtyodd station maelstrom telling the Southwest folks to get behind those WBAP Seven Aces. But we have lots of friends down in that territory too. They will have hard work holding that position when it comes to the final show-down."

Christensen Looms

### Christensen Looms

Christensen Looms
While WLS is getting into position Paul
Christensen's orchestra at WHO, Des
Moines, plopped over a big barrage of
votes that brought them within speaking
distance of the Texas filers—a total of
£,637—just \$57 votes behind the 4,494 of
the Hired Hand's stalwarts.

But Christensen's men have stirred up WOC's Little Symphony at Davenport, Analyzing the situation the Iowa City Press-Citizen says:

Press-Citizen says:

"We see a red hot race between Paul
Christensen's WHO organization and
WOC's Little Symphony orchestra. It
would be hard to tell which has the most
friends at this stage of the game. The
contest promises to prove interesting to
those who listen to both orchestras and
it ought to help the quality of programs
in general."

In general.

There's a strong aggregation behind the
Royal Fontenelle orchestra at WOW,
Omahu. It may be the Woodmen of the
World are backing these artists in a solid

Ine.

It was Donald P. McIlvane, 902 W. Broadway, Fort Worth, who led the assault on the WLS supremacy in the North.

sault on the WLLS supremacy in the North. Watch WLS Chaps
"Can't let these Chicago chaps get away with anything that rightfully belongs to our boys, and everybody knows there couldn't be anything more popular than the WBAP Seven Accs. We just naturally want the rest of the world to know it, that's all."

Mr. McIlvane discussed the proposition.

that's all.

Mr. McIlvane discussed the proposition with a few friends with the result that 3,500 votes came through the mail at one

a,500 votes came through the mail at one swoop.

Paul Christensen's friends were inspired with a similar idea as they gathered around in a circle in the lobby of the Fort Des Moines Hotel and discussed strategic operations. By mobilizing some of the units nearest to the WHO studio they scurried over the top for first place in the Third District with 2,500 votes in one smash. This move dropped Hauric Sherman to second place in the district.

All along the line the many orchestras have their ardent supporters for the final honors. R. H. Roberts, program director of CNRW, writes from Winnipeg:

"A number of CNRW listeners have asked me to forward to you the enclosed 1,200 votes for Irvin Plumm and his Jasper Park Lodge orchestra. This orchestra broadcasts from the Fort Garry Hotel.

# PICTURING BROADCAST ACTIVITIES



DOROTHY HEYWOOD REEDY and her piano classics put the polished touch in KVOO programs at Tulsa.



THAT spotted how tie denotes the true artist type found in Walter Johnson, chief announcer, WTIC, Hartford.



G OVERNOR A. HARRY MOORE of New Jersey frequently reaches his fellow citizens by aid of the microphone, as shown above.



CHANCES are you have this Indian's face in your pocket right now. He is Chief Two Gun White Calf, original for the Indian nickel. He is with Charles H. Moester, WCBS, St. Nicholas hotel, Springfield, Ill.



M AY and June, Ideal Home team of WCFL, Chicago, take brick, trowel and hammer in hand to do a little construction work at Lombard ceremonies. They gained their first renown at WLS, Sears Roebuck station.





"SWEET ADELINE." these are the exact words issuing from the lusty throats of this Super-Six of Twins at WJR, Detroit. From left: Rayovax, Russ Wildey and Bill Sheehan; Lullabye, Ford and Glenn; Monamotoroil, John Wolfe and Ned Tollinger.



ATYPICAL Bostonian is Ardan Red-mond, announcer and singer at WBZ-WBZA, in the old New England Hub.



PUT your finger down anywhere in California and you'll find a beauty. This is Annamae Morgan, KWTC, Santa Ana.



CHARLES H. GABRIEL, JR., son of the famous gospel song writer, is pro-gram director for the Orange net of the NBC.

# RADIO PERSONALITIES AND EVENTS



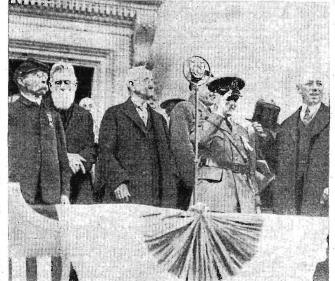
SO'S your Uncle Wip of WIP, Philadelphia; and after Santa Claus he's next for the little Pennsylvanians.



O'N top of Chicago's premier movie palace, the Chicago, is a private theater called the "Little Chicago". Rehearsals and broadcasts are made from here through WMAQ. Two famous artists are uluse Buffano (left) and Leopold Spitahny.



IF you have wondered about the lady with the soft and fascinating voice on the Columbia chain, she's Miss Elizabeth Lennox, contralto.



PEARSON S. CLINE, 84; H. M. Guyer, 90, and Wm. S. Burk, 84, Civil War veterans, were three venerable broadcasters to participate in ceremonies dedicating the new \$1,500,000 or Scottish Rite Massonic temple in Philadelphia.



ONE of the reasons for KFRC popularity in San Francisco is Helen O'Neill, who plays, sings and directs as occasion demands,



REMEMBER this lady's face? Of course you do-Irene Rich, one of the Warner Brothers KFWB stars.



CHARLIE CARLAND is always a popular artist wherever he goes; just now he is being amounced from WBBM.



THIS is Bobby Griffin, director-announcer of WJBT, Chicago, who made a reputation in France, Iowa and Oklahoma.



ALL set for a ziggity deal by Arnold's Seven Aces of WWNC, Asheville, N. C. "And they're the pick of the deck," said W. Arnold Summey, "when it comes to popular dance music". This Carolina station has forged to the very front of Eastern broadcasters.

www.americanradiohistorv.com

th m b-ac m th ac re

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### FIRST LAP WON BY MAURIE'S PLAYERS



### Death of Two Radio Commissioners Changes Complex of Federal Board

Arduous Work in Effort to Straighten Wave Tangles Believed to Have Weakened Heart of Admiral Bullard, Who Died in Sleep-Lafount Takes Office

By L. M. Lamm

RATE seems to decree that the federal TATE seems to decree that the federal Radio commission shall not have all of its members sitting at one time. Rear Admiral W. H. G. Bullard, chairman of the commission died quite suddenly leaving another vacancy on the commission, in addition to the filling of the vacancy left by the late Colonel. John F. Dillon, by Harold A. Lafount, to represent the Fifth Zone. These changes have been made within one month.

Admiral Bullard, sometimes called the "father of Radio," and at any rate having had considerable to do with its development, left the commission one day, apparently in the best of health, and died that night in bis sleep. It is supposed that he had an attack of heart disease. Since taking office as a Radio commissioner, the Admiral Bullard appeared before the appropriation committee of the House urging adequate funds that the Radio Act

of 1927 might be properly administered.
Admiral Bullard was a great friend of
the amateur operators and he guarded
their communication with religious care.
To them he attributed much of the progress of Radie in the United States and he
often expressed the belief that they would
keep this country in the foreground of
Radio development.

keep this country in the foreground of Radio development.

It was Admiral Bullard, among others, who suspected the organization of the Radio Corporation of America following the World War in an effort to keep certain Radio patents in the United States. President Wilson, at the request of officers of the Radio corporation, detached Admiral Dullard from his navul duties in order that he might sit on the board of directors of the new company for a time.

Despite the fact that Radio is among the newest of the sciences, Admiral Bullard and been actively connected with it for more than a quarter of a century. He had taken part in every step of its remarkable development from the days of its infancy in the late '90's until now. His text book on Radio communications, written in the early days of Radio, is still standard and is used at the Naval Academy.

Lafount Open Minded

early days of Radio, is still standard and is used at the Naval Academy.

Lafount Open Minded
Commissioner Lafount, who came here to fill the vacancy left by the death of Colonel Dillon, has just recently taken his oath of office. He is a business man of Sait Lake City, Utah, and is assuming his new office without any axes to grind.

While disclaiming any special technical knowledge about the Radio field, for years Mr. Lafount has been intensely interested in Radio and has watched its development with keen interest. He reports that Radio reception in the Pacific coast states has been materially improved during the administration of the Radio commission, although there are some rough spots to be fromed out in that section of the country. At the present time Mr. Lafeunt has no new policies to lay before the commission. Generally speaking, he said, he is in full accord with the basic principles laid down so far designed to clear up interferences and to improve Radio reception as mapped out by the commission.

LA FOUNT ARRIVES AS COMMISSIONER



HAROLD A. LAFOUNT (above) has been wel-comed at Washington, where he took the oath of office to fill chair for Fifth Zone, left vacant by the late Col. John F. Dillon of Cali-fornia, Commissioner Lafount is a Salt Lake City business man.

### Rush for Lowest Wave Shocks Commissioners

Give Us Watts on Any Old Cycle," They Plead

MEMBERS of the federal Radio commission received a distinct shock recently as the result of four different applications from broadcasters asking to be assigned the lowest waves in the band. Commissioner Caldwell of New York, who has been on the firing line of the battle of the "Kill O'Cycles" and "Kill O'Cycles" as the Watts and well take once the way in the battle of the particular of t

unrew up his hands and called for help.

"Give us the Watts and we'll take enre
of the Cycles," said WTFF of Mount
Vernor Hills, Va., the new Ku Klux Klan
station. It has 1,480 kilocycles (202.6
meters), which seems quite all right if
the commission will consent to power of
10,000 watts. The present assignment is
50 watts.

Description.

50 watts.

Practically the same proposition is submitted by WHEN of Gainesville, Fla., willing to share time on 1,480 kilocycles if it can get 5,000 watts. This power has already been granted, as well as the permit to WTPF to build a 10,000-watt station. The later is hoping later to get use of 50,000 watts on this wave.

The other two stations desiring the law vave are WCSH, Portland, Me., and WKEW of Buffalo willing to take anything from 1,400 to 1,500, but already operating on 1,380. The provision is made that both be assigned lower on condition they can raise their power to 5,000 watts each.



AURIE SHERMAN and members of Mainth Sherman and memoers of a specially posed picture for friends who put them over for the leaders in the first lap of the Radio Digest contest for world's most popular Radio orchestra. They hope to win back leadership that slipped slightly for January.

### Phelps Practices Own Philosophy

KMTR Director Does His Stuff by Announcing While Confined With Leg in Cast

ALLISON PHIELPS. manager and night announcer of KMTR. "Your Friend in Hollywood," has been known for nearly five years in Southern California as "The Hadio Philosopher." He has delivered more than 190 original lectures in which he has admonished people never to permit discouragement to grip them, to always be cheerful and not allow circumstances or conditions to overcome them. Recently when an old injury to his right knee developed seriously and he was forced to go to bed with his entire leg in a plaster-of-paris cast he decided to put his own philosophy to work. He had the Los Angeles telephone company install a "loop" between his bedroom and KMTR, connected a Western Electric 13-C Amplifier to the lines and went on the air via remote control and declared a follow might be knocked down but could never be knocked out until he, himself, permitted it. He invited people to send in jokes and wisecracks to write on his plaster leg and he has received hundreds of letters from every part of the United States and Canada.

Each night at 6:15 o'clock Mr. Phelps

### RADIO ANNOUNCER GIVES TOES AIR



46 TVEN if old Shank's horse is stalled in a for," Ca. Allison Phelos, amouncer-philosopher at KMTR, declared as he pulled the microphone a little closer, "all five toes are out and setting a good look at the world. Ever realize law compared in the contraction of the contraction

Phelps' microphone and he makes his next announcement. The system works so effi-ciently that no one listening would sus-pect that there was anything unusual about the broadcast unless they were told about it.

Can Live Philosophy

but could never be knocked out unit no, himself, permitted it. He invited people to send in jokes and wisecracks to write on his plaster leg and he has received hundreds of letters from every part of the United States and Canada.

Each night at 6:15 o'clock Mr. Phelps statts announcing the evening programs of KMTR from his bed. In a small lounging room adjoining the main studio of KMTR a loud-speaker has been installed through which the artists can hear Mr. Phelps announcement the operator in the operating room switches from Mr. Phelps' microphone to the microphones in the main studio of the station, miles away, lumediately the artists start playing. On a dresser near Mr. Phelps' bed is another loud-speaker through which he hears the program. As soon as a number is concluded the operator switches back to Mr.

### QUIN TAGS FOUR BIG HITS FOR WGN



66 H. HUM," sighed Quin Ryan of Luckner, German sea raider during the WGN, Chicago, "wooder who would war; Benny Friedman, All-American quant-be a good feature for this day's program?" ter-back, 1925, and Frank Willard, father Just then in blew Floyd Gibbons, war of "Moon Mullins." L. to R., Benny, Von, correspondent and author of "Red Knight." Floyd, Quin and Frank. And then Quin fame. Then he lined up Count Felix Von called in the "photog."

# CKY Pursues "Gorilla" to Trail's End

Radio Leads Greatest Man Hunt in Canadian History and of ands Woman Killer in Winnipeg Prison

WELL, Radio Station CKY got its me and everybody along the Canadian border from the Great Lakes west is

W and everybody along the Canadian border from the Great Lakes west is glad except the man.
You could scarcely call the creature who cowers in the murky cell at Winnipeg a man" at that. He is known otherwise as the "Gorilla" or the "Strangler" for his bench twisting his hard muscular hands and waiting for the footsteps of the hangman who will come shortly to lead him to the little door that drops with a clatter and lets a murderer out of this world to reckon with the next.

Dumbly he sits there, his hard gray flocked eyes peering about now and then as a caged animal seeking some small crevasse or flaw through which he can shripe matter for him to pick the locks and flee from the cell in the little jail that held him before they brought him to Winnipeg. The kinky hair and thick lips tell

By G. Carlyle Allison Radio Editor, the Winnipeg Tribune

door that clangs at the end of the corridor. A few more days and it will be January 13th. That will be the end of Earle Nelson, the Gorilla, the Stranglor!
Rewards have been posted for his arrest across the United States and Canada. Scarcely a week passed but he left the strangled and broken body of an innocent woman or little girl along his ghastiy trail, a predatory animal seeking the fairest to satisfy his lust and killing them with iron taions that closed about their throats. Twenty-two such deaths have been many more. The last two were in Winnipeg—a young mother and a little school girl. At Winnipeg the powers of locate him."

Mrs. Morgan prepared a good meal for the fellow whose eyes shifted about a great deal. Morgan managed casually to slip out of the room for a morment and whispered his suspicions to his neighbor, Albert Dingwall, who promptly communicated with Constables Sewell and Gray at Kiliatney, 18 miles away. The Gorilla quickly finished his meal—he had seemed half famished and desperate—and numbling a sort of thanks told his host he would have to be on his way. Dingwall watched him leave. It was only a few miles to the international border. The two Wakopa men followed him to a slough two miles outside the town, where Nelson seemed inclined to hide for the night.

The constables had informed Winnipes and broke all records driving from Killarney to Wakopa. Morgan and Dingwall directed them to the slough. The Gorilla was surrounded and surrendered without a fight. Better go along easy, he figured: it wouldn't be hard to slip these country jailers, and, over the boundary.



the strain of the degenerate Negro in his blood. He wandcred out, from the old Barbary coast underworld of San Francisco less than a year ago. Perhaps in his solitary musings he wonders how he came to be caught, why it was that he seemed to be recognized and regarded with fear by the people he met. His flight had become a nightmare of torror. He evaded railway lines and took to the highways. Motorists scanned his features when he asked for a lift, they noted his cap, his tie, the color of his clothes, his shoes, even though he changed them time and aguin.

Recognized Everywhere

Recognized Everywhere
The instinctively fell that they knew him, his terrible crimes, his very thoughts, though they said little. He saw cheeks blanche at sight of him. Women and children peered at him from behind drawn blinds as he found farmhouse doors unanswered and bolted against him. He knew they were there and he ran for fear the man of the house was steading up on him in the darkness with a loaded shot-gun.

him in the darkness with a source shorten.

Perhaps he does not yet know how his approach seemed to be heralded from every house—yes literally every house top. For a bit of shining wire from house gable to barn gable or in the near vicinity had picked up the voice of Franklin E. Rutland, announcer at CKY, Winnipeg, detailing every bit of information received from the roadways and villages and towns where the dreaded Gorilla had last heen seen.

where the dreaded Gorilla had last heen seen.

How hungry he had been! Rarely did hee find conditions favorable for a back door hand-out. The towns bristled with danger. He foraged tender corn from the fields. Occasionally a berry patch or outlying vegetable garden furnished him with food. Once he snared a young chicken from a hole he had dug into the side of a field stack. Before he could wring its neck with his expert fingers it squawked and a dog barked at the farmhouse a little distance away. He dropped the chicken and field through a grove of maple trees toward a road he knew not of, but which he surmised must cross his way sooner or later.

Waste No Sympathy

Woste No Sympathy
However, waste no sympathy on this creature. He does not know the meaning of the word in his own behavior. He would show you no atom of pity were your conditions reversed, and you an innocent human. Anyway he is making up now for the meals he lost. He is gorging himself and putting on fat for that last short walk he will take to the scaffold and the little



AT left: "Gorilla" Nelson takes last look at daylight, his strangling hands manacled, as he
leaves for cell, where he sits waiting—as
shown below. Center: Franklin Rutland, who folled him with detailed Radio descriptions as he
with detailed Radio descriptions as he
keeper who recognized Nelson by Rutland's
description, and Alhert Dingwall who aided in
capture. Both received \$300 rewards. "Gorilla" Nelson takes last look at day

Radio broadcasting were put upon his trail

Radio broadcasting were put upon his trail to bring his career to a speedy end.

It was the tenth of last June that William Patterson came home from his work and found the house open but no cheery little wife to meet him. At first he was only slightly concerned. He called her name a few times then inquired about her from the neighbors. She had not been seen. Patterson became alarmed. He had read about the Gorilla in other towns. Being a devout man he was in the habit of taking his troubles to his God. So he knelt at his bedside and asked for Divine guidance. As he started to rise his glance caught a bit of fabric he knew belonged to his wife's gown beneath the bed. He jerked at the bed covering that concealed it. In a moment he had uncovered the dead body and distorted features of his wife. She had been profaned and tortured—the work of the Gorilla!

Gorilla Rents Room

Earle Nelson had arrived in Winnipeg. Perhaps an hour before this shocking crime had been discovered he had appeared at a Smith street rooming house. There may have been something suspicious in his manner or appearance to make the housekeeper glance at him hesitatingly. But he immediately became affable and smiled with a plous smirk.

I'want arroom,' he said, "where I will not be disturbed in my religious reflections."

tions."

She gave him a room that seemed to fill the requirement. It would seem that the Gorllla immediately set forth for another victim whom he could torture at his leisure. His eye fell on little Lola Cowan, 14 year old flower girl who was finding a great market for her luscious June roses and a few flowers she gathered from the wildwood, which she visited with the larks early in the morning.

early in the morning.

Three days passed in the frantic search for little Lola Cowan. The Gorilla became nervous and did not return to his lodging on Smith street that Sunday after

Those may not be the exact words with which be put all within range of CKY on guard and alert for the fugitive, but it is the essence of his message. He described the clothing, issued warning to admit no stranger and to summon police to invostranger and to summon police to invostranger and to summon police to invostrange are very agrant answering the description of the Gorilla. Like buying bloodbounds in every direction the messages swept with speed faster than lightning through every street, highway and lane.

lane.

It was the greatest man hunt in the history of Cunada. Every farmhouse was armed and ready to capture or kill. Chief of Police Chris H. Newton, Detective Chief George Smith and Inspector Phillip Stark kept Rutland posted with every good tip that came in from all sections of the nrovince. province.

ape-like at his sides.

"What's the chances for a bite to eat?" he asked Morgan, glancing past the country storekeeper and making a general shifty survey of the store.

Something clicked in Morgan's memory, something that brought to mind the voice of Rutland the announcer and a description of a shabby man with big hands, shifty eyes, thick lips and kinky hair—the Gorilla! But he concealed all this successfully and told the man he thought he could fix him up.

their powers would end. Sullenly he submitted to their commands and they put him behind bars with a double lock on the door.

Jaller Alone with Gorilla
Morgan and Dingwall went away satisfied they had accomplished a big night's work. The jaller was alone with his only prisoner. It was a big day for him too, The biggest man hunt in Camada had driven the quarry to his balliwick. Be'd smoke his pipe and—matches, he was out of matches. Not a match him. Fe'd smoke his pipe and—matches, he was out of matches. Not a match him. He'd smoke his pipe and—matches, he was out and get some. So the Gorilla had the Jail to himself for five minuted.

Five minutes was all he wanted for that jail. The strangling fingers manipulated a nall file against the cell door lock. It pushed open. When the jailer came back the Gorilla was gome.

A few minutes later the whole community was aroused. People had begun to come into town anyway from hearing Rutland's message over the air. Soon an army of citizens swarmed through the community, but the fugitive could not be found. There was one place they had missed. That was the dark hole under the railroad station platform.

In the morning a train with a special carload of police approached from Winnipeg. A furious mob had assembled, eager for the blood of the Gorilla; but there was no Gorilla. He had crawled like a snake into a pile of brush close to the tracks. The police train drew near. Ignorant of its nature the man sprang from his hiding place and ran for the step.

Captured by Renton

Captured by Renton

Constable W. A. Renton of the border patrol saw him first and started in pursuit. As the mob caught sight of the murderer they began to yell "Kill him!" Kill him!" But Nelson was collared and yanked onto the train before he could be dealt with summarily by the angry civilians.

The trial was a clean cut case. The Gorilla had been so graphically described that E. P. Gibson of the Winnipeg Tribune staff had drawn a picture of the man extend the score of other women will be avened to the sco

as it could have been had the man actually posed.

One week from next Friday little Lola Cowan, Mrs. William Patterson and a score of other women will be avenged by the law of Manitoba. The Gorilla will be no more. His fate was broadcast to the CKY listeners as the doom had been pronunced by the judge. CKY got its man, living up to the traditions of Canada's famous mounted police.

that came in from all sections of the province.

Rides by Day

When Rutland announced that the Strangler seemed to be making his way in a certain direction from cumulative reports every person in that vicinity kept in touch with the local peace officers. But the Strangler hid by day and sneaked through the cordons by night until he reached the outskirts of Rogina, Saskatchewan, 555 miles distant. From that point he doubled back, a tortuous stubbern trail. Rutland was hot after him down through western Manitoba. At Wakopa, close to the boundary, L. H. Morgan was about to close up his general store for the night when a shabby unshaven man peered for a moment through the door and then stalked in. Little pouches sagged under his eyes. A yellow pallor survived the roughening effect of a long tramp in the open. His hands, big and nervous, hung ape-like at his sides.

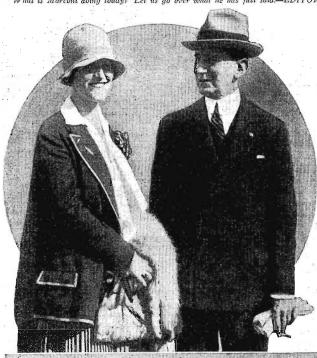
"What's the chances for a bite to eat?"

### "Radio Still in Swaddling Clothes," Says Marconi in Visualizing Future

Deplores Neglect of Short Wave Development Recently Discovered to Have Unsuspected Qualities for Distance Transmission Great Field Open for Future Experimentation

DURING his recent visit to the International Radio conference at Washington Guglielino Marconi, "father of Radio," responded to a mumber of interviews vehich indicated his continued intense activity along the lines that brought him deathless fame. He regretted that he did not have more time than there are hours in the day to carry on his endeavors to perfect long distance transmission, especially the development of the short varie. He scarned the tendency of many who "tet down" ofter a certain measure of success, and give up the idea of hard and persistent work. He revealed many personal characteristics of America's own electrical genius, Thomas A. Edison.

What is Marconi doing today? Let us go over what he has just said.—EDITOR.



Senatore Marconi and Bride in America

### By Guglielmo Marconi

By Guglielmo Marconi

O'NLY the feeble-minded or the prematurely old stop and abandon their lifes interest for the sake of idless. I have aboratories wherever I go and wherever go and wherever so the sake of idless in th

### CANADA HOPES FOR SHORT WAVE RELAY

EXORBITANT charges on the part of long distance telephone lines has greatly hampered the growth of chain broadcasting in Canada, according to Sam J. Ellis, Radlo supervisor in Ontario. But relief during the year 1928 is anticipated by the Marconi improvements in the use of the short wave.

year 1928 is anticipated by the Marcomi improvements in the use of the
short wave.

"For the recent British hook-up,
which was received in Montreal by
Marconi beam," said Mr. Ellis, "the
telephone company demanded \$480 for
use of the line from Montreal to Toronto for the two hours service. It is only
120 miles from Buffalo to Toronto but
even that short stretch calls for a toil
of \$200 an hour.

"We are very much interested in the
progress being made in many American
stations by use of the short wave in
conjunction with their regular hroadcasts," continued Mr. Ellis. "A number of the leading stations in the Dominion are making plans to pick up
these programs through short wave receivers and rebroadcast on their regular
waves. The cost of the new installations will be insignificant compared to the toll costs."

far as I can ascertain, in regard to the application of very short waves to Radio

tar as I can ascertain, in regard to the application of very short waves to Radio purposes.

Research along such lines did not appear promising—short waves were not easy to produce or to detect with the means then at our disposal, and up to recent times the power that could he put into them was small. This, together with the erroneous but general belief of the high attenuation of the waves over even short distances, deterred experimenters from entering this new field of research.

Some years ago, during the great war, I could not help feeling that we had perhaps got into a rut by confining all our researches and all our tests to long waves; that is, to waves of hundreds of thousands of meters in length, especially as I realized that, in accordance with theory, it would be practically possible only by the use of short waves to project the radiation in narrow beams in any desired direction instead of allowing it, as has always been dene, to spread and dissipate in every direction.

An Age of Radio

dene, to spread and dissipate in every direction.

An Age of Radio
This is a Radio age. The world is coming more and more to doing everything by Radio. So far it is only communicating and amusing by it. It will soon be educating its people and regulating all its life by it.

Radio will, furthermore, acquire a larger and larger share in the life of all people as it will become more and more widely appreciated that as a science it is yet in its swaddling clothes. The utilization and properties of short waves is still practically unknown—at least compared to what I believe wo will finally be able to discover as to how to bend them to our will.

In the enlightenment of the world as to the possibilities of this medium I will continue to do my part. Radio is by now my second nature, and I sometimes regret that other duties are often placed upon me, which I cannot, nor indeed would not evade, which curtail the available time for research.

### Land SOS Saves Alaska Gold Diggers in Blast

Life and Comfort in Northland Depend on Radio

As YOU lean back in your comfortable chair and listen to the pick of the air coming to you dreamlily from your well modulated loud speaker think for a moment of what Radio means to your fellow eltzens in Alaska.

It's quite a different picture up there according to reports recently received from the signal corps' outposts and filed in the archives at Washington. Terrific cold, sharp mountain ledges, burled trails and a multitude of handicaps make communication and travol difficult and often impossible. For example, not long ago two miners were blasting for gold across the Brooks mountains, with the thermometer 40 below. Fingers, numb with the cold, fumbled a charge and there was a premature explosion. One man was crippled, the other crippled and blinded. Only a faithful malamute dog remained able-bodied. He carried a scribbled note over a 3,000-foot pass and came scratching at his master's door in Little Squaw. It was 2:30 in the morning. Oscar Ottersontz tumbled out of his bunk and called the dog in. He took the bit of paper to a candle. "Come. Both scriously injured by explosion," he read, Unles Sam's signal corps maintains a Radio station at this point, 90 miles above the Anctic circle. The message was relayed to Fairbanks and from there an airplane was dispatched to the rescue.

# ECKERSLEY THINKS BEAM NEXT "SUPER"

CTANT CENTRAL STATION TO CIRCLE GLOBE

iglish Engineer Foresees New "Spaced" Aerial System as Answer to Fading and Distance

NOTHER British expert with strong

to Fading and Distance

A NOTHER British expert with strong faith in the future of beam Radio is captain P. P. Eckersley, chief engineer of the British Broadcasting company. In a recent interview with the New York Times he pointed out that the beam has not only achieved distance records but also overcome much of the atmospheric conditions that have hindered heretofore.

By using spaced aerials in a new station being erected at Chelmsford he said the problem of fading seems in a fair way of solution. The spaced aerials make it passible to tune in a number of receivers of corresponding aerial lengths which receives the same transmission simultaneously and by combining the reproduction compensate for signals that fade.

A digest of the Times interview states: "I visualize the time when a giant station somewhere in the heart of Bugland will broadcust to the empire," he said. "Beams will radiate to Canada, South Africa, India and Australia, there to be received by spaced aerial systems spread over miles of territory. Local stations will then relay to listeners in the Dominions, and empire broadcasting will be an accomplished fact.

"But," he added with a twinkle in his ge, "do not quote mo as saying that this dream is possible at once. Our present efforts at an empire service may end in complete failure for a year or two. Britain's experiments toward empire broadcasting have materialized in the erection of a 20-kilowatt station at Chelmsford to work on 24 meters in conjunction with American short-way stations.

"While in America I was in close touch with Dr. A. N. Goldsmith of the Radio Corporation of America, and specific re-

"While in America I was in close touch with Dr. A. N. Goldsmith of the Radio Corporation of America, and specific reciprocal tesis have been arranged across the Atlantic both in transmission and reception. It should be explained that 58W at Chelmsford is not a beam station. It



Capt. P. P. Eckersley

Capt. P. P. Eckersley
has been erected for the purpose of collecting data on the subject of reception
from both America and the Dominions.
"A spaced aerial system is also being
built at Chelmsford, and when results in
reception demonstrate a definite advance
international programs will be relayed to
British listeners through the British stations. The Americans have a different
scheme for improving reception, a more
complicated one, but Britain is at present
pinning her faith to the spaced aerial.
"In the meantime the British Brondeasting Corporation is carrying out a series of
relays from 2FC Sydney, Australia, using
the orthodox methods, and a considerable
measure of success has been achieved. The
relays usually take place on Sunday between 5 P. M. and 7 P. M., Greenwich
Time, and one of the most amusing features is that British listeners have to realize that it is the following morning in
Australia."

### ENGLISH WANT MORE

WHILE American listeners are compared by plaining that there are too many stations, our English consists complain that they should have more stations in order to afford a wider selection of programs. There are 2,000,000 Radio listeners on the Eritish Isles. An advisory committee of listeners unanimously declared in favor of a greater number of stations. Only one station may be heard in any single territory. But crystal sets are still used.

รเล hav The hur usi wh usi ther ther one far Am she in top ant bro par tak ing the I spe ern gre oth ma int Fre Ge: Ge: the not mil

see ant

### **AMERICAN STATION** BEST-E. A. DAVIES

WIP DIRECTOR WRITES OF EUROPEAN TOUR

Judges Popularity by Comparing An-tennas He Saw on Homes in Various Nations

Judges Popularity by Comparing Antennas He Saw on Homes in Various Nations

By Edward A. Davies Director of WIP

A Director of WIP

A Down, about my little trip to Europe. I traveled through France, Germany, Holland, Belgium and Switzerland, and flew from Paris to London. To say that I had a great thrill would be putting it mild.

I had an excellent opportunity of studying Radio conditions of each individual country. The most progressive, to my way of thinking, was Germany. On or about September 1st they opened one of the most powerful transmitting stations in the world. I was given to understand that it has a maximum capacity of one hundred fifty thousand watts. The type of apparatus used in the building of this station was absolutely foreign to me. It was entirely different from anything I have been used to seeing in America. Their towers are considerably over five hundred feet from the ground. They were using the usual L shaped antenna. From what I could learn they are figuring on using all the great musical conters through this super-power key station.

France apparently has not as yet awakened to the possibilities of Radio. The most remarkable condition I found in Paris was that in my eight-day sojourn I saw only two shops that dealt in anything pertaining to Radio, and both these shops sold their Radio apparatus in conjunction with talking machine records and apparatus.

Reminded of Home

Various cities throughout Holland made one think of our own American cities, in so far as the Radio antenna was concerned. Amsterdum, Rotterdam and the Hague all showed the tremendous interest evidenced in Radio by the row upon row of house tops crowned with the inevitable Radio antenna. The station in Amsterdum broadcast some very beautiful concerts. Belgium is taking to Radio very fast. I found great interest in Antwerp, but particularly in Brussels. Switzerland is taking Radio rather matter of fact, seeming to be perfectly satisfied picking up the concerts from Germany and England. The French broadcasting, as I stated

England has her Radio entirely stabilized, being under government control, and each concert under entire government (Continued on page 12)

### "Jenny Lind," WRVA



i-it e it

A MODERN Jenny Lind, is Miss Mary Bowe Sims, coloratura soprano, who has been adjudged by Radio listeners the has been adjuged by reado listeners the best singer in Virginia. She appears at WRVA, Richmond, in a series of Jenny Lind programs, and by the time you read this you may have heard her over one of the Man York chars.

### Michigan Enacts Radio Law

INICINGAL ELIACUS NACHO LAW
Through legislative action Michigan
authorized the state public utilities comnission to regulate Radio operation in
the peninsular state. Listener organizations throughout the commonwealth were
invited to the capitol to consider phases
of the proposed bill to be enacted. Although the blooping nuisance has been
largely abated, the bill provides legal
basis for its suppression. The commission expects to have one man whose sole
duties will be to advise on public Radio
problems.

problems.

It was stated as the aim of the new control law to cooperate with the federal commission and assist in enforcing regu-lations calculated to be of greatest good.

### LET "OFFICIAL" CALL **BOOK BE YOUR GUIDE**

DID you read about MacDonald in California logging 616 stations? He's scientific, and you can bet he doesn't just go about it blindly to make such a record. He knows what he is going after and he's doing it according to Hoyle—as you might say in this game, "according to the Official Call Book." Radio Digest publishes each month a complete, corrected-to-date directory of broadcasting stations. It comes with the magazine comes with the magazine nothing extra.

# MAID OF COEUR DE ALENE THRILLS LISTENERS WITH SPIRIT OF VIOLIN



ONE of the most beautiful places in work on the Sunday evening classical America ir Crour de Alene, Idabo, a programs. She made her debut in New limpid mountain lake with mammoth trees to the very edge, a typical little western as an artist with unusual ability. Perhaps town struggling between the modern and the primitive; this was the home of Mary, spirit of Nature's beauty as found at Chainey (above) heard over the Red Net-Coeur de Alene.

### Kiley Backs Davies in U.S. Radio Superiority

Bigger Selection and Better Quality of Programs Here—N. Y. Has 2,500 Hours Monthly

Has 2,500 Hours Monthly

ORE than twenty-live hundred hours of entertalmment were offered Rado listeners in New York City by suttions in New York during the recent autumn, according to a statement by George H. Kiley, vice president of the Farrand Manufacturing Company and an authority of Radio conditions.

American listeners are particularly fortunate in comparison with listeners in England and other countries, Mr. Kiley explained, pointing out that the majority of British Radio listeners, for example had only two or three hreadeasting station programs to choose from, while listeners in New York City had from ten to thirteen stations on the air at the same time, all within the range of their receivers, exclusive of stations out of town that cannot be brought through the locals on most receiving sets.

clusive of stations out of town that cannot be brought through the locals on most receiving sets.

American listeners have more than five times as much program material offered them than do listeners in any other country, with the quality of the programs with the Radio Digest popularity

as they once did. For almost every special occasion, Christmas or Halloween, Pat throws a party for his small friends and they fill the studio in the big Wrigley building to overflowing. That's Pat himself, in the center of the group. Pat's an author now, too. He has published a

### Delights KGO Fans



WHEN the Hearsts at San Simeon or the Barkleys at Hamilton want to tune in an especially good singer from San Francisco they look up the hour when Miss Gail Taylor is to be heard at KGO.

### Fame Passes But KFKX Carries On

No Longer DX Goal Hastings Station Moves to KYW Home and Serves Farmers by Daylight

Moves to KYW Home and Serves Farmers by Daylight

OLD KFKX, at one time the most popular DX station in America, has moved from Hastings, Nebr. to Chicago and settled down on the reof of the Congress hotel, where it nestles alongside its more elegant sister, KYW, of the Westinghouse family.

For a time this old stalwart with faded glory seemed to be lost, but KYW needed someone to share that 526m-570kc allocation—someone within the family. So KFKX picked up its tubes, antenna, "mike" and other paraphernalla and moved into the Chicago Westinghouse Radio residence. It's down Michigan boulevard just a little way from Bill Hay of WGN, whose voice used to be the KFKX voice everybody tried to hear.

In those early days KFKX was the passion of the DX fiends. Every man made his own set. Ruby Holmes in Chicago would invite his friend George Ayer over to hear the new neutrodyne he had regenerative set that blooped like sin, but between bloops Holmes got KFKX, and regenerative set that blooped like sin, but between bloops Holmes got KFKX, and Radio certainly was wonderful.

Don't worty, KFKX won't interfere with any of the swell chain programs KYW broadcasts at night. But the farmer's always were her best friends. At 9:30 in the morning sine swings off to the blue with investock reports from Omaha, Kunsas City, East St. Louis, St. Joseph, Chicago, Sioux City, St. Paul and a few points East. At 5:30 the final summary is given and then she leaves a clear track for KYW and her dinner dances, fancy studio doings and the opera.



### POPULAR ORCHESTRAS

(Continued from 5)

(Continued from 5)
Winnipeg, during the-winter months, and goes to the famous Canadian National Railways summer resort, Jasper, during the summer months. Besides to the regular listeners they play especially for passengers abound the Radio-squipped crain, Transcontinental Limited, and the National."

Following are the standings of the or-chestras December 15th: DISTRICT No. 1-EAST

# Comprising: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland and District of Columbia. Pennsylvans, District of Columbia. Vincent Lopez's orchestra, WEAF.....2,173 Crosley Moscow Art orchestra, 1,805 WEAF 1,805 Preddie Rich's orchestra, WJZ, ,658 Palais D'Or orchestra, WEAF, 1,306 Ipana Troubadours, WEAF, 998 Roxy's symphony, WJZ, 983 Al Steele's Musicale Vagabonds, WMCA

Meyer Davis' Swanee syncopators, WRC ..... Meyer Davis' Swanee syncópators, WRC
Century orchestra, WMAK.
Hotel Pennsylvania orchestra, WJZ...
WOO orchestra (Robert E. Golden),
Director), WOO
Charlie Woodward's Gondollers, WNAC
Meyer Davis' Hotel Biltmore orchestra, WLSI
Maxwell House orchestra, WJZ...
Savoy Plaza concert orchestra, WJZ...
Savoy Plaza concert orchestra, WEAF...
Jack Morey's Singing orchestra, WEAF...
Jack Morey's Singing orchestra, WEAF...
Joe Amphouster's orchestra, WMAK.
Klein's Serenading Shoemakers, WJZ.
Art Coogan and his Dance orchestra,
WJZ...
Mythel's orchestra, WJZ...

Art Coogan and his Dance orchestra, WIP
Markel's orchestra, WIZ.
Ernie Andrew's troubadours, WBZ.
Golden Dragon orchestra, WFAN.
Joe Rines and his Elk's Hotel orchestra, WNAC
Waldorf-Astoria orchestra, WEEI.
Eamberger's Little symphony, WOR.
Cinderella orchestra, WLSI.
Granadas, WJZ
Jacques Renard and his Cocoanut
Grove orchestra, WASC.
Bay State Aces, WOR.
Porkor House orchestra, WEEI.
Eden Symphony orchestra, WFAN.
Leo Drayer and his New York orchestra, WNAC
Seville Troubadours, WOR.
Seville Troubadours, WOR.
Strand Ball Room orchestra, WFAN
All Friedman's orchestra, WFAN
Leo Reisman and his Hotel Brunswick
orchestra, WNAC
Villa Venice orchestra, WOR.
Jedo Highlanders, WOR.
Ledo Anderson and his orchestra,
WHAC
Villa Venice orchestra, WOR.
Ledo Anderson and his orchestra,
WFI
Goodrich Zipper orchestra, WEAF.

WFI
Goodrich Zipper orchestra, WEAF....
Henderson's Roseland orchestra, WOR
La Franco orchestra, WEAF...
Hotel Ten Eyek orchestra, WGY...
Tennesseans, WJZ
Hotel Chelsea Concert orchestra,
WPG...

POLAR BEARS IN ARCTIC FROLIC



322		
313	THERE'S a frosty tingle and sleigh bell jing from the Boston Shopard stores antenna. spite of a handicap sta	gle
794 752	I from the Boston Shepard stores antenna.	T
102	Tom Timothy's Frivolity Club orches-	-
327		30
316	Dellwood Ballroom orchestra, WMAK	30
	Jerry Falvey and his orchestra, WBZ	30
500 572	Seville Troubadours, WHN	30
516		
515.	Joe Rines and his Elks hotel orches- tra, WEEI  Hotel Statler orchestra, WEZ Bert Dolan's orchestra, WBZ	30
	Hotel Statler orchestra, WBZ	20
508	Bert Dolan's orchestra, WBZ	30
507	Henry Kalis and his Lido Venice or-	19
507	McEngliv's orchastre WPZ	15
504	Bernard Levitow's Commodora en-	• •
		18
503	Riviera Ramblers, WGBS	18
500	Capt. Warmack Buffalonians, WMAK	18
500	Piccadilly orchestra, WCAU	1.5
500	Bauel Bessels analysts WUAC	18
497	Hotel Bridgway orchestra WTIC	i
490	Champion Sparkers, WEAF	1'1'1'1'
487	Piccadilly orchestra, WCAU	1
482	Armand Vecsey and Hotel Vanderbilt	
481	string orehestra, WGBS	10
477	New York Philharmonic orchestra.	10
	Parody Club orchestra, WOR	1
477	Club St. Marks orchestra, WRC	1
477	WOR Parody Cluh orchestra, WOR	
475 471	WIP	10
	Spallophurg Salon orchestra, WCAH	1
470	Cotton Club Dance orchestra, WHN	ī
468	Roman Gardens orchestra, WNAC	1
467	Harbrecht's orchestra, WHAZ	1 1 1
46I	WIP WTAG little symphony, WTAG Snellenburg Salon orchestra, WCAU. Cotton Club Dance orchestra, WHAC Harbrecht's orchestra, WHAC Benjamin Franklin orchestra, WIP Benjamin Franklin orchestra, WIP	I
		-
459	Hotel Mauger orchestra WIZ	1
458 458	Hotel Mayflower orchestra, WRC	î.
458	Fletcher Henderson's Roseland Dance	
100	orchestra WHN Arcadia Ballroom orchestra, WMAK. Emerson Gill's orchestra, WTAM Lou Klayman and his orchestra, WNAC	1
457	Arcadia Ballroom orchestra, WMAK	
454	Lon Klayman and his crehestra	
454	WNAC	
452	Statier's Pennsylvanians, wear	
452		
451	ble, WOR	
	Campus Screnaders, WHAZ	
451 450	Silver Slipper Supper club dance or-	
450	Silver Slipper Supper club dance or- chestra, WPG Jannsen's Hofbrau orchestra, WEAF. Carborundum Band, WMAK. Orientals, WCAU. Pepper Pot orchestra, WOR. Iceland Dance orchestra, WHN U. S. Army Band orchestra, WRC Remington Band, WPG Masonic Band, WPG Shepard Colonial Luncheon concert	
	Carborundum Band, WMAK	
450	Orientals, WCAU	
436	Pepper Pot orchestra, WOR	
413	If C Approx Band orchestra, WPIN	
408	Remington Band WMAK	
407	Masonic Band, WPG	
	Shepard Colonial Luncheon concert orchestra, WNAC WEAL Dance orchestra, WBAL	
399	orchestra, WNAC	
387	WBAL Dance orchestra, WBAL	
400	Vanderbilt hotel string ensemble,	
385	Sidney and his Hotel Mayflower or-	
384	chestra, WRC	
	WGES Sidney and his Hotel Mayflower or- chestra, WRC Calvary Philharmonic orchestra, WNAC	
383		
302		
382	Quackenhugh orchestra, WJZ	
380	Richardo Sodero's Little Symphony.	
379	George Hall's orchestra, WJZ	

Mediterraneans, WJZ

Loew's 86th Street theatre orchestra,
WIIN

370 368

Mediterraneans, WJZ
Loew's New York theater orchestra,
WHN
Rensselaer Polytechnic Institute Students Band, WHAZ
New Departure orchestra, WTIC....
Bolton's Band, WMAK.... Boiton's Rand, WMAK...
Jimmie Hooley's orchestra, WNAC...
Fhilharmonic symphony orchestra,
WGY
Durham Radioliers, WCAU...
WBAL Dinner orchestra, WBAL...
Virginia Vetter's entertainers, WHAS
Blue Hill's Plantation orch, WEAF...
Cathay concert orehestra, WFAN...
Sylvania Foresters, WJZ...
Hotel Van Curler orchestra, WGY...
Rensselaer Polytechnie Institute Students Symphony orchestra, WHAZ...
WPG
Loew's 88th Street theatre orchestra.

ten the WNAC Polar Bears come romping down were nominated in the orchestra contest, but in re-scored 311 votes to date.

Irving Spectors Rhode Islanders, Irving & WEAN WEAN
Premier dance orchestra, WOR.
Eastman orchestra, WMAK
Andy Orefice and orchestra, WCGU...
Hotel Astor orchestra, WJZ...
Metropolitan Grand orchestra, WNAC
Tommy Gott's Silver Silvper orchestra, WHN
Veretise Condeling tra, WHN
Venetian Gondoliers, WJZ
Fox Theater Symphony orchestra, Golden Dragon Rostaurant orchestra, WCAU WCAU
South Sea Islanders, WBRL
Geo. Maddens Delawareans, WDEL
Municipal Band of Baltimore, WBAL
Trojan Ice Cream Health Crusaders,
WHAZ
La Touraine Coffee concert orchestra,
WEEI
Strawbridge & Clothler Tea Room Ensemble, WFT
Ganger's Buffalonians, WGR.
Super-Oil Heater orchestra, WOTC.
Madd-Rite orchestra, WOTC.
DISTRICT NO. 2—SOUTH Super-Oil Heater Orchestra, WTIC... 1
Madl-Rite orchestra, WOR... 1
DISTRICT NO. 2—SOUTH
Comprising: Virginia, West Virginia,
North and South Carolina, Georgia, Florida, Louistana, Misstaslapi, Alabama, Tennessee, Arkansas and Kentucky.
Chas. Dornberger's orchestra, KTHS...1,033
Andrew Jackson Hotel orch. WSM... 998
Tennessee Collegians, WLAC... 75-2
Kentucky hotel orchestra, WHAS... 750
Ruby Brown and his orchestra, WSB. 50-0
Nick Rose and his Revellers, WLAC... 649
Dixola Novelty orchestra, WSMS... 542
Cock-a-Doodle-De orchestra, KTHS... 567
Majestic Cub orchestra, WFWA... 563
Hotel Richmond orchestra, WRYA... 363
Hotel Richmond orchestra, WRYA... 393
Bob Start's Tennesseans, WSM.... 323
Hal Kemp and his Recording orchestra, WHAS... 323
Hal Kemp and his Recording orchestra, WHAS... 325
Joe Clutz Cavalier Hotel orch, WEA 151
Rainhow orchestra, WRYA... 151
Rainhow orchestra, WRYA... 152
Barlice Leide's orchestra, WDAG... 52
Barlice Leide's orchestra, WDAG... 52
Barlied Leide's orchestra, WDAG... 52
Barlied Conception orchestra, WTIC... 29
Texaco Salon orchestra, WDAG... 52
Ray Miller and his orchestra, KTHS... 35
Rentilwerth orchestra, WDAG... 52
Baniker's Bond company orch, WILAS... 35
Ray Miller and his orchestra, WTA... 30
Muntchal Pier Casino orch, WFLA... 7
Bedeuins orchestra, WRYA... 7
Li of Arkansas orchestra, WDAG... 4
WDAG Symphony orchestra, WDAG... 4
DISTRICT NO. 3—MIDDLE WEST
Comprising: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa and DISTRICT NO. 2-SOUTH Dremland, WMC 1

DISTRICT NO. 3—MIDDLE WEST

Comprising: Ohio, Indiana, Illinois, Michigan, Wiseonsin, Minnesota, Iowa and Missouri.
Paul Christensen's orchestra, WHO. 2, 537

Maurie Sherman's orchestra, WIS. 2, 724

Chief Razzberry's orchestra, KOIL. 1, 040

Crosley Cossacks, WLW ... 1, 007

WENR Studio orchestra, WENR. 938

Fred Hamm's Victor orch, WLIS. 351

Kansas City Nighthawks, WDAF 352

Bell Lampe, WOK ... 551

Ted Fiorito and his orchestra, WSAI 549

Kentucky serenaders, KYW ... 555

Paul Ash's Merry Mad Musical Gang, WGN ... 555

Paul Ash's Merry Mad Musical Gang, WGN ... 555

Paul Ash's Merry Mad Musical Gang, WGN ... 555

Paul Ash's Merry Bad Mosical Gang, WGN ... 555

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Paul Ash's Merry Mad Musical Gang, WGN ... 555

Paul Ash's Merry Mad Musical Gang, WGN ... 555

Paul Ash's Merry Mad Musical Gang, WGN ... 555

Paul Ash's Merry MGN ... 555

Paul Ash's Merry M 328

Jean Hammond's Elks Club Tune
Tinkers, WTMJ
...
Sammy Watkins' Claremont Tent orchestra, WHK
...
Ben Pollack's orchestra, WBBM...
Jen Russo's orchestra, WWJ...
Jesse Boone, KWUC...
Jack Chapman's LaSalle Hotel orch,
WMAQ
Sweeney syncopators, WHB... 395 Sweency syncopators, WHB..... Earl Hoffman's Chez Pierre orchestra, WJAZ

Ray Miller and his Brunswick Recording orchestra, WSAI
Trianon orchestra, WMBB.

Ed Day's Bedford Glens orch. WHK
Dick Long's orchestra, WCCO...

Edgewater Beach hotel orch. WEBH
Wesley Barlow's orchestra, WCCO...

Crystal Slipper Ballroom orch. WHK
Morris Gillumet and his Troubadours,
WJR
Paul Howell and his Troubadours,
Paul Howell and his Toubadours, 201 WJR
Paul Howell and his Playboys, WADC
The Ramblers, WOS.
Hotel Cleveland orchestra, WTAM.
Charles Fitz-Gerald's Rhythm Kings,
WJR
Mel Doherty's French Bauer orchestra, WJR
Hotel Lowry orchestra, WCCO.
Jedison Symphony orchestra, WENR.
Joe Constantineau and his Buckeye
State Serenaders, WHK.
Hotel Davis orchestra, WHBO.
Crosley Ensemble, WLW.
Walk-Over Cavaliers, WDAF.
Joe Kemp's string band, WOS.
Wisconsin Roof orchestra, WTMJ.
Minneapolls Symphony orch, WCCO.
Cincinnait Symphony orch, WLW.
Troutdale orchestra, KFAB.
Jack Johnstone's Studio orch, WEBM
Guy Lombardo and his Royal Canadians, WJBT.
Neapolitans, WTAM
Formica Concert orchestra, WLW.
The Victorians, WHO.
Lincoln Solon orchestra, WHO.
Ambassador's orchestra, WIBO.
Ray Miller's orchestra, WIBO.
Ray Miller's orchestra, WUBO.
KOIL
Deshier-Wallock orchestra, WGCO.
Hoodlums, WLIB
Pete Kuhl and his Seven Aces, KOIL
Ambassadors, WHO
Henry Thies's orchestra, WGCO.
Hoodlums, WLIB
Pete Kuhl and his Seven Aces, KOIL
Ambassadors, WHO
Henry Thies's orchestra, WGCO.
Hoodlums, WLIB
Pete Kuhl and his Seven Aces, KOIL
Ambassadors, WHO
Henry Thies's orchestra, WGD.
Bajles Club orchestra, WTMJ.
Chicago Woman's Symphony orchestra, WHAD
Buick Studio orchestra, WTMJ.
Chicago Woman's Symphony orchestra, WLS
Alexander's Virginians, WSBC.
York Symphony orchestra, WLS
Alexander's Virginians, WSBC.
York Symphony orchestra, WHB.
Joe Hunn's Astor Hutel orch, WTMJ
Jack Crawford's orchestra, WAB.
Art Krueger's Wisconsin Hotel Badger Room orchestra, WDAF.
Waddy Wadsworth's Terrace Garden orchestra, WJB.
Joe Hunn's Astor Hutel orch, WTMJ
Jack Crawford's orchestra, WGBZ.
Little symphony orchestra, WDAF.
Waddy Wadsworth's Terrace Garden orchestra, WJB.
Joe Hunn's Astor Hutel orch, WTMJ
Jack Crawford's orchestra, WCCO.
Danceonian orchestra, WCCO.
Danceonian orchestra, WCCO.
Danceonian orchestra, WCCO. 56 49 

### U. S. STATIONS BEST

U. S. STATIONS BEST

(Continued from page 11)
supervision. It seems almost incomprehensible that seven hundred stations could operate successfully at one time, that they could be accommodated in the limited number of bands that we have, and the great amazement of all was expressed in the fact that we had enough artists to supply the tremendous demands of this number of stations.

A rather interesting incident occurred in Frankfort, Germany, where I had gone upon hearing the humor that they were going to broadcast their performances of opera. In talking with one of the Radio officials, he informed me that it was seriously considered, as the idea had been taken back to Germany in 1924 by their State Opera Company as performances had been broadcast while in Philadelphia. You can imagine his amazement when I informed him that my station had been the station that broadcast the German State Opera Company's performances from the Metropolitan Opera House in Philadelphia.

I had the pleasure of renewing my

from the Metropolitan Opera Ilouse in Philadelphia. I had the pleasure of renewing my acquaintance with several of the artists who were appearing in Frankfort at that time, and who had been with the German company in Philadelphia in 1924. To sum the whole thing up, while I enjoyed every minute of my trip to Europe, and was interested in observing their method of operating their broadcasting business, I was firmly convinced that the American broadcasting station is superior to any in the world.

# Simple Explanation of Broadcasting

Part II-How a Station Creates Radio Waves and Sound Rides Them Over Land and Sea



Last month's copy of Radio Digest, in case you favor mind that we first took up the creation of a voice wave in the singer's throat, explained bow it traveled forward with part of it reaching the microphone, then considered the speech amplifier which increased the power of the electrical impulses through several speech amplifier which amplies set up and, finally, followed the impulses through several speech amplifier units. We were then ready to put our created solo into the transmitter.

By Marvin W. Thompson

casting on a frequency of 700 kilocycles by oscillator is shown the first amplifier. Several speech amplifier which for create and sean of radio waves in the purpose of one of the two groups of course of the power of the proper to swing outward and torth a steady stream of Radio waves in the form of the right of the 5 watt capacity. This causes the Energy to swing outward and torth a steady stream of Radio waves in the form of the right of the 5 watt capacity. This causes the Energy to swing outward and torth a steady stream of Radio waves in the form of the reaction of the region of the regent and the property of two groups of the power of the property of the power of the reaction of the region of the regent and the power of the



TUBE



Now a Radio telephone transmitter, as used by the first class broadcasting station of today, is quite an imposing affair. Probably a great many readers have seen the near little transmitters assembled by a Radio transmitters as great many seaders have seen the near little transmitters. A great many lave, by now, visited a broadcasting plant and seen an outif tof, let us say, 500 to floedrical energy they can throw out into the air.

The really large, nationally known broadcast transmitters are nearly beyond the conception of anyone who has not actually inspected such a plant. The generator room has become a mederate size building, or a large part of a large building. Where two control panels of about the first three to see that twill stay there is called "modulating," and the tubes and equipment which do the trick are "inodulating." Where two control panels of about the first three to see that the wise is called "modulating," and the tubes and equipment which do the trick are "inodulating." It is find the modulating apparatus that we feed the impulses from the speech amplifiers described in Fart I.

### How Amplifiers Work

How Amplifiers Work

Taking up now the oscillator and power amplifier. We start things with a tube but little larger than the ordinary UV-201-A, one which many fans now use as the second audio tube in their sts—the UX-210. We connect it to colls and other parts in such a way that it now does just the opposite duty that a detector tube does in your receiver. In your receiver, it is the function of the detector to take in Radio frequency currents, which change their direction of travel in the wire from 500.000 to 1.500.000 to these as second, and turn out direct current which travels only in one direction. When we apply the 210 tube as an oscillator in our broadcast outfly, we apply direct current to it, and it produces alternating current which starts no endirection and then comes back, anywhere from a half million to one and one-half million times a second. These frequencies of alternation are called Radio frequencies but they are not as yet Radio waves.

Refer now to Figure 4. Here we have a

and then a tube of 250 watts capacity takes up the job.

Giving Energy Fush.

The power now stored up in the swing of Energy has become pretty strong. In 1923 and 1924, a station that finished the series of amplifiers with two 250 watt tubes working together and putting their power into the antenna, was considered a lirst class station. Now such tubes are merely a stage of power amplifier and, farthest to the right in Figure 4, we have two huge tubes of 10,000 watts cach working together to give Energy its flux pushes. This would give a 30 kilowatt station—yet WGY has used tubes in banks or groups to create a final push of 50,000 watts.

The measuon might well be asked. "Why

station—yet WGY has used tubes in banks or groups to create a final push of 50,000 watts.

The question might well be asked, "Why start with the little tube and work up through the intermediate sizes to the big oncs? Why not cause the largest size to create currents at Radio frequencies and be done with 1t?" That's a fair question and—that's the way it used to be done. It was found, however, that when this was done, the frequency had a tendency to vary, that is to increase a few thousand or decrease a few thousand per second. The result was that, when one got nicely tuned to receive the program, it faded in and out or, what was worse, became too close in frequency to that of another station, and created a steady whistle.

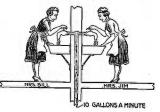
To stop this, a little device was perfected called a Piezo crystal control. The heart of this unit is a Piezo crystal, which is made up of much the same material as sand. The substance is called quartz, and chunks can be obtained large cnough to grind flat crystals from, much as opticians grind down a lens for one's glasses or a lens for a kodak. These crystals are most interesting. Naturally they have a grain just as wood or glass or ice does. The thin flat plates must be cut through at a certain angle to the grain and the surfaces must be ground down very carefully and delicately.

Crystals Control Frequency

Crystals Control Frequency

that it will cause the tube to create only the frequency for which the crystal was ground. This cannot vary. We come now to Figure 5. At the left we have the two 10,000 watt tubes swinging energy with the little Piczo crystal holding up its hand for them to slow down a little as they are swinging Energy too fast. These huge tubes would merely laugh at the little crystal, run right over it and destroy it. At the right, however, the crystal has tackled the little 5 watt tube which is no larger or more powerful than it is and this tube must obey.

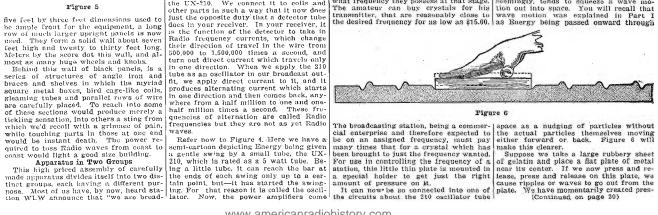
That is the reason for the series of amplifier tubes. We can accurately control the little fellow and then build up its output through larger ones, each of which must swing Energy at the rate of the tube ahead. Neat? It most certainly is, Now please don't misunderstand and get the impression that every large broadcaster asses tubes in just the capacities mentioned. Those sizes are merely named for illustration. The Bellmore station of the National Broadcasting Company uses a 7% watt tube followed by another one, then a 56 watt, two of 56 wats capacity, one of 20,000 watts operating at about 5,000 and finally, a



Pigure 7

bank totaling 50,000 watts. The Bound Brook station also starts with a 7½ watt oscillator, and then has a single 250 watter, two 250 watter these, and then a group of large ones totaling 40,000 watts. "Squeezing" a Wave
This truly terrific power is then placed across the buge condenser formed by the antenna on the one side and the ground on the other. Between these two surfaces there is an electrical pressure set up at each alternation of the current which, seemingly, tends to squeeze a wave mo-Crystals Control Frequency
Every so often they must be removed from the grinding holder and tested as to what frequency they possess at that stage.

The amateur can buy crystals for his tion with the space. You will recall that transmitter, that are reasonably close to the desired frequency for as low as \$15.00.



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# Facts About That New Christmas Receiver

A BOUT the only exact figures the Radio commission probably cannot get that pertain to Radio are those on the number of new sets that went into operation between December 23rd and 27th. From the business the Radio departments and Radio stores did during December, as good a guess as any would be 300,000. That many families, at least, will find themselves faced with an electrical and mechanical triumph of science that has been brought down to considerable simplicity in the matter of operation but still remains a device for handling energy in such minute quantities as were hardly dreamed of not many years ago.

To get trouble-free operation from it, and the results which the advertisements claimed were possible for the machine, takes a little practice and some study of what happens when various symptoms occur. You had to learn a few things about your car, its switches, chokes, gauses and breaks, so have the same parience with your Radio—and give it as much thought.

Most of the receivers sold this year will probably be installed either by the dealers who sold them or by service men, so it is hardly necessary to explain to the new set owner how to connect up the various accessories with the main cabinet. Earlier in Radio's history, each purchaser of a set had to be his own installer, service man and trouble-shooter, but those days are about over. There are many points in connection with ownership of a Radio set, however, that will make for much more enjoyable operation, and these we propose to give here as one who is somewhat familiar with Radio talking to the newcomer.

Study Instructions Before "Ricking"
First of all, new member of the Lodge of BOUT the only exact figures the Radio

to give here as one who is somewhat familiar with Radio talking to the newcomer.

Study Instructions Before "Kicking"
First of all, new member of the Lodge of Listeners, read over the instructions carefully. Doubtless right now you can Just filp the switch and hear a few stations, and get them with a beauty of reproduction that cheers your soul and makes you think of many wonderful evenings at home. But, you'll find that some stations have a tendency to tune pretty close to others and maybe there is a faint background of one mixed in with the louder nusic of a station you wish to hear. Do you know how to adjust and tune to eliminate the unwanted broadcaster? It's highly probable that there are several paragraphs in the instruction book about what to do to improve selectivity, or get around a too powerful nearby station.

The remedy may be a little knub just inside the top cover which changes what is called "coupling," or a couple of small knobs at one side of the panel that "Sharpen" the tuning a bit or, yet again, you may have too long an antenna for your location. If the book don't help you, after careful study, discuss the matter with your dealer.

On the other hand, perhaps you get dis-

after careful study, discuss the matter with your dealer.
On the other hand, perhaps you get distance without trouble, but rather faintly in the speaker and not sufficiently loud that you can sit over in the arm chair and enjoy those far away programs. The book or your dealer, it you approach him pleasantly on it, can solve the difficulty nine times out of ten.

How to Tune

How to Tune

How to Tune

Success with a Radio outfit depends on learning it—thoroughly. For instance, once you learn the numbers on the dial where certain nearby stations come in very loudly, you'll tune with one hand on the tuning dial and one on the volume control. And then, when you go across the scale, you'll back up a little with your "Volume" when approaching those numbers, and advance "Volume" when in between them. That way, you won't have programs blasting forth at you one moment and a dead slience the next. This procedure makes a great many stations come cut with practically equal volume, whether near or far away. But that little stunt is not "in the book."

It is not probable that anyone told you

It is not probable that anyone told you It is not probable that anyone told you that your cone speaker was a little temperamental or fussy as to where it was to be placed. True, it will work anywhere you may hang or set it, but it is liable to sound a great deal better if hung either aeroes a corner of the room or away from a wail. Presuming it is the kind with a base, the natural tendency is to place it on the set and shove it back close to the wall. Cones, most of them, do not fare well in that location; better to keep a cone speaker well forward on the set or, better yet, place it somewhere else and away from walls, since quite a few Radios create within themselves an unpleasant howl or steady whistle with a speaker resting on the cover.

the cover.

Practically all speakers, either cones or horns, are adjustable. It is possible that your dealer's clerk did not have time in the rush to explain this to you. Also, most of them have instruction sheets on this point. If you haven't one, a note to the maker will bring it. Cones, such as Western Electric, have a little nut on the tip for adjusting to your set and its voltages. A few have this inside a removable back grill-work. Horn speakers have a

**TOUR** Radio Digest expert tells here some of the Y secrets inside the new Christmas Radio set you are just beginning to understand. Of course, if your are a novice, there is a great deal of mystery about the whys and wherefores of the little jiggers that make it work, and if anything should go wrong you never, never would know why—unless someone who does know would sit down and explain. Sit down and go over this summary with Dr. Tommy.

little lever on the side just below the neck, or underneath the base, and inside.

neck, or underneath the base, and inside. Power Supply Units
Possibly you didn't feel in a position to invest in a power supply unit at this time, or the giver felt that batteries were O. K. Batteries, especially if of the large heavy duty type, should run your set for several months—they should last until summer. This refers to "B" batteries. You can get a power-from-the-socket "B" unit at that time; get your money's worth out of those batteries now. If you did get power supply units, they too should have instruction sheets enclosed or pasted in the cover. There are two types of these socket.

ply units, they too should have instruction sheets enclosed or pasted in the cover. There are two types of these socket units for supplying "B" energy to sets; that which has a tube and that which uses little jars of lfquid. There are two types of tubes; if you find something on the unit or its instructions about "Raytheon" or "Q.R.S." it is quite abright if the tube does not light up. It's not supposed to, although it may get warm and even hot, which is O. K. If the tube turns out to be a "213" or "280" it should light up when in operation. Tube type "B" units need no attention after being installed.

The power units for giving one "A" current, to light up the tubes in the set, are of four types. There is one kind, completely dry, and the elements in them last indefinitely. If the sheet lists nothing to be done in the way of maintenance, yours is that kind. Then there are dry ones, that use a centridge, which should last about a year. The replacement of the cartridge is very cheap however. Then, there is a wet variety that needs an occasional glass of distilled water in the rectifier cell, which should be covered in the operating sheet. The fourth variety, and that in most general use, is the one containing a storage battery, a rectifier (either wet or dry) and a power switch.

The battery in this kind will need water every so often, but there cannot, from this type, be a "hum" in the reproduction. If there is an adjustment to be made of the cluarging rate from the rectifier, study the "dope" on this operation carefully.

Adjusting "B" Unit

The socket power devices for "B" current should be put into uss with the help of a "high resistance voltmeter." The cordinary meter, such as you or your friends may have tested batterles with, will not do. The "B" eliminator is, like the cone speaker, a little temperamental on one or two points. If your dealer did not adjust this unit with such a meter on installation, you should borrow one from a friend or the dealer. Weston makes such a meter and so do Jewell, the type number of the latter being No. 116.

To quote from the Jewell instruction sheet: "A 'B' eliminator should be tested under load. To adjust it to a radio set the 'B' eliminator should be connected so that the set is operating normally. The negative (—) terminal of the 'B' eliminator and the voltameter should be connected to the negative (—) terminal of the 'B' eliminator and the other lead attached to the 250 volt terminal of the 'B' eliminator and the true voltages applied to the Radio set will be indicated on the 250 volt terminal of the 'B' eliminator and the true voltages applied to the Radio set will be indicated on the 250 volt terminal of the 'B' eliminator and the true voltages applied to the Radio set will be indicated on the 250 volt scale.

"Adjustments should be made where possible, so that the voltages on any tap are those regulred for the proper operation of the Radio set as indicated on it if the receiver merely has instructions for the number of 'B' batteries to be supplied, an equivalent voltage to these 'B' batteries should be supplied by the 'B' power unit."

Now most Radio sets require 45 volts (1 hattery), 20 wolts (as supplied by 2

unit."

Now most Radio sets require 45 volts (1 hattery), 90 volts (as supplied by 2 hatteries) and "Power" which can be either 135 or 130 volts (3 or 4 batteries). As a rule the colored leads from the set are identified with little metal tags that indicate the voltage each wire should get, in relation to the minus wire, so you can readily adjust the knobs on the "B" unit so that the meter readings at each plus wire are as required.

Ground Is Important

Ground Is Important All sets, except those which operate from a loop aerial, require a ground con-

ing of an antenna is more trouble, consider nection. Most people, because the erect-the antenna of a great deal more importance and let almost anything go as a "ground connection." This connection is just as important and, in these days of A.C. tubes, it is even more necessary because it is the ground connection that eliminates much of the possible "hum."

It a friend volunteers to put in your set and wants to just wrap a piece of seraped wire around the radiator pipe or water pipe, let him go ahead to save argument, but you drop into a Radio store and purchase, for a quarter, a ground clamp which looks like a very small carpenter's clamp and has a threaded screw, pointed, that you can force to dig into the pipe a fraction of an inch. Then just fasten the bared wire under the screw on the clamm, put it on the pipe and tighten up. That's the only decent ground connection this writer has yet seen, next to soldering with a blow torch.

Loop aerials, such as are used with super-heterodyne receivers, and a few shielded tuned Radio frequency sets, are another type of accessory that is a little finicky about where it is placed. If you put the set on a table in front of a nice tall mirror and want the loop on the set, take the mirror away. Or put the loop somewhere else. The silvering on the mirror is a very effective shield against stations in that direction and, when the loop is parallel to it, will "kill" signals perceptibly. Radiators, too, should be avoided by several feet with a loop aerial. If your apartment has those very solid metal doors, finished in walnut or mahogany, don't expect the loop to do 'its stuff' loop per cent with the door swung backclose to it. Just below a wall bracket containing lights, with the possibility of wires running in the wall straight down from it, is a good place to avoid with a loop.

Tube Precautions

from It, is a good place to avoid with a loop.

The Precautions

If the set was installed hurriedly, it may help a great deal to switch tubes around a little—providing you watch your step on which tubes you switch. In storage battery type sets, or rather, those using storage battery type tubes, there are 201A, 200A and either 112 or 17t tubes. The 201A variety are the ones to be tried out in the different sockets that take these tubes: there is likely to be only one 200 or 200A, which must stay where it is, and only one 112 or 17t, that must stay where it is. There may not be a 200A, in which case all but the 112 or 171 will be 201A. Tubes do not run quite uniform in their characteristics due to the delicacy of their construction and some are better amplifiers in what we call the "Radio frequency stages" than others, while the one that shows up poorly at that point may make a whale of a tube in the "first audio stage." Or, it might make a great detector in sets not supplied with the 200A type for that purpose.

purpose. The AC tubes seem to vary even a little more, and here the trying of different tubes in the various scokets will almost, surely prove of value. Remember, however, that tubes of the 226 type must be put only in the sockets intended for them. If you put one in the socket intended for them. If you put one in the socket intended for the 112 or 171 you'll be "out" a tube. You cannot mix the 226 and the 227 type because the nomber and placing of pins is different, but the 225 will go in the sockets intended for the power tubes 112 and 171—with disastrons results. Keep the 226 buils in their correct sockets and playing around with them will prove of value. Regardless of which kind you have, 201A or 228, have one or two extra ones. In the first place, you have more to try out for extra good ones, and second, if one "goos" during an interesting program, it is only a matter of a minute to put in the extra. Just like having a spare thre on your car only less trouble to replace. Au extra power tube is good too. It can burn out, (Continued on page 35) purpose.

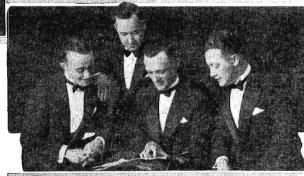
The AC tubes seem to vary even a little

(Continued on page 35)

### WHK IS FOR MEN-MALE QUARTETTES



CLEVELAND is famous for its good male voices, and here are a couple of quartettes that have done their share. Both are with the WHK broadcasting station. The upper group is known as the Underwood Battery Male Quartette and the lower. The Fifth City Four. Letters from the fans indicate that the voices of both fours have been heard simultaneously on the Atlantic and Pacific Coasts. "WHK has no quarrel with the women," said the program director, "but experience has taught us that men are preferred for the air entertainment. We are for men all the time. We take great pains to provide male voices that plense, and are pround of these two quartettes."



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# Hidden Minerals Answer Radio's Call

New Scientific Tests Indicate Subterranean Ores Respond to Ether Waves Operated by Prospectors

WILL the Forty-niner of 1949 start out

Will the Forty-niner of 1949 start out with a short wave transmitter and portable receiver, and hunt his ore with microphone and headphones? It begins to look that way.

Max Mason, the tall, angular sport loving president of the University of Chicago, says experiments in that direction have already been successfully carried out. The main thing is to learn the language of the ore, signal to it and tune in for the unswer—if any.

He victured the

-if any.

He pictured the progress of the work to a recent gathering of the New York section of the New York section of the American Institute of Mining and Metalurgical Engineers. His revolations surprised his listeners almost out of their seats. The Radio prospector presents an analogous appearance to the old time superstitious vodoo and his divining rod, except the Radio apparatus, sets on tripods, is keyed with electricity and actually produces sounds from the depths below the surface.

The pictures on this page give one an idea of how the margic" devices for finding ore by Radio look. The engineers with the tr ouffit journey into the field beneath which they expect to locate ore. The underbrush is cleared a way, the tripods erected, batteries connected to transmitter and receiver. The engineer at the transmitter practically sends convention and control and control

### Calling Up Ore

"Ello, 'ello, 'ello Ore, are you there?"
"Um-um-um-huh-huh, I'm here," comes
the answer to the engineer at the receiver
with the headphones over his ears.
"Good, Old Top, and I say how far do
you extend yourself down there?"
"You hear me now, don't you? Well
keep going until I fail to answer."
So the Padie, prepeter where up his

So the Radio prospector picks up his apparatus and moves on a little further and makes another inquiry. He keeps on testing while his assistant marks off the area into charted squares or circles where the responses are most clearly audible and where they fade.

Pinally the whole field is laid out, even to the approximate depth at which the pay ore may be found and never a pick or shovel or drill is used except to clear the ground sufficiently to set up the tripods. Does this process sound absurd? Well, just hold your smile, it has been worked out. President Mason described all the technical details to the open mouthed engineers. When he had finished the theory seemed perfectly clear and Radio prospecting was accepted as one of the new miracles of modern science.

"The fundamental procedure is to shout

ing was accepted as one of the new miracles of modern science.

"The fundamental procedure is to shout down questions in the hope that the ore body will hear and answer back," said President Mason, "A large part of the expert's study must relate to the kind of questions best suited to the temperament and intelligence of the ore bodies."

Best results have been obtained working at a depth of 100 feet or less, he said, and was skeptical of working at depths of 500 feet or more. The greatest uncertainties are those met in the exploration of virgin lands for new ore bodies.

He stated that with his associates practical surveys have been made of nine different mineral regions, four known to contain ore. In each case results agreed with ore known to exist. Only one of the remaining five areas has since been drilled. Ore was found there in paying quantities and the cost of survey was found to be between \$5 and \$7.60 an acre.

Others Interested

gold helds. The man with the best Radio outfit is the one who is going to stake the best claim.

Do not be too pessimistic because the most of these observations seem to specify "conductive ore bodies" without any particular reference to the queen of all metals—Gold. Yes, indeed, gold is a conductive metal, although it is not commonly used for wiring receivers. It serves much better for old fashioned wedding rings and door knobs for millionaire booldeggers.

Of course gold is still good for coin of the realm and many articles of jewelry, and just to prove to you that Radio works in gold prospecting it is a known fact that several wholesale manufacturerers who use gold in quantity employ a Radio device at the exits to detect any uninvoiced parcels of the precious metal departing in the pockets of the workers. Certain theves and crooks make a practice of seeking employment in such institutions, where they work along side of honest employes. In the dexterity of their professions they menuage to sip items of gold into their clothing. The whistle blows. They rush for their coats and hats and pass in line toward the door. But as they upproach the door a man near the exit observes a little needle on a dial suddenly becoming agitated. It flegtes back and forth and then points accusingly at the thief.

The detector will work in a case like this, there is every reason to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to believe that the same device will see the case of the professions to be the that the same device will see the

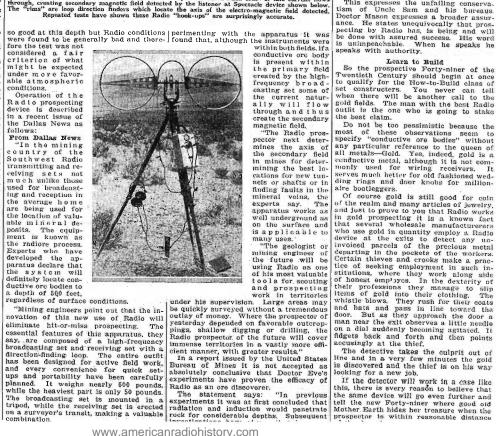


SMITTING and Receiving apparatus used in prospecting for hidden ores. Upper photo s transmitter ready to send down alternating current of high frequency with large primary nagnetic field. Presence of conductive ore body is indicated when extended the creating secondary magnetic field detected by the listener at Speciacle device shown below. ms' are loop direction finders which locate the axis of the electro-magnetic field detected. Repeated tests have shown these Radio "hook-upo" are surprisingly accurate.

rical surveys have been made of nine different mineral regions, four known to contain ore. In each case results agreed with ore known to exist. Only one of the remaining five areas has since been drilled. Ore was found there in paying quantities and the cost of survey was found to be between \$6 and \$7.50 an acre.

Others Interested

Experiments of this nature have been carried on not only through physicists connected with the University of Chicago but also by other educational interests and to some extent by commercial interests. Dr. A. S. Eve of McGill University at Montreal has been experimenting in Colorado. He



## Broadcasting of Interest to Home Makers

### Directs Programs for Listeners of Two Nets

RIENDS of Bertha Brainard, the new program director of the National Broadcasting company, are not surprised that she has been made supervisor of all the programs staged by the two New York "Reys" stations. They know that in every way she is qualified for such a procession. nosition.



### New Dishes for the Careful Hostess To Add to Her Bridge Supper Recipes

By Mildred D. Terman-KDKA Cooking Expert

DURING the long winter evenings nothing is pleasanter than an evening of bridge played to the soft accompaniment of the Radio. In fact Radio and bridge are closely connected, since the bridge lessons broadcast during the past two years have made a knowledge of scientific bridge universal.

If the bostess is to enjoy the game her letter two slices of white bread and place a slice of dark bread between them. Now

edge of scientific bridge universal. If the hostess is to enjoy the game, her mind must be at ease about the supper she will serve when the game is over. She must feel that her menu is attractive and incorporates some new idea. If she does not have a maid, she must plan so that everything can be prepared to a large extent in advance. A two-dish supper is an excellent choice and may be composed of a salad or entree with sandwiches or hot bread or rolls, plokles, olleys, celery or radishes, and a dessert with a beverage. All liner dishes and silverware should

or radishes, and a dessert with a beverage. All line, dishes and silverware should be ready and waiting, of course. Many hostesses place the support cloth over the bridge cover, which serves as a silence cloth. A teacart is invaluable to help bring in the linen, silver and plates on which the first course has been placed. It is used to remove these dishes and to bring in the dessert and coffee.

developed her dramatic instinct. She was interested in theatrical work and took part

interested in theatrical work and took part in many amateur performances. At the outbreak of the World War, she enlisted in the motor ambulance section of the American Red Cross. She served with her unit for many months during the hos-tilities. After the Armistice she took up newspaper work.

Bertha Brainard, N. B. C.

Bertha Brainard, N. B. C.

Although Miss Brainard is lovely to look at with her expressive eyes and her Titian hair, it is her energetic personality which impresses the interviewer. She has definite and interesting ideas on every part of her broadcasting work from the mechanical methods of reproducing the human voice to the dramatic handling of each program. She is continually thinking about her vast invisible andience.

New Jersey claims Miss Brainard because she was born in South Orange. Aligh School and the Montelair Normal school.

It was during her school days that she

For an unusual sandwich to serve with a salad, the following is suggested:

Mosaic Sandwiches

Cut crusts from one loaf white and one loaf graham bread. Cut in %-inch slices, having an equal number of each color. Butter two slices of white bread and place a slice of dark bread and place a slice of white bread and place a slice of white bread between them. Now butter two slices of dark bread and place a slice of white bread between them. Continue until all is used. Cut these sandwiches of three slices of bread into slices % inch thick. Butter a slice and put it with another slice so that a dark strip is against a white. Put three of these together. Wrap a damp cloth around them—place a flat weight on them—cut in %-inch slices. This makes a mino-cubed sandwich with alternating colors.

If a hot bread is desired to serve with a salad, butterscotch rolls are interesting and easy to make and are enjoyed by everyone.

Butterscotch Rolls

### Butterscotch Rolls

Butterscotch Rolls

Sift 3 cups flour, 4 teaspoons haking powder, ½ cup sugar and 1 teaspoon salt. Cut in 1½ tablespoons shortening, then add 1 beaten egg to which 1 cup sweet mitk has been added. Roll out into a rectangular shape. Spread with melted butter, granulated sugar, and sprinkto with cinnamon and broken pecan meats. Roll lengthwise like a felly roll and cut in ½-inch slices. Mel: 1 teaspoon butter and 1 tablespoon brown sugar in each compartment of muffin pans. Place the slices of the roll in the mufin pans, cut side down. Place in refrigerator until twenty minutes before baking, then take them out to let rise. Bake in a hot oven (375 degrees F.) 20 to 25 minutes. Turn rolls out and serve hot.

An unusually attractive salad with much color is:

much color is:

### Song Salad

Scoop pulp out of bright red apples, allowing 1 apple for each serving. Out the apple pulp into small pieces. To each cup of apple add the following: Cut finely 1 cup stoned dates, 1 cup English walnuts and 1 stalk celery. Chill thoroughly. Add boiled salad dressing to moisten. Fill apple cuts with the mixture. Fince on a crisp lettuce leaf. On the edge of the apple ballance a bird made of cream chees, as follows: Cream the cheese and mold

the body of the bird first. Then mold on the head and wings which have been made separately. Use cloves for eyes and beak.

A different mayonnaise for fruit salad is often desired, and the following recipe makes an unusually delicious dressing.

### Whipped Cream Dressing

Heat ½ cup pineapple juice in a double boiler. Add very gradually to 2 beaten eggs, to which ½ cup of sugar has been added. Return to double boiler and cook until the mixture coats a spoon. Add ½



Mildred D. Terman, KDKA

cup each of orange juice and lemon juice. Let cook a few minutes longer. Remove from fire, cool. Before using add ½ cup

### WOMAN'S PROGRAM INDEX (Daily Unless Indicated)

### Household Economics,

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Eastern 9;30 a. m	Central 8:30	Mountain 7:30 Fonight's dinn	Pacific 6:30
WWJ (352,	7m-850kc), '	Conight's dinn	er,
10 W.D. D. (22)	9 11101-1	M - 1 W	7
WEAR (27)	work in the	. Modern no	usekeepini
WCSH (365	fun-Satilier	ex Sal	me.
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WIP (348.6)	n-860kc), Tt	Modern Ho te American ho ex Sat. Lome hour, tes, Thurs, Sat Woman's hour	, menu.
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		8:15 Cooking chats.	
WEL (405.2	m-7 (0kc). Il	omekeeper's h	our.
WNAC (461	3m-650kc).	Woman's club	
WRC (468.3	m-640kc), A	omekeeper's h Woman's club lon. Wed, Fri. 8-45	
WTAG (516	.9m-580kc),	Wed, 171.	7.45
10:45	9:45	8:45	7:45
WHO (535.	m. 560kg)	vaulo Cher.	
1 1.5 (344 m	1-870ke)	Radio Chef. Wed, Fri.	
WTIC (535.	4m-560ke),	Wed, Fri.	
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11. 1.1 1 (36	7.7ml120ke),	Cooking, Tue	S. Frt.
WE VE (491	Sm-610ke),	Wed. Pri. Ber	y Creeker
WOL (265.3	m-1130ke)	Tues Thurs.	homemak
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11:15	10:15	9:15	8:15
Luca The	S. GIN-950RC)	9:15 Housekeeper	2 161100
11:45	10:45	9:45	8:45
WREN CE	[ 1 m-1180kcl		
12	- 11	10	9
WEBH (36)	.6m-820kc),	Prudence Peni	ny.
WOJ 447.5	in-6/0kc), C	Howahold b	inte
12:30 n. n	11:30	Prudence Penrahunet hour, Household h	9:30
KYA (309.	m-970kc),	, Household h 10:30 Shopping serv	rice, Mon
Fri.			
WEBH (36.	5.6m-820kc),	Prudence Pen Tues, Sat, Calumet hou 10:45	my,
WMAO IS	7. 5m 670ke	Calumet hor	r
12:45	11:45	10:45	9:45
MFVC (33)	.4m-1330kc)		
WSM (336.	2m-800kc)		
	12	11	10
KEX (239.5	m-125()kc)	11 Household hel	00
1:30	12:30	11:30 Ex Fri, Sat, F Totem cookin Economies tall	10:30
KNX (336.	m-890kc), e	K Fri, Sat, B	ate Brew
KOMO (30:	.9nt-980kc).	Totem cooking	g school.
WGY (379.	5m-790kc),	Economics tall	11
UEDC /40	m-660ke) X	Ion Wed Fri	
KOIN (319	m-940kc). I	ion, Wed. Fri loosewives' he Home hour	ur.
WGHP (27	7.6m-1080ke	, Home hour.	
2:05	1:05	12:05	11:05
WJZ (454,:	2m-660kc). I	Daily means.	*****
2:15	1:15	12:05 Daily means, 12:15 oppers' aid, 12:30 Julia Jane,	11:15
2:30	1:30	12:30	11:30
CKLC (356	.9m-840kc).	Julia Jane.	Mon' Med

2.30	Central 2:30	1:30	12:30
WLS (344.	7m-870kc), I	Iomemakers'	hour.
4	3	2	1
WOC (374.	8m-Subkci. /	Vunt Jane	
4:30	3:30	2:39	1:30
KEOA 144	7.5m-67Uke).	Daily ex St	r, Mon.
6:30	5:30 .9m-920kc),	4:30	3:30
KOA (323	.9m-920kc),	Question b	ox, culinar
hints, Tu	ies, Fri.		
8:20	7:20	6:20	5:20
KUOA (29)	5.9m-1010kc)		
8:45	7:45	6:45	5:45
WHA (333.	1m-900kc), I	Iome econon	ics.
10:45	9:45	8:45	7:45
KOAC (270	).lm-1110kc),	Tues, Thur	s.

10.45	9-45	ome economi 8:45 Tues, Thurs.	7:45
	'Aunt S	ammy"	
Eastern	Central	Mountain	Pocific
10 a. m.	9 690kg) M	on, Wed, Fri	7
10:30	9:30	8:30	7:30
WCSH (365	.6m-820ke)	WHO (535,4)	n-560kc).
WIBX (239)	m-12hille)	8:45	7:45
WDBO (288,	3m-1040ke)		
WEAO (282	10	9	8
WEW (352.)	m-850kc)		
WEW (352.7 WKBII (220. WOS (422.3	4m-1369kc)		
WSB (475,9	m-/10kc)		
11:10	10:10	9:10	9:10
	9ni-1010kc).	9:30	8:30
11:30 WOS (422.3	10:30 m-710kc), N	lon, Tues, W	ed. Thurs
PTI.			9
KFSD (440.5	11	10	-
KOV (270.1	m-1110ke), 3	Mon. Wed. F	ri.
WRVA (254	1m-1180kc)	10:15	9:15
12:15 p. m WAMD (22	2.1m-1350kc)	10.15	
1	12	11	10
KTUS (384. 1:30	12:30	11:30	10:30
F. E.W. 13 (30)	2m .830kc)		
WAPI (340. 1:45	7m-880ke),	Fri. 11:45	10:45
WDAF (370	1.2m-8(0kc)	11.45	20.55
WDAG (26)		12	11
KOII. (319)	n-940ke)	12	**
KUOM (46)	n-940ke) 1.3m-650ke) 1.3m-1170ke)		
WASH (256 3:30	2:30	1:30	12:30
WHK (265.	3m-1130kc).		
4	3	2	1
WOC (374.8	3:10	2:10	1:10
WFBG (267	.7m-1120ke)		
WDAY (545	3:15 5.1m-550kc)	2:15	1:15
4:30	3:30	2:30	1:30
KOII, (319)	n-940kc)	humo	
	m-710kc), T	4:30	3:30
KMA (394.5	m-760kc)		6
KOW (296.9	m-10101cc)	7	•
***** (P) (P)			

### Fashions and Sewing

			-6
Eastern	Central	Mountain	Pacific
11:30 a. r	n. 10:30	9:30	8:30
WCAE (46	1.3m-650kc),	Styles, Tues,	Fri.
1:30 p. r	n. 12:30	11:30	10:30
KF\V1 (20	57.7m-1120kc)	. Fashion bir	us. Mon.
Thurs			
Eastern	Central	Mountain	Pacific
1:35	12:35	11:35	10.35
KPO (422	3m-710kc), F	ashion critic. P	rl
WGBS (34	9m-860kc), L	ressmaking les	sons, Fri.
5	4	3	2
WOS (422.	3m-710kc), V	Ved.	
6:45	5:45	4:45	3:45
KOA (225	Om-Ornbal E	Cachion conion	Tues

### Health and Beauty

10 a. m.	9 _	8	7
WGBS (349.	m-860kc), L	essons in lo	veliness.
10:15	9:15	8:15	7:15
10:15 -WCAE (461	.3m-650kc).	Health talk	
10:30	9:30	B:30	7:30
10:45	9:45	8:45 auty talks,	7:46
WLW (428n	n-700kc). Be	anty talks.	Tues, Fri.
11	10	9	8
WEET (508)	2m - 590ke) `	Mon, Thurs.	•
WOR (422.)	3ni-710kc).	Lessons on	Loveliness.
Mon.	,,		20
1 n. m.	12	11	10
KMTR (526	m-570ke). I	Beauty talks.	. Tues.
1:30	12:30	11:30	10:30
K FON (24)	8m-1240kc).	Physiology	of heauty.
KFWI (267.	7m-1120kc).	Beauty hint	s. Tues. Fri.
KVA (309.1	m-970kcl. I	Diet and Hea	dth. Tues.
		Beauty talk	
2.30	1:30	12:30	11:30
TID 1740 C.	- 9601rai II	noith talk	
3:40	2:40	1:40	12:40
WC 4 1260 7	m-1150kc)	Dietetic talk,	Wed
9:20	8:20	7:20	6:20
KERC (454	301-660ke) 1	Thurs, Mada:	me Marie
10.45	9+45	8:45	7:45
KNX (336.9	. (04/002-146	Dr Robert '	T Williams
Tues.	JIM-OJUNC/	DI. MODELL	A, 17 1111E1113,

### Interior Decoration

Eastern -	Central 8:30	Mountain 7:30	Pacific 6:30
9:30 \VWI (352.7)	8:30 950ka) S	7:30	\$:30
10.70	9.30	8:30	7:30
WLW (428m	1-700ke), F	urniture talks	i, 10
KYW (526m Watson	-570kc), I	ues. Talk,	W. Craits
	_		

### Gardening

Eastern 1:20 p. 1 KFI (468.5	Central m, 12:20 m-640ke).		foun 11:			Pacific 10:20 Plant.
KP1 (408.5	m-bauke).	дом	ana	AA DAG	10	riant.

Eastern	Central	Mountain	Pacific
4:15 WIP (348.6	3:15 m-860kg . 11	2:15 ome Gardening,	1:15 Mon.
KHI (416.4		2	2

, ive	ws	
Eastern Central	Mountain 5:30	Pacific 4:30
WLAC (225,4m-1330kc) 10 a. m. 9 WGN (416,4m-720kc)	8	7
10:30 9:30 VCCO (405,2m-740kc)	8:30	7:30
11:30 10:30 WHAS (322,4m-930kc)	9:30	8:30
I1:55 10:55 WTIC (535,4m-560kc)	9:55	S:55
12 11 WMAK (545,1m-550ke) WTAG (516,9m-580ke)	10	9
12:45 11:45 KOLL (319m-940kc)	10:45	9:45
1 12 KGW (491.5m-610kc) WTAG (516.9m-580kc)	11	10
2:30 1:30 KFON (241,8m-1240kc) WGBF (236,1m-1270kc)	12:30	11:30
3:30 2:30 WFAA (545,1m-550ke)	1:30	12:30
3 KGA (260.7m-1150kc)	1	12
VGY (379,5m-790ke) WHAS (322,4m-930ke)	3	2
6:50 5:50 KOL (319m-940kc)	4:50	3:50
7 6 KFON (241.8m-1240ke) KOA (325.9m-920ke)	5	4
WTAG (516.9m-580kc) 7:15 6:15 WCSH (365.6m-820kc)	5:15	4:15
7:30 6:30 KFOA (447,5m-670kc)	5:30	4:30
7:40 6:40 WDBO (288.3m-1040kc)	5:40	4;40
8 KOA (325.9m-920kc)	6	5
8:55 7:55 WDBO (288,3m-1040kc)	6:55	5:55
9 8 KJR (348.6m-860ke) KOIN (319m-940ke)	7	6
KOMO (305.9m-980ke) WTAG (516.9m-580ke)		
9:20 8:30 KOA (325.9m-920ke)	7:20	6:20
10:01 9:01 WBZ (333,1m-200kc)	8:01	7:01
10:30 9:30 WTAG (516,9m-589kc)	8:30	7:30
10:50 9:50 KFWB (361,2m-830kc)	8:50	7:50
11 10 WEBH (365.6m-820ke) WTIC (535.4m-560ke)	9	8

# Dorothy Thinks Morgan Ace Announcer

### He Exerts Perfect Self Control Although Sub Tenor Tears His Soul to Bits by "Waugh-Waugh" Blasting

STRUGGLING out of the Times Square station after our first visit to the National Broadcasting company's studies at 195 Broadway, something over a year ago, we were hailed by an acquaintance who is an ardent Radio listener, with the breathless meer.

ance who is an ardent Radio listener, with the breathless query, "Oh, did you meet Mr. McNamee?" "No," we returned, "but we did have a nice chat with Arnold Morgan." "Morgan?" she repeated, "Why whoever is he? I've never heard of him." "Well, there are a lot of highly necessary people around there you've never heard of." we told her. "With some of them announcing is a side issue when they are not busy with other duties. But something tells me there is a time coming when you are going to hear more of Arnold Morgan." Whether it was some unusual intuition,

Whether it was some unusual intuition, or the impression made by our short contact with him, when our common sense told us we were not talking with the



By Dorothy Brister Stafford



A RNOLD MORGAN, above, who has forged ahead as dependable NBC announcer. Norman Clark, left, and Leslie doy, right, tenor and announcer who are becoming known to the millions who listen to the music of the chains.

usual, garden variety of announcer, we have been gratified in the past year to see our impulsive prophecy come true, for the phrase. "This is Arnold Morgan speaking from New York." has been coming in with increasing frequency for the past several

menths.
With Mr. McNamee devoting more and

increasing frequency for the past several increation.

With Mr. McNamee devoting more and more time to personal appearances and sports broadcasts, and Mr. Carlin now busily engaged with the manifold duties of general manager of WEAF, and Leslie Joy, another veteran of the interophone acting as his chief assistant, in the course of events it naturally followed that there was an opportunity for some other rising young man to come to the fore and be identified with the more important announcements of this station.

Hear Arnold Morgan

And when, one night this fall, we had all drawn up our chairs to listen to the Sunday evening program, the Man Who Buys Eatterles pricked up his ears and said. By George, it's Arnold Morgan. And sure enough it was,—handling the most important hour of the entire National Broadcasting company's chains, which heretofore had been the exclusive prerogative of the Messrs. McNamee and Carlin.

It is just possible, that with the carelessness born of familiarity, you at the other end don't realize just how seriously the studio takes this concert hour. After being present during the broadcasting of one of these important features, one comes away with the impression that the entire NBC. from Merlin Hall Aylesworth down, would curl up and die from chagrin should there be a single misplaced accent or the slightest slip-up to mar the perfection of the offering.

Strolling in casually one Sunday night at lall-past infine when a Metropolitan star was making her debut via microphono, we were struck by the tense atmosphere som as we closed the reception-room door. Gone was all the cheery hospitable air prevalent among the WEAF-ers on other nights. Mr. Carlin, the master of ceremonies, wore evening clothes and a worried expression. Miss Stewart, gowned in green decolletage, had the same apprehensive air. Several assistant hostesses

we could see the singer through the glass door.

Diva Fears Observers

"Oh, I am afraid not," she fluttered, "It's her first broadcast, and she is very nervous and temperamental, and we are afraid she wouldn't like being stared at."

Such an iddosynersey on the part of a public artist, who was accustomed to facing Metropolitan audiences sounded ridleulous to us, and we inquired who the lone man might he who was enjoying the privilege of viewing proceedings through the glass door.

"Oh, that's H.—," naming a celebrated conductor. "He's a personal friend of Madam's."

"Well, you tell them we're Mary Garden," we whispered, as we slipped to a vantage point beside the conductor. And our persistence was worth while, though we know the little hostess was terribly worried.

The celebrated diva, from whose throat issued the golden notes of a great aria, stood before the microphone, a stage smile upon her face, accompanying her singing with every studied movement she would have used upon the opera stage.

When, with some dramatic gosture she moved away from the microphone, she was gently put in place by the conductor, and as she sang with clossed eves, she was apperently unconscious of the fact that she wasn't facing a visible audience. But when,—as the last glorious note floated out from the loud speaker, she turned with an angry exclamation to the first violin, and then clapped her hand over her mouth in horror at the director's gesture toward the microphone, she was frue four walls of the studio and the nervousness that had gripped her at the start. It was all very interesting, and the air of sugneyease was versent with the large of sugneyease and the microphone a

mortician's assistants at a funeral, and we stayed patiently put for about five minutes. Then remarking that it was all very nice, but we could be doing just as well six hundred miles away, we asked one of the young ladies if we might not stand where we could see the singer through the glass door.

Diva Fears Observers

"Oh, I am afraid not," she fluttered, "It's her first broadcast, and she is very nervous and temperamental, and we are afraid she wouldn't like being stared at."

Such an idiosyncrany on the part of a public artist, who was accustomed to facing Metropolitan audiences sounded ridiculous to us, and we inquired who the lone to use the time to use the present of the provided want is to go off without a hitch. And it naturally follows that the announcer selected to preside over this event must be a man of sound musical celebrates, with a sprinkling of Broadway stars, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the disasters, including the perennial Miss Nora Bayes, crowded around the such as well as a sufficient the provided around the staff with the form of the correlation of the correlation of the correlation

And when, one night this fall, we had all drawn up on chairs to listen to the Six of the street, and the perfect of the Areas and the same and the s tion.

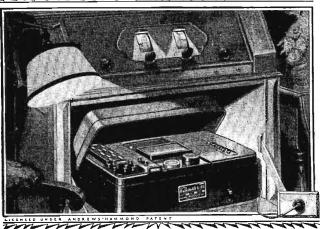
She Meets Morgan

The night we met Mr. Morgan was one of those heetic evenings that are a common occurrence at a big studio, and in the breathing spells between his manifold duties,—which seemed to include such various chores as announcing programs, sterring artists to their destinations, listening to complaints and emptying ash-trays—he dropped into a chair beside us, and with shrowd twinkling oyes told us some of the merry catastrophes that crop up in the course of a busy evening.

The West street plant had broken down twice that night, (of course this was before the installation of the 50 K.W. Bellmore transmitter,, and they had been off the air for several minutes in the middle of two important programs, and the worst of it was no one around the studio seemed to know who had been short-changed on his time. Leslie Joy was popping in and cut of the monitor's booth like an agitated jack-in-the-box, his general harrassed appearance contrasting sharply with the calm, cool exterior he presents in his phe-

He had a good laugh at the "discovery" we had made that practically every member of the National Broadcasting company, no matter what his official capacity, is prepared to "double in brass" at short notice. We told him one expected to find musicians among announcers and program directors, but we had been considerably amazed that noon while having a business chat with Mr. G. W. Johnstone, the genial manager of the Press Relations department to have one of the hostesses stick her head in at the door and say, "Oh, Johnny won't you come and play for us? We have five minutes to fill." And Mr. Johnstone had obliged by diving into the bottom drawer of his desk and energing with several places of music. He disappeared into the studio, and then came the voice of the announcer,

"Mr. Johnstone will now play for you,--"Black Bottom."



# The clearest and truest Electric Radio

# Is a standard radio set equipped with Balkite Electric "AB"



Balkite "A" — Exactly like Balkite "AB" but for the "A" circuit only. Enables owners of Balkite "B" to make a complete light socket installation at very low cost. Price \$35.



Balkire "B"—the accepted, tried and proved light socket "B" power supply. The first Balkite "B," after 5 years, is still rendering satisfactory service. Three models: \$22.50, \$35, \$42.50.



The standard charger (whether trickle or high-rate) for radio "A" batteries is Balkite. Noiseless. Can be used during reception. Three models: \$7.50, \$9.50, \$17.50.

There are special models for 25-40 cycle current at slightly higher prices. Prices are higher West of the Rockies and in Canada.

Of course you want an AC electric receiver. For its convenience. Now you can have it, without the uncertainty of untried apparatus, and without sacrificing quality of reception.

Simply by adding Balkite Electric "AB" to your present radio set. Balkite Electric "AB" replaces both "A" and "B" batteries and supplies radio power from the light socket. It contains no battery in any form. It operates only during reception. It makes any receiver an electric set.

This method makes possible the use in electric reception of standard sets and standard type tubes. Both are tried and proved, and give by far the clearest and truest reproduction. With this method there is no waiting for tubes to warm up. No difficulty in controlling volume. No noise. No AC hum. No crackling or fad-

ing of power. Instead the same high standard of reception to which you are accustomed.

In this method there is nothing experimental, nothing untried. It consists of two of the most dependable products in radio—a standard set and Balkite. And if you should already own a radio set, the cost of equipping it with Balkite is only a fraction of the cost of a new receiver.

By all means go to AC reception. Its convenience is the greatest improvement in radio.

But be as critical of an AC receiver as you would of any other. Let your AC receiver be a standard set equipped with Balkite Electric "AB." Then it will be as clear and faithful in reproduction as any receiver you can buy.

Two models, 135 volts, \$64.50, and 180 volts, \$74.50. Ask your dealer. Special model for 25-40 cycles, \$74.50.

### Chicago Civic Opera Balkite Hour Every Thursday Evening

Now Balkite brings you an entire season of one of the world's greatstoperacompanies. Balkite Hour, Thursday Evenings, 10 o'dook and 10:30 o'dook Eastern time. Over WJZ and fifteen associated stations on the Blue Network of the Nationaf Broadcast Chain.

FANSTEEL PRODUCTS COMPANY, INC., NORTH CHICAGO, ILLINOIS

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# Balkite ELECTRIC AB

∢[contains no battery]>



# How to Build New Karas AC Equamatic

### A Famous Circuit Adapted to the '26 and '27 Tubes

By John G. Ryan

IN THESE days of Sonorous Sixes, Snappy Sevens, Aching Eights and Naughty Nines it is hard to imagine a five-tube receiver that will really step out and give a performance that astonishes anybody, let alone blase Radlo editors, experts, writers and what have you. Yet the Karras AC Equamatic does just that and more; it surpasses many, many super-heterodynes in both sensitivity and sharp tuning and puts out reproduction that really has the "purity of tone" the ads all tell about.

that really has the "purity of tone" the ads all tell about.

What it has proven it can do is usually pretty convincing. Mr. A. L. Kafka of 909 Foster Avenue, Chicago, has had one on test for some time. That address is on the lake and programs from the west must pass through all of Chicago and, sluce the aerial is on the east side of his hotel, must pass through his own steel building as well. Mr. J. L. Bright of 6211 S. Carpenter Street, Chicago, was present on the evenings of September 21st and November 12th while Mr. Kafka was tuning around. So we have a witness to the set's performance AND verification cards. Just Inok at the coast stations on this list: WBZ, WCAE, WHEA, WCFA, WFFA, WGY, WJZ, WLW, WMAK, WOW, WRC, WRR, WSAI, WSM, WWJ, KDKA, KFJ, KFJR, KFRC, KFWE, KGO, KGW, KJR, KMTR, RNN, KOA, KOMO, KLX, KFSD, CPCA, CHIC, CNRT and CKNC.

### Through the Locals

Through the Locals

Those evenings were not silent nights and the Chicago stations were all with us. One was a Wednesday and the other a Sunday night. Since there are 69 stations in the metropolitan area varying between 15 and 15,000 watts, those two evenings of turing are really something to cheer about. Location is not responsible, as that hotel boasts some high priced, multi-tube receivers that are perfectly satisfied to stick to locals every night. This was not headphone reception either; all were brought in on the loud speaker. And unless they were clear and clean of interference they didn't count. There are other samples of performance that might be quoted, but in this case we had both a witness present as to the set used and a full list of verifications—either letter or card.

or card.

Arrangements have been made now so that you can buy both front and sub-panel for this set, all drilled and engraved, ready for use. Laying out and drilling these pieces is the nuisance of Radio. Their cost, ready for assembly, is but slightly higher than if one bought them plain. The Equamatic, either in its original form for storage battery tubes or this new development for the AC type, is unusual in that you get a constant and equal transfer of energy at all wavelengths between each stage. Most tuned Radio frequency sets have the objection that they are sensitive only at one narrow band in the range of 200 to 600 meters and rather "dead," elsewhere.



Equamatic System Unique
The primary and secondary windings of the Equamatic System are entirely separated from each other. The primaries are mounted on the extended shafts of the condensers so that they turn with the turning of the condenser falls. Each secondary coil is mounted on the subbase and is adjustable both as to the distance from its primary and for angular relation with respect to the primary at any setting. There, I believe, is the secret of this set's superfortly. Adjustments are made when the set is first put into use, such that individual differences in wiring, "B" power, etc., are compensated for, and one can get that equal transfer of energy and equal sensitivity at any broadcast wave length.

When these easily made adjustments have been determined and set, the result is a variable coupling between primary and secondary, which automatically varies at exactly the proper rate to maintain, the tubes at their highest point of efficiency while the dials are revolved clear from zero to one hundred. By reason of this design, the Equamatic across any virth the necessity of any losser methods, such as high variable resistances in the plate circuit, potentiometers, designs which involve coil absorption, etc. By a very simple adjustment of the first primary coil the AC Equamatic automatically compensates for any length of aerial.

Construction is Easy

This receiver is not hard to build as

### Construction Is Easy

Construction Is Basy

This receiver is not hard to build, as really unusual work has been done to simplify the layout and cover every detail so that it may be constructed even by those who have never before attempted such a thing. A picture wiring diagram is provided, each wire is numbered, each hole in both panel layouts is numbered, and the instructions cover fully the placing of each wire, indicating if the wire goes through a hole and the number of the hole when it does. Complete hardware, including screws for mounting every piece of apparatus in the entire set, is supplied with the control system.

Before proceeding to the mounting instructions, a reminder will be in order. In the sub-panel layout and wiring diagram you are looking at it from the bottom side. Therefore, apparatus located above the sub-panel is shown dotted as

though you were looking through it. Bear in mind also that the apparatus is reversed with respect to the ends of the set from the way they appear in a top view. Wires and parts below the sub-base are shown in solid lines, while wires and apparatus above are in dotted lines. You can determine the top of your sub-base purchased drilled by the three white engraved lines.

### Mounting Parts Below Sub-Base

Using two \$\( \frac{9}{16} \)-inch 6-32 oval head nickel plated machine screws, supplied with the sub-panel brackets, mount BRI through countersunk holes Nos. 20 and 23, making sure that the hole in the bracket

are toward hole No. 17. Bend the mounting strips on the 2,000 ohm Electrad fixed resistor, R3, at the bottom of the soldering lugs, at right angles and away from thom. Now mount this resistor in hole No. 25 with an Ma-loch round head screw. A soldering lug is to be attached as per the diagram and screw is fastened on towith a bex mit. Now put on the 6-32 terminal unit, which completes binding post 12.

See the diagram for the placing of hind.

post B2.

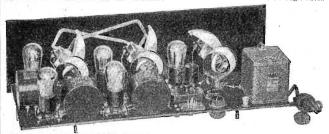
See the diagram for the placing of binding post B1 in hole No. 32, noting the soldering lug. Binding post B3 is mounted in hole No. 34 with a soldering lug bent at right angles; likewise, B4 is mounted in hole No. 35. With a soldering lug silpped over it, the antenna binding post is then secured in hole labeled "ANT."

The 1 mfd Curter fixed condense: C8, is

is then secured in hole labeled "ANT."
The 1 mfd. Curter fixed condenser, C8, is mounted through hole No. 62 with a 4,"
6-32 round head screw. Now remove the mounting bracket and cardboard index of the Yaxley cable plug and mount from above in holes Nos. 49 and 41, with two 4,"
6-32 round head screws. Replace the cardboard index on the bottom side of the calde pins underneath the sub-panel.

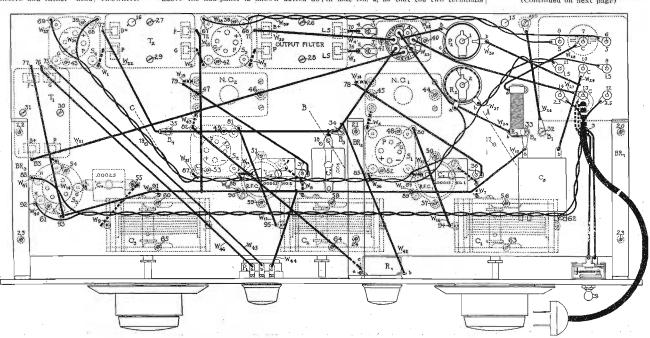
### Apparatus Above Sub-base

Mount socket No. 1 with two 11/16" 6-32 bund head machine screws through holes



which mounts the front panel is on the outside. Likewise mount BR2 through holes Nos. 21 and 24, and BR3 through holes Nos. 21 and 24, and BR3 through holes Nos. 22 and 25.

The two panel logs, supplied with the hardware, are then mounted by screwing them into tapped holes Nos. 15 and 16. The two tip jacks are mounted in holes Nos. 43. S3 is the green top socket with five terminals and it is mounted through hole No. 35. S4 and 41, with the "K" terminal just above hole No. 93. Socket, S2, through hole No. 36 with a %-inch 6-22 round head machine screw (see diagram). Low mount the .00015 fixed condenser, C7, through hole No. 36 with a %-inch 6-22 round head machine screw (see diagram). Use a soldering lug on top of the subpanel with a right angle head in it and fasten the condenser undermath with a hexagon nat. Likewise mount .00015 fixed condenser, C5, through hole No. 37. Mount the Carter 2,000 ohm potentionseter, P2, so that the two terminals close together ("A" and "C") are toward hole No. 40. Maunt the 2 ohm rheestat, R2, In hole No. 2, so that the two terminals (Continued on next page)



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### AC EQUAMATIC

AC EQUAMATIC

(Continued from page 19)

condenser, NC2, is secured at holes Nos. 46 and 47 with the terminals at hole No. 47. Audio transformer, T1, is mounted with the round head screws supplied with it, through holes Nos. 30 and 31. The "P'terminal is to be just over the "P" post on socket S3.

The other audio transformer, T2, is mounted at holes Nos. 37 and 29 with the "P" terminal near-set the "P" terminal on socket S4. Through holes Nos. 36 and 28, mount the output filter, and so that its "P" connection is close to the "P" terminal on socket S5.

Take one of the Type 17 variable condensers which we will call C1, and secure it through holes Nos. 66 and 63 with two of the ¼ 6-32 round head screws. The law end is toward BR1. Likewise mount snother Type 17 (C2) by means of holes Nos. 53 and 64, and the other one, C3, through holes Nos. 60 and 65. Radio frequency choke, RPC1, is mounted with two ¼ 6-32 round head screws through holes Nos. 50 and 57. RFC2 is mounted in the same manner at holes Nos. 51 and 59. Now

At this stage you install the front panel connect the "B" plus detector, or blue connecting the 3 gold screws supplied. There is a 5" piece of sleeve on wire 42, 7% trye, and the "B" plus amplifier, or gray length on W43 and a 10 ½" piece on W45. There is another 10 ½" length on W46. Pull out the small, wire of the AC Pormer as far as it will go. Remove the plug from the extension cord and pass both of these wires through hole No. 3. Cut the small wire in the center and attach the ends to the two terminals of the 110 volt switch. Now replace the plug on the extension cord. The set is now completely wired and we are ready to install the Equamatic colls and the control system.

Mounting Control System

Before proceeding, loosen the bearing nut on the eondensers so that the plates will just drop of their own weight. Then remove the shafts in condensers C1 and C3 and replace them with the long shafts provided with the control system. Apply one of these in C1 so that the shaft protrudes from the back of the condenser %. Now loosen the set serves on condenser %. Now loosen the shaft far enough back to allow for the uninsulated end of the control system. Now push the shaft forward so that it protrudes from the back of the condenser %. Now loosen the set screws on condenser C2 and push the shaft far enough back to allow for the uninsulated end of the control system. Now push the shaft forward so that it protrudes from the back of the stack of the set and the AC Former extension is plugged into the light sockets as each type tubes in socket hose. It is socket hose in C1 so that the shaft protrudes from the back of the condenser %. Now loosen the set screws on condenser C2 and push the shaft far enough back to allow for the uninsulated end of the control system. Now push the shaft forward so that it protrudes from the back of the set and the socket have the socket have the socket have the socket the socket the socket have the

receiver to counteract the period of the aerial. It is sometimes necessary to pro-vide maximum coupling on the first coil at the low wavelengths due to the aerial. This is an adjustment which can be made only under the particular conditions under which the set is operating.

### SIMPLE EXPLANATION

SIMPLE EXPLANATION

(Continued from page 13)
sure between our top and bottom plates. While you cannot see it, u pressure of an electrical nature has been created between the antenna and ground and a stendy stream of waves is radiated. Because it carries the program to its thousands of destinations, you frequently see this referred to as the "carrier wave."

Having created this wave, we must now get the program impressed on it. As mentioned before, the modulation equipment is provided to accomplish this. In our sample chain of power amplifiers we ended up with two 10,000 watter wave they throw into the aerial circuit, we must have two more 10,000 watters working with them. The system of modulating, universally used and about to be described, is called the Heising method because first devised by an American inventor of that name. It has proven far superior to anything less for this purpose.

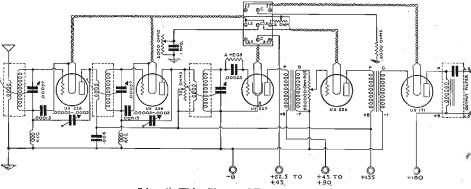
\*\*Edising Modulating Method\*\*
Figure 7 illustrates how it is done. Let Mrs. Bill at the left represent our first mentioned two large tubes which are the last stage of power amplification. We will say that Mrs. Jim at the right is our pair of modulating tubes and of equal size. The power supply which is common to both pairs of tubes is here represented by the water pipe coming up through the wall and going to the fancet of both Mrs. Bill and going to the fancet of both Mrs.

noth pairs of tubes is here represented by the water pipe coming up through the wall and going to the fancet of both Mrs. Bill and Mrs. Jim. There is a steady, unvary-ing flow to the water of 10 gallons a min-ute, while, in our Radio parallel, there is 5,000 volts pressure and S amperes pos-sible

If Mrs. Bill and Mrs. Jim both have their faucets about half open, each gets, we'll say, 5 gallons a minute. But, if Mrs. Jim (the modulators) opens hers a little wider she gets 6 and Mrs Bill gets only 4. This latter lady calls out that she needs a little more and Mrs. Jim turns her faucet back and cuts her flow of water to 3 gallons. Then Mrs. Bill (the big amplifier tubes) gets 7. New, in our Radio transmitter, we cause the amount of current (amperes) to vary in our modulator tubes by talking or playing and, since the amount supplied is 8, the current possible to the amplifier tubes will vary above and below 4.

below 4. If the Mrs. Jim, modulator tubes take 4½, the other pulr get but 3½ while, if they draw but 3½ amperes, the Mrs. Bill, power tubes can have 4½—and take it. So it goes. As we talk or sing into the microphone we cause little impulses to tear through the speech amplifiers, building up strength as they go, which in turn so affect the modulator tubes that they draw more or less current and permit the powerful amplifier team to get varying amounts.

Modulator a "Shaper"



Schematic Wiring Diagram of Karas A C Equ

remove the terminal nuts and washers from the Karas AC Former and mount through holes Nos. 6 to 14 inclusive by placing so that terminal screws go down through these holes and the 5 volt filament supply posts are in holes Nos. 6, 7 and 8.

Apparatus on Front Panel

The front panel is not as yet secured to the sub-base; we'll do that later on. The front panel is not as yet secured to the sub-base; we'll do that later on. The front panel is not as yet secured to the sub-base; we'll do that later on. The front panel is not as yet secured through the hole marked "Control" and so that terminals "a" and "e" are toward the center of the panel. The 500,000-ohm Electrad potentiometer, Pi, is secured through the hole marked "Volume" with soldering lugs toward the bottom of the panel. The 100 volt Carter switch is mounted in the hole at the extreme left end of the panel. We are now ready to wire the Equamatic.

Wiring Suggestions

Wiring can be done almost entirely with the picture diagram but a few pointers on things not entirely clear on the picture will help. One side of the grid condenser, C4, touches "G" post of socket S3 and these should be soldered. Likewise the "F" post of socket S3 and the "F" terminal of transformer T1. Wire 7, running from condenser C1 to RFC1, is soldered to the lug at hole 36. The same with wire 8 and the lug at hole 37. Where wire 10 passes under hole 89, a short piece of wire W11 connects it to the terminal just above hole 90, and W13 connects W10 to the terminal just above hole 91 through that hole. A 2" piece of sleeving or spaghett is slipped on 10 where it passes bracket BR2.

Wire W14 is looped around and soldered to W10 just where W10 bends to go up through hole 93. There is a 5% piece of sleeving on W15, a 2% piece on W14 as a 6" piece on W20 and 14" piece on W2.

W22 is soldered to B4 and between that point and its being soldered to B3. there is a 6" sleeve; between B3 and the grey piece on W20 and 14" piece on W24.

The piece on W20 and the piece on W24 apases to reach the brown po

2½" length on W39 and the piece on W30 is 3½".

W33 and W34 are flexible Celatsite, the first being 24" long and the other 30". They are twisted about 8 times between holes 59 and 87. W23 makes connection with minus of socket 2 at hole 86 and minus of socket 1 at hole 14. Chen continues to the lug at hole 11. W34 makes connection to the plus of 82 at hole 87 and plus of S1 at hole 85 and goes to "a" of R2. They are stripped of insulation at those holes and connected up through with short lengths. A 6" piece of Celatsite connects "b" of R2 to the lug at hole 14. Wires 38 and 29 are 18" strips of Celatsite twisted. Wires W40 and W41 are 30" pieces of Celatsite twisted.

condenser % and tighten the set screws. Place the other long shart through condenser C3, through the insulated end of the control system and through the panel, so that it also protrudes by % at the back. Now with the control system up against the panel, the condensers all the way in, and the control as far in that same direction as it will go, tighten the set screws. If the system does not work easily, something is out of alignment and should be rectified. This can often be done by loosening the condenser mounting screws and shifting the condenser about slightly. The dalls can now be applied. condenser %" and tighten the set screws

by loosening the condenser mounting screws and shifting the condensers about slightly. The dals can now be applied. Mounting the Colls.

The hardware includes three spring clips, and three 8-32 screws with muts, for providing a slip adjustment for the secondary coils. These spring clips are assembled with the screws into holes Nos. 17, 18 and 19, with the lock nut on the bottom of the sub-panel. Tighten these so that the secondary coil, when put under the spring clip, with the little notches riding in the slot of the secondary bracket, will just slip easily.

Now apply the primary coils. When the condensers are turned entirely in, the bracket across the primary coil should be horizontal and the part which slips over to within ½m' from the end of the condenser bart should be slipped over to within ½m' from the end of the condenser bearing adjustment, but should not touch.

to within 722 then the series bearing adjustment, but should not touch.

The black lead of the first primary should be attached to binding post No. 1. and the green lead to binding post No. 2. The black lead of the second primary coil should be attached to the "P" binding post of socket No. 1, and the green lead attached to binding post No. 3. The black lead of the third primary coil should be attached to the "P" binding post of socket No. 2. The green lead goes to binding post No. 4. The primaries should be set cross-wise to the white engraved lines just below them.

The secondaries are now slipped under

whee to the white engraved lines just be-low them.

The secondaries are now slipped under their respective spring clips with the sec-ondary brackets parallel to the white lines. The black lend of the first secondary should be attached underneath the serew terminal of the frame connection of Cl and the green lead should be attached to the grid terminal of socket No. 1. The black lead of the second secondary coil goes to the serow lerminal of the frame connection of C2. The green lead goes to the grid terminal of tube socket No. 2.

The black terminal of the third secondary should be attached under the serew terminal on the frame connection of C3. The green wire goes to the screw which holds the nearest elip of the grid condenser C4. Now insort the 2 megohm grid leak.

### Attaching the "B" Supply

Connect the brown or ground connection to a water pipe with a ground clamp, or solder securely. Connect the "B" minus, or yellow connection of the cable plug, to the minus of the "B" voltage supply.

also at the back of the set. It is possible to operate this receiver on a fifty foot aerial; a longer aerial however, will give better results. It is good practice to have just as long an aerial as is consistent with your location, so that the nearest local does not interfere too much. We are now ready to make the final adjustment. Grid Bias

Grid Bias

The negative bias on the two RF and the first audio tubes is provided by the voltage drop in the variable resistance P2 applied at the exact electrical center of the 1.5 volt flament supply. At 90 volts, this resistance will provide 6 volts negative bias at full 2000 clms and proportionately less depending upon the setting of the rheostat. This rheostat should be varied until the best aperation is obtained. The UX 227 tube requires a positive bias for the heater. Grid Bias

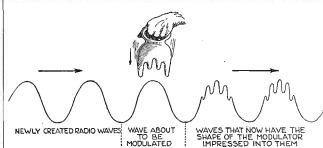


Figure 8

turn up R2 and turn the dials back and possible for the little third speech ampliforth across the point at which the stution fier depicted in Part I of this series to was tuned in. If the receiver still oscillates, make a slight adjustment on the Hence we put in a series of audio amplitumb screws. A point will be found on these condensers at which the receiver will Radio frequency currents that followed not oscillate when R2 is turned entirely up these condensers at which the receiver win not oscillate when R2 is turned entirely up and the dials are turned over the entire broadcasting range. It is possible in adjusting these condensers to go too far,

and the dials are turned over the entire broadcasting range. It is possible in adjusting these condensers to go too far, however.

The only other adjustment that need be made is on the first primary coil; this should be varied, depending on the length of the aerial used in connection with the

### NEW RADIO YEAR

(Continued from page 5) actually 1,500,000 now and constantly increasing. The Radio farm and market service already has gone far in solving the age-old problem of market gluts, with resulting demoralization of prices and wreeking of values, WLS has found. Tens of thousands of farmers or their wives now hear and tabulate the market returns every day on the particular product in which they are interested at the time and plan their marketing accordingly. This helps to maintain or increase values, or at least to stop disastrous breaks. Livestock truckers within a radius of 100 miles of their market and decide after hearing the morning's estimates and review of conditions whether that is the day to sell or whether to wait for more favorable news. Scores of thousands of livestock shippers act on these reports daily and the same is true of the grain and other market reports. "WLS feels that this service is so im-(Continued from page 5)

true of the grain and other market reports. 
"WLS feels that this service is so important and has such a big place in the Radio field that it has extended the farm programs to other stations until now the WLS farm service is conducted regularly on programs over station WSB at Atlanta, Ga., WMC at Memphis, Tenn., and WFAA at Dallas, Tex. And the response to these programs is proving as great in comparison as those at WLS.

"Now as to the actual dollars and context."

"Now as to the actual dollars and cents "Now as to the actual dollars and cents value of this service. A casual intimation by the farm program director at WLS, Fred L. Petty, recently that he wondered if the market information as broadcast was being used by listeners brought a 5,000 letter response in which the specific instances of definite gains and savings to the writers on account of Radio market reports from WLS totaled into tens of thousands of dollars. Typical is the case of an Indiana farmer who followed the livestock report summaries and on one shipment alone added \$500 to the price received on a large shipment of cattle."

Voice of Chain Station.

### Voice of Chain Station

Voice of Chain Station

As a typical and pivotal chain station reaching every class of listener from the Pan Hundle to Newfoundland WGN, Chicago Tribune, was consulted as to the general program situation. The following statement was submitted in reply:

statement was submitted in reply:
"Having brought the Radio year of 1927
to a successful close with a series of spectacular Christmas broadcasts, WGN, Chicago, is planning new delights for Radio
listeners who follow the fortunes of the
station during the coming twelvemonth.
Programs are to be enlarged and improved; the cream of the New York chain
features will be continued, and mechanical
conditions are already of the finest.

conditions are already of the finest.

"The year 1927 proved a remarkably successful one for WGN. A steady stream of excellent programs was furnished to listeners, and so many special features that the station probably exceeded the efforts of any one individual broadcaster in this field. The list of celebrities presented on WGN reads like a page from "Who's Who," and the fine educational programs were enjoyed by every listener.

Indianapolis Race

### Indianapolis Race

Indianapolis Race

"Among the top-notchers presented by WGN during 1926 were the broadcasts at the Indianapolis 500-mile auto race, the Kentucky Derby, the Dempsey-Tunney fight, all of the season's baseball games played in Chicago, a record list of important football games, both collegiate and professional, and many other interesting individual items. For the listener who likes to meet prominent people on the Radio there were interviews with Count Felix von Luckner, the famous German sea raider; with "Text" Rickard, the boxing promoter: with Red Grange and Benny Friedman, football stars, and a host of others.

The year 1928 will see a continuation of ture broadcasts from WGN. The Infeature broadcasts from WGN. The Indianapolis auto races and the Kentucky Derby will both be presented sgain, and the station plans a resumption of its baseball broadcasts throughout the year. It will be the station's endeavor to bring as many great events to listeners as present themselves, making it more than ever a force for public service.

### "Bigger and Better"

"Hingrer and Better"
"Improved musical programs, with larger orchestras and a greater amount of variety in vocal music, together with many new musical novelties, are the WGN musical plans for 1928. The station's staff continues the same as in 1927, with Bill Hay as manager and chief amouncer: Henry Selinger, musical and program director. Quin Ryan, director of features, and sports and feature announcer."

Broadcasters from New York to the Pacific have expressed every confidence that 1928 is going to be the banner year—that programs are to be better, reception better and the listeners happier with the results of their Radio pleasures. It has been hinted that international programs will be a common feature for every listener before the next New Year comes around. We are told Radio listeners may expect

We are told Radio listeners may expect to hear Lendon programs almost any day over the National Broadcasting Net sta-tions.

### "VIVA LINDY!" REMEMBER THE DAY WHEN YOU HEARD HIM COME HOME?



ERE'S your real and only Air Hero—on the wave or on the wing—and now that he's gone and done it again you might like to see this latest photo. You can hear that staccate voice, boyishly dignified:
"I am sorry that those waiting for me had such a long time under the hot sun, but I was just as anxious to come down as they were to have me. The entire trip was made in the face of some difficulties which, I think, show conclusively the importance of cross-country training in flying."

(Continued from page 12)

DISTRICT NO. 4-WEST
Comprising: North and South Dakota,
Nebraska, Kansas, Oklahoma, Texas, Mon-
tana, Wyoming, Colorado and New Mexico.
Seven Aces, WBAP
Royal Fontenelle orchestra, WOW 2,507
Ernest Loomis' Victor Recording
orchestra, KOA1,066
Joe Willrich's orchestra, KPRC1,003

Chief Gonzales and his Arabian Room orchestra, KOA
Crawford's Louisiana Syncopators,
KOW

Gunter Hotel Crystal Ball room, WOAI Bourdon orchestra, WFAA.....

ORCHESTRA | STANDINGS | Kensington Hall dance orch., KPRC... 825 Parrino-Sparkman orchestra, WFAA... 131 GS | Rensington Hall dance orch, KPRC. |
Parino-Sparkman orchestra, WFAA. |
Scheurerman's Colorado orch, KOA. |
Troutdale orchestra, KFAB. |
Kota, Tracy-Brown's orchestra, WOW. |
Tracy-Brown's orchestra, WOW. |
Tracy-Brown's orchestra, WOW. |
Dan's Musical Dons |
4.94 | J. Lesite Fox, KFH. |
Palaisior orchestra, WOW. |
Thatisior orchestra, KTHS. |
Lesite Fox, KFH. |
Arlington concert orchestra, KTHS. |
KOA orchestra, KOA |
WFAA Symphony orchestra, WFAA |
Beaumont Symphony KFDM. |
Gunter hotel orchestra, WOAI. |
Dallas Athletic club orchestra, KRLD |
State College Symphony orch, KFDY |
Baker Hotel orchestra, WFAA. |
Delk Richardson's Dallas Country

### LIST OF PARTS FOR KARAS AC EQUAMATIC

Karas Electric Co., 4040 No. Rockwell St., Chicago, III.

Chicago, III.

AC Former, type 12
2 Type 28 Audio Transformers @ \$8.00
10 tupup Hilling
3 Type 17 Vorioble Condensors @ \$8.25
3 Type 17 Vorioble Condensors @ \$8.25
12,00
2 Micrometric Dials, 0-100
2 Micrometric Dials, 0-100
3 Sub-pund torackets, per set of three
1 Control System, including Hardware
3,00

Yaxley Mfg. Co., 9 So. Clinton St., Chicago, 1 Cuble Plug

Electrad, Inc., 175 Varick St., New York City I Fixed Resistor, B-20, 2000 ohms I Royalty Variable Resistance, type E

Benjamin Electric Mfg. Co., 120 So. Sanga-mon St., Chicago 4 Sockets, type 9040, Red Top @ \$0.75 I Socket, type 9036, Green Top

International Resistance Co., Perry Bldg., Philadelphia, Pa. 1 Durham Crid Leok. 2 megohm 50

Hammarland Mfg. Co., 430 West 33rd St., New York City 2 Chokes, type 85 @ \$2.00 4.00

Samson Electric Co., Canton, Mass

2 Neutralizing Condensers, cap. .00003 to .0003 @ \$2.25 \$4.50 Carter Radio Co., 300 So. Racine Ave., Chicago

Chicago

Code 110, "Imp" Pracer Switch

I Mider Kheastat, type MW-75

Midge Rheastat, type MW-30

I Palentiometer, type MW-30

Eypars Condenser, type MW-2000

Eypars Condensers, cap. 00015

© 80-10

Frixed Mica Condenser, cap. 006.

Frixed Mica Condenser, cap. 006.

Frixed Mica Condenser, cap. 00025

eth drier

Alica Condenser, cap. 00025

eth drier

Ether Mica Condenser, cap. 00025 1.25 .80 .85

ormica Insulating Co., 4600 Spring St., Cincinnati

Orifice and Engraved Front panel, 7°x24° 5.75

Drilled and Engraved Sub-panel, 9°x23° 6.00

X-L. Radio Laboratories, 2424 N. Lincoln Ave., Chicago 1 X-L "Push Post" (binding post) .15

Warren Electric Co., Dopt. R.D., Peoria, III.
Suggested B' Eliminator Model T
Raytheon Unit 21.00

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Red Peppers, KVOO	7
Gebhardt Mexican players, WOAL	3
KSAC	3
Father Flanagan's Roys' Home band	1
DISTRICT NO. 5—FAR WEST	
WOW  DISTRICT NO. 5—FAR WEST  Comprising: Idaho, Arizona, Ut  Nevada, California and Washington.  Max Dohn's studio orchestra, Pacific	Lan,
Max Dohn's studio orchestra, Pacific	508
Max Dohn's studio orchestra, Pacific Coast Network	123
room orchestra, KFRC	398
Andy Wallace and his band, KFWI1	282
Joe Mendel and his Pep band, KRFC	922
Benson hotel orchestra, KOIN	751
Hal Chasnoff's orchestra, KFI	750 750
Eiltmore hotel orchestra, KPX	750
Eill Funk's Packard Six orch., KFf Cavaliers dance orchestra, KHJ	672 451
Piggly Wiggly concert orch., KFON	450
Cavaliers dance orchestra, KHJ	236
Girvia Beale's Hotel Oukland dance orchestra, KGO.  Roy Dyer's El Nido cafe orch., KLX. Pacific Coast Club, orchestra, KFON Georgians, KHJ  White King orchestra, KGW Anson Week's Hotel Mark Hopkins orchestra, KFRC.	325 325
Pacific Coast Club orchestra, KFON	163
White King orchestra, KGW	158 157
Anson Week's Hotel Mark Hopkins	
Anson Week's Hotel Mark Hopkins orchestra, KFRC. KFRC dance orchestra, KFRC. Cole McEtroy's Columbia Recording dance band, KOIN KFWI Gypsy band, KFWI. Metropolitan dance orchestra, KFI. Cadillac-La Sula concerns such FII.	155 151
Cole McElroy's Columbia Recording	150
KFWI Gypsy band, KFW1	150
Cadillac-La Sulle concert orch., KHJ	150 71
Cadillac-La Sulle concert orch., KHJ Lombardia orchestra, KJR	63
Rudy Seiger's Fairmont Hotel concert orchestra, KPO	60
Rudy Seiger's Fairmont Hotel concert orchestra, KPO Cocoanut Grovo orchestra, KNX Public Service Little symphony or- chestra, KGW Tom Carunovich's Roof Garden or- chestra, KFWI	57
chestra, KGW	56
Tom Carunovich's Roof Garden or- chestra, KFWI Seattle Fire Department band, KJR Sherman Clay & Company concert orchestra, KFOA Long Beach Municipal band, KFON Palace orchestra (KG and, KFON	47
Seattle Fire Department band, KJR	43
orchestra, KFOA	43
Palace orchestra, KGA	42 23
Standard Symphony orchestra, KPO	24 24
Long Beach Municipal band, KFON Palace orchestra, KGA Standard Symphony orchestra, KPO Fox Theatre Grand orchestra, WOO Los Angoles Philharmonic orch., KFI Cloverleaf orchestra, KFON Frank Ellis and his Hotel St. Francis dance orchestra, KGO	20
Frank Ellis and his Hotel St. Francis	1.9
dance orchestra, KGO	14
Oregon Agricultural College sym-	10
phony, ROAC	9
Norman Woodside's Roberts-at-the Beach orchestra, KGO	
Calder Infantry band, KJR	7 5 5
States Restaurant orchestra, KPO	5 5
Pilerine KGO	5 3
U. of Arizona Symphony orch., KOE Puget Sound Savings and Loan asso-	3
elation, KJR	2
ciation, KJR	L.
Athens Athletic club orchestra, KLX DISTRICT NO. 6—CANADA Comprising: The entire Dominior	
Irwin Plummer and his orch., CNRW Dunny Yates' Hotel Windsor orches- tra, CKAC	1,600
tra, CKAC	452
Chateau Laurier concert orch. CNRO	297 154
tra, CKAC  Eveready orchestra, CKNC  Chateau Laurier concert orch., CNRO  Jackio Souders and his orch., CNRV  Palm Room orchestra, CKCL  Charat Balmont orchestra, CKCL	150 102
	97
Harold Rich-Morris London Versatile Canadians, CFCA	52
Canadians, CFCA Guy Watkins Art Harmony Seven, CFQC	
CFQC	49 28
Charlie Bodley's dance orch., CKNC. CNRC orchestra, CNRC. Jasper Park Lodge orch., CNRW	22 14
lonian serenaders, CNRA	S
W. Knight Wilson's capitolians, CNRR Peavey and his orchestra, CKY	8
Ediphone Recorders, CKCL Leon Asper's concert orchestra, CFAC	7
Campbell's Old Time Fiddler orches-	
tra, CFQC	2 2
	-

Club orchestra, WFAA.. Red Peppers, KVOO.......

### Rules and Conditions

Rules and Conditions

1. The contest starts with this issue of Radio Digest, November 1, 1927, and ends at midnight, April 10, 1928. All mail epolesing ballots must bear the postmark on or before midnight, April 10, 1928.

2. Ballottling will be by means of coupons appearing in each monthly issue of the Radio Digest and by special ballots issued only when requested at the time of receipt of paid in advance mail subscriptions to Radio Digest when received direct and not through subscription agencies according to the schedule given in paragraph 4.

3. When sent singly, each coupon clipped from the regular monthly issue of Radio Digest counts for One vote. BONUS votes given in accordance with the following schedule:

For each two consecutively numbered coupons sent in at one time a bonus of five votes will be allowed.

For each three consecutively numbered enumons a bonus of fifteen votes will be allowed.

For each three consecutively numbered ecupons, a bonus of fifteen votes will be allowed.

(Continued on page 34)

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vol. xxx

January, 1928

### Crystal Control or Quit!

R ADIO engineers agree that practically all the hetrodyning between stations on the same or nearby wave lengths can be eliminated by the use of the inexpensive Piczo electric oscillators by broadcasters. These magic crystals, when properly calibrated by the Burcau of Standards, hold the signal on the assignational control of the signal of the statement of the s the assigned wave length.

the assigned wave length.

Although practical and endorsed by all experts, yet there are many broadcasting stations that are not yet equipped with this device. While the Federal Radio Commission is perspiring under the job of assigning a few wave lengths among seven times too many applicants, many plants are going on the air daily without using the Piezo crystal—thus mussing up receiving conditions. It is time that the Federal Radio Commission issue a mandatory order for all stations not equipped with crystal control to stop broadcasting until so equipped.

With the constant shifting of wave lengths and the

until so equipped.

With the constant shifting of wave lengths and the slowness of the Bureau of Standards in calibrating crystals, we would suggest that the commission compel each broadcasting station when changing bands to surrender its calibrated Piezo oscillator for its old wave to Washington. In turn the commission could send the surrendered crystal to the station assigned that band. Proper credit arrangements could be made.

The ideal way of working out this plan would be for the commission to have a stock of Piezo electric oscillators calibrated by the Bureau of Standards for each wave band and ship the crystal with the renewal license for the new allocation. All stations would thus be crystal controlled by law.

### Put Chain on One Band

D EFORE the elimination of stations by the Federal Raduo Commission, as announced by Commissioner Pickard, is resorted to that body owes to the public its serious considerations of placing station members of chains on one wave band during a chain broadcast. The time thus made available on the freed wave length could be assigned to other local and worthy stations. worthy stations.

Worthy stations.

The plan is practical as demonstrated by WBZ and WBZA. Dr. Goldsmith and Commissioner Caldwell have both gone on record publicly that the idea is technically correct. WHT, Chicago, worked on two different waves during the evening, thus indicating there would be no difficulty in the local non-chain station stepping up or down to use the freed band of the chain station.

Messrs. Commissioners, any listener who has found chain programs all over his dial when he wanted to listen in to a local or nearby event, is interested in this logical and inevitable one-wave-for-the-chain plan. Every broadcaster who divides time or is eliminated from the free air is entitled to demand the reason for the favoritism shown in the wastage of wave bands

The broadcasting fraternity must be Democratic in politics, judging from the number of state righters before the Radio Commission. A broadcasting channel for each scenator would leave only WEAF and WJZ in New York state with nothing for the (in) de-

The parable of the loaves and the fishes might be of help to the perplexed Radio commissioners in satisfying the multitude.

Leaving the heir: "My boy, bumpers on automobiles are not for the protection of pedestrians."



### THE READER'S VIEW

### Vega's Petition

A PETITION to the President of the United States of America and to the Chairman of the House and President of the Senate of the U.S. A. and to the Radio Commission, Washington, D. C., and to the Radio Digest, Chicago, III., or to Whomsoever Else this may come, Greather.

We, the undersigned Radio Listoners, wishing to daily use our Radio Receiving Sets, beg to submit some conditions and stern facts, which we are continuously running up against, and which cause us much annoyance and considerable profanity. We have coully given much time and thought as to the cause and romedy of this unimely and fierce interference, with the following conclusions: We believe that the Radio Commission has not given due consideration to the wishes and needs of the listening public, but on the other hand has given overdue consideration to some of the big financial broadcasters and have given them much more control of the sir than is beneficial to the general public. We do not know if this SUPER-POWER given to the big financial stations is a product of the wealth of said stations or not, but WE DO KNOW that it is not what is wanted by the PUBLIC, for reasons as follows:

We do not object to chain programs, on the other hand, We, the undersigned Radio Listoners, wishing to daily

by the PUBLIC. for reasons as follows:

We do not object to chain programs, on the other hand, are glad to have them, but we want all of the stations of the same chain to be on the same meter. I.B.: Let each station that is on the chain have its own meter for its own private programs, but for the chain programs, to tender the same after as the mother KEY station uses the SAME MITTER as the mother KEY station uses. Let these meters be somewhere from 300 to 409, then any ordinary receiving set can get them, and we will not be compelled to listen to them unless we want to do so. We believe that the only way any station has any right to compel us to listen to them would be that they put on programs that would compel our attention.

### 5,000 Watts Enough

After several years at the RECEIVING end, we would further say FIRMLY that FIVE THOUSAND WATTS is as much as should be allowed to any station, and WE are of the opinion that 1.000 watts would fill the needs of any station and through the chains reach any hamlet in the U. S. A. and at the same time do very much toward clearing up the air.

ward clearing up the air.

We would further state that we are not in favor of discontinuing any of the stations now licensed, but we DO. KNOW that there are too many stations now on the air to broadcast continuously and do any of them any good, or the public either, therefore we would suggest that stations on the same or near the same meter in the same part of the country be required to divide time; properly allocated, this can easily reduce interference at least FIFTY PER CENT.

at least FIFTY PER CENT.

We would further request that the members of the Radio Commission or some representatives of said commission, visit remote and various parts of the United States, and listen in, on common Radio sets un average nights from seven to eleven p. m. and be informed of the INFERNAL HOWLS that come from almost every mark on the dial. And we would then DEMAND that said commission take proper steps to correct this continual interference.

If opposition should develop to the reasonableness of fits petition, then we may well be sure that those objecting are in some way financially interested in the big. Francial stations which are principally responsible for the disturbance.

In submitting this petition, we are asking the Radio Digest to publish same, with the hope that every community in the U. S. A. may either take this petition literally as it is, or draw one of a similar nature and have it signed by the listeners of each community and forward the demand to the Radio Commission at Washington as we have done

### Keep Politics Out

The author of this petition is a northern man, a Republican in politics, living in the South, and in sympathy with the present administration, but this is not a political issue, it is not North nor South, neither East nor West, and we want POLITICS kept out of it, but if the people cannot have re-dress in that the air we breathe be kept free, then we had better take stock of our present conditions.

This petition is being malled to each of the above, addressed, and in addition, to Fields, at KFNF, to Baker at KTNT, to Henderson at KWKH, and to Gish at KGRS, with the wish that each person concerned will do every HONORABLE thing possible; that each and every broadcaster may have a fair DEAL, and that the public may be enabled to enjoy their Radio sets.

Signed,

John Heisleman
Lulu M. Loyd
Merle Wood
George Funk
Bob Ballard
B. L. Freeman
W. A. Jinks
Mrs. C. Williams
O. L. Jinks
F. f. Smith
C. E. Slutz
H. R. Shields
A. D. Glava
E. L. Krahn
F. P. Smith
Lynn Smith
A. M. Miller
J. O. Murrey
Chas. Ingram
C. E. Campsey
C. H. Roark
L. W. Landrum
R. Harwell
F. E. Walker O. H. LOYD and W. A. Williams Vega Drug Store D. E. McKendred E. B. Harris John VanMeter Jack M. Roberson Vernon Shields Herb. Ballard Herb. Ballard
J. E. Scott
J. C. Campsey
C. M. Raley
F. A. Collins
F. H. Krahn
J. H. Jones
John Rector
F. Wiseman
Buin Wiseman
H. L. Morris
S. E. Green
A. C. Klein
R. C. Godwin
A. A. Kirkpatrick
Allen Staggs Merle Morgan W. P. Ballard W. P. Ballard
Henry Creltz
W. O. Denny
D. M. Voyles
Col. J. T. Owen
W. E. Klein
H. Murphy
C. L. Morris
W. N. Miller
J. E. Murrey W. N. Miller
J. E. Murrey
Ottls McCall
H. G. Green
C. E. Winder
J. A. Campsey
E. H. Bales
J. C. McDonald
J. A. McGowan Allen Staggs T. M. Blacklock T. M. Blacklock
Roy N. Ivy
Rex McNabb
Wayne Dyer
J. M. Hobbs
O. O. Slutz
John Dunn
(All of Vega, Tex.)

The above polition speaks for itself and is submitted without alteration of any kind as an expression of the people of this Texas community. Sind politions have been received from other sections of the country. This one is typical.—EDITOR.

### No Soap!



### RADIO INDI-GEST

### God's Radio

I sit in the gloom of my lonely room Far from the noise of the town Like the deadly doom of a voiceless tomb The stillness holds me down

And yet this I know I have but to go To a magic chest near by
With a touch or so and I'll hear the flow
Of raptures from the sky.

Oh I wonder, dear, perhaps you can hear— In that Somewhere over There— Ab—to tune that Sphere, and to keep you near, God's Radio to share!

### Iowa City Wins Bean

OSCOE! Roscoe! Come hither! Bring forth the golden key to the Vault of the Sacred Saccharine and out of the crystal treasure select the Bluest and Purest Jelly Bean. Make haste and do not linger in the Royal pantry. See to it that the Jelly Bean is securely boded and directed by special messenger at once to J.E.R., winner of the Forty-ninth Word Steeple Chase. We might quibble on his o in out but otherwise the tale is well told.

The course, the faithful will remember, was as follows:

The course, the laterful will remember, was as a Resistance Microphone Soprano Tenor Duet
The epistle from J.E.R. of Iowa City follows:

The epistle from J.E.R. of Iowa City follows:
"Camping, a few months ago, on the shores of the Iowa river, I grew disgusted with the insects. I could drive off bugs and beetles, but simply couldn't resists asts. I decided to telephone to town for a taxi. The nearest station, however, was across the river. I had no boat, but camping near was a genial Irishman. To him said I:
"Mike, row, phone, and call a taxi." "Nothin doin unless you pay me \$10," retorted Michael. I flattered him a while, but 'twas futile, and finally, when my "soft soap" ran out. I drew forth a "tennen," and said: "All right; do it"—and he did.

Get set for the next course. Here it is—Circuit, unit, eliminator, ampere, static.

### Good Steeplechase Sport

Gould Steeplechase Sport

M. Gould of Wann, Okla., pulled a Prince of
Wales for the jolly old Jelly Bean, but gave us
a peach of a line in his letter. He said:
"I call the Digest the Wish Book. You wish you
could get the programs you read about."
Then he slips us a nice little posy.
"I don't see how any one could use a receiver and
get half what they should from it without the Radio
Digest. It's improved wonderfully. I notice that my
friend who runs the drug store at Copan is selling
more of them now. I hought my first Radio Digest
from him." from him.'

Thanks a lot, Mr. Gould. We sure'd like to send you the jelly bean for "them kind words" but the jelly bean "ain't even been thunk up yet" that could do justice to your letter.

### My Goodness What Crowds!

— From National Broadcasting Co. Publicity.

By this time we may safely assume that all of six thourand cople have seen that wonderful show! That's the Big Town or you!

A T LAST! The radio tube that needs no batteries! Here it is functioning quietly, smoothly, powerfully in this new Crosley 6 tube receiver—the A C Bandbox. Now, the Crosley A C Bandbox needs no more attention than you pay the electric lamp that lights your home.

This is what the world has anticipated and many have imitated. Crosley offers it to you at the WORLD'S LOWEST PRICE-\$110 without tubes.

Combined with the Crosley facilities for economical manufacture is the patent situation of which Crosley has full advantage. Licensed to manufacture under the patents controlled by the electrical and radio industries, the Crosley Bandbox is a NEW receiver incorporating latest radio developments, the most advanced ideas of radio reception as well as sound reproduction. This outstanding engineering job is best understood when you consider its features are such as are found in radios twice and more its price.

Complete shielding of all elements.

Absolute balance (genuine Neutrodyne). 2.

3. Volume control.

Acuminators for sharpest tuning.

Single cable connections.

Single station selector.

Illuminated dial.

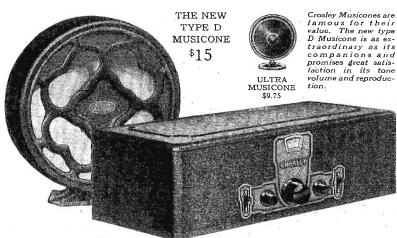
Adaptability to ANY type installation.

The set is solidly mounted on a stout steel chassis. As all controls are assembled together in the front, cabinet panels are easily cut to allow their protrusion. The metal escutcheon is screwed on over the shafts and the installation has all the appearance of being built to order.

Two large furniture manufacturers have designed console cabinets in which the Bandbox can be superbly installed (Showers Bros. Co., of Bloomington, Ind., and the Wolf Mfg. Industries of Kokomo, Ind.). Powel Crosley, Jr., has approved them mechanically and acoustically and has seen to it that the famous Crosley Musicones are built in them so that the best type of loud speaker reproduction may be insured.

The Bandbox is housed in a brown frosted crystalline finished metal case which is easily removed for console installation.

See the new Crosley A C Bandbox at your dealer's NOW! Hear first hand its delightful performance! Enjoy the best in radio at the least cost! Write Dept. 49 if you can't locate a dealer!



Crosley is licensed only for Radio Aznateur, Experimental and Broadcast Re-

The CROSLEY
RADIO
CORPORATION Powel Crosley, Jr., President Cincinnati, Ohio

SUPER

MUSICONE

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

of these wonderful tubes



The amazing new RCA alternating current tubes—the UX 226 and UY 227—utilize for their filaments and their heating regular house-lighting current. Current is stepped down through transformers. Rectifiers are not used

### the radio patents of these industries



The research and development work of these great industries—the Radio Corporation of America, The General Electric Co., The Westinghouse Co., The American Telephone & Telegraph Co., and The Hazeltine and Latour Coporations—are available to Crosley engineers in the constant advancement of radio design.

and the amazing capacity of this MERSHON Electrolytic CONDENSER



This is one of Crosley's great features. It is an exclusive Crosley device. It is self-healing—will last indefinitely—never needs attention and eliminates the danger of blown out paper condensers which are causing so much trouble in electrically operated sets.

# DIRECTOR OF NORWEGIAN STATION EX

SERVICE THE SE

### HIGH LIGHTS OF THE AIR

M. OA. DENVER, is not going to wait until some other station acquaints its listeners with the works of Denver composers. Friday evening, January 6, some of the composers themselves will appear. Estelle Phillies, who wrote the music to 'Oat Where the West Begins,' Burrill Phillips, H. Everett Sachs, Edwin J. Stringham, Francis Hendricks, Grace Mays, and Jeau Altard Jeanson will broadcast their own compositions.

will broadcast their own composi-tions.

A regular Saturday feature of KFI
is the "Media Hora Espanola" or
Spanish half hour. Felipe Delgado,
barttone, explains the meaning of the
song in English and then sings it in
Spanish

Song in Dental Control of the Chicago Sunday Listeners of the Chicago Sunday Evening club will reserve January 29 to hear Dr. Harry Emerson Posalek speak. Other speakers during the month are Bishop Edwin H. Hughes, January 1; Dr. Charles M. Gordon, January 8; Dr. Alfred E. Stearnes,

OF IHE AIK

January 15, and Dr. Albert Parker

Fitch, January 22.

This is the season of the year when
basketball fans tune in. WIBO will
describe the games played at Northwestern this year. January 71 Michigun meets Northwestern; January 30,
Minnesota.

The musical biographies being
given by Don Malin from WIS have
been creating a favorable impression
with the audience of this, station.
Tuesday, January 3, Mr. Malin discusses Jules Massenet; January 10,
Georges Eizet; January 24, Ghacoua

Puccini and January 31, Johnnes

Brahmes.

Clef T. Helst director of the Ber-

Brahmes.

Olaf T. Holst, director of the Bergen Broadcasting company's stations at Bergen, Norway, has planned the program which will be given from WBAL January 22. This "All-Nurwegian" program Mr. Holst exchanged with Mr. Huber for an "All-American" program planned by the American station.

PACIFIC Coast Radio fans are enjoying the weekly cancerts given ever over KPO by the Abas string quartet. This quartet, which is compose Brodetzky, violinist; Michel Penha, cellist, and Romain Joseph Verney doing unusually fine group work. Smiling Stan Lee Broza, left, is the jew WCAU, Philadelphia. He not only announces but directs the productive Paley, a young coloratura soprana, who frequently appears at WGBS, seventeen she has appeared in "The Vagahond King" and has starred of Rudolf Friml.



### SUNDAY, JANUARY 1 Headliners

| Central Mountain | Pacific | Spring | Pacific | Spring | Pacific | Spring | Pacific | Spring | Pacific | WRA (422.5m-710bc) | WEAR (422.5m-110bc) | WEAR (422.5m-110bc) | WAR (422.5m-110bc) | WAR (422.5m-110bc) | WAR (423.5m-110bc) | WAR (424.5m-110bc) | WAR (425.5m-110bc) | WAR ( Central Mountain

Boys, WFAN (224m-1340kc) James LaRue, baritone, W1BO (305.9m-980kc) Gents of Music.

| Wildo (205.9m.-1300kc) James LaRue, baritone. | Wildo (205.9m.-880kc) Gents of Mesic. 6 | VCDD (244.6m.-870kc) Brass quartet. | VCR (22.3m.-70kc) and Columbia chain, Emeraced 8:01 | 7:01 | 6:01 | VFAN (244.6m.-870kc) | 7:01 | 6:01 | VFAN (244.m.-140kc) Grenadiers. | 6:15 | 6:15 | VCAE (461.5m.-650kc), WEL1 (598.2m.-550kc), WTAM (29.5m.-70kc), WEL1 (598.2m.-550kc), WTAM (29.5m.-650kc), WEL1 (46.1.5m.-650kc), WTAM (46.4m.-72kc), WTAM (40.2.5m.-90kc), WCI (44.6m.-72kc), WCI (45.5m.-70kc), WCI (45.2m.-70kc), WCI (45.5m.-70kc), WCI (45.5m.-70

WOR (422.3m-710kc) and Chimmus chain, annual frame for the first format format for the first format format for the first format format format format for the first format format

Regular Sunday Features

REGUIAT SUNGAY FEATURES

Eastern Time Stations

GFCA Toronto, Con. (356.9m-840kc) 7 p. m. service: 8:15; musick, Pp. (315.6m-950kc) 7 p. m. service: 8:15, WIZ, 20:15, 21; 10:15; VIZ, 20:15; WBZ Sprincheld, Mass., (333. Im-900kc) 2 p. m. WJZ; 7:50. Hotel Statler ensemble; 8:15. WJZ; 9:15. WZS; 9:15. WGHS New Jork, N. 1. (assmeant, b.30 p. m. pro-gram Darton, Mich. (27.6m-1000ke) 3 p. m. Co-lumbia chain; 9-11, Columbia chain. WGR Buffalo, N. W. 18, 28, 28m-990kc) 10-45 a. m. serv-WGY Schenectade, N. W. 18, (37.5.m.-790kc) 10-30 a. m. service: 4, organ: 7:20, Capitol theater; 9:15, WEAN 25. (27.5m.-700kc) 10-30 a. m. WCY Schemetady, N. Y. (375,5m.790kc) 10:30 a. m. service; 4. organ; 7:20, Capitol theater; 9:15, Wkki, organ; 7:20, Capitol theater; 9:15, Wkki, organ; 7:20, Capitol theater; 9:15, Wkki, organ; 7:20, Cubb orchestra; 11, organ; 11:30, Cubb orchestra; WiP Philadolphia, Pa. (348,6m.600kc) 9:30 p. m. WCBS, or 7:18 p. m. service; 9:30 ps. 6:30 p. m. WLM, organ; 9:18 p. m. service; 10, organ; 0:30 p. m. WiR-WCX Detroit, Mich. (440,9m.660kc) 10 a. m. First Bantist church; 2. WIZ; 6. twifight hour; 8:17 points; 10, song service, First Bantas church; 10, organ; 10, song service, First Bantas church; 10, organ; 10, song service, First Bantas church; 10, song service, First Bantas church; 10, song service, First Bantas church; 10, song service, WIZ; NSA, KSW, WZ, KS, WZ, WZ, KSA, KSW, WZ, WZ, KSA, KSW, WZ, WZ, Chan, Service; 10, organ; 2,30, nusical literature, WBAL; 8:15, Cul-

lia chan; 745. Sunday evening musicane; 7, Commission hour.

WPG Atlantie City, N. J. (272,6n-1130ke) 4:15 p. m. community recital; 5:15, twilight heur; 9:10, evening morpham; 10, Sunday evening musicane.

Service; 1, Sunday evening musicane.

J. m. Service; 1, Sunday evening musicane.

Service; 1, m. M. Z. (685,m-640ke) Musicane musicane.

WSAC Clinicanati, O. (361,m-630ke) 7:15 p. m. chimes; 8:15, time; 8:15, originam; 9:15, WEAF; 10:15, WEA WSEA Norfolk, Va. (265m-1x40kc) 7 p. m. dinner centert.
WTAG Worcester, Mass. (316.9m-180kc) 7:30 p. m. spudio program.
WTAM Clawshud. 0. (398.8m-750kc) 3 n. m. mutick 91.5, WEAF; 7:20, studio program; 8, servtick 91.5, WEAF; 01.50, orchestra.
WTIC Hartford, Conn. (535.4m-550kc) 5:30 p. m. mumemble; 6:30, band,
WWJ Detroit, Mich. (352.7m-850kc) 10:30 a. m. servtick 2.18, WEAF; 5:15, WEAF.
WSEC, Salavelle, N. C. (226.5m-1010kc) 7:30 p. m. service.

Central Time Stations Central Time Stations

KFAB Lincoln, Neb. (3i9m-40tkc) 11 a. m. service;
9 lg. m., symphony.
Hibito study; 11. studio service; 2 b. m. KLDS string
Hibito study; 11. studio service; 2 b. m. KLDS string
9:15. services; choir: 6:39, vespers, sermony;
9:15. services; choir: (3:3), vespers, sermony;
60:16. Council Bluffg, la. (319m-940kc) 10 a. m.
service; 2 n. m. Cofumbia chain; 7:30, children's
hour; 11:30, Ambassadors,
PSEC [Southern Council Sudices of the KSD St. Louis, Mo. (845.Ins.5806), 6:20 p. m. WEAF; 8:15 WEAF, KST. St. Parings National Park, Ark. (384.4m-7806c) 11 a. m. services; 5:10:30 p. m. soloists; New York, National Park, Ark. (384.4m-7806c) 11 a. m. services; 5:10:30 p. m. soloists; New York, National Stolois, 8:15, WEAF, p. m. googet KYW Chicago, III. (826m-8706c) 10, m. WJZ; 7:15-8:15, WIZ, 8:17, good reading; 9:15; VJZ. WBAF L. Worth, Tex. (499,7m-6006c) 11 a. m. servicence 11. 120 p. m. Kulties hour; 7:0:20-11, sacred centerts. noss; 12:30-1:30 p. m. kiddies hour; 9:30-11, sacred WBBM Chicago, III, (384-4m-70ke); 2 mid, Nutry club Zion, III, (344-6m-870ke) 8 p. m. trios, mixed Guartet, Zion Choir.

WCCO Midnesspolis-8t. Poul, Minn, (405, 2m-740ke) 9:58 s. m. service; 10:51, services; 4:10 p. m. service; 10:51, services; 4:10 p. m. service; 10:51, services; 4:10 p. m. service; 10:51, services; 10:51, s WBBM Chicago, Ill. (389.4m-770kc) 12 mid., Nutry concert.
W1BO Chicago, Ill. (305.9m-980kc) 7:10 p. m. program: 10, concert.
WJAZ Chicago, Ill. (263m-1140kc) 7-9 p. m. studio wjBT Chicago, Ill. (388.4m-770ke) 2:30-12 mid. Paul Rader, WJJD Chicago, 111. (365.6m-820kc) 9 p. m. onera com-WJAC Nashville, Tenn, (2626m-1230kc) 6;30 p. m. wirak (2626m-1230kc) 6;30 p. m. service; 9:15, sacred music. WLIB Chlego, III, (418-m-720kc) 5-5;30 p. m. misicale; 5;30, songs; 5:50, songs, Tommy Coates; 6, string quinter, 11, (248-m-790kc) 1-30 p. m. chapel service; property of the pr islar program. WMBI Chicago, III. (263m-1140kc) 5 p. m. gospel SORUS.

WMC Memphis, Tenn. (516.9m-580ke) 6:20 p. m.,

WEAF; 8:15, WEAF.

WOAJ San Antonio, Tex. (499.7m-600kc) 7:30 p. in. Service.

WOC Davenport, Ia (374.8m-800kc) 7 p. m. service;
8:15. WEAP: 9:15. program.
WOW Omaha, Ncb. (508.2m-590kc) 9 a. m. services;
5:30 p. n. Bithe hour: 8:15. WEAF: 9:15. music.

WSB Atlanta. Ga. (478,9m-630kc) 5 p. m., vesper; 6:20, WEAF; 8:15, WEAF
WSM Nashville, Ienn. (336,9m-890kc) 6:20 p. m.
WTMJ Milwakee, Wis. (289,9m-1020kc) 6 p. m. dinner concert; 7, organ; 9:15, WJZ.

Mountain Standard Time Stations
CFAC Caleary, Can. (343,8m-600kc) 7:10 n. m. service.
KOA Denwy, Colo. (252,9m-920kc) 11 a. m. church secretics; 5:30, organ; 7:43, Three Stations
KEX Actification of the Colorable of the Colorable

when hour, KFRC San Francisco, Calif. (454.3m-660kc) 5 p. m. organ: 6:50, twilight recital; 8:50, orchestra; 11 

Sunday, silent night for: KSFD, KLX, KMA, KOB, WFLA, WSMB, WRVA, WTAG.

MONDAY, JANUARY 2 Headliners Headliners

Central Mountain

730 p.m. Central Mountain

730 p.m. Mountain

730 p.m. Central Mountain

730 p.m. Central

730 p.m. Central WWNC (296.9m-1010kc) Happiness Girls.

WWNC (296.9m-1010kc) Happiness Girls.

KFI (468.5m-640kc) Gene Johnston's Music Box KFI (468.5m-600kc) Gene Johnston a Music abow W.R. WCX (440.0m-680kc). The Stinson Four. WOR (422.5m-710kc). WEAN (275.1m-1690kc). WNAC (461.5m-650kc). WWW (485.8m-1600kc). WNAC (461.5m-650kc). WWW (485.8m-1600kc). WWW (485.8m-1600kc). WWW (485.8m-1600kc). WWW (485.8m-1600kc). WKRC (485.8m-1200kc). WKRC (485.8m-1200kc). WKRC (485.8m-1200kc). WKRC (485.8m-1200kc). Capitariors orderestra. Columbia chain. 8:30 (228.5m-1800kc). Capitariors orderestra. Columbia chain. 8:30 (228.5m-1800kc). WWW (238.5m-1800kc). Capitariors orderestra. Columbia chain. 8:30 (238.5m-1800kc). Capitariors orderestra. Capitariors orderestr Wi.S. (244.6m.\$70kc) Hockey (zame, Blackhawks-Trorouto, 250m.

Wall Jack, WSM ministrel men, 1915

KOA (325.5m.920kc) Ministrel olays

KFI (465.7m.640kc) Los Angeles Philarmonic onchestra.

1915

KOA (325.5m.920kc) Ministrel olays

KFI (465.7m.640kc) Los Angeles Philarmonic onchestra.

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1918 1 a.m. 12 11 10 WSU1 (475.9m-630ke) Pastime Theatre program.

Regular Monday Features

Eastern Time Stations
Pittsburgh, Pa. (315.6m-950kc) 7:30 p. m. WJZ, 9, WJZ.
WAIU Columbus, 0, (282,8m-1050kc) 7:15 p. m. service: 10, Columbia chain.
WBAL Baltfmore, Md. (288,5m-1050kc) 6:30 p. m. dhaner orchestra; 7:30, WJZ; 9, staff concert; 10,

WAIU Columbant O. (282,8m-1060kc) 7:15 p. m. serv-WAIU Columbant O. (282,8m-1060kc) 7:15 p. m. serv-WAIU Columbant O. (282,8m-1060kc) 7:30 p. m. dinner orthostra; 7:30, W12; 9, staif concert; 10, staif concert, 10, staif c WTAG Worcester, Mass, (516.9m-580kc) 8 p. m. program. WTAM Cleveland. Ohio (399.8m-750kc) 6 p. m. orches-tra: 8:30, WEAF, 10:30, studio program; 11:30,

Haji 535, WEAF, Loss (1980) Fp. m. program; 8, New Departure orchestra; 8:30, WEAF; (10:30, orchestra, 19:30, WEAF; 20:30, WEAF; 10:30, WEAF; 10:30,

DANCING

\*\*Xiv.\*\* Tuesday

\*\*Xiv.\*\* Xiv.\*\* Xiv

# ON EXCHANGES PROGRAMS WITH WBAL

joying the weekly concerts given overy Friday evening from 9 to 10 p. m. nartet. This quartet, which is composed of Nathan Abas, violinist; Julian, cellist, and Romain Joseph Verney, viola solioist, has a reputation for Smiling Stan Lee Biveza, left, is the genial voice heard over the air from announces but directs the productiums as well. To the right is Nellie, who frequently appears at WGBS, New York. Although she is only it Vagabond King" and has starred in vandeville. She is also a protege of Rudoll Frimi.



DANCING Central Time

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Tuesday

S. Winx: 8:30, Koa.

S. Winx: 8:30, Koa.

S. Winx: 8:30, While

S. Winx: 8:30, While

Whe, Whip: 9:30, Wean

10, Kex. Whom, Whie,

Whip: 9:30, Wean

S. Winx: Who, Whip:

Whip: 10:15,

Kyw. Wean, Weat,

Kym. Wean, Weat,

Kym. Whip: 10:15,

Kyw. Wean, Weat,

12:10, Whip:

S. Winxies, Whip: 12:10,

Whip: 12:10, Whip:

S. Winxies, Whip: 12:10,

Whip: 12:10, Whip:

S. Winxies, Whip:

Whip: 12:10, Whip:

S. Winxies, Whip:

Whip: 10:15, Weath (pp. 31-5),

Kyil. Kyw. Weat, Wip.

Whip: 10:15, Weath (pp. 31-5),

Kyil. Kyw. Weat, Wip.

Thursday

Thursday

Thursday

8:30, Web; 8:45, Wfla;

8:30, Web; 8:45, Wfla;

8:30, Web; 8:45, Wfla;

8:40, Web; 9:40, Wbz;

Weat, Win, Web;

Win, Web;

Win, Web;

I 1:30, Wai; I 1:45, Wda;

I 1:30, Wai; I 1:45, Wda;

I 1:42, Kire, Kgo; I 2:10, With

With,

With.

Friday

6:10, Wlw; 8, Wiax;
6:10, Wlw; 8, Wbal;
9:30, Wiz, Wrc, Wwj.
9:45, Waam; 10, Kon,
Wcas, Wco, Weat, Wrice,
10:40, Wian,
Wian,
With With Wrice,
10:40, Why Wian,
10:40, Why Wian,
10:41, Why 10:43,
Weat, Kofl, Kyw, Wbbm;
11, Klab; 11:45, Wdai;
12, Kirc, Wilb.

WWNC Asheville, N. C. (296.8m-1010kc) 7 p. m. din-ner music; 9, old-time music.

WWNC Asheville, N. C. (298,8m-1010kc) 7 p. m. dinner music; 7; old-time music.

KFAB L. Central Time Stations

KFAB Limoth only, 1318m-400kc) 5:30-6:30 p. m. dinner music; 100 m KSD St. Louis, Mo. (545.1m-550kc) 9:30-10:30 p. m. Music Carinda, Io. (227.Im-1320kc) 7:30 p. m. orcross-control of the control of music. KSO Clarinda, Ia. (227.1m-1320kc) 7:30 p. m. or-

WERH Chicago, III. (385.4m-320kc) 9 n. in., program. WHAP. Shineston, (845.4m-520kc), 78 p. m. orcheston, 78 p. m. orcheston,

CNRC Calgary, Car. (434.8m-690kt; 9:30 p. m. proGramburer, Colo. (235.8m-220kc) 8 p. m. Schuerer,
mari's Colorado orchestra; 8:15. studio program.
Pacífic Standard Time Stations
KEX Portland, Ore. (239.8m-1250kc) 7 p. m. program:
8. studio program.
KFI Los Angeles, Calit. (468.5m-640kc) 7-8 p. m.
music; 2-9, crauge network; 9-10, program, KPO;
music; 2-9, crauge network; 9-10, program, KPO;
KFOA Seattle, Wash. (447.5m-670kc) 6:30 p. m. studio
program; 8. Orange chair; 19:30, froic,
KFC San Francisco, Calit. (434m-680kc) 7 p. m.
Cscilline; 8. Jamborgs; 10, froic.

KGA Spokane, Wash. (260.7m-1150kc) 6:45 p. 13.

KEOSTRIE, 10. during unselection (260.6) 6.655 p. m. orchestra; 18-9, orange network; 9-book chat.

KGW Portland, Orc. (491.5m-160kc) 8. National Broadcesting company; 9-10, concert, Marional Broadcesting company; 9-10, concert, Marional Marional Marional Construction (200.6) 11. (200.5m-500kc) 9-10 p. m. Lake Merriat Duckarlosco, Calif. (422.5m-710kc) 6:30-7 p. m. organ; 8-9, orange chain; 9-10, studio program; 10-11, program.

Monday, silent night for: CFCA, CKCL, KFDM, KLDS, WFI, WGBS.

TUESDAY, JANUARY 3 Headliners

Eastern Central Mountain Pacific 7:30 p.m. (4:40). 5:30 c.m. (4:10). 5:30 c.m. (4:10

N. A.R. (27/5m-1080ke) Child Study sourse,
Gamerine Miller,

S. A. (333.1m-500ke), Former Life of Kanasa as
Shown by Fossila, Dr. A. B. Sherry

1978-3m-630ke) Froft. Broce E. Mahau,

1978-3m-630ke) Froft. Broce E. Mahau,

1988-3m-630ke) Froft. Broce E. Mahau,

1988-3m-630ke) Froft. Broce E. Mahau,

1988-3m-630ke) From Study Study Study

1988-3m-630ke) From Study Study

1988-3m-630ke) Study essemble.

1988-3m-630ke) Study essemble.

1988-3m-630ke) Song rectral; Chester Newman,

planist. KRLD (461.3m-650kc) Lelaud Johnson-Talking Baritone-Festure, WMAQ (447.5m-670kc) Kent College of law debate. 11:05 10:05 9:05 8:05 WHAM (280.2m-1070kc) "The Homesteaders" from Odenbach Restaurant.

Regular Tuesday Features

Eastern Time Stations CKCL Toronto, Can. (356.9m-840kc) 7-12 mid. pro-KDKA Pittsburgh, Pa. (315.6m-950kc) 8-10 p. m. WIZ.
WBAL, Baltlmore, Md. (285.5m-1050kc) 6:30-7:30 WBAL, Ballmore, Md. (285.5m-1080e) 5:30-7:30 p. m., dinner music: 7:30, quartet: 8, WJZ; 9, en semble: 10, dance music: 7:30, quartet: 8, WJZ; 9, en semble: 10, dance music: 17:30, subsemble: 10, musicale: 10, dance music: 10:30, musicale: 10, musicale: 10:30, dance music: 10:30, WEAF; 10:30 wEAF; 10:30 wEAF; 10:30 WCAE Pittelburgh, Pp. (481,4m-nours). WEAF; 10:20 (Concert; 8. musicule: 8:30, WEAF; 9, WEAF; 10:20 (WEAF). WEAF; 10:20 (WEAF). WEAF; 10:20 (WEAF). WEAF; 10:30, orchestra. WEAF Portland, WEAF; 10:30, orchestra. WEAF Portland, WEAF; 10:30, orchestra. WEAF; 10:10.00 (Club, 8 p. m. Strand theater; 9, WEAF; 12, Lions Club, 8 p. m. Strand theater; 9, WEAF; 12, Lions Club, 8 p. m. Strand Strand WEAF, WEAF 11 300 ordestra. WEEL Boston, Mass. (508.2m-590kc) 7:30 n. m. mu-sicale; 8. WEAF; 9. WEAF; 10:30, cruising rise air. WFI Philadelphia, Pa. (605.2m-740kc) 6:30 p. m. WELF partial, RES. (77.5m-1090kc) 8:10 p. m., mu-sicale. sicale. WGR Buffalo, N: Y. (302.8m.-990cb) 6:30 p. m. or-orchestra; 7:45, science news; 8:11, WEAF, WGY Schenectady, N, Y. (379.5m.-790kc) 7:30 p. m. musicale: 8, WEAF; 8:30, WEAF; 9, WEAF; 10, WEAF; 10:30, WEAF. FARMERS' PROGRAM INDEX Eastern Central Mountain Pacific 3 (1988) (1

Special Farm Features

Weather Local Time

Weather
Local Time

RDKA, 10:10 a. m., 10 p. m.

KFH, 8:30 p. m.

KFH, 8:30 p. m.

KFH, 8:30 p. m., 11:55 p. m.

KFH, 2:30 a. m., 12:40 p. m.

KFH, 7:30 a. m., 12:40 p. m.

KGA, 6 p. m.

KGO, 12:30 p. m., 7:03 p. m.

KGW, 10:30 a. m., 12:30 p. m.

KMM, 19:30 a. m., 10 p. m.

WABM, 7:15 p. m.

WABM, 7:15 p. m.

WABM, 7:15 p. m.

WABM, 7:15 p. m., 10 p. m.

WEEL, 11:40 p. m.

W

Monday niral Mountain 9 a. m. 8 7 6 KMMJ (285.5m-1050kc), Poultry talks, 12 11 10 9 KMMJ (1285.5m-1050kc), Poultry talks, 9
VIX (265.3m-1130kc), Farm Fishes, 9
VIX (265.3m-1130kc), Farm Fishes, 9
VIAX (340.7m-890kc), Farm flashes, 10
VIX (340.7m-130kc), U. S. Farm talks, 10
VIX (340.7m-130kc), U. S. Farm talks, 10
VIX (340.7m-130kc), V. S. Farm tal

1:20 12:20 10:20 1

Enstern Central Mountain Pacific State Am Labes, 8:55 KWSC (394.5m-1608ch, Parm Basbes, Truesday Parm Central Mountain Pacific State Am Labes, 112 Central Mountain Pacific State Am Labes, 112 Central Research Part State Am Labes, 112 Central Research Part States, 112 Central Research Part States (112 Central Research Part Research Par

KUM (425.9m-920ke), Farm question bux, 8 KUOM (461.3m-650ke), Radio Farm school, Triday Eastern Central Mountain Paclife Wilk (265.3m-1130ke), Farm flashes, WRVA (265.3m-1130ke), Farm flashes, WRVA (265.4m-1120ke), Farm flashes, 12.20 (461.3m-120ke), Farm flashes, 12.20 (461.3m-120ke), Farm flashes, 12.20 (471.3m-120ke), 12.20 (47

WIP Philadelphia, Pa. (508.2m-586kc) 7 p. m. recital; 10, weekly movie; 11:30, orchestra, weekly movie; 11:30, orchestra.
 WJAX Jacksonvilla, Fla. (340.7m.880kc) 8 p. m. dinner music; 9, recital; 10, dauce music.
 WJR-WCX Detroit, Mich. (440.9m.680kc) 7 p. m. orchestra; 8, WJZ; 9, Manuel Girls; 9:30, orchestra; 10, Red Apple Club.

tra; 10, Red Apple Club.
WJZ New York, N. Y. (454.2m-580kc) 7 p. m. dog talk; 7:15, orchestra; 7:30, Cook's travelog; 8, Stromberg, Carlson hour, WBZ, KDKA, KYW, WBAL; 19, attiss; 11, slumber music. WLW Cincinnati, Ohio (428.3m-700kc) 7:30 p. m. orchestra; 9, Formica concert: 11, done music.

WMAK Buffalo, N. Y. (545.1m-550kc) 6:15 p. m. dinner music; 8:30, Ibeater program; 10, program; dinner music; 8:30, theater program; 10, program, 12, organ, 12, organ, 12, organ, 12, organ, 13, o organ; 3:13; conserved; (c. 688.5m-560kc) 6 p. m. N. Minne, organisation, D. C. (688.5m-560kc) 6 p. m. N. B. C.; 7, orchestra; 3:11:30, N. D. C. WSAI Cinclimati, Ohio (361.2m-380kc) 7 p. m. children's hour; 7:30, talk; 9:11:30, WEAF; 11:30, orchestra dren's hour; 7:30, talk; 9:11:30, WEAF; 11:30, or-chestra.
WSEA Norfolk, Va. (283m-1140kc) 6:45 p. m. dinner cuncert: 8. musicale: 10 dance music

WSUN- St. Petersburg, Fla. (516.9m-580kc) 8:32 Jg. m. program; 10, dance orchestra, WTAG Worester, Mass. (616.3m-580kc) 7:30 p. m. studio program, WTAG Lowerster, Mass. (616.3m-580kc) 6 p. m. State MTAG Lowerster, China (1998.9m-750kc) 6 p. m. State Lowerster, China (1998.9m-750kc) 6 p. m. State Lowerster, China (1998.9m-750kc) 7:30 p. m. music: 9. concert; 9:30, studio programs; 10:30, orchestra. WWJ Defroit, Mich. (352.7m-850kc) 6 p. m. dinner Success & WEAF 9, WEAF 19, WEAF 9, WEAF 19, WEAF 19,

KFAB Lincoln, Neb. (319m-940kr) 6:30 p. m. Good Will program; 7:30, U. of Neb.; 8, orchestra; 9, Jr. Chamber of Commerce. Will program? 7:30. U. or Neb: 3, orthestra; 9, Jr. Kumiber of Cummerce Man-Tolkich on, program, NOIL Council Blufts, Ia, (319m-490kc) 7 p. m. program; 9, family reminm; 11. Ambassadors; 11:30, organ; 12, Pow-Wow, KPKC Houston, Tex. (293.9m-1020kc) 7:30 p. m. dince music; 8:30, studio program, S. St. Audus, Mo. (485.1m-550kc) 7-9 p. m. mu-KSD 5t. Louis, Mo. (348.1m-550ke) 7-9 p. m. musicale.

KWEAPE Sprimer Nollona Park, Ark, (384.4mreal 8 p. m. program.

KYOO Tulsa, Okla, (348.6m-850ke) 6 p. m. dance
music; 7. WEAPE 9, concert.

KYW Chrisago, III. (258-3750ke) 6:323-7 p. m. dinner
program: 7. WIZ. 9-10:55. musicale.

WBAF Fort Worth, Tex. (492-37m-600ke) 6 p. m. orWBBM Chicago, III. (388-4m-770ke) 7-10 p. m. program: 10, dance period.

WBCN Chicago, III. (258.5m-1040ke) 7 p. m. popular

WBCN Chicago, III. (258.5m-1040ke) 8 n. m. popular

JEONGY W. Citt. III. (448-6m-570ke) 8 n. m. p. popular WCBD Zion City, Ill. (344.6m-570kc) B m. m. chorus, wCBD Zion City, Ill. (344.6m-570kc) B m. m. chorus, celestial bells. WCCO Mineapolis-St, Paul, Minn. (405.2m-740kc) 7 p. m. musicale; S. W.E.A.F.; 9-20, musical program, WCFL Chicago, Ill. (445.6m-650kc) 6 p. m. Jabor hour; WCFL Chicago, Ill. (445.6m-1200kc) 19 p. m. Footwarmers. WOTHERS, WARRAN City, Mo. (370.2m-810kc) 7:30; WEAF S, program; 11:48-1, Nighthawk strolle. WDOD, Chaltanooga, Tenn. (243.8m-1230kc) 7-10 WEBH Chieso, III. (385.6m-820kc) 7-8 p; m, orlchestra, artists; 9-11, Uptown theater stage prechestria, artists; 9-11. Uptown theater stage pre-View of the property of the property of the property of the WEAN College of the College of the property of the WEAN College of the College of the property of the WEAN Chinage of the College of the property of the WEAN Chinage of the College of the Property of the WEAN Chinage of the College of the College of the WEAN Chinage of the College of the College of the College Sam no Henry; 10:20, music hox; 10:40, Salernos, WHAS Louisville, Ky. (222-4m-980c), 7:30 u.m. music: 8-9-30, WEAF. MIGO Chicago, Ill. (388-4m-770kc) 10-1 a, m, popularity MIBO Chicago, Ill. (388-4m-770

| WJBT Chicago, III. (333-4m-770kc) 10-1 a, m, popular programs. | II. (365-6m-820kc) 6-7 p, m, dimer will programs. | II. (365-6m-820kc) 6-7 p, m, dimer will programs. | II. (365-6m-820kc) 6-7 p, m, dimer will programs. | II. (346-6m-870kc) 7 p, m, dimer consumer. | III. (346-6m-870kc) 7 p, m, dimer consumer. | III. (346-6m-870kc) 7 p, m, dimer will be consumer. | III. (346-6m-870kc) 6 p, m, dimer will be consumer. | III. (346-6m-870kc) 6 p, m, dimer will be consumer. | III. (346-6m-870kc) 6 p, m, dimer will be consumer. | III. (346-6m-870kc) 6 p, m, dimer will be consumer. | III. (346-6m-870kc) 6 p, m, will be consumer. | III. (346-6m-870kc) 6 p, m, will be consumer. | III. (346-6m-870kc) 6 p, m, will be consumer. | III. (346-6m-870kc) 6 p, m, will be consumer. | III. (346-6m-870kc) 6 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will be consumer. | III. (346-6m-870kc) 1 p, m, will b WOC Davenport, Ia. (374.8m-800kc) 8 p. m. WEAF; WOC Davenport, In. (374.8m-800kc) 8 p. m. WEAY; WOK Classon, III, (232m-1190kc) 11-12:30 s. m. popular program; 6:50, Randall's Krout Pontenella orchesperan; WSB Atlanta, Ca. (475, 8m-200kc) 6:30, m. orchesperan; WSB Atlanta, Ca. (475, 8m-1200kc) 5:7 p. m. Hugh Suc Chicago, III. (232-4m-1200kc) 7 p. m. WEAF; 9:10, Randall's Concert Special Sp

wythin Milwankee, Wis. (293.9m-102006) 722 min. program.

Mountain Standard Time Stations

Koh Denver Colo. (325.9m-2006) 7.30 g. m. farm in the control of the control of

KFRC San Francksc, Calif. (484.3m-6008c) 0.30 p. m. dimer consecret: 8, music club; 9, studio program: KFWB Hollywood, Calif. (361.2m-830kc) 4:45-12 midnight, program: Wash, (236.2m-830kc) 4:45-12 midnight, program: Wash, (236.2m-830kc) p. m. proc. (36.2m-830kc) p. m. proc. (36.2m-830kc) p. m. proc. (36.2m-830kc) 4:45-12 midning consecret; 8:8-30, Cathedral Echnes; 9-40, National Broadcasting company; 10, N. J. C. M. C. (481.3m-6108c) 8:30 p. 30-40, National Broadcasting Companional program; 9, National Broadcasting Companional Programs; 9, National Broadcasting Programs; 9, National Broadcasting Companional Programs; 9, National Broadcasting Companional Programs; 9, National Broadcasting Programs; 9, Nation

Tuesday, silent night for: CFCA, KFH, KLX, WAIU; WLIT, WOS, WSMB.

WEDNESDAY, JANUARY 4 Headliners

| Eastern | Central | Mountain | Pacific | Sci | p.m. Hambourg trio, "Market Seminer Cementary program," Hambourg trio, "May Legal Revolution of the Market Revolution of the M 9 8 7 6 WCFL (491,5m-610ke) Robert Hawkes, impersona-

Columbia chain.

(20 million (128 million) (

Eastern Central Mountain Pacific 1310kc), WCAO (243.8m-1230kc), Columbia Phonograph hour, Pionograph hour.
10:15
9:15
KOA (32.5 m-920kc) Mrs. Harris, Detry, soprans,
KOA (32.5 m-920kc) Mrs. Harris, Detry, soprans,
KUI (40.5 m-600kc) Nick Harris, Detry, Soprans,
WJR-WCX (440.9 m-690kc) Charlotte Meyers and
Mary Tudor. WJRS Personality Girls,
16:46
Key Company Company Company Company
Key Company Company Company
Key Company Company
Key Company Company
Key enfertainer. WLS (344,6m-870kc) Blackhawks-Canadiaus Hockey game. 11:05 9:05 8:05 W1AM (280.2m-1070kc) Organ Recital, J. Gordon Baldwin. Baldwin. 11:30 9:30 8:30 WSM (336.9m-890kc) Bob S(ark's Tennesseans orglestra. orchestra.

1 a.m.
12 11 10

KFI (468.5m-640kc) Half Hour of modern music,
Winified Hooke, concert planist.

### Regular Wednesday Features

Eastern Time Stations
CFCA Toronto, Can. (356.5m-840kc) 7 p. m. orchesKDEA 850.6metern, (316.5m-850kc) 7:30 p. m. program: 8, WJZ. 9, WJZ.
WALU Columbus, O. (252.5m-1050kc) 8:30 p. m. prowaran; 9, Columbus, Chain.
waran; 9, Columbus, Chain. WBAL Baltmore, Fu. (2003).

10. dance music,

WBZ Springfield, Mass. (333.1m-900kc) 6:30 p. m.
ensemble: 8, WJZ; 8:39, WJZ; 9, WJZ; 10, artists; WEZ Swringfield, Mass. (333,1m-900kc) 6-30 p. m. ensemble: 8. W12 8-30,0 W12 9, W12 10. artists; 10-35, orchestra. W. 24, s. 20, w12 9, w12 10. artists; 10-35, orchestra. W. 24, s. 20, w12 9, w12 10. artists; 10-35, orchestra. W. 24, s. 20, w12 10. artists; 10-35, orchestra. W. 24, s. 20, w12 10. artists; 10-35, orchestra. W. 24, s. 20, w12 10. artists; 10-36, w12

WFLA Clearwater, Fla. (\$16.9m-\$50kc) 8:30 p. nt. open husse; 10, dannee program, control of the program of the ressons; 5. orcnessta; 9, Wehr; 11:05-12 mid., WCY Schenectedy, N. Y. (379.5m-790kc) 3:30, WCAF; 9:30, coffee hour; 10, studio program. WHN New York, N. Y. (394.5m-760kc) 6:30 p. m. orchestra; 11:30, Silver Silpuper orchestra; 12 Friewilty club, 0, (585.3m-1130kc) 6 p. m. sercnad-WHK Cleveland 10:15, orchestra, 9. dance orchestra; 10, musicale; 11:30, orchestra; 9, dance orchestra; 10, musicale; 11:30, orchestra; orchestra; y, dance orcnestra; us, musicare; k. 1.00. morchestra; WJZ, New York, N. Y. (454,2m.660kc) 8 n. m. Champion Sparkers, KDRA, KYW, WLW, WJR, 8:20. Sylvania Foresters, WBZ, KDRA, KYW; 9, to be announced; 10:10. to be announced; 10:30. orchestra. WLW Cincinnati, Ohio (425,3m-700kc) 7:30 p. m. farm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 8, WZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, wZAF; 10:01, organ; 11, arm radio councit talk; 9, arm radio councit talk; 9, arm rad orchestra.

WMAK Buffalo, N. Y. (545.1m-550kc) 6:15 p. m.
dinner music; 8, band; 9, Columbia chain; 11:05, WMAK Buttalo, N. Y. (845.im-800kc) 6:13 p. m. dimorr music; 8, band; 9, Columbia chain; 11:05. WK Columbia chain; 11:05. WK Columbia chain; 12:30. frolic club. WNAC Boston, Mass. (461.3m-650kc) 7:30 p. m. orchestra; 10, musicale; 12:30, frolic club. WNAC Boston, Mass. (461.3m-650kc) 7:30 p. m. program; 9, Columbia chain; 11:05, dance music. WOR Newark, N. J. (422.3m-710kc) 6:15 p. m. program; 9, Columbia chain; 11, orchestra cutsic. WFG Allantic City, N. J. (272.6m-1100kc) 7:05 p. m. music. 9:30, teathure; 10, band; 11:15, dance music. WPG Atlantic City, N. J. (272.bm.-1100kc) 7:3b p. m. strong and the control of th

grum.

WWJ Detroit, Mich. (352.7m-850kc) 6 p. m. dinner concert; 8-10:30, WEAF; 10:30, organ.

WWNC Asheville, N. C. (296.9m-1010kc) 7 p. m. din-

Central Standard Time Stations

KFAB Lincoln, Neb. (319m-940kc) 5:30-6:30 p. m. dinner concert; 8:30-8:15, orchaptra.

KFAB Lincoln, Neb. (319m-940kc) 5:30-6:30 p. m. dinner concert; 8:30-8:15, orchaptra.

KOIL Council Bluffs, 1a. (329m-940kc) 7 p. m. poor gram.

KOIL Council Bluffs, 1a. (329m-940kc) 7 p. m. poor gram.

KPRC Houston, Tex. (239,9m-91020kc) 7 p. m. poor gram.

KSD St. Louis, Mo. (345,1m-550kc) 7 p. m. WEAF.

KTHS Hot Springs, Ark. (344,4m-760kc) 8 p. m. concert; 3:30 p. m., chamber rutsic; 0, trolic.

KTHS Hot Springs, Ark. (344,4m-760kc) 8 p. m. program.

KYW Chicago, Ill. (328m-570kc) 7-9 p. m. WIZ: 9, miscialc; 10:33, Secundors.

WEAF Fort Worth, Tex. (498-7m-800kc) 8 p. m. WKAF

WEAF Fort Worth, Tex. (498-7m-800kc) 8 p. m. will state the substitution of the WCOA Pensacola, Fla. (249.9m-1200kc) 8 p. m. progran.

WDAF Kansas City, Mo. (370,2m-810kc) 7:30-9:30
p. m. WEAF 9:30, Cavaliers; 11:45-1 a. m., Night-bawk frolic.

WDOD Chattanooga, Tenu. (243.8m-1230kc) 7-10 p. m. music.
WERH Chlease, III. (385.6m-820kc) 7 p. m. orchestra; 9-11, program; 12, revue, 9-30 p. m. WEAF; 9-19, program; 12, revue, 9-30 p. m. WEAF; 9-30, musicale; 10:10, "Sym ir Henry; 10:20, Music Box; 10:40, melody time, WHAS Louisellie, Ky, (224,4m-830kc) 7:30 p. m., WHAS Louisellie, Ky, (224,4m-830kc) 7:30 p. m., string trio; 10:20, 340.7m-880kc) 7-8 p. m. string trio; String trio.
WHO Des Moines, Ia. (535.4m-560kc) 7-11:30 p. m. WHAT Chicago, III. (395-5m-990kc) 3:30 p. m. musicalk, WIBO Chicago, III. (395-5m-990kc) 3:30 p. m. musicalk, WIBO Chicago, III. (395-5m-990kc) 7:10 p. m. program; 10, musicalk, WIBAC Chicago, III. (285m-1140kc) 7 p. m. program; 3, studio coutert.
WJJD Chicago, III. (385-6m-820kc) 3-9 p. m. children's musical bour; 11:12, Victorians, WLAC Nashville, Tenn. (226m-1330kc) 7 p. m. class-WLAC Nashville, Tenn. (226m-1330kc) 7 p. m. class-WLAC Nashville, Tenn. (226m-1330kc) 7 p. m. class-WLAE (16-12kc) MCAF; 11-12. Huodhuns; 12. dance nusic,

Carter Radio Co.

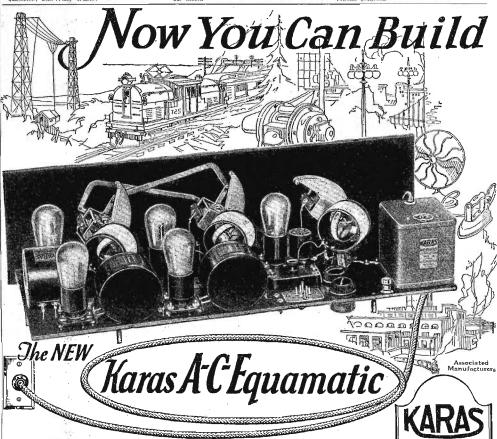
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of them all!

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circuit through the Karas A-C-Former Filament Supply.

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WAAQ Chicago, III. (447.5m-670kc) 7 n. m. North-bersytte university; 8, Columbia chain; 10, Stevens wester orderses, 11, (222m-1190kc) 6 p. m. dinner mu-sic; 7-10.30, program, WABI Chicago, III. (225m-1190kc) 8 p. m. orchestra, WABI Chicago, 11, (235m-1490kc) 8 p. m. w12; WABI San Antonio, Tex. (499.7m-600kc) 9-10 p. m. UCAL San Antonio, Tex. (499.7m-600kc) 9-10 p. m. UCAL San Antonio, Tex. (499.7m-600kc) 9-10 p. m. WOAL Sax Antonio, Tex. (499.7m-600kc) 9-10 p. m. Urah imagrani. WO Davemport, In. (374.8m-800kc) 7:30 p. m. WEAF; 8:30, WEAF; 9:30, tralks. WOS Lefterson City, Mo. (422.3m-710kc) 7 p. m. Farm school; 8, program. WOW Omaha, Neb. (508.2m-590kc) 7 p. m. WEAF; 8 WSB Atlanta, Ca. (475.9m-630kc) 8-10. WEAF; 10:45, concert.

B. m., WEAF, W. S. M. S. WEAF; 10:45, WSB Atlant, Ga. (475.5m-630kc) 8-10, WEAF; 10:45, WSB Atlant, Ga. (475.5m-630kc) 8-10, WEAF; 10:45, WSB Atlant, Ga. (265.5m-630kc) 7:15, p. m. dinner consecrit; 8. WEAF; 18:30, WEAF; 9:30, mm-sker; 10:30, organia.

M. S. Weaf, M. Weaf, M. S. We

Wodnesday, silent night for: CKCL, WCBD, WFAA, WFI, WCBF, WCBS, WIP, WJAX.

### THURSDAY, JANUARY 5 Headliners

Eastern Central Mountain Pacific 7:15 p.m. 6:15 S:15 4:15 WKAR (777.6m-1089bc) "Makets of Agricultural History." History."
7:30 6:30 5:30 4:30
WGY (379.5m-790kg) "The Lives of Some Common Animals," Part 111—Mammals, Prof. Robt.

\( \text{WGY} \) (29-25m-3) (27-1 (11-Mammons, e.c., \) \( \text{K} \) Enders, \( \text{F} \) (25m-4) 

Pierre orchestra, 10 9 8 7 WTIC (535.4m-560kc) Clum Worthy Hills orchestra. KVOO (348.6m-860ke) Marie M. Hine, organist. 11 0 9 8 CFCA (357m-840ke) London Versatile Canadians. KFI (468.8m-640ke) Drana program, direction of

Act of the property of the pro

### Regular Thursday Features Eastern Time Stations

Lastern 1 ime 5 tations

CFCA Toronto (358,9m-840ke) 11 p. m. Canadians.

KDKA PHIsborgh, Pa. (315,6m-890kc) 7 p. m. sheich;

WBAL Ballinore, Md. (385,5m-1900kc) 6:30 p. m. dinner urchestra; 7:30, musicale; 8:30, WJZ; 9, WJZ; 10, cascamble.

WBLS Springfeld, Msc. (333,1m-990kc) 8, WJZ; 9, WBLS; 10, WBLS; 11, WBLS;

WCAE Pittsburch, Pa. (681,3m-850kc) 7 p. m. dinner WCSH Portland, Ma. (385,5m-200c) 1.30 h. m. WCSH Portland, Ma. (385,5m-200c) 1.30 h. m. WCSH Portland, Ma. (385,5m-200c) 1.30 h. m. WCAF Now Continue to the William Willia

hall com.

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hall com.

Mass. (461.3m-850kc) 6:30 m. m. dir.

MA contert; 9.13. Martopolitan theater; 10:15. danca
missi; 11:05, ortesara.

WOR Newart, N. J. (422.3m-710kc) 6:15 p. m. en.

WOR Newart, N. J. (422.3m-710kc) 6:15 p. m. en.

WOR Distriction of the content of the conten

Central Standard Time Stations
KMA Shenandosh, Ia. (394.5m-760kc) 7-8:30 p. m.
Mandolin Musicians.
KOIL Council Bluffs, Ia. (319m-940kc) 9 p. m. revue;
II. ambassadors; 12. Pow-Wow.
KPRC Houston, Tex. (293.9m-1020kc) 7:30-9:30 p. m.
studio concert. studio concert.

KTHS Hot Springs National Park, Ark. (384.4m-780kc) 8 n. m. solo program; 9, dance frolic, VOO Tulsa, Odta, (386.6m-860kc) 6 p. m. instru-KYW Chicago, Ill. (526m-570kc) 7-8 p. m. program; 8, 10, WJZ; 10, program; 11:32, Congress carnival: WBAF Fort Worth, Tex. (499.7m-600kc) 6 p. m. ur-distribution of the control of t chestra; 6, where to initial the initial that it is a superior in the initial that it is a superior in the initial that it is a superior in the initial that is a superior in th WCBD Zino, III. (344.6m-870kc) 8 p. m. Cornet quartet, vocal solos, trio. Winn. (495.cm-740kc) VCCO Minoseapolis-St. Faul. Minn. (495.cm-740kc) WCFL Chicago. III. (483.6m-820kc) 8-12 p. m. popular hour WDAF Kansas City. Ma. (370.2m-810kc) 6 p. n. School of the Air; Z. WEAF: 11:45-1. Nighihaws frolic, WEBH Chicago, Ill. (365.6m-820kc) 7-10 p. m. N.B.C.:

WENR Chicago, Ill. (288,3m-1040kc) 8, orchestra, artists; 9:30, popular program. WFAA Dallas, Tex. (645,1m-50lkc) 7 p. m. musical units; 7:30, WEAF; 9, mogram. WCN Chicago, Ill. (415-4m-720kc) 6:10 p. m. Punch and Judy; 6:35, ensemble; 8, WEAF; 10:10, Sau 'n Henry; 10:20, Music Box; 10:40, Correll and Goc-WHAS Louisville, Ky. (322.4m-930kc) 7:30 p. in. WEAF; 9, studio concert.
WHB Kansas City, Mo. (336.9m-880kc) 7 p. in. diner hour organ; 8, evening concert; 9:30, dance WJAZ Chicago, Ili. (263m-1140ko) 9:30 p. m. studiu WJBZ Chicago, Ili. (265m-120ko) 8-9 p. m. chil-dren's huur; 11-12, Victorians. WLAC Nashville, Tenn. (265m-1330kc) 9 p. m. pro-will ili Chicago, Ili. (245m-1300kc) 7 p. m. ensemble: Ili-1 a. m. organ. (344-6m-870kc) 7:30 p. m. Super-WLAC Nashville, Chicago, Ili. (344-6m-870kc) 7:30 p. m. Super-WAAC Chicago, Ili. (347-5m-870kc) 7: p. m. U. of Chicago lecture: 8. orchestra; 9. WMAQ players; 10, Chicago bleaster.

WMBB Chicago, III. (252m-1190ke) 6 p. m. dinner concert; 7. Trianon ensemble; 8:30. Trianon orches-WMBI Chleago, III. (263m-1140kc) 7 p. m. sacred musicale. WMC Memphis, Tenn. (516.3m-580kc) 7:36 p. m. WEAF: 8, WJZ; 9, music. WOAI San Antonio, Tex. (499.7m-500kc) 9 p. m. Kelvilnatur flour. WOC Davenport, Ia. (374.8m-800kc) 7:30 p. m. WOC Davenport, Ia. (374.8m-800kc) 7:30 p. m. WOW Omaha, Neb. (508.2m-590kc) 6 p. m. organ; 7. WEAF; 7.30, WEAF; 9.30, WJZ. WQJ Chicago, Ill. (447.5m-670kc) 11:30 p. m. orchestra. WSB Atlanta, Ga, (475.9m-630kc) 8 p. m. WJZ; 10:45, WSB Atlants, Ga. (475.9n-ts0kc) 8 p. m. WJ c; 10:45.

WSB Atlants, Ga. (475.9n-ts0kc) 8 p. m. WJ c; 10:45.

WSB New Orleags, La. (286.9n-10)06 c 330-000 p. m. program.

WSB New Orleags, La. (286.9n-10)06 c 330-00:30 p. m. program.

WTM Milwatkee, Wis, (293.9n-1020kc) 8, WJ Z; 9, old favorites; 10, dance orchestra.

Mountain Standard. Time Stations

CRNA Calgary, Can. (434.8in-890kc) 9 p. m. CNR

program.

Pacific Standard Time Stations KFI Los Angeles, Calif. (468.5m-640kc) 7 p. m. University of S. C.; 8, drama hour; 9, orange network

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KFRC San Francisco, Calif. (454m-660kc) 6:20 p. m. beauty talk; 7, musicale; 9, studio program; 10, beauty talk; 7, intercence, 2, dance orchestra, dance orchestra, KFWB Hollywood, Calif. (361.2m-830kc) 6-7 p. m. dinner concert; 7:50, news; 8-9, features; 9-10, pro-pany:

KHJ Los Angeles, Callf. (416.4m-720kr) 6:30-7:30
n. m. children's hour; 8-10, string quartet.

KPO San Francicco, Callf. (422.3m-710kc) 6:30-7 p. m.

organ; 8-9, program; 9 N. H. C.; 10, quartet. Thursday, silent night for: KFAB, KLX, KOA, WAIU, WDOD, WEAO, WEMC, WLIT, WOO, WOS.

FRIDAY, JANUARY 6

Headliners Central Mounts Austin Organ Recital-Eschier A. Nelson.

Rkl.D (461-3m-650ke) Ruth Muse, Buster Dees, Rkl.D (3m-650ke) Ruth Muse, Buster Dees, Rkl.D (3m-650ke) The Pagcant-Asst. Prof. Will (379,5m-750ke) Fro-Joy Hour. Will (379,5m-750ke) Fro-Joy Hour. Will (379,5m-750ke) Recent Research in England and its Significance, lecture by Prof. Ernest Lind and its Significance, lecture by Prof. Ernest T. Kubl.

Columbia chain. 8:30 7:30 6:30
KF1 (468.5m-640kc) Clarice Russell, blues singer. W(Y) (379.5m-790kc) One-Act Play, WGY Players. KF1 (468.5m-640kc) Actist Students Club. KOA (325.9m-920kc) Selections by Denver com-

KPI (468.5m-460ke) Artist Students Club, Marchae 220, pp.1-25ke) solicetions by Dauver commons 220, pp.1-25ke) solicetions by Dauver commons 220, pp.1-25ke) with Gladys Sauderson and Ivab High (28. M. 275, hm-100ke). WOR (42.2 m-100ke). WKR (12.5 m-100ke). WAR (42.5 m-100ke). WAR (43.5 m-100ke). WAR (44.5 m-100ke).

| Eastern Central Mountain Pacific | 12 mid. | 11 mid. | 12 mid. | 13 mid. | 14 mid. | 15 mid. |

WBZ Springfield, Mass. (333.1m.2008c) 0:12 p. m. ordestra; 3:20, WLZ II, ordestra: UII.15, ordestra: Content S. WCAE Pittsburgh, Pa. (461.2m.650kc) 6 p. m. dinner content; 8. WEAP; 11, urchestra: Urchestra: WEAP; 10, urchestra: Urchestra: WEAP; 10, urchestra: Urch Cremins, 1987 (202.8m-990kc) 6:30-7:30 p. m. dance orchestra; 3-11;30, WEAF-30kc) 7:30 p. m. dance orchestra; 3-11;30, WEAF-30kc) 7:50 p. m. dance music; 9, WEAF; 9:30, players; 10, WEAF, 19:30, playe will Philadelphia, Pa. (148.6m-60ike) 7 p. m. Serims story, WJAX Jacksonville, Flag (340.7m-80kc) 8 p. m. popular more property of the propert musicale: WEAF, 9:30, musicale: 10, WEAF, 10:30, new 10

Central Time Stations KFAB Lincoln, Nebr. (319m-940kc) 5:30-6:30 p. m. Hotel Lincoln orchestra; 8-10:30, program; 11-1, Kole Liminori Urvenstar, 1998, pp. 1 780kc) 8 p. m. specialites; 8:30, junior Loons, //
proftestra. Olin. (348.080kc) 6 p. m. concert;
KYOO, TAP; 8, musicale.
KYW Chicago, III. (526m-870kc) 7-9 p. m. WJZ; 910:30, carrival; 10:30-11:55, musicale.
WBAF Fort Worth, Tex. (489.7m-800kc) 6 p. m. ororchestra; 5, WEAF; 10, program: 11, popular music.
WEAF, WEAF, 10, program: 11, popular music.
Concept 12, organi. (888.4m-770kc) 7-11, m. music.
WBCN Chicago, III. (288.3m-1040kc) 7 p. m. popular
program. program.

WCCO Minneapoits-St. Paul. Minn. (405.2m-740kc)
7 p. m. WEAF; 9, musicale: 10:05, dance orchestra,
WCFL Chicago, Ill. (483.6m-620kc) 10-12, mid. pro-WCOA Pensacola, Fla. (249.9m-1200kc) 8 p. m. pro-WCOA Pensacola, Fla. (249.9m-1200kc) 8 p. m. program, WDAF Kansas City, Mo. (370.2m-810kc) 7 p. m. WEAF; 8, program; 8:30, WEAF; 9, mssicale; 9:30, donce hour; 11:45:1 a. m. Nighthawk Irolic, McGardine McGardine, McGardi WFAA, Dallas, Tex. (545.1m-5900c) 7 p. m. mess-s, 9, program.
WGN Chicago, III. (418.4m-720kc) 8 p. m. WEAF; 8:30, Paul Ash: 9, Arabian Nights: 10:10, Sam in 8:30, Paul Ash: 9, Arabian Nights: 10:10, Sam in Studio concerts. 8, 9, (222.4m-390ks) 7:30 p. m. studio concerts. 8, 9, (222.4m-390ks) 7:30 p. m. WHB Kansas City, Mo. (340.7m-880kc) 7-8 p. m. failk. WHB Kansas City, Mo. (340.7m-880kc) 7-8 p. m. talk.
WHO Urts; 8:30 s. M.; (335.4m-580kc) 6:30 p. m. orWHO Urts; 8:30 s. M.; (335.4m-580kc) 8:30-10 p. m. orWHT Chicago, III. (305.5m-580kc) 7:10 p. m. orwell program.
WJAZ Chicago, III. (305.5m-580kc) 7:10 p. m. musicale Chicago, III. (365.5m-580kc) 7:0 p. m. dinner
concert; 9. studio program. 200kc) 8-8:30 p. m. musical (bour; 1:1-1 a. m., Victorians,
WLIS Chicago, III. (446.6m-780kc) 7:20 p. m. WEAF,
WLS Chicago, III. (446.6m-780kc) 7:20 p. m. Duo;
WMAQ Chicago, III. (457.6m-670kc) 6 p. m. chimes;
s. Culumbia chain.
WMAQ Chicago, III. (45.5m-150kc) 6 p. m. chimes;
s. Culumbia chain.
WMAC Chicago, III. (45.5m-150kc) 6 p. m. chimes;
s. Culumbia chain.
WMC Memphia, Tenn. (516.5m-580kc) 8:30 p. m. program, WQJ Chicago, Hl. (447.5m-670kc) 10 p. m. orchestra, WOAl San Antonio, Tex. (499.7m-600kc) 9 p. m. pro-WOAL San Antonio, Tex. (499.7m.4609kc) 9 p. m. program.
W. S.D. Development, Is. (374.8m.800kc) 7 p. m. WZAF;
W. S.D. WEAF,
W. S.D. WEAF,
W. S. W. S

hestra.

Pacific Standard Time Stations
Los Angeles, Callf. (468.5m-840kc) 7 p. m.
san; 8, program; 9, orange network; 10, mu-KFI

KFOA Seattle, Wash, (447.5m-670kc) 9-10, chain program: 10:30-12, KGW, KFOA Seattle, Seat Value Sea

Friday silent night for: CFCA, CKCL, KPRC, KPSN, WCBD, WFI, WIP, WLAC, WLIT, WPG.

### SATURDAY, JANUARY 7

Headliners
Eastern Contral Mountsin Pacific
R8.00 p. m. 7
RRLD (461.3m-650) Buster Dess, Margaret Sanford—Feature.
8.15 KRLD (461.3m-650) Buster Dess, Margaret San-ford-Peature, 7:18 6:15 5:15 White Conditions of the Condition CYCLE, CARROLL (1440.9m G80kc). Charlotte Meyers and Mary Tudor, the "WJR's Personality Girls," WSM (336.9m-850ls); 10:30 Bran Dance program, 10:30 Ftf (468.5m-640kc). Felipe Delgado, Spanish bariana tone.

11 (12.5 m. 200c) Chief Gonzales ma his
KOA (12.5 m. 200c) Chief Gonzales ma his
KOA (12.5 m. 200c) Chief Gonzales ma his
KOA (12.5 m. 200c) Chief Gonzales ma his
HAM (280.2 m. 1070kc) Hughie Barrett's Sagamore hotel orchestra.

10:10 Barrett's Sagamore Med Gonzales Mill. (12.5 m. 2010)
KÖll. (12.5 m. 2010) Red Heads,

2 (468,5 m. 640.5 KFf Midnite Froic, Los
Angeles Fire Bept, orchestra.

Regular Saturday Features

K! K(

Eastern Time Stations
Toronto, Can. (357m-840kc) 8 p. m. talk; 9 CFCA 1 of ortho, Can. (357m-390kc) 8 p. m. (101; y Chembrish and Canal WBZ Springfield, Mass. (3331m-390kc) 7:30 p. n. musicale; 8:10 p. pogram; 10-20, Hotel Statler of musicale; 8:10, program; 10:20, flotel Stater ov-chestra.

WEAF New York, N. Y. (491.5m.-610kc) 6:12 mid.

High-linkers; Old Gold on Broadway; orchestra.

WEEL Boston, Mass. (308.2m-590kc) 7:20 p. m. or-chestra: 8. WEAF: 10, crusing the air: 10:05, aews.

WFI Philadolphia, Fa. (405.2m-740kc) 8 p. m. pro-gram; 10, orchestra.



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i	Town, State	ĺ

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WSAI Clae-lumat, Ohio (361\_Zm-830kc) 7:30 p. m. program; 10, WEAR;
WSEA Northel, Va. (363m-1140kc) 6:45 p. m. dinner
concert; 8, recital; 11, dance or-cleatra.
WTAC Worrester, Mass, (516\_3m-850kc) 8 p. m.
WTAM Cleveland, Ohio (399\_8m-750kc) 6 p. m. orcleatra; 7, studio concert; 8, Indians; 10, minstrel; 11, dance or-cleatra,
WWJ Detroit, Mich. (352\_Tm-850kc) 8:30, WEAF;
10, program;

Central Standard Time Stations

Central Standard Time Stations
KFAB Lin-70in, Nebr. (319m-360k): 530-630 p. m.
Botel Ligotid orchestra; 8-8, orchestra; 9-40. Chamlev of Commerce programs—150ko 7 p. m. songaKOIL Council Bluffa, In. (319m-360ko 7 p. m. stringquarter); II. Amhassadors; 12, Pow-Woo,
KFRC Houston, Tex. (232-3m-1020ko 7-39 p. m.
KFIS Hot Surfags National Park, Ark. (384-4m780ko); 8 p. m. semi-classical gems; 8-30, masicale;
9-dinne context, 434-6m-stoke; 6-35 p. m. popuKVOO Tulsa, Okl. 27, council.
KVOO Tulsa, Okl. 27, council.
KVOO Tulsa, Okl. 27, council.
KVOO Tulsa, Okl. 27, council.
KVOC Tulsa, Okl. 27, council.
KVOC Council II. (250m-570ko; 6-32-7 p. m. dinner
sonect; 7-9, W/V.; 9-10-33, Congress Carnival;
III. 32-60-85, uschestra. KTW Limegov, W1/2: 9-10:32. Congress constitutions, and constitutions of the constitution of the constitut W Dear Company W Dear Company W GO Minimagonells-St. Paul, Minn. (405.2m-740kc) W GO Minimagonells-St. Paul, Minn. (405.2m-740kc) W GO Minimagonells-St. Paul, Minn. (405.2m-740kc) W GO Minimagonells-St. Paul, Minn. W CFL Chicago, III. (483.6m-620kc) 7-12 mid. enter-

WDAF Kansas City, Mo. (370.2m-810kc) 8 WIZ: 9-10. nopular program; 11:45-1 a. m., Nighthawk

WGR Buffalo, N. Y. (303m-990kc) 8 p. m. WEAF; 9:39, WEAF; 11:05, support.

WGY Schnentady, N. Y. (379.5m-790kc) 7:30 p. m. WEAF; 11, dance music, 1730 p. m. WEAF; 11, dance music, 1730 p. m. WEAF; 11, dance music, 1730 p. m. pro-WHK Cleveland, Ohio (285.3m-1130kc) 8 p. m. pro-WHK Cleveland, Ohio (285.3m-1130kc) 8 p. m. pro-WHK Cleveland, Ohio (285.3m-1130kc) 8 p. m. pro-WHK Cleveland, Ohio (285.3m-1130kc) 7 p. m. bedtime National Computer 10 acceptable of the property of th WHO Des moines, A. N. B. C. N. B. C. WHT Chicago, Ill. (305.9m-980kc) 8:30-10 p. nt. pro-WHO Chicago, III, (305.5m-200ke) 53:30-10 p. m. musi-cale; 10, popular prugram, WJAZ Chicago, III, (235.m-140ke) 7 p. m. dinner concert; 9, studio, WJJD Chicago, III, (385.6m-820ke) 6 p. m. symphony; 8-11, Palmer House program, WLAC Nashville, Tenn. (225m-130ke) 7 p. m. chil-WLAC Nashville, Tenn. (225m-130ke) 7 p. m. chil-WLAC Chicago, III. (344.6m-870ke) 7:30-1 a. m. barn dance. dauce.

WMAO Chicago, Ill. (447.5m-670kc) 8, photologue;
9 Direago, theater revue.

WMBB Chicago, Ill. (222m-1190kc) 6 p. m. dinner concert; 7-8:30, Triauon ensemble; 8:30-10, popular concert.
WMC Memphis, Tenn. (516.9ai-580kc) 8 p. m. WJZ; 9. overhestra.

WCC Davenport, Ia. (374.8m-800kc) 7-8 p. m. musicelle: 3. W1Z.

WOW Omatha, Neb. (308.2m-590kc) 6 p. m. program:

WCC W1Z. 9. program.

WCC W12. 9. program.

WCC W14. 9. M. (47.5m-870kc) 9:45 p. m. popular WSB Atlanta, Ga. (475.9m-630kc) 8 p. m. WJZ; 10:45, concert.
WSM Nashville, Tenn. (335.9m-890kc) 8-9 p. m. N.
B. C. : 9-11:30, barn dance.
WSM Swew Orleans, La. (295.9m-1010kc) 8:30-10:30
WSMB New Orleans, La. (295.9m-1010kc) 8:30-10:30 p. n. Public School of the ANT PROFESSIOR. Solos. WSUN St. Petersburg. Fla. (516.9m.580kc) 7 p. nr. Flordia theater program; 10. Ed and Mama; 11. dance orchestra. WTMJ Milwaukee, Wis. (293.9m-1020kc) 8 p. m. WJZ; 9. Engles.

WTMJ Milwaukos, Wis. (293.9m-1020kc) 8 p. m. WJZ; 9, Engles,
NJZ; 9, Engles, Calif. (468.5m-640kc) 7:30 p. m. program; 8.9, orange network; 9-10, N. B. C.; 11-KFRC San Franckso, Calif. (464.3m-660kc) 6-72 p. m. Cecilians; 8-16, orthester; 10-12, dance music. KFRC San Franckso, Calif. (464.3m-660kc) 6-72 p. m. Cecilians; 8-16, orthester; 10-12, dance music. KWH Hollywood, Calif. (252m-1190kc) 6-72 p. m. Oli Company; 9-10, musicale; 10-12, dance music. KGO Oakhan, Calif. (364.4m-780kc) 8 p. m. National Broadcasting company; 9-10, sand, sand,

Saturday, silent night for: KFDM, KGA, KLX, KOB, WBAL, WCBD, WCSH, WGBF, WGHP, WICC, WJAR, WOAI, WOS, WRVA, WTIC, WWJ.

### SUNDAY, JANUARY 8

| SUNDAY, JANUARY 8 | Headliners | Headliner

Zastern (202.8m.590ke), WWGR (302.8m.590ke), WWGR (370.2m.440ke), WWF (370.2m.440ke), WWF (370.2m.450ke), WGY (375.2m.740ke), WGY (375.2m.740ke), WWGY (375.5m.710ke), WWBT (285.5m.1160ke), WWGW (508.2m.590ke), Atwavanin Martinelli, Morn WOC WWJ KYOO WCCO WSB WMC WHO 8:30 7:30 6:30 (384,4in-780kc) Mrs. George Fletcher, Suprano, 9:45 8:45 7:45 6:45 KTHS (384,4m-780kc) Edward Barry, tenor, KTHS (384.4m-780kc) Edward harry, (enor. 10 % KOH, (319m-940kc) Little symphony. KRLD 1661,3m-659kc) William Muse, tenor. When the state of the symphony of the symphony. The symphony of the symphony of the symphony. The symphony of the symphony. The symphony of the symp

**MONDAY, JANUARY 9** 

WJR-WCX (440,9m-680kc) "Along Tin Pan Alley."
11:30 10:30 9:30 8:30
1 1 1 10: 12 11 10

VSUI (475.9m-539kc) Pastime Theatre program,
Elaine Blair, organist.

### TUESDAY, JANUARY 10

Headliners

Eastern Central Mountain Pacific 4:30
WIR WCX (446.530 Me) 5:30
WIR WCX (440.530 Me) 5:30
WIR WCX (450.500 Me) The Draumers."

Amend Kyle, Soprano and Kenyon Countain Magerl Kyle, Soprano and Kenyon Countain Magerl Kyle, Soprano of Meutal Hygiene for Childbood, "Catherine Miller, WTIC (535.4m-360ke) Trinity College Dialogue, WIIAM (250.2m-1070ke) "Minding Your Mind," Prof. William Rerry.

WIIAM (252.4m-300kc) Are Animals Changing? Berry, K. Nabours, State Countain Magage players, State Countain Miller, WIIAS (324.4m-300kc) Juseph J. Eisenbers, tenor, W. Carrier Miller, William Rerry, Countain Miller, William Rerry, State Magage Payers, State Miller, State Magage Payers, State Miller, William Rerry, State Miller, William Rerry, State Magage Payers, State Miller, William Rerry, William Headliners

Eastern Central Mountain 6
CKCL (356.9m-840kc) "The Gondoliers."

KCFL (491.5m-640kc) "The Gondoliers."

KCFL (491.5m-640kc) Cail Bandell and Frank Chiddis.

Trade (384.4m-780kc) Little Rock Civic concert heaturing artists of the Arbayanas School, for 9:30 7:30 Annual and Frank 9:30 7:30 6:30 Tills (384.4m-780ke) Little Rock Civic contert haluring artists of the Arkansas School for the Bland. the Blind, To the Man Solicy Family Reujon William 940kg) Family Reujon William 940kg) The Red Apple Club, 19-20 (1998) The Red Appl

WEDNESDAY, JANUARY 11 Headliners

Central Mountain garet Glass. 11:30 10:30 9:30 8:36 WSM (336.9m-890kc) Bob Stark's Tennesseans orchestra.

THURSDAY, JANUARY 12

Headliners
Eastern Central Mountain Pacific
6:30 p.m. 5:30 4:30 3:30
WCAU (260.7m-11.0ke) Cathay Tea Garden orcheatra. KVOO (348.6m-860ke) Roy Cumingham, baritone. 11 19 9 8 KNX (336.9m-890ke) Calmon Luboviski, master KNX (336.9m-890leg) Calibon Lawrence Violinias, WMAO (447.5m 670ko) Hermitonians, WMAO (447.5m 670ko) Hermitonians, H. 130 (456.5m-1016) Hermitonians, M. 130 (456.5m-1016) Hermitonians, M. 130 (456.5m-800ko) F. Arthur Henkel, organist, 12 on 11 (461.5m-650kc) All Dallas hour,



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FRIDAY, JANUARY 13 Headliners

Eastern Central Mountuin Pacific States and Central Mountuin Pacific States and Central Mountuin Pacific States and Eastern Central Mountuin Pacific States and Eastern Central States and Eastern Central States and Eastern Central Central

### SATURDAY, JANUARY 14 Headliners

| Central | Mountain | Pacific | 15.25 | Mountain | Pacific |

### SUNDAY, JANUARY 15 Headliners



Kochanski. 5:30 7:30 6:30 KTHS (534 4m-780kc) Music Lovers Hour, Arlington Hotel concert ensemble. 5 10. 8 KTHS 384 4m-780kc) Organ recital. Thomas Avey.

# MONDAY, JANUARY 16 Headliners Contral Mountain Pacific Street Mountain Pacific

| Control | Mountain | Pacific | Gent | Structure | Mountain | Pacific | Gent | Structure | Mountain | Pacific | Gent | Gent | Structure |

### TUESDAY, JANUARY 17 Headliners

| Headliners | Central Mointain | Pacific | 7:30 m.m. | 6:30 m.m.

### WEDNESDAY, JANUARY 18 Headliners

Eastern Central Mountain Pacific 6:30 p.m. 15:30 d. 13:30 d. 13:30 WTIC (535.4in-5618c) Sca Gull Dinner Group. WCAU (260.7m-1150ke) Club Madrid orchestra. Reviol (349.6m-860kc) Ilyechka club. 15:30 KVGO (348.6m-860kc) Ilyechka club. 15:30 KVGO (148.6m-860kc) Bess McLennan Hughes and artists. Reviol (148.6m-860kc) Reviol Reviol (148.6m-860kc) Reviol Reviol (148.6m-860kc) Reviol Reviol (148.6m-860kc) Reviol (148.6m-860kc) Art Brights songs. 15:30 KTIK (334.4m-780kc) Art Brights songs. 15:35 KTIK (334.4m-780kc) Art Brights songs. 15:45 KTIK (334.4m-780kc) Art Brights songs. 15:45 KTIK (334.4m-780kc) Art Brights (348.4m-780kc) Art Brights



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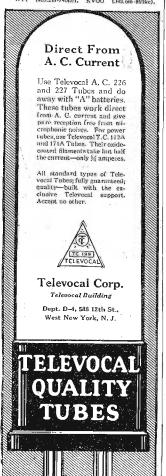
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n Central Mountain Pacific 9:45 8:45 7:45 (344.6m-870kc) Hockey game, Blackhawka WLS 0.444.6m-87040c) Hockey game, Blac Detroit, 12 mid 12 mid 15 KOD 0.22.4m-710ke) Ambassadors, KPO 0.22.4m-710ke) Abas string quartet,

### THURSDAY, JANUARY 19 Headliners

Eastern Central Mountain Pacific 7:15 P. m. 6:15 5:15 4:15 WKAR (277.6m:1080kc) "The Dardenelles Ex-pedition," 11, DeWeerd. 8 7 6 5 SAC (333.1m-960kc) Debate: The United States Should Materially Reduce Her Tariff on Im-School Control of the WTIC (533.m-560kc) Club Worthy Hills or-chestra. 8-30 S20 7-20 KUO (348.6m-860kc) Marie M. Hine, organist. WMAQ (447.5m-670kc) Hamiltonians. 11:06 10:05 WIIAM (280.2m-1070kc) Cliff Weller and bis Club orchestra.

### FRIDAY, JANUARY 20 Héadliners

| Castern | Central | Mountain | Pacific | Tp.m. | 8 WCAU (260.7m-1)50ke) | Picalifity | orchestra. | 5 KR | 1.1 (461.3m-650ke) | Ruth | Muse, | Buster | Dees, | Bill Saling. | 6 Pacific | 1 Pacific KRI, D. (461,3m-690ke) Auto anuse, beauto Bill Saline, 8
WCFL (491,5m-610ke) Haynes & Ferris, 9:30
KTIIs (284,4m-780ke) Miss Ethel Wilson, biamst. 9:48
S-438-35,4m-560ke) Pete Phillips, tenor, 7
9:48-35,4m-780ke) Pete Phillips, tenor, 7 KTIIs (384-4m-78)Mc Pete Philips, tenor, 108 (375-48) Uncle Josh, KTIIS (384-4m-78)Mc Musical comedy gens, by KTIIS orchestra-3.03 (375-30) Wilking Company of the Manager of the Manager

### SATURDAY, JANUARY 21

| Headliners | Eastern | Central | Mountain | Pacific | Fis30 n.m. | Si30 | Ai30 | Ai30 | KOIL (319m-540kc) Mrs. E. Gertrude Day. | 4:30 | WCAU (260.7m-1150kc) | Cathay tea garden. | 6:30 | WCAU (260.7m-1150kc) | Cathay tea garden. | 6:30 | WCAU (260.7m-150kc) | Turdue 10wa | Baskuttail | Ai30 | Saue.
9:30 6:30
8:30 7:30 6:30
KTHS (384.4m-780kc) Natalic Arnoux, violinist.
10 8 7
WBAL (285.5m-1050kc) Municipal Band of Balti-WJR-WCX (440.9m-680kc) Charlotte Meyers and Mary Tudor, 'WJR Personality Girls,' WSM (336.9m-690kc) Regular Barn Dance pro-



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Boston, 11:05 10:05 9:05 8:05 WHAM (280.2m-1070kc) Hughie Barrett's or-chestra,

### SUNDAY, JANUARY 22 Headliners

Eastorn Central Mountain Pacific
7 n.n.,
9 (MR-WCX (440,9m-680kc) Dinner Music by Jean
Goldkettle's Venetian Ensemble,
7:30 (5:30 drag)
KVOO (348.6m-860kc) Dorothy Heywood Reedy,
pianist. 7:45 6:45 5:45 4:45 KRI-D (461.3m-650ke) Dallas Athletic Club or-chestra. WCAU (260.7m-1150kc) Edward Nimble-Thimble | WLAD (4296-78-14398C) E-00-810 All Miller Parker Fitch | WhAD (4475-m-670ke) Chicago Sunday Evening club. Dr. Albert Parker Fitch | State | What | When | | Castern | Central | Mountain | Pacific | K.51 | (365.1m.590kc) | WRC (468.5m.640kc) | WRC (378.5m.640kc) | WRC (

### MONDAY, JANUARY 23

Headliners
Eastern Central Mountain Pacific
KRID 161.3m-6500c) Ruth Mucc-Feature.
WJR-WCX (440.5m-6500c) Caspar J. Lingeman
Minstreis. Minstrels. 6:15 VKAR (227.6m-1080ke) "Art Principles Applied Room Arrangement," Mrs Marion Hoffman. 8 WSUI (475.9m-630ke) Radio Chamber prehestra. WTIC (535.4m-590ke) New Demarture band. | Eastern | Central | Mountain | Pacific | William | Value | V

TUESDAY, JANUARY 24

Headliners

Eastern Central Mountain Pacific

7 Pure Control Mountain Pacific

8.30 Pacific

9.30 Pacific

"Giacoma Puccini."

CKCL (356.9m-840kc) "The Chocolate Soldier."

WCFL (491.5m-610kc) He Peppers.

WTIC (535.4m-560kc) Manning-Bowman Concert.



All Eletric or Battery Set!

### MIRACO Users Say:

The Unitume brings in stations very clearly and with a selectivity that is amazing when you take in consideration the mass of stations on the air at the same time. I have near three and four stations that were organized same wavelengths at the same time.

"was able to tune out one after

America's big, old, reliable Radio Corporation (dish successful year) guarantees in its big, powerful, latest 6, 7 and 8 tube Miraco sets "the finest, most enjoyable performance obtainable in high grade radios." Unless 30 days' use in your homefully satisfies you a Miraco is unbeatable at any price for beautiful, clear cathedral tone, razor-edge selectivity, powerful distance reception, east opporation, etc.—don't buy HI Your verdict final. Save or make lots of money on sets and equipment—write for testimony of nearby users and Amazing Special Factory Offer.

Miraco's work equally fine

to Coast, Canada to Mexico, loud and clear—with the magnificent cathedral tone quality of costlest sets. Don't confuse Miraco's with cheap, "aquawky" radios, Miraco's have finest parts, latest approved shielding, metal chassis, etc.—as used in many \$200 sets. **Deal Direct** 

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yoperation, etc.—don't buy it
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make lots of money on sets and
equipment write for testimony
of nearby users and Amazing
Special Factory Offer.
Miraco's work equally fine
on "AC" electric house
current or with batteries.
Take your choice, Many thonsands of Miraco users—who
bought after thorough comportisons—enjoy programs Const

Dealer Write

MERAGENTS: Make big profits thowing stimes

AND AMAZING

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Wholesale Frice Offer to live.

SEND NO MONEY—30
DAYS' TRIAL, Special
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cos, testimony of nearby Miracousers
s proof you want—sent with catalog. "mail coupon right now! Big Discounts to User-Agents





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Another Big Bargain! Famous powerful big Miraco Super 6, 1923 model—ultra selective! Thosasands find it outperforms sets of much higher price.

30 Days' Trial Free. Fully
Guaranteed.
ADDRESS

www.americanradiohistory.com

Eastern Central Mountain 9:30 7:30 KTHS (384.4m-780kc) Little Rock Civic WMAQ (447.5m-676kc) Brokers Conventi 12:30 a.m. 11:30 10:30 9:30 KOIL (319m-940kc) Maxxon Webb, organist. WEDNESDAY, JANUARY 25 Headliners

Headliners

Cantral Moustain Pacific
6 p.m.

WLVI (370.2m.810kc) "Common Sense in Religion."

WSUI (475.9m.540kc) "Common Sense in Religion."

WSUI (475.9m.540kc) "The Origin and Rive of
the Nervous System. Dr. G. L. Houser.

WILLIAM (180.2m.540kc) "The Origin and Rive of
the Nervous System. Dr. G. L. Houser.

WILLIAM (180.2m.540kc) "The Origin and Rive of
the Nervous System.

WILLIAM (180.2m.540kc) "The Origin and Rive of
the Millier and Millier and Millier and his band.

WILLIAM (180.7m.1150kc) Felin's Prolitekers.

WILLIAM (180.7m.1150kc) Felin's Prolitekers.

WILLIAM (180.7m.1150kc) Felin's Prolitekers.

WILLIAM (180.7m.1150kc) The Tapping time with Ray
Millier and his band.

WILLIAM (180.7m.1150kc) The Melady Boys in song
and navelty.

WJR-WCN (444.9m.950kc) Doe Higgins old time
song revue.

SOLIN (1819m.940kc) (Innon) ball statements.

7.115

recital. 11:30 9:30 9:30 8:30 WSM (336.9m-890ke) Bob Stark's Tennessceans occhestra.
12 mid.
11 mid.
12 Pid.
12 Pid.
13 Pid.
14 Pid. (422 Jm-710kc) Ahas string quartet.
WLS (344.6m-870kc) popular program.
1 a.m.
12 Roll. (319m-940kc) Indian Pow-Wow.

THURSDAY, JANUARY 26

Headliners

Eastern Central Mountain Pacific

KYOFT (348.6m-86.0kc) Barney Frence, Song 4:15

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prano. 10 9 8 7 KTHS (384.4m-780lic) Favorite heart songs, by KTHS stringed sextette. K 1118, (384-4m-780fc) Favorite heart songs, by KTIIS stringed searcite, 18-18, (385-4m-586fs) Club Worthy Hills archestra. Will (365-4m-586fs) Club Worthy Hills archestra. Will (365-4m-586fs) Club Worthy Hills archestra. Will (365-4m-586fs) Club Hills archestra. Will (366-4m-586fs) Landau Hills archestra. Will (366-4m-586fs) Anniacsafore (366) (

FRIDAY, JANUARY 27 Headliners

New Westgale

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Here's our offer. Put any one of our 22 here 1928 needed in your home or 30 DAYS TRIAL. Use it is not those or 30 DAYS TRIAL. Use it for distance, the contract of the contrac

\$47 to \$72 Retail Prices iscount to Agents. Now WESTGALE offee last word in Radio at lowest prices. Once system gives amazing reproduction. Othersol, latestablicked construction puts Westernel, latestablicked construction puts Westernel.

24 Styles to Choose From 5, 6 and 7 Tube Sets

> i type cabinets. Get our FREE on and 20 Day Trial Offer at once. for it reder WESTGALE ELECTRIC COMPANY Dept. 501 1751 Belmont Ave., Chicago, Ill. Why Not Be Our Agent?

Central Mountain 8 p. m. 7 WGHP (277,6m-1080kc) organ recital, WHAM (280,2m-1070kc) Yawman and Erbe "Cur-tain Calls."

tain Calls." 8 Mr. Automotive hour—Ruth Muse, Buster Dees, Bill Saling. K 100, 1648,6m-266ke) Frincess Pakanlii and Chief Saling. Trial Saling. 7:30 6:20 KTIS (384.4m-780kc) Mrs. Violet Belding, controling. RTHS (384.4m-780kc) Mrs. Violet Belding, contrallo, WTIC (535.4m-560kc) Ivanboe Knights, 9:45 6:45 KTHS (384.4m-780kc) Pete Phillips, tenor. 7 KTHS (384.4m-780kc) Spanish favorites by Arlington orchestra. ton orchestra. 9:30 (19:30 7:30 10:30 W) R-WCX (4:0.9m:680kc) "Statie." Gladys Sanderson and Ivsh Hilled WLS (344.6m:870kc) Campus flirts. 1a.m. 11:0 10:00 (19:30m:940kc) Indiana Pow-Wow.

SATURDAY, JANUARY 28

| Head liners | Factor | Head liners | Head WIR-WCX (440,0m; 6806c; Charlotte Meyers and Mary Tudor, The "VIR's Personality Girls" WILC (353,4m; 650c; Charlotte Meyers and Mary Tudor, The "VIR's Personality Girls" WILC (353,4m; 650c; Charlotte Meyers (153,5m; 670c; Charlotte Bout Dance orehestra, 2013) WIMAG (447,5m; 670c; Charlotte Bout Dance orehestra, 2013) WIMAG (447,5m; 670c; Charlotte Bout Dance, 2013) State of Charlotte Bout Char | No. | Observation | Observat

SUNDAY, JANUARY 29

SUNDAY, JANUARY 29

Headliners

Cantral. Mountain Pacific

Sam.

(447.5m.670cb. Chicago Kent-U. of

Wyaming sichate.

WYAMO (447.5m.670cb. Pattis: Adams Piano School.

WY.WA (379.5m.630cb. Pattis: Adams Piano School.

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WY.WA (379.5m.630cb. Pattis: Adams Piano School.

WYAMO (447.5m.670cb. Pattis: Adams Piano School.

WYAMO (447.5m.670cb.) Rochester string quartet.

WIAMO (447.5m.150cb.) WERI (308.2m.530cb.)

WYAMO (447.5m.670cb.) WYAMI (451.2m.870cb.)

WYAMO (447.5m.670cb.) WYAMI (451.2m.870cb.)

WYAMO (447.5m.670cb.) WYAMI (451.2m.870cb.)

WYAMO (452.5m.970cb.) WYAMI (452.5m.670cb.)

WYAMO (454.5m.670cb.) WYAMI (452.5m.670cb.)

WYAMO (454.5m.670cb.) WYAMI (452.5m.670cb.)

WYAMO (450.5m.670cb.) WYAMI (452.5m.670c

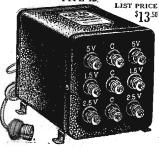
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**MONDAY, JANUARY 30** 

Headliners

Eastern Contral Mountain Pacific 7:30 p.m. 6:30 5:30 4:30 WFI (405.2m-740kc) Adelphia Whispering or-chestra.

KARAS A-C-FORMER FILAMENT SUPPLY TYPE 12.



NO HUM:

At last you can step down your 110 volt A, C, house current to operate your set with standard A. C, tubes such as Cunningham, RCA and CeCo, without having to use separate device for center typ., and with ABSOLUTELY NO HUM. Let the Karas A.-C. Former Flament Supply, Type 12, replace your "A" Battery and charger. Will operate 8 1½-volt Type 23 or 327 Tubes, and 2 5-volt Type 177 Tubes at one time. Compact, powerful, sturdy and built the common Way—by precision methods. Write the common type 150 per 150 per



Mountain E. Lottain, 8 7 6 KTHS (384.4m-780kc) Plantation hour by the Rosnoke Harmony Kings, negro quartet: WIBO, (305.9m-920kc) Basketball, Kortilwestern Romotke Harmony Kings, negro quarter: WIBO (305.9m 920kc) Basketball, Northwestern vs. Minnesota. WSUI (475.9m-630kc) Creighton-Iowa Basketball game.
9:15
9:15
9:10
WNC (296.9m-1010kc) Happiness Girls.
9:40
9:40
Fig. (483.6m-620kc) "Down the Rhine."
9
8
7 (325,9m-920kc) Scheuerman's Colorado or-KOA (235.9m-920k0 October 1981).

KOII (319m-940kc) Uncle Josh.

KOII (319m-940kc) Uncle Josh.

KOII (319m-940kc) Herbert 1981.

10-15 (315.15 c) 1981.

10-16 (315.15 c) 1981.

10-16 (315.15 c) 1981.

10-17 (315.15 c) 1981.

10-18 (315.15 c) 1981 KPO (422,3m-710kc) KPO Variety hour.

### TUESDAY, JANUARY 31 Headliners

Eastern Central Mountain Pacific
6 p.m.
WLWL (370.2m.810kc) Catholic World hour.
7:45 6:45 S145
WHAM (280.2m-1070kc) "History University of
Rochester," Mr. Carl Lauterbach, KSAC (33J.Im-960kc) Music, Mrs. Earl Litwiller and Mrs. H. J. Wylie. 8:30 7:30 5:30 WLS (344.6m-870kc) Personalities in Music, "Johannes Brahms." 9:30 8:30 7:30 6:30
KTIIS (384.4m-780ke) Little Rock Civic concert, 10 chestra.

11 10 9 8 8

KPO (422.3m-710kc) Gypsy and Marta,
KRLD (461.3m-650kc) Leland Johnson Talking 12 mid. 11 to 9 KOIN (319m-940kc) Studio vandeville feature.

Gets an and Japanal Ja

Townsend Socket Power (

Townsend Laboratories
713 Townsend St..
Dept. 17 Chicago, Ill.

Easy as A-B-C You Can Play Any Instrument

In a Few Months This Delightful New Easy Way!

Quickest because natural and pleasant. Grateful students say they learn in a fraction of the time old dull methods required. You play direct from the notes. And the cost averages only a few cents a lesson!

EARNING MUSIC is no longer EARNING MUSIC is no longer a difficult task. If you can read the alphabet, you can now quickly learn to play your favorite instrument! A delightful new method has made it positively casy to become a capable performer within just a few months. And the cost is only a fraction of what people used to spend on the old, slow methods!

You don't need a private teacher, this new way. You study entirely at home, in the privacy of your own room, with no one to interrupt or embarrass you. And, strange as it may seem, you'll enjoy every minute of it—because the new method is agreeable as well as rapid.

No Tricks or Stunts—You Learn From "Regular" Music

"Regular" Music

You don't have to know the first thing about music in order to begin. You learn to play from actual notes, just like the best musicians do. And almost before you realize your progress, you begin playing real tunes and melodies instead of just scales. There are no trick "numbers," no "memory stunts." When you finish the U. S. School of Music course, you can pick up any piece of regular printed music and understand it! You'll be able to read music, popular and classic, and play it from the notes. You'll acquire a life-long ability to please your friends, amuse yourself, and, it you like, make money (musicians are highly paid for their pleasant work.)

Whether you like the plano, violin, cello, organ.

pleasant work.)
Whether you like the plane, violin, celle, organ, smophone, or any other instrument, you can now learn to play it in an amazinally short time. By means of the newly perfected home study, method as reading about 15 mass is made almost as simple as reading about 15 mass is made almost as simple as reading about 15 ms. The study of the control of the

The Surest Way To Be Popular and Have a Good Time

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Do you sit "on
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you out of it because you can't
play? Many,
many people
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musician who
claims attention! If you
play, you are always in demand.
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PICK YOUR INSTRUMENT Pick YOUR INSTRUMENT Plane Violin Organic Clarinet Cornet Saxophone Harp Plucolo Mandolin Hawaiian Steel Cuitar Sight Singing Tiano Accordion Vicente Harmon And Composition Pruma and Trap Automatic Finer Automatic Finer Or 5-String)

trus offer you wonderful afternoons and eventings. And you meet the kind of people you have always wanted to know. So don't miss this ex-

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The whole interesting story about the U. S. School course can not be told on this page. So a booklet has been printed—"Music Lessons in Your Own Home." You can have a copy absolutely free by mailing the coupon below. In the booklet you will find an offer that makes the U. S. course will find an offer that makes the U. S. course to you at a very low price. With it will be some the young that the price with the will be some the young the price of the young that the price with the will be some the young they have young the young the young the young they will be young the young the young they will be young th

U. S. SCHOOL OF MUSIC
18312 Brunswick Bldg., New York City
Please send me your free book "Music Lessons in your Own Home," with introduction by Dr
Frank Crane, Demonstration Lesson, and particular
lars of your offer. I am interested in the follow
ing course:
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Have you above instrument?	
Name(Please Write Plainly)	
Address	
CityState	

www.americanradiohistory.com

### New Way to Renew Tubes



### Algonquin Buys Circuit

EO POTTER, president of the Algonquin Electric Co., Inc., with offices at 245 Firth Avenue, and a large factory at Poughkeepsic, recently purchased for the sum of \$170,000, from Fred A. Jewell, the well-known Radio engineer, a Radio circuit known as the Super Hilodyne, which Mr. Jewell developed after over five years of research with more than 2,000 circuits.

This new circuit is said to be entirely immune from patent litigations and to function more satisfactorily than the basic circuits over which there is so much dispute in the courts.

### Make Interesting Model

Make Interesting Model
Miniature Ship Models, Inc., have placed
a very interesting loud speaker on the
market. The Melody Ship is to all appearances a handsomely decorated ship model
with sails of an intricate net work of riggings, rope ladders and guides. The diaphragm of a loud speaker is coucasled in
the matin sail. Behind the diaphragm a
loud speaker unit is fastened to the main
mast. Two slender wires running from
the unit is the only indication that the
ship is anything lout a replica of an historical vessel.

Alfred P. Sloan, Jr., president of General Motors, has expressed great satisfaction in the use of Radio broadcasting as a means of reaching the public. The General Motors opening program over the WEAF net was presented Novembor 7 from New York.

### To Cure Corrosion

Corrosion of A battery connections may be avoided by soldering short pieces of wire to the terminals and attaching the receiver clips to the ends of these wires.



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

Full information and circulars on request.

STANLEY ENGINEERING, INC. 161 Devenshire St. . . Boston, Mass

### Modernizes Old Set

Modernizes Old Set

By means of a new device just introduced, it becomes possible to modernize
the old set without the use of toels or the
performance of a major operation. In
fact, not a single wire within the set is
altered; not a thing is changed; not a
single practical fact need be known about
Radio; yet the old set is instantly transformed into a modern set so far as efficient and simplified operation is concerned.

Briefly the new date is the set.

cient and simplified operation is concerned.

Briefly, the new device is the Amperite Adapter, comprising a base with clips to take two standard Amperite units complete, which are thereby connected in parallel so as to obtain their combined current-carrying capacity. The Amperite units are selected in order that the combination may provide the desired ampeerage for the group of tubes in the receiver is started or stopped by means of a single switch. The longest life is aspected in the proup of tubes in the receiver is started or stopped by means of a single switch. The longest life is aspected to the proup of tubes in the receiver is started or stopped by means of a single switch. The longest life is aspected by the proup of tubes in the receiver is started or stopped by means of a single switch. The longest life is aspected by the proup of tubes in the receiver is started or stopped by means of a single switch. The longest life is aspected by the proup of tubes in the receiver is at all times.

from the simple three-tube layout with-out power tube, to the six-tube layout with power tube.

The Amperite Adapter may be mounted within the cabinet or at the rear or again hear the external storage battery, accord-ing to preference. It is connected in the minus A lead, between storage battery and receiver. No tools are required. The wire ends clip into place. The only remaining step is to turn the rheostats of the set full on. If there are individual resist-ances or so-called ballasts, these are short-circuited.

The set is now ready to operate with

# 135 Volt "B" Eliminator



HINK of it! A 135-volt "B" Battery Eliminator. This wonderful new invention, using a special filter circuit, developed after months of experimenting, gives a uniform and constant flow of power that you cannot get from batteries. Can be plugged into any lighting socket and is adapted for any kind of set up to seven tubes.

Works perfectly on ordinary house current, either alternating or direct. Gives power up to 135 volts, using the full wave of the power supply.

### Operates Perfectly on Any Set -Hooked Up in Sixty Seconds

No matter what make or size of set you have, you may use this amazing new invention that makes "D" batteries entirely imnecessary, does away with "frying" noises, assures sharper tuning and gives more power because of the steady, intense flow of current through the tubes. This Perfect costs less than a set of cells and it ends plate current through the tubes. This Perfect costs less than a set of cells and it ends plate current through the tubes of the state of the sta

### 90-Volt Model

A good, dependable Eliminator at a very low price.
Similar in con-Similar in con-struction to our 135-volt model, but not so powerful. Suitable for sets up to 5 tubes. Send \$1.00 with order; halance C. O. D., \$3.95 plus few cents postage.

### Completely Equipped-No Extras to Buy

Our amazingly low price of \$7.95 covers everything. The Eliminator comes to you completely assembled and ready to plug in on any lighting socket. No moving parts—nothing to break or wear out. It's a solidly built, permanent addition to your set that will give you no end of nleasure.

preasure.

Don't put up with battery troubles another day. Send at once for YOUR "Perfect" Eliminator and realize the genuine pleasure that comes only through absence of battery bother. This new 1928 model "Perfect" Eliminator is one of the big sensations in the radio field. You can fully realize its wonderful advantages only after a trial in your own home.

### 10 DAYS' TRIAL Send Your Order NOW!

Pin a dollar to the coupon and mail it to us today. The postman will deliver your "Perfect" Eliminator within a few days. Pay bim the blaknec due, \$605, plus a few cents postage, (or \$3.55 plus postage if you want the 90-yold model). Plug in the Eliminator, and it. If not more than satisfied with resolts, return it within 10 days and get your money back. Act NOW and get double enjoyment from your sets.

### Perfect Eliminator Co. R28 National Theatre Building Cincinnati, Ohio

I enclose \$1.00. Please send new model d35-you't Perfect' Eliminator to me C. O. D. for balance (\$6.95 plus a few cents postage).  Leading the control of th	Perfect Eliminator Co., R28 National Theatre Bldg., Cincinnati, Ohlo.		Check Model Wanted
M <sub>0</sub>	to me C. O. D. for balance (\$6.95 plus	proved 1928' model "Perf	eet Elim-
		1	·
	Name	• • • • • • • • • • • • • • • • • • • •	

### **VOLUME-DISTANCE** WITH THE AMAZING

### REESONATOR

TRADE MARK

The Reesonator is an instrument designed to balance the antenna to the receiving set and increases the volume and selectivity of your machine. It will enable you to play with dance volume stations which are barely audible objects that the selectivity of which are barely audible without it. It will also decrease battern trely insufficie without it. It will also decrease battern trely insufficie without it. It will also decrease battern trely insufficient to the selection of the selec

### What Some of Our Users Say TESTIMONIALS

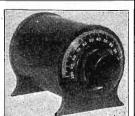
Gentlemen: Your Reesonator received and sore does all if not more than you claim for it. Please shin me at once, by C.O.D. parcel poxt, six more of the same kind. I cannot say enough for this unit. Respectfully yours, Vincent Walker, Bruce, Wis.

Dear Sirs: I have given your Reesonator a thorough test on single dial — machines, and find a sreat improvement to them. On distant stations it will more than double the volume. Yours truly, Peterson & Larson Else, Co., Fargo, N., Dag.

Gentlemen: Please send another Recsonator C. O. D. It is worth five times your price. Absolutely does all you claim for it. Would not be without one. Sold mine to a neighbor and he is delighted with same. Smeerely, I. D. Rankin, Lamesa, Texas.

Pirst National Bank Fargo, National Bank | Name.

First National Bank Fargo, National Bank | Address. State.



Not a wave trap but a wave booster (Pat. Pend.)

\$4<sup>75</sup> COMPLETE

### TESTIMONIALS

Gentlemen: I have thoroughly tested out your Reesonator and I believe it to be the best attachment made for a radio, regardless of price. Yours truly, C. W. George, M. D., Corydon, lowa.

C. W. George, M. D. Corydon, fowa,

Dear Sirs, Semetime spo. I purchased a Recognitor
from you. It is very good and works fine. I now
set distant stations when all New York City radio
stations are broadcasting,
it stations that were all veceived front 6:00 p. in, 10 12:00 p. m. ensirem standard time when New York City stations were broadstating. WMAK. WOC. KDKA. WHI. WCAU.
WEEA. KYEN. KTYT. WYS. W.W. WICC.
WYS. WIT. WHIAM. WBAK. WCCO. WTAM,
tons could not be received before 12:00 fines et al.
tons could not be received before 12:00 fines.

Above Testimonials Unsoldled

does fall you enum
one. Soul mine to a neighbor and near the soul of the soul

### Effarsee Art Panels Make Novel Aerials

INSIDE aerials in the form of tapestry effect art panels are among the interesting aerial instruments now on the market. The Fishwick Company has made these Effarsee aerials on a design which involves a patent construction that is new

ORCHESTRA STANDING

be allowed.

For each five consecutively numbered coupons a bonus of thirty-five votes will be allowed.

For the complete series of the six consecutively numbered coupons sent in at one time a bonus of fifty votes will be allowed.

(Continued from page 21) For each four consecutively numbered outpons a bonus of twenty-five votes will



The Nymph" This is one of several Greek my-thological repre-sentations the are used on the Effar-see Antennae art panels.

3-year; three 1-year; one 1 and one 2-year paid in advance mail subscriptions direct. 4-year; four 1-year; two 2-year; one 3-year and one 1-year; paid in advance mail 500 votes subscriptions direct. 12.00 750 votes

(Continued on next page)





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letters. All stations also cross indexed by cities,
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e wonderful programs now being broadcast ar good to miss. The Red Book is the greatest hel-jet the programs you want and obtain the utmo-oyment from your set, regardless of make ee-to advertising pages to wade through. It is almple and convenient to use, yet so complete an

### "B" Power Unit Aids In Radio Operation

The "B" power unit is rapidly becoming recognized as the logical source of "B" Radio current. This has made it necessary that any "B" power unit, in order to be successful, must be capable of performing satisfactorily with a variety of Radio sets whose electrical characteristics and requirements differgreatly. The plate current for the receiver must be direct, and it is the function of "B" power units to produce this current. In compliance with those requirements, the Modern current she will a "B" compact that is the source of constant and dependable power. The Modern "B" compact uses Raytheon type B or BH tubes. The internal compartments are shielded to prevent line disturbance and interchreuit, and the large capacity con-The "B" power unit is rapidly becom-



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densers are carefully insulated. All compartments are sealed against moisture. Large size overwindings capable of withstanding heavy overloads, two variable controls and provision for reducing the voltage output from the last tap make the Modern "B" compact a high quality product.



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An amazing value that can't be bent!

An amazing value that can't be bent!

Latest 6-thbe tuned radio frequency circuit. Extremely selective, marvelous sensitivity. Three stages of radio frequency, detector and two stages of low life transport of the selection of the s

Tested and Approved laboratory tests have proved the remarkable to your times are anding us letters praising aderful receptive qualities.

Simple Wiring Directions

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

SEND NO MONEY

RADIO EQUIPMENT CO.



Startling reduced price offer Starting reacceptrecoper on a highest grade, nation-ally known "B" Elimina-tor. Seize this opportunity. Get constant 10% efficiency in "B" current for your radio direct from your light socket. Stop using the old style, nefi-cient and costly "B" batteries.

1 - Year Guaranteed Majestic Super "B" Eliminator



The Mojestic is connected to your radio just like "B" batteries and at tached to an ordinary electric socket. (For 1 to 12 tube radios.)

and furnishes "B" current from regular house lighting current. Simplifies radio receiving. More efficient than dry or wet "B" batteries. Entirely noiseless, Operates from 110-120 AC, 50-50 cycle current.

### Attaches to Any Electric Light Socket

Cabinet finished in rich black crystal enamel. Dimensions: 10½ in, deep by 5½ in, wide by 9 in, high. Weight: 20 pounds net; 25 pounds packed. Bakelite Panel. Complete with extension cord and attachment plug. One majestic Super-Power "B" Rectifier: Packed in individual padded wire-bound wood cases. Guaranteed for one year against electrical and inchaintal defects.

## \*4<sup>50</sup> a Month <sup>If Satisfied</sup> Free Trial

Only \$1.00 with the coupon below brings the Majestic Su trial. Try it out thoroughly before you pay another penny how much more convenient than using batteries. Judge for and make your radio set more enjoyable. Then, it not satisfied, send it back at our expense and we'll refund your \$1.00 plus all transportation charges. If you decide to keep the paying the large of the paying the

### Send Coupon!

Send coupon now while this offer lasts Order by No. Y8789JA, \$1.00 with co pan; \$4.50 a month; total price \$29.50

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ay atte	another penny. See how it improves reception. See cries. Judge for yourself how it will save you money
	STRAUS & SCHRAM Dept. R3511 Chicago Enclosed find 11. Ship special advertised Majestic Super "P Battery Eliminator. 1 am to have 30 days free trial. 11 Lecg II., will pay 703 \$4.50 monthly. If not satisfied, money and any express charges 1 paid. Majestic Super"B" Eliminator, No. Y8789JA, \$29.50
į	Name
4	Street, R. F. D. or Box No.
. }	Shipping Point
Ī	Post Office State
ı	Name of the Control o



### THAT CHRISTMAS SET

THAT CHRISTMAS SET

(Continued from page 14)
and will eventually, and is just as necessary as the others. It will not deteriorate in a drawer and you'll need it sooner or later—maybe sooner.

A great many people find that they would like to have a speaker in the dining room, at the end of the hall, after the set is installed in the living room. This is perfectly fensible and is not hard to put in: the diagram at the start of this article will give one the layout for accomplishing this. The added parts needed are three Carter portable jacks, type 12, and 3 Carter 'One-Way" Plugs. Yaxley probably makes similar items but these are the Carter identifications.

If your set has two little holes into which you insert the tips of the speaker cord, you'll also need two Carter 'Imp'' Plugs. "One-Way" Plugs are "A" and nortable jacks, "B." A piece of fine insulated flexible wire, 4 feet long, is cut into one-foot lengths, and the insulation removed at both ends of each piece for about one-half inch. Take one of these pieces and insert an end into one of the "Imp" plugs can be inserted in the holes in the set where the speaker tips went. The third one-foot length, and holes in the set where the speaker tips went. The third one-foot length is now applied by wrapping one of its bared ends around the bared end of the first one lust where it goes into the plug, making two wires which are connected to the plug. If a friend has a soldering iron, solder it.

Wire 4 is now wrapped around the bared end of wire 2 where it enters its plug, so we have two leads from this plug also. We will call wires! and 3 which we have connected to the same plug, pair X and 2 and 1 going to another plug, pair Y. Take one of the portable jacks and run one wire of pair X into it and one from pair Y. Do the same with another of the portable jacks. We now have two speaker outlets. Put a "One-Way" plug on the speaker tips of the speaker at the set. Now run twisted, flexible light cord to the point at which you wish the other speaker; put a "One-Way" plug

#### ORCHESTRA STANDING

(Continued from page 34)

(Continued from page 34)
the "EAST." will include the states of Maine, New Hampshire, Vermont, Massachusetts, Rinde Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, and District of Columbia. District in number two, known as the "SOUTH." will comprise the states of Virginia, West Virginia, North and South Carolina, Georgia, Plorida, Louisiana, Mississippi, Alabama, Tennessee, Arkansas, and Kentucky. District number three, Rnown as the "MIDDLE-WISST," will include the states of Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri. District number four, known as the "WEST," will comprise the states of North and South Dakota, Nebraska, Kansus, Oklahona, Texas, Montana, Wyoming, Colorado, and New Mexico. District number five, known as the "FAR WEST," will consist of the states of Jdalao, Arizona, Utah, Nevada, California, Washington, and Oregon. District number six, known as Canada, will comprise the entire Dominion of Canada.

6. The orchestra polling the highest number of votes of all six districts will be declared THE WORLD'S MOST POP-ULAR ORCHESTRA and will be awarded

orchestra is to receive prize.

7. In the event of a tie for any of the prizes offered, prizes of identical value will be given to each tying contestant.

8. Any question that may arise during the contest will be decided by the Contest Editor, and his decision will be final.

ROXY SAYS

(Continued from page 3)

The studio party every week soon had the effect of cementing the various artists into a family. They knew each other before and were friendly enough, but something about getting together each week for the Radio made a homeiness that brought us all into closer relationship. This is how "Roxy's Gang" came into being—the result of the Radio and the millions of listeners-in. The folks who heard of us took a personal interest in our doings and in the different members of the Gang. They made each singer and player a household word all over the country, which he came in the country of the country, which he country, which he country, which he country, which he came in the came

player a household were country.
You would be surprised at the number of well-known artists who have "arrived" by way of the Radio and the motion pieture houses. Four of my own people have realized a singer's greatest ambition, that of singing at the Metropolitan Opera

a golden plaque. After the grand prize winner is eliminated the orchestra polling the highest vote in the district in which they are registered will be declared to be the MOST POULAR of their district and each awarded a silver plaque. No orchestra is to receive more than one prize.

7. In the event of a tie for any of the prizes offered, prizes of identical value will be given to each tying contestant.

8. Any question that may arise during the contest, will be decided by the Contest Edditor, and his decision will be final.

ROXY SAYS

(Continued from page 3)

The studio party every week soon had the effect of cementing the various artists into an embers made itself felt over the Radio so that the listeners really the effect of cementing the various artists into an enhuge results of the Gang members made itself felt over the Radio so that the listeners really enough, but something about getting together each week.

For the folks on the other end—the re-

ment.
For the folks on the other end—the recelving end—the Radio has been one of
the greatest blessings ever known. Before
broadcasting came along the general public had practically no idea of good music.
"The Maiden's Prayer" and others of the
same sort were about all some of the folks
knew existed in the way of songs.

The Radio has been the means of introducing the great mass of people to music of a higher order. Do they like it? Do they? Well, you'd think they did if you saw the mall we get after each week of broadcasting. At first we used songs and orchestral music that were well known—at least to a majority of folks, but now it is possible to play music of quite an advanced order. And the listeners-in like that, too.

In other words, they are getting an education—getting it painlessly. If the ordinary man is offered an education in so many words, he will run as if pursued by a tiger, but the Radio is teaching him many things without him knowing it, lacenuse entertainnent is always acceptable. Understand, we are not running a musical appreciation Radio hour—our object is to entertain. But honestly, sometimes in the course of a good show you can get some mighty useful knowledge, and knowledge never hurt anybody very much. But the uplift and educational side of broadcasting is incidental. Our greatest "comeback" is due to the fact that we know our programs reach thousands of people who otherwise would not hear any kind of musical entertainment.

## Warren "B" Supply

Cash with order, f. o. b. Peoria, Ill. Complete with tube. Money back guarantee with every unit. (Formerly \$35.00)

Guaranteed output—180 volts at 50 mils, on 110 volt, 60 cycle, AC. Will operate any set with 1 to 12 tubes.

## WARREN ELECTRIC CO.



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The SUPER HILODYNE is a new basic circuit employing nine tubes. Its all around performance will amaze you. You can help repeat Radio History and make money by representing us in your community in your full or spare time. Write TODAY for details. Dept. RD-128.

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Send Order Today Just write address on a slip of paper—pin a one dollar bill to it and mull today. We will ship same day order is received for \$1.275 C. O. D. \$9% discount for cash with order. Remember you are the judge and are fully protected—so send order

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Requires no electric light current. Simply connect to 22/4 | States and the plan is done. The plan is act the tuthe and the job is done. The plan is stated in the plan is done in the pla

## Aerial Easily Installed

Aeriai Lashiy Installed.
What will, no doubt, be hailed by Radiousers as a distinct relief from antenna troubles is the Stanley Aerial, a compact, single-mounting unit of tin-dipped copper wire, manufactured by the Stanley Engineering and Sales Company of 70 Monroe Street, Lynn, Mass.

Where formerly it was necessary to clutter backyards and apartment house roofs with innumerable cutangling wires, the Stanley Aerial offers alleviation of all



such conditions. It has been particularly effective for apartment house use inasmuch as its super-selectivity eliminates interference and all neighborhood noises that raise havoc with all good reception.

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Men, here is a wonder—the most sen-sational invention of the age! If you're labeling for a rapid fire seller—an item that nets you 199% producted that selle itself to 7 out of 10 men on demonstrate that selle itself to 7 out of 10 knazing new yest poses adding machina.

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Tobacco Habit BANISHED Let Us Help You

No craving for tobacco in any form after you begin taking Tobacco Redeemer. Don't try to quit the tobacco hait unaided. It no fer a losing fight against heavy odds and may seem. Let us help the to the nervous synthem. Let us help the to fight of your will just take Tobacco Redeemer according to directions. It is marvelously quick; thoroughly reliable.

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of the remedy. It makes not a particle of
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tobacco. how much you use or in what form
persented to the property of the remedy of
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we HAVIE comparison.

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Think of it! Only \$1 for this guaranteed renewer that is so simple and easy to operate a child can do it. Operates direct from your A and B batteries—nothing more to buy. Approved by Popular Radio Laboratory, Your money refunded it you are not amazed and delighted. Order to-day, Just send name and address and tube number of the president of the property of the pro

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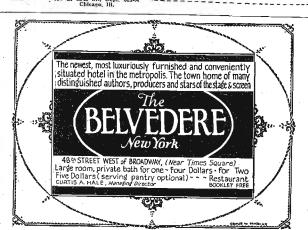
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Devils Lake, N. Dak. 230.6m-1300kc, 15 watts. Radio Elec. Co. Announcer, Harold Serumgard Bert-Wick, Daily ex Sun 7-8/30 cm, news, music 12-12/30 mm, weather; 6-5/30, markets. Mon. 9/30, 11/20 pm. Sur 11 am, church. Founded Jan. 28, 1985. Central.

KDYI.

Salt Lake City, Utah. 258-5m-1160kc. 100 watts. Intermountain Broadcasting Corp. Aunouncer, Philip G. Lasky. Slogan, "On the Air-Gore Everywhere." Drilly ex. Sun. 10:30 am. 2-5:15 pm. Mon. Wed. Fri. 6-10 pm. Tues, Thurs. Sat. 6-12 unid. Sar. 12-2 am. Sunntain.

KELW

Buthank, Calif. 228-9m-1310kc. 250 watts. Earl L. White. Daily ex Sun, 11-2 pm, 5-10. Wed, 13-2 pm. 5-7 pm. 9-10. Last Sat, in month 10-1 om, polic. Pacific.

Portland, Ore. 239.9m-1250kc. 2,500 watts. West-ern Broadcasting Co., Announcer, Jack Barnet, Baily ex Sun, 9:15-3 pm, 5:30-12 mid, Sun, 6:30-10 pm, Pacific

KFAB

Lincoln, Neb. 319m-940kc, 5030 watts. Nehraska Buick Auto Co, Announcer, Gayle Gruhb, Daily, 9-10 am, 11:45-12:30 pm, 2-3, 4-5, 6-7, 8-9, 10-11, Founded Dec, 4, 1924. Central.

KFAD

Brise, Ideho. 285.5m-1050kc. 4000 watts 6 am-6-pc 2000 watts. Independent School Dist, of Bois Mon. Tues, Wed. Thurs, Fri. 12;30-1 pm, weather unarkets, U. S. program. Tues, 7;30-8 pm, children hour; 8-10, music. Thurs, 8-10 pm. Sun, 3-4 pr 7;30-9 pm. Founded Oct. 1921. Mountain.

Havre, Mont. 275.1m-1090kc, 59 watts. F. A. Buttrey Co. Announcer, E. A. Baer, Daily ex Sun, 12;30-1;30 pm, music, markets, weather reports, Wed. 7:30-9 pm, Sun, 1-3 pm, Founded 1921.

**KFBC** 

San Diego, Calif. 247.8m-1210kc. 100 watts. Bal-baa Theater Bidg. Daily ex Sun, 9:30-10:30 am, 12:45-1:45 pm, 5-10. Sun. 10-12 am, Bible lesson.

Sacramento, Calif. 535.4m-550kc, 100 watts. Sacramento Ree. Kimball-Upson Co. Announcer, R. K. Clark. Tues, Sat. 7:40-10 pm. Thurs, 8-10:30 pm. Founded 1921. Pacific

KFBL

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

Laramic, Wyo. 483m-620kc, 500 watts, Bishop N. S. Thomas, Amouncer, W. J. Reed, Sunday services, Daily 11 am, 7130 pm. Mountain,

KFCB

Phoenix, Arix, 243.8m-1239kr, 125 watts. Radio Supply Co. Announcer, E. A. Nielsen, Slogan, "Kind Friends Come Back." Mon. Thurs, 8-9 pm. Sat, 8-10 pm. Sun, 9-11 am. Mountam.

KFCR

Santa Barbara, Calif. 211.1m-1-420kc, 50 watts Santa Barbara Broadcasting Co. Daily ex Sun, 12-1 pm, 5-45-7, 7-72.0, 72-07-730. Mon, Tees-Well, Thurs, 7-230-230 pm, Fri, 7-23-10 pm, Sar, 15-2-15, Lacific, 12-2-15, Lacific, 12-2

Benument, Tex. 483.6m-620kc. 500 watts. Mag-nolia Petruletum Co. Announcer, Static. Slogan "Katl Ior Dependable Magnolene. Tucs. Fr. 12:39 12:55 pm, hand concert; Tucs, 8:10 pm; Fri. 28:30 10:30 pm; Snn. 89 pm. Founded Oct. 1, 1924. Cen

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

**KFDY** 

Prookings, S. D. 545.1m-550kc. 500 watts. State College of Agriculture and Mechanical Arts. An-numeer, Albert Krauz. Daily ex Sun. 12:30-1:15 pm. Time, Phins, 7:30-9 pm.

Minneapolis, Minn. 215-7m:-1390kc. 10 watts, Harry KFEC

Portland, Ore. 214,2m-1400kc, 50 watts. Meier & Frank Co., Inc. Announcer, R. E. Hartzog, Daily ex Sun, 12-1 pm, weather, music; 4-5 pm, music, 6-7.

KFEL

Denver, Colo. 247.8m-1210kc. 250 watts. Eugene P. O'Fallon. Inc. Announcer, I. B. Hatlawar, Daily ex. Sun. 7:15. am, gym; 10, 11, 2, 4, 5, 6, Tues, Thurs, 8 pm. Tues, 10 pm. Fri, 11 pm. Sun. 8:39, nm. (), 2:30 pm, 4:30. Mountain.

**KFEQ** 

St. Joseph, Mo. 230.6m-1300 kc. 1600 watts, J. L. Scroggin, Amouncer, Clarence Koch, Daily ex Span, 845 am, 9, 10, 11, 12, 2, markets; 5 music; 6:30, muşic, 8:30-10, Mon. 11-12 mid, Sun, 11-12 n.

Kellogg, Idahu. 232.4m-1293kc. 10 watts. Unior High School Station. Autonomer, Walter C. Clark Slogan, "Voice of the Court D'Alenes," Mon. Thurs. 7-8 pm. Fucific.

KFGQ

Boone, Iowa. 209.7m-1430kc. 10 watts. Boon Biblical school. Founded April 1923,

Nichita, Kan. 245 bm-1220kc, 590 watts, Hotel Lassen, Announcer, J. L. Fox, Daily ex Sun, 8:30 ann, 9:10, 11, 12 pm, markets; 1:15, music, 7:30-9, Sun, 9:30 an, 7:30 pm, Founded Dec. 1, 1925. Chicago, house Electratal.

KFHA

Gunnison, Colo. 254.1m-1180kc. 50 watts. Western State College of Colorado. Announcer, E. Russell Wightman, "Where the Sun Shines Every Day," Tues, Fri, 7-9:30 pm, Founded May 1922 Mountain.

KFHL

Oskaloosa, Iowa. 212.6m-1410kc, 10 watts, Penn College. Announcer, Donald Haworth. Tues, Fri, 7 pm. Fri, 9:45 am. Sun, 4 pm. Central.

KFI

Los Angeles, Calif. 468.5m-640kc. 5900 watts. Earle C. Authony, Inc. Announcer, Leslie Adams. Slugan. "A National Institution." Daily ex Sat. Sun, 5:30-11 pm. Sat, 5:30-2 am. Sun, 11 am. 5:30-11, Installed Spring, 1920. Pacific.

KFIF

Portland, Ore, 214,2m-1400kc. 50 watts, Ben-son Polytechnic School. Announcer, Albert Skei, Omar Bittner, W. Hollensted, Tues, 8:15-9:15 pm. Pacific.

Spokane, Wash. 245.8m-1220ke. 100 watts. North Central High School.

KFIU

Juneau, Alaska, 225,4m-1330kc. 10 watts. Alask Elec. Light & Power Co. Announcer, O. E. Schoem bell. Mon, Wed, Fri, 6-7 pm. Alaskan time.

KFIZ

Fond du Lac, Wis, 267.7m-1120kc. 100 watts. Fond du Lac Commonwealth Reporter. Daily ex Sun, 5 pm, news, markets, weather. Central.

KFJB

Marshultown, Iowa 247.8m-1210kc, 100.250 watts. Marshall, Electric Co. Anunouece, T. 10.250 watts. Marshall, Electric Co. Anunouece, T. 10.250 watts. William of Iowa, P. 10.250 pm. Daily, 6 pm. 7. Tues. Pri. 8:30 pm. Sun, 11 am, 7:30 pm. Founded June 2, 1923. Central.

Kirksville, Mo. 225.4m-1330kc, 15 watts, State Teachers College, Announcer, F. M. Henry, Mon. 8:30-9:30 pm, Thurs, 8-9 pm, Founded 1923, Central.

**KFLV** 

Rockford, Ill., 267.7m-1120kc, 100 watts. Swedish Evangelical Mission Church, Announcer. Oscar Olson, Paul Bodin, Mon. 8:15 nm. Sun, 10:45 km, 9:30 pm. Founded Oct, 1933. Central.

KFLX

Galveston, Texas, 270,1m-1110kc. 100 watts. George

KFMR

Sioux City, Iowa. 232.4m-1290ke, 100 watts. Morningside College. Daily ex Sun, Sat, 11:40-12:30 pm. Tues, Wed. Thurs. Fri. 7:30-8:30 pm. Founded 1924. Central.

KFMX

Northfield, Minn. 236.1m-1270kc. 500 watts, Carleton College. Daily ex Sun. 10:30 am, time. Fri. 8:15 pm, lecture, 8:45, 10, Sun. 7 pm. Central.

**KFNF** 

Shenandoah, Iowa 461,3m-650ke, 2000 watts, 6 am-7 pm, Henry Field Seed Co., Amouncer, Herry Field, Slogan, 'The Friendly Farmer Station,' Daily ex Sun, 6-8:30 am, 10-11, 122-230 nm; 3, ladies hour; 5-7. Sun, 8:30-9-30 am, 10-15 am, 2 pm, 3-4 services; 6, Golden Rule, church service, Founder Feb., 1924, 'Central,

KFOA

Scattle, Wash. 447.5m-670kc, 1000 watts. Rhodes Dept. Store. Announcer, Arthur W. Lindsay, Mon. 10 am-10 pm. Tues, 12-10 pm. Wed. 10 am-11 pm. Thursday, 12-10 pm. Fr., 10 am-12 mid. Sat. 12n.-10 pm. Sug., 530-6:39 pm. Facilic.

KFON

Long Beach, Calif. 241.8m-1240kc, 500 watts. Nichols & Warinner, Inc. Announcer, Hal G. Nichols, Slogan, Piggly Wiggly Station, Daily and Sua, 9:30 am-12 mid. Founded March 1924, Facific

**CHALLENGE!** 

ONE DOLLAR will be paid to the Radio fan submitting the most errors in any one station's listing in this official Call Book and Log. Letters must reach Radio Digost office not later than a month from date of issue corrected. Renders are not limited to correcting one station, but such corrections must be certified by the stations thomselves, and NOT by comparison to other so-called accurate broadcasting directories and lists. Readers also must live in same state or province as stations corrected are located. Station verifications must accompany corrections. In case of tit duplicate awards will be paid. Until the wave lengths and watts are permanently assigned these cannot be counted in the challenge.

That's just how sure Radio Digest

That's just how sure Radio Digest is that this Official Call Book and Log is correct! To make the challenge fair for everyone, broadcasting sta-

tions and their employes are barred from this offer.

In this issue is a complete alphabetical arrangement according to wave lengths, a wave length index, and a state, city index of stations. The information contained in each station data listing is given in the following order: Call letters, city, state, watts antenna laput, owner's name announcer's name, slogan used, if any, name of listener. In 'club,' and the used, as "Central." "Mounin," etc.

.in," etc.

in," etc.

Each issue of Radio Digest gives
one the most complete and accurate
Call Book and Log obtainable. This
service is original with this publication, and has been maintained from
the start. Right of reproduction
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Oklahoma City, Okla, 272,6m-1100kc, 759-1000 watts, National Radio Mig. Co. Announcer, Tree Hand. Slogan. Radio Headquarters of Okla-homa City—The City of Opnortunity. Daily co Sun, 9 am., music; 13, sacred music; 10:30, markets 12:1;30 pm, music; 7-10. Sun, 9 am, 1, B. S. A. 10, Men's class; 11, services; 8, services. Central

Astoria, Ore. 249.9m-1200kc, 15 watts. E. E. Marsh and Liberty theater. Amounter, E. E. Marsh, Wed, 11-11:30 pm, organ, Sun, 12:39-1:30 pm, Pacific Marsh.

Grand Forks, N. D. 333.1m-900kc, 100 watts. University of North Dakota, Daily, 12 m, 6 pm. Sun. 10:45 am, 12:30 pm, 4:30, 6. Founded Oct, 1223. Central.

KFJR

Portland, Orc. 282.8m-1069kc. 100 watts, Ashley C, Dixon & Son. Announcer, Ashley C, Dixon Sr. Mon, Tues, Wed, Thurs, S-6 pm, 7-8. Mon, 9-11 pm, Tues, 9-11 30 pm, Fr, 4-6 um, 7-8, 121. State, 4-6 pm, 7-8, 121. Postuded Sept. 23, 123.

KFJY

Fort Dodge, Iowa. 232.4m-1290kc, 100 watts. Tunwail Radio Co. Announcer, Carl Tunwail, Daily ex Sun. 10.39-11:30 am., 3:45-7 pm. Tues. 10-11:30 pm. Thurs, Fri. 8:30-9:30 pm. Wed, 3-4 pm. Sun. 11-12:30 pm. Founded Oct. 1923. Central,

Fort Worth, Texas. 249.9m-1200kc. 50 watts. W. E. Branch, Announcer, Jack Fralia. Daily ex Wed. Snn. 7-8 pm. 9-10, 7-8, 9-10. Sun, 1-3 pm. 6-7.

KFKA

Greeley, Colo. 249.9m-1200kc. 200 watts. Colorado State Teachers' College. Announcer, H. E. Green. KFKB

Milford, Kan. 241.8m-1240ke, 2500-1500 watts. J. R. Brinkley, M. D. Daily ex Sun, 10:15-10:39 am. 12-1-30 pm. Daily ex Sun, Sat, 3-4 pm, 5:30-10. Sun, 8 am. 10, 6-12 mid. Central. KFKU

Lawrence, Kan. 254.1m-1180kc, 500 watts. University of Kansas, Announcer, Elisworth C. Dent. Mon. Thurs, 7-8 pm. Founded Dec. 15, 1924. Cen-

Chicago, Ill. 526m-570ke. 2500 watts. Westing-house Elec. & Mig. Co. Daily 10:05 a. m. Daily ex Sun, 2 pm, 5:30 pm, 10:55. Central.

Lincoln, Nohr. 217.3m-1380kc, 103 watts. Howard A. Shuman, Daily ex Sun, 12:30-1:30 pm, 2-3:15, 6-7, 8-10, Fri, 11-1 am, Central.

Gmaha, Nebr. 258.5m-1160kc, 100 watts. Board of Education. Technical High. Daily ex Sun. Sat, 124-130 pm. Tues, 7:30-9 pm. Central.

St. Paul, Minn. 222.1m-1350kc. 250 watts. Beacon Radio Service. Announcer, M. G. Goldberg. Daily ex Sun. 9 pm. Mon. 7 pm. Founded Mar. 1924.

Dublin, Texas, 275.1m-1090kc. 15 watts. C. C. Baxter, announcer. Mon, Thurs, 8 pm. Sat, 11 pm. Sun. 7:30 am, 1:30 pm. Central. Crenville, Texas. 230-6m-1300kc, 15 watts. The New Furniture Co. Announcer, Dave Ablowich, Jr. Stogan, "The New Furniture Co., the Home of Good Furniture," Located at Greenville, Texas, Where You Find, "The Blackest Lado, the Whitest People," On Jr. W. Stone, 1 pm, music, Mon. Wed, Fri. 8 nm, Sun 1 am, services, 7:39 pm, irregularly, Central,

KFPR Los Angeles, Calif. 232,4m-1290kc. 250 watts. Los Angeles Co. Forestry Dept. 1rregular schedule KFPW

Spokane, Wash. 245.8m-1220kc. 250 watts. Symon. Investment Co. Announcer, E. B. Craney. Daily ex Sun. Sat, 9:45-11 am, 3-9 pm, 6-10:30. Fri, 3-1 pm, Sat, 10:30-11 am, 2:30-3 pm. Sun, 7:40-9 pm

**KFOA** Sr. Louis, Mo. 234,2m-1280kc, 1000 watts. The Principia. Sun. 8 pm. Founded May 9, 1924. Cen-

KFQB
Fort Worth, Tex., 333.1m-900kc, 1000 watts. Lond Star Broadcast Co. Automicer, Zack E. Hurt. Daily ex Sun. 8,393-831 and 2130.1 and 1330 pt. 1

Anchorage, Alaska. 344.6m-870kc. 100 watts. Anchorage Radio Club. Amouncer, Frank O. Berry. Moo, Fri, 8-10 ppr. Suu, 7:30-9 pm. Alaskan time.

Holy City, Calif. 249,9m-1200lic. 100 waits. W. F. Riker. Announcer, Arthur J. Landstrom. Daily ex Sun, 6:30-7:30 pm. Tues, Fri, 9:30-11 pm. Wed. Thurs, Sat, 9-10 pm. Sun, 11-12 n, 10-11 pm. Pa-

Seattle, Wash, 217, 3m-1380kc, 100 watts, KFOW, Inc. Facilie, Daily ex Sun, 10-11 am, 13-1 pm, 2-3, 4-30-5-37, 5-12-6, 6-7, 8:39-10, 10-11. Sun, 4-5 pm, KFOZ

Hollywood, Calif. 232,4m-1290kc, 100 watts. Tati Radio Company, Announcer, Allan Fairchild. Daily ex Sun, 12-1 pm, 5-6 pm, 6-11. Sun, 7-11 pm

KFRC

San Francisco, Calif. 454.3m-660kc, 1,000 watts. Dun Lee, Inc. Announcer, Harrison Holliway, Daily ex Sat. Sun, 7-9 am, 10-12 n., 12-1 pm, 4:30-12 mid. Sat, 7-9 am, 10-12 n, 12-1 pm, 4-12 mid. Sun, 10-1 pm, 2-4, 5-12. Pacific KFRU

San Diego, Calif. 440.9m-680kc. 500 watts. Airfan Radio Corp. Daily ex Sun, 10-11 am, 6-10 pm. Sun, 11 am, 2-4 pm. Pacific.

KFSG

Los Angeles, Calif. 275.1m-1090ke. 500 watts.
Angeles Temple. Daily ex Sun, Mon. 10:30-11:30
am. 11:30-12:30, organ; 2:30-3:30 pm. regram;
3:30-4:30, vssper; 6:30-7-30. Tues; 7:30-9:30 pm.
Wed. 8:41, 7:30-9:30 pm. 7:30-5, Fr. 7:30-9:pm.
Sun, 10:30-12:30 pm. 2:34-4:40 pm, 6:30-11 pm. Facilie.

Galveston, Texas, 258.5m-1160kc, 500 watts.
Thomas Groggan & Bros.

KFUM
Colored S

Colorado Springs, Colo. 282,8m-1060kc, 1000 watts. Corley Monutain Highway, Announcer, Howard Brawn, Mon. 5-7 pm, 10-12. Tues, 8-10 pm, Thurs, 8-12 mid. Fri, 10-12 mid. Sat, 8-10 pm. KFUO

St. Louis, Mo. 545.1m-559kc, 1000 watts, Concardia Theological Seminary (Lutheran), Announcer, Herm. H. Hubenstein, Mon. Wed, Fri. 6 pm. Sun. 3 pn., 3:30, 9:15, Funnied Dec. 14, 1924. Central. KFUP Denver, Colo. 227.1m-1320kc, 100 watts. Fitz-simons General Hospital, Educational and Recrea-tional Dept. Daily ex. Sat. and Sun, 10-11 nm. Tues. Thurs, Fri, 7:30 pm. Mountain.

Onden, Utali. 225.4m-1330kc, 500 waits. Peery Building Co. Tues, Thurs, Sat, 9:50-11:50 pm, dance MFUS Oakland, Calif. 256.3m-1170kc, 50 waits. The Gospel Radio, Stoyan, The City of Opportunity." Men, Wed, Fri. 30-11 am, Wed, Fri. 8-9 pm, Sat. 1:30-2:30 pm, 6:30-7:30. Sun, 9-10 am, 11-12a, XFUT.

Lake City, Utah. 249.9m-1200ke. 50 watts. KFVD

Venice, Calif. 208.2m-1440kc. 250 watts. U. J. & C. I. McWhinnie. Announcer, Mary Elizabeth Carter. Daily ex Sun, 9:30-12 n, 4:30-6 pm. 9-12 mid. Weil, 12-2 am. Founded April 1925. Facific. KFVG Independence, Kan. 225-4m-1330kc. 50 watts: First Merhodist Episcopal church. Announcer, R. W. Elliott, Slogan, "The Vaire of Southeastern Kaussa from Independence, the Buckle on the 501 Berl. Sun, 10:25 am, 7:30 pm. Founded Mar.

Huuston, Teras, 238m-1269kc, 50 watts. KFVI Broadcastins Company, Announcer, Harry Waters, Dally ex Sun, 1-2 pm, Mun, Wed, Sat, 8-9-30 pm, KFVS

Cape Girardeau, Mo. 223,7m-1340ke, 50 watts. Hirsch Battery & Radio Co. Announcer, W. W. Watkins, Slogan, "The City of Opportunity," Daily ex. Sun, 12-15 mm, news, markets, 6-451 music.

Hollywood, Calif. 361.2m-839kc. 500 watts. Warner Brothers, Announcer, William "Bill" Ray. Mon. Tues, Thurs. Fri. 10-10:40 am. 12-2:30 pm. 4-45-12 mid. Wed, Sat. 10 am. 12n-12 mid. Sun. 7:30-10 pm.

KFWC Pomona, Calif. 222,1m-1350kc. 100 watts. L. E. Wall, Announcer, Bert Elise Wall, Daily ex Sun, 4-6 pm, 7-11. Pacific. KFWF

St. Louis, Mo. 214.2m-1400kc. 250 watts. St. Louis Truth Center, Slogan, "The Voice of Truth." Announcer, Rev. Charles II, Hartmann, Thirs, 193 ann, 748 pm. Sun, 9 an, 10:45, 7:45 pm. Founded 1233.

Rando Entertainments, Juc. Mun, 8 am-11 pm. Tues, Wed. Thurs, 171, 7 am-11 pm. Sat, 7 am-12/30 am. Sun, 7:50-11 pm. Pacific. KFWM Oakland, Calif, 236.1m-1270kc, 500 watts. 1000 6 am 6 pm. Oakland Educational Society An-100 pm. California C

KFWO

Avalon, Calif. 299.8m-1000kc, 250 waits. Major Lawrence Mott-Signal Corp. Slogan, "Katalina for Wonderful Outings," Daily, 12:30-1:30 pm, 7:30-9, Tues, Fri, Sun, 5-6 pm, Pacific.

Jerome, Idaho. 204m-1470kc. 15 watts. KFXD Inc. Daily ex Sun. 12 n. Wed. Sat. 8-10 pm. Son. KFXF

Dencer, Colo. 282.8m-1060kc. 250 watts. Colorado Radio Corp. Announcer, M. E. Gorman, Slogan, "The Voice of Denver." Mon, Tues, 6-10 nmt. Wed, 6-12 nmtd. Pri, Sat, 6-12 nmtd. Son, 8 pm. Mountain.

**KFXJ** 

rer, Colo., 215.7m-1390ke, 50 watts, R. G. Slogan, America's Scenic Center, Daily 2-4:30 pm, 5:30-9. San, 9-10 pm. Muuntain KFXR

Oklahoma City, Okla, 223,7m-1340ke, 50 watts, Evchange Ave. Baptist church, Mon, Wed, Fri, KFXY

Flagstaff, Ariz. 205.4m-1460ke. 25 watts. Mary M. Costigan. Announcer, Cecil J. Walters. Tues, Thurs. Sat. 10:15-11:15 pm. Mountain.

Breckenridge, Tex. 211.1m-1420ke, 15 watts. Kirksey Brothers Battery & Elec, Co, Daily ex Sun, 10:30-11:30 am, 12-1 pm, 8-10. Sun, 8-10 pm.

Bismarck, N. D. 249.9m-1200kg. 259 watts. 500 6 an.6 pm. Heskins-Meyer, Inc. Announcer, C. F. Dirlam, Darily ex Sun, 12:304-30 pm. 71-208. Thers. 10-11 pm. Sun, 10-30-12 n. 1-3 pm. Founded Dec. 1925.

Spokane, Wash, 260-7m-1150ke, 2,009 wat Northwest Radia Service Co. Paily ex Sun. 9, au; 12, news; 12:15 pm, 5:30, kiddies' program; rime; 6:15-16 pm, Sun, II am, 7:30. Pacific,

KGAR t, 234.2m-1280kc. 169 watts, Tueson nouncer, flarold S, Sykes. Daily ex Sun, 11 am. Installed June 1926. Tucson, Ariz, Citizen, Anno Sat, 7-9 pm.

KGBU 

KGBX St. Joseph, Mo. 288.3m-1040kc, 100 watts. Fo Hall, Inc. Announcers, R. D. Foster, R. L. Daily ex Sun, 7-3 am, 12-1 mm, Mon, 3-6 pm, 5-7 pm, Tues, Thurs, Fri, 6-10 pm, Sun, 7:30 Founded August 11, 1926. Central.

KGBY Columbus, Neb. 222,1m-1350kc, 50 watts. Thelen and Laddiken. Tues, Sat, Fri, 12:35-1:15 pm, 8-9:15. Central.

KGBZ VOIK, Neb. 212.6m.1410ke, 250 watts, Announcer, Dr. George R. Miller, Slogan, "Keep Your Hoss and Poultry Healthy," Mon. Tres, Wed. Thurs, Fri. Sat. 5:30 am, 12:20 am, music, 12:30, 2:30, 7:30, Thurs, Sat. 10:30-11:30 m, music, Alternate Sun, 11 am, 7:30 pm, service, Opened Aug., 1926. Central.

Decorali, Ia, 247.8m-1210kc. 10 watts. Bar Clothing Company. Amouncer, Charles Gree Daily, 12:39-1 pm. Wed. 7-8 pm. Sun, 2-4 Central,

KGCB Oklahoma City, Okla. 215.7m-1390kc. 50 watts

KGCH Wayne, Nebr. 293.9m-1620kc, 250 watts. Wayne Hospital, Announcer Merrill Shum, Slogan, "Re-member Us When U. R. Ili." Daily ex Sat. Most, G:30 pm, Tues, Thurs, 4-5 pm. Founded Aug. 1926. Central

KGCI San Antonio, Texas, 220.4m-1360kc. 100 watts. Liberty Radio Sales. KGCL

Seattle, Wash. 230.6m-1300kc. 50 watts. Louis Wasmer, Archie Taft, Announcer, Herman Riece. Mon, Wed, Thurs. 6;30-7;30 pm, 8:30-11. Tues. Fri, Sat. 3-7;30 pm, Pacific. KGCN

Concordin, Kan. 208.2un-1440kc. 50 watts. Concordin Broadcasting Co. Daily ex Sun, 12:30-1:30 pm, 7-9. Founded Aug. 1926. Central. KGCR

Brookings, S. D. 208, 2m-1440kc, 15 watts. Cut ler's Radio Broadcasting Service, Inc.

Mandan, N. D. 239.9m-1250kc, 100 watts. Mandan Radio Assn. Aunouncer, H. L. Dahners. Daily ex Sun, 7-8-30 cm, 12-130 pm, 6:30-8, Sun, 11-12 n, 4:39-6:39 pm. Mountain. KGCX

Vida, Mont. 243.8m-1230hc, 10 watts. First State Bank of Vida. Announcer, E. E. Krebsbach, Daily ex Sun, 12n, Sun, 11 am, 2-4 pm. Mountain.

Dell Rapids, S. D. 254.1m-1180kc, 6 am,-6 pm, 15 watts. Flome Auto Co. Sun, 10-11 am, 1:30-5 pm, Central. KGDE

Barrett, Minu. 205,4m-1469ke, 59 watts, Jaren Drug company, Daily ex Sun, 12;39 pm, musicale; 1, news, weather, markers; 4;30-y, musicale, Sun, 10:30-3 pm, 6.8. Licensed Sept, 15, 1926, Central. KGDM

Stockton, Calif. 217.3m-1380kc. 10 watts. Peffer Music Co. Daily ex Sun. 10-11:30 am, 2-3 pm. Thurs, Sat. 8-10 pm. Central.

KGDP Puehlo, Colo. 223.7m-1340kc. 10 watts. Boy Scouts of America. Tues, 8 pm. Thurs, 9 pm. Mountain. KGDR

San Antonio, Texas, 206.8m-1450kc, 15 wetts. Joe B. McShane, Amanucer, Joe B. McShane, Daily ex Sun, 4:30-5:30 pm, Thurs, 9-10 pm, Cen-tral

KGDW Humboldt, Nebr. 293.9m-i020kc. 100 watts. Frank J. Rist. Announcer, C. M. Hecht. Mon. Sat. 7:30 pm. Tues, Wed. Fri. 11:30 am. Thurs. 8:30 om.

KGDX Shreveport, La

KGDY Oldham, S. D. 206.8m-1450kc, 15 watts. J. Alher Loesch, Thurs. 7:45-11 pm. Central. Founded bec, 26, 1926.

KGEF Los Angeles, Calif. 263m-1140kc. 500 watts, Trinity Methodist church. Daily ex Sat. 6-10 mm. Sun. 10:45-12:30 pm. 5-6, 7-10:30. Pacific. Founded Dec.

**KGEH** Eugene, Orc. 201,2m-1490kc. 50 watts. Eugene Broadcast Station. Daily ex Sun. 9-10 am, 12:15-12:50 pm, 6:30-8. Sun. 9:45-10:30 am, 6-8 pm. Fri. 10-13 mid. Facific. Founded Jan. 1, 1927.

**KGEK** Yuma, Colo. 263m-1140ke, 10 watts. 7 am-7 p. Beehler Electrical Equipment Co. KGEN

El Centro, Calif. 225.4m-1330kc. 15 watts. E. R. Irey and F. M. Bowles. Daily ex Thurs, Sun. 12:15-1:15 pm. Mon, Wed, Fri, 5:30-6:30 pm. Tues, Sat, 8-9 pm. Thurs, 9-11 pm. Pactic. KGEO

Grand Island, Nehr. 205,4m-1460kc, 100 watts. Hotel Yancey, Mon, Wed, Sat, 8-9 pm, Tues, Fri, 12:25-12:55 pm, Sun, 2-4 pm, Central. KGEQ

Minneapolis, Minn, 204m-1470ke, 50 watts, Fied W. Hertmann, Mon, 7-8 pm, Tues, 8:39-11:45 pm, Wed, 6:30-8:30 pm, Thurs, 8:30-10:30 pm, Fri, 6:15-9 pm, Sat, 3-5:30 pm, Central. KGER

Long Beach C. Merwin Founded Dec KGES nch, Calif. 215.7m-1390kc. 100 watts, in Dolyns. Daily ex Sun, 9 am-1 am. Sec. 19, 1926. Central City, Neb. tral Radio Elec. Co. 204m-1470kc. 10 watts. Cen

KĞEÜ

Lower Lake, Calif. 227,1m-1320kc. 50 watts. Lotowana Lodge. Mon. Wed. 7.33-9-30 pm. Fri. 7-9 pm. Sun. 1:45-2:45 pm. 8-9. Pacine. Founded Bec. 1926.

Fort Morgan, Colo. 218.8m-1370kc 100-290 watts. City of Fort Morgan, Aunouncer, Glenn S. White, Daily ex Sat. Sun. 5:15-5-45 pm, markets, Thes. 2-4 pm, Mountain St. 12-1 pm, 8-10. Sun. 11-12n, KCEY Denver, Colo. 201.2m-1490kc, 250 watts. J. Dietz.

KGEZ Kalispell, Mont. 203.9m-1029kc, 100 watts, Flathend Broadcasting Assn. Daily and Sun, 12-1:30 am. Founded Feb. 20, 1027, 11 am, 7:30 µm. Mountain. KGFB

lowa City, Josea. 223,7m;1340kc, 10 wests. A. G. Dunkel, Inaily ex Sun, 12-12:30 pm, 6-6:30. Mon, Tues. Wed. Thurs, Fri. 11-12 mid. Central, KGFF

KGFG Oklalioma Full Gospe KGFH

La Crescenta, Calii. 223.7m-1340kc. 250 watts. Frederick Robinson, Announcer, Formosa H. Robin-son, Slogan, "Voice of the Sierras." Mon, Tues, Wed, Fri, 8-10 pm. Founded Feb. 7, 1927. KGFI

San Angelo, Ten. 220,4m-1360kc. 15 watts. M. L. Eaves. Daily ex Sim. 9 am, 12m., 3 pm, markets, weather. 8-11, entertainment. Central. KGFJ

Los Angeles, Calif. 208.2m-1440kc. 100 watts. Ben S. McGlashan, Slogan, "Keeping Good Folks loyful," Daily ex Sun, 6:30-9:30 am, 12-4:30 pm, 6-9. Daily ex Sut, 12-6:30 am, Sun, 9 am-2:30 pm, Fueric, Founded Jan, 18, 1927.

KGFK Hallock, Minn. 223,7m-1340kc. 50 watts. Kittson County Eenterprise, Founded May, 1927. KGFL N. M. 222.1m-1350kc.

KGFN KGFO

KGFP KGFW

Ravenua, Nebr. 296,9nn-1010ke, 10 watts, F. Sothman, Aumouncer R. H. McConnell, St. "Catering to the Home Folks," Daily ex 8-9 am, 11:45-12:15 pm, 3:15-4:15. Central.

Pierre, S. D. 254.1m-1180kc. 200 watts. 6 am-6 pm. Dana McNeil.

Picher, Okla, 206.8m-1450kc, 100 waits, Dr. D. L. Connell, Daily ex Sun, 7:30-8:30 pm, 8:30-9:30. Central, On air Sept. 1, 1927. KGGH

Cedar Grove, La. 212.6m-1410kc, 59 watts, Bates Radio & Elec. Co. Announcer, A. J. Bates, Mon. Wed, Fri, 7-9 pm. Central. Founded Sept, 15, 1927. KGGM

Inglewood, Calif. 204m-1470ke. 160 watts. Jay Peters, Portable. Daily ex Sun 6-10 pm. Sun, 12-2 pm. 8-12. Pacific. KGHB

H 1 227 lm-1320ke 250 watts KGHC
Classian, Minn, 209,7in-1430ke, 15

Pueblo, Colo, 20 5m-1439bc. 259 watts. Philip G. Lasky & J. H. Albert.

Hardin, Mout. 263m-1140kc, 50 watts, American Legion, Hardin Post, No. 8.

Oxland. Calif. 384.4m-780kc. 5000 watts. Gen. Elec. Co. Aunouncer. Howard I. Milholland. Daily ex Sun. II.30 am. 1 pm. weather, stocks: 6-6:55. dinner concert: 6:55. reports. Mon. 4:5 mm. Mon. 9 am. Look review. 5:36. kidner chief. 6:5 grad pm. Look review. 5:36. kidner chief. 6:5 grad pm. 10:40. Sp. 10:40. pm. 10:40.

KGRC San Antonio, Texas, 220.4m.1360kc, 109 watts. Paramount Radio Co. Amounter, L. G. Weber. Daily ex Sun, 8309-393 am, 2-3 pm, Mon. Sat, 93.509-30 nm, 42-3 pm, 5.509-30 nm, 12-2 pm. Central, Opened Jan. 31, 1927. KGRS

**KGTT** 

San Francisco, Calif. 206.8m-1450kc. 50 watts.
Glad Tidings Temple and Bible lustitute. Daily
ex Sun, 12:30 pm, scripture reading. Tues, Wed.
Fri. 8-10 pm. Wed. 2:33-4 pm, Divine healing
scrvico. Smn. 2:33-3 pm, Sunday school, 3-5,
service; 7:30-10, service. Pacific. Founded Nov.
1925.

KGU

Honolulu, Hawaii. 270.1m-1110ke, 600 watts, Marion A. Mulrony, Announcer, Homer Tyson, Daily ex Sun, 12-1415 pm, 4,30-533. Mon, Tues, Thurs, Fri, 7:30-9:30 pm, Sat, 12-5 pm, Sun, 6-9:30 pm, 1876, merindian, 2½ kours earlier than Pacific KGW

Portland, Ore. 491.5m-610ke. 1099 watts. Oregonian Publishing Co. Annonner Dick Haller. Sum. 10-11. 30 am. town. circle, household helps; 67, concert, 7-10. Mon. 9-12 mid. Tues. 9-45-10 am. exercises; 2-3 pm. 7, struckels; 9-11 pm. Wed. 9-10 pm. 30-10 min. 30-10 m

Lacey, Wash. 243.8m-1230kc, 50 watts. St. Martin Gollege. Announcer, Seigstian Ruth. Singan, "Out where the Cedars Meet the Sea." Snn. Tues. Thurs 2020, 250 pm. Facilite, KHAC

Pacific Coast. 204m-1470kc. 50 watts. Flying Broad-casters, Inc. KHJ

Lee, Daily ex Sun, 12:39 pm, markets; 6 dinner music; 6-48, 7, 7-10, Wed, 2:30-3 pm, Sun, 10 KHMC

Harlingen, Tex. 236.1m-1270ke, 100 watts. Harlingen Music Co. Daily ex Sun, 2-4 nm. Mon, Wel, Frt, 7-9 nm. Sat, 8-10:30 nm. Central. Founded Feb., 1927. KHQ

Spokane, Wash. 370.2m-810kc. 1006 watts. Louis Wasmer, Inc. Announcer, C. P. Underwood, Slogan, Tells the World. "Daily ex Sun, Wed, 12:30-130 pm. 3-4, 6-12 mid. Wed, 7-10 pm. Sun, 10:30 am. 11, 2-10 pm. Pacific. KIAF

Sibtippe, Minn, 422,3m-710kc, 500 watts. Steele Co. Siegan, For from the Maddening Crowd. Mon, Wed. Pri, 7-8 pm. Sun, 2-3 pm. Central.

KICK

Red Oak, Iowa. 322-4m-930k Malnut Grove Products Automobile Co. Operated by Walnut Grove Products 11:50-12:30 mm, question Mospharkets Daily ex Sun, 7:45-9 pm. Founded 1921. Central **KJBS** 

San Francisco, Calif. 220.4m-1360kc.
Julius Brunton, & Sons Co. Anouncer, C
tiansen. Daily ex Sun, 9-12 n, 1:30-5
Wed, 8-10 pm. Tues, 8-12 mid. Thurs,
Fri, 8-11 pm. Sun, 1:30-5 pm. Pacific.
Jan., 1925.

Seattle, Wash, 348-6m-860kc, 2500 watts. Northwest Radio Service Co. Announcer, W. C. Cordon, Daily ex Sun, 9 am-12 mid. Sun, 9 am, 10, 11, 2:30 nm, 6:15-7:15, 7:15, 7:30, 9. Pacific, KKP KJR

Seattle, Wash, 265 3m-1130kc, 15 watts. City Seattle, Daily, 10 pm, Pacific, KLCN

KLDS ndependance, Mo. 270,1m-1110kc, 1500 wates. Re-organized Church vol. 18-us Christ of Latter Day Saints, Midland Broadcasting Co. Announcer, Ar-pur B. Church. Tues, 6:30 am. 7, 6:45 pm. 73.08. Thurs, 6:45 pm, 8, Fri, 6:30 am. 7, Sat, 8 pm. Sun, 8,50 am. 9, 11, 3 pm. 6, 9:15. Central. Founded

KLIT Partland, Ore. 206.8m-1450ke, 10 watts. Lewis L.

KLS Calif. 245.8m-1220kc. 250 watts. War-Radio Supplies. Announcer, Ralph Moore. 'The City of Golden Opportunity.'' Sun, Facific.

KLX ALAM
Oakland, Calif. 508.2m-500kc, 500 waits. Oakland
Trilanie, Announcer, Charles Lloyd. Shagan,
"Where Rail and Water Meet. Daily os Sun, 10
am, waran heur: U1:30, luncheon concert; 1, 4:30,
5:30, 6:30, dinper concert; 7, news; 8, program.
Pacific. Founded Nov. 20, 1922.

KLZ Denver, Colo. 296.0m.1010kc, 1020 wnits, Reynolds Radio Co, Announcer, Julian C, Riley. Slogan. "Pioneer Brandensting Station of the West." Daily and Sun. 9:30 am. 1. 6. Mon. 6-10 pm. Tues. 6-11 gm. Wed. 6-10 pm. Thues, 6-7 pm. Frj. 6-11 pm. gm. Ved. 6-10 pm. Thues, 6-7 pm. Frj. 6-11 pm. Fruncel 1919 s. 200. 200. am. 7-11. Monutain.

**KMA** Shenandoab, Iowa. 394.5m-760ke. 1000 watts. May Seed & Nursery Co. Announcer, Earl E. May Daily ex Sun. 6-7 am, 9-10, 11-1 pm, 2-4 pm, Daily ex Sun. Mon. 5-330 pm, Mon. 5-19-50 pm, Sun. Jan. 1925. 1213-239 pm, 4-6. Central, Eounded

**KMBC** Kansas City, Mo. 270.1m-1110kc. 1500 watts. Mid-land Broadcast Central. Announcer, Arthur B. Church. Daily ex Sun. 9 am. 12 n. 4 pnl, 7, 9, 10. Sun. 7 pm, 7:45. Founded 1921, Central.

KMED

Medford, Orc. 249,9m-1200kc. 50 watts, W. J. Virgin, Daily ex Sun, 10-11 am, 12;15-1:15 pm, 6:15. Mon, Tues, Wed, Fri, 10 pm, Thurs, 11 pm, Sun, II-12 n, 8-9:15 pm, Paciñc. Founded Dec. 22, 1926. **KMIC** 

Inglewood, Calif. 223,7m-1340kc. 259 watts. J. R. Fouch, Mon. Tues, Wed. Fri, 7 am-8 pm, 10-12. Thurs. Sat. 7 am-12 mid. Sun. 11-12:15 pm. 8-9:15. Pacific. Founded Jan. 10, 1927, KMJ

Fresno, Calif. 365.6m-820kc. 50 watts. Fresno Dee, Announcer, W. F. Bragg, Mon. Wed. Rri. 7:15-10 pm. Tues. Thurs. 9-10 pm. Sat. 9:15-12 mid. Pacific. Founded Oct. 1, 1922. KMMJ

Clay Center, Neb. 285,5m-1050kc, 250-500 watts. M. M. Johnson Co. Daily ex Sun, 7:30 am, 10, 11, 12:30, L. S. livestock market; 1:30 pm., 7, 8, Sun, 9 pm. Tues, silent. Founded 1925. Central.

KMO NITO
Tacoma, Wash, 254.1m-1180ke, 250 watts. KMO, Inc. Announcer, Carl E. Haymond, Mon, Tucs, Wed, Thurs, 10-11 am, 2-3 mm, Mon, 7-9:30 nm, Tucs, 9-12:30 am, Wed, Thurs, Fri, 8-10 pm, Sat, 10-11 an, 2-3 pm, 6-7, 9-11, Fri, 10-11 an, 2-3 pm, 6-7, 9-11, Fri, 10-11 an, 2-3 pm, 5-12 mil, 6-7, 7:30-9, Pacific, Founded Aug, 25, 1926.

**KMOX** 

No. 29.5 an-1600kc 500 watts. The Voice of S. Louis, a memucer, Goorge Junkin, Daily ex Sun, 9-40 am, markets; 10:45 pm, table; 11:15, muss; 12 n, farm fassi; 19 n, orderst; 2; leicture; 2:50, studio program; 5, markets; 6, chil-Columbia chain; 10-1 am, dance mussic. Thes, Thurs, 8 pm, 10-1 am, Sun, 2 pm, 4 pm, 8. Central-Founded Dec, 18, 1235.

**KMTR** 

Los Angeles, Calif. 526m-570ke. 500 watts. KMTR Radio Corp. Daily ex Sun 2-7:30 am. exercises 7:30-8:39, 8:45-9, time: 11 pm. 1:30-2:30, 5:30-11 Installed June. 1925.

KNRC

Santa Monica, Calil, 374.8m-200kc, 599 watts. Keirulff & Ravenscroft Co. Daily ex Sun, 1:30-4;30, Tues, 4:30-5 pm. Sun, 10:45 am, 3:39-4 pm, 5-9, histalled 1921. Pacific.

KNX

Los Angeles, Cali, 336.9m-890kc, 500 watts, Los Angeles, Cali, 336.9m-890kc, 500 watts, California, Ca

KOA

Denver, Colo.: 325-9m-920ks, 2300 watts, 6 anipm. 5000 watts, General Elec. Co. Announcer,
pm. 5000 watts, General Elec. Co. Announcer,
pm. 5000 watts, General Elec. Co. Announcer,
prod resorts, markets, Daily ex Sai, Sin, produce,
Daily ex San, 12:05 pm, organ, Tues, Thurs, Fri,
3200, houseworks markets, Daily ex Sai, Sin, produce,
Daily ex San, 12:05 pm, organ, Tues, Thurs, Fri,
3200, houseworks markets, Thurs, 4 pm, Daily ex
halletins, Men, 7:30 pm, Appreciation hour, Tues,
farm question box; 8:30 pm, Med, 7:10 pm, Tup,
Thora program, Sai, Pm, dauce, Sain, 11 an and 7:31
pm, service; 5:30 pm, music, Founded Dec 15, 1924.
Mountain.

KOAC

Corvallis, Ore. 270.1m-1110kc. 500 watts. Oregon Agricultural College. Announcer, W. L. Kadderly. Mon. Tues. Wed. Thurs, Fri, 7 pm. Pacific. Founded Dec., 1922.

KOB

State College, N. M. 394,5rg-760he, 7500 watts, 6 am-6 pm, 5000 watts, N. M. College of Agri, & Mech. Arts, Amounter, Robert Stewart, Slogan, 12:30 pm, time, weather, markers, road reports, news; music 9:55:1010, time, weather, road re-ports, Mon. 7:30-8:30 pm, farm program, Wed, 274, 7:30-8:30 pm, music Founded 1320, Moun-

KOCH Omahu, Neb. 258.5m-1160kc, 259 watts. Central Radio School, Annuncer, C. H. Thompson, Mon. Tues, Thurs, 7-10:30 pm. Sat, 12 multight, Sun, 3:30 pm, Founded 1923. Central.

KOCW

Chickasha, Okla. 252m-1190kc, 250 watts, Okla. College for Women, Tues, Thurs, 8 pm, music. Daily ex Sun, 72-1:30 pm, Sun, Mon, Wed, Thurs, 10:15 am, Mon, 10-1:30 am, musicale, Central. KOIL

Conneil Bluffs, Ia. 319m-940kc, 5000 watts. Mona Motor Oil Co. Announcer, Rob Hall, Daily ex Sur 7-9 am, musicale; 19-11. Aunt Sammy; 12-39-2 mu, musicale; 3-4, 5-5-39, 5-39-6, 7-8, 9-10, 11-12, 12-1. Central. Founded July 10, 1925.

KOIN Portiand, Ore. 319m-940kc, 1009 watts. KOIN, lac Daily ex Sun, 9-10 am, 10 am, 11 am, 12 m, 3, 5:15, 6, 7, 7:30, 8-9. Sat, 11-1 am, Mon, Wed, Frl. 10-11 pm. Sun, 3-4:30 pm, 6-7 pm, 7:50, 9. Pacific, Founded April, 1926,

KOMO

Scattle, Wash. 305.9m-980kc. 1002 watts. Fisher's Blend Station, Inc. Announcers. G. Denald Grar. George Misson. Daily es Sun. In am-1-230 am. 10, Gravel Station. Daily es Sun. In Statistics. 12 in Grant 1518; 12:15. organ; 11: vocalists; 12 in, Grant 1518; 12:15. organ; 11: 5-45, stocks and bonds; 6, news; 6:15, cuberters; 19, W. B. C. 16, propram; 10:30, news; 10:45, dance 5:10, Pacific. Founded Dec. 3, 1026. KOW

Denver, Colo. 247.8m-1210kc, 250 watts. The Associated bulustries Broadcasting, Daily ex Thui 7-9 pm. Sun, 11-13 n, 6-7 pm, 7:30-9. Mountain. **KPCB** 

Seattle, Wash. 230.6\(\hat{n}\)-1300kc. 50 watts. Pacific Coast Biscuit Co. Daily ex Sun, 9:39-9:50 and recipe; 7:20-8:50 pm. Mon. Wed. 5:30-6 pm. 6, sports. Thes, 6:30-10 pm. Fri, 8:30-9:30 pm. Sat. 8:30-9:30 pm. Tacific, Tounded April 1, 1927. **KPJM** 

Prescott, Ariz. 214.2m-1400kc. 15 watts. Frank Wilburn. Irregular hours, news, sports. KPLA Los Angeles, Calif. 252m-1190kc. 500 watts. Pacific Development Radio Co. Dafly 11 am-il pm. Suo, 7-10 pm. Pacific. Founded March, 1927.

**KPNP** Muscatine, Iowa, 211,1m-1420kc, 100 warts, Central Radio Co. Wed, 10:15-11:15 pm. Central.

KPO San Francisco, Calli. 422,3m-710kc. 1600 waits, Hall Bross, and Jile Chronicke. Announcer, Curris City by the Collete Gate. Daily ox, Sun. 6:45-713, 744, health drills; 16:30, utility (satures; 12 n. falls, Mon. 7 n. falls, Mon

**KPPC** 

Pasadena, Calif. 228.9m-1310ke. 50 watts. Pasadena Bresbyterian church, Wed. 7-9 pm. Sun, 9:45-12:45 pm, 6:45-9. Founded Dec. 25, 1924. Pacific.

Houston, Texas, 293,9m-1020kc, 503 watts. Houston Post-Dispatch, Slowan, Kotton Port Rail Centers. Announcer, Alized P. Daniel, Dality ex Sun, 19:55 am, time; 11, weather, markets; 12 mon, entertainment, Jally ex Fry Sun, 3-4 m. Dality ex Sun, 17 m. Dality ex Sun, 17 m. Dality ex Sun, 17 m. Dality ex Sun, 18 m. Sun, 1 m. Dality experience, Founded May 8, 1925. Central.

**KPSN** Pasadena, Cslif. 315.6m.950kc, 1000 watts, Pasadena Star-News, Aunouncers, George Frenger, P. C. Pryor, Dally es Sun, 12:15 pm, 6 pm, news, Tues, Thurs, Sat, 3-9 pm, Sun, 10:30-12:30, am. Installed Nov. 23, 1925. Pacific,

KQV Pittsburgh, Pa. 270.1m-1116kc. 560 watts. Doubleday-Hill Elec. Co. Announcer, Howard E. Clark Mon, Wed. Fri. 4-5 pm. 6-9. Tues, Thurs. 4-5 pm. 6-7. Sun, 1-2 pm. Eastern.

KOW San Jose, Calif. 296.9m-1010ke, 500 watts. First Baptist church. Daily ex Sun, 1-2;30 nm. nusic; 55:30, 6-thidden's hour; 5:30-6. studio program; 6. Auni Sammy; 6:206.30, 6. Sun, 5:30, 6-thidden's hour; 5:30-6. Sundio program; 6. Auni Sammy; 6:206.30, 6. Sun, 6:30

Shreveport, La. 220.4m-1360kc, 50 watts. Radio Club. Announcer, R. M. Dean,

KRE Calif. 256.3m-1170kc, 100 watts. First KRLD

Dallas, Texas. 461.3m-659kc. 509 watts. KRLD, Inc. Announcer, Arthur W. Stowe, Slogan, "Where the Bluebanuels Grow." Daily ex Wed. Son, 12:30-11:30 pm, 7-8:30, 9:30-10:30, Mon, 11-12 mid. Tuess. 8-8:30 pm, Thurs, 8-8:30 pm, Sat, 11-12 mid, organ, Central. Founded Oct. 30, 1926.

Los Angeles, Calif. 215.7m-1390kc. 2: Freeman Lang, A. B. Scott. Announcer Biddick. Daily ex Sun. 12:20-2:30 pm. 9-12 mil. Pacific. Founded Feb. 7, 1927, KRSC. KRLO

Scattle, Wash. 211.1m-1420kc 50 watts. Radio Sales Corp. Announcer, William J. Calsamalia. Daily ex Sun. 9-10 am. 6-7-20 pm. 9-10:30 pm. Mon. Wed. Pri. 3:30-5 pm. Pacific.

Manhattan, Kan. 333.1m-990ke, 500 watts. Kansas State Agricultural College. Announcer, Liste L. Longsdorf. Daily ex Sat. Sun, 9-9:55 am, 9:55, 12:35 pm, 7:30-8:30. Central. KSBA

Shreveport La. 267.7m-1120kc. 1000 watts. Shreveport Broadcasting Assn. Announcer, W. G. Patterson, Daily es Sun. 10-13 am, 12-15 m. 3-15, markets, weather, news: Tues, Wed, Thurs, Fri. 6-30, pm. 8. Mon., 11 ym. Sat. 9 pn. Sun. 11 am, 7-20 pn. Central. Founded March 14, 1922.

Sourx City, Iowa, 243,3m-1230kc, 500 watts, 1005 6 am-6 pm. Perkins Brothers Co. Daily ex Sun, 9-48 am, 10-45, 1245 stock, unarkets, weather 11:30-123,9 bm. news, music; 1:45-3:45 pm. Mon Pues, Wed, Fr. 6 pm. Sun, 11 am, 7:30 pm, serv-ics; 2-4, musicale. Central

Sr. Louis, Mo. 545.1m-550kc. 500 watts. Pulitzer Pub. Co. Announcer, W. P. Corwin, Daily ex Sum, 9:40 am, 10-46, 11-34, 12-30, 13-40, 3-40, Mon, Tues, Thurs, Pri, 7-11 m, Wald, 63-911 m, Sat, 7-11 pin. Sun, 3-45-9:15 pm, Central. Founded KSEI KSD

Pocatello, Idaho. 333.1m-990kc. 250 watts. KSEI Bruddensting Assn. Announcer, W. J. O'Connor. Daily ex Sun, 3-4 pm. 6-8, 9-11. Sun. 9-11 pm. Mountain.

KSL N.S.L. Lake City, Utab. 302.8m-990kc. 1900 watts. Radio Service Corp. of Utab. Autonoucers, Roscoe Grover. Tel Rogers. Daily ex. Sun, 7-8 am. 10-11:30, 12a-1-30 nm. 4-5. Mon, Tues, Wed. 6-11:30 nm. Sat. Daily nm. Thirra, 6:30-11 pm. Fri. 5:30-11/30 pm. Sat. 6:30-12 pm. Thirra, 6:30-12 pm. 7:55-3, 5-11:30. Mosnification of the company of the company

**KSMR** Maria, Calif. 272.6m:-1160kc. 100 watts. Santa Maria Valley Railroad Company. Announcer, Sydney C. Peck. Daily ex Sat. Sun. 10-30-11:30 am 6:30-2:30 pm. Sat. 7:30 pm. markets. Pacific.

KSO Clarinda, lowa. 227.1m-1320kc. 500 watts. Berry Seed Co. Announcer, Joe Fanssen. Slugan, "Keen Serving Others." Daily ex Sun, 6:39.9 m. 12-1 pm. music talks. Daily ex Sun, 6:39.9 m. Sm. 11-12 n. Sep Jun, Founded Nev. 2, 1925. Central

KS00 Sioux Falls, S. D. 209.7m-1430kc, 250 watts Sioux Falls Broadcast Assn. KTAB

Onkland, Calif. 280.2m-1070kc. 500 watts. The Associated Broadcasters. Amouncer, Lytton Spauldur, Slozan, Knowledge, Truth and Benty, Duby, Sam, 6-48-1-30 nm, 4-7-30, 8-11, San, 9-45-12-30 nm, 1-30-2-30, 7-8, 8-9-315, Pacific.

Stan Antonio, Tex. 228.9m-1310kc. 20 watts. Robert B. Bridge, Alamo Broadcrasting Co. Slogan. "Kum to America's Playrvund". Daily ex Sun. 6:30-830 am. 10:30-11:30. 12:30-2 pm, 6:30-8, 9:30-10:30, Man. silent. Sun. 4-6 pm. 9:30-10:30. Central. Founded Sept. 15, 1927.

KTBI Los Angeles, Calif. 288.3m-1040kc, 500 watts. Bible Inst. of Los Angeles. Announcer, H. P. Herdman. Daily ex Sun. 8:45 ann, 2 pm. Daily ex Sat. Sun. 7:15-9. Sun. 10:45 am, 3, 6 pm, 7:15-9:30.

KTBR Portland, Ore. 282,8m-1050lc. 50 watts. M. Brown. Daily S. Sun, 6-7 program disput program of the control of th

Hot Springs National Park, Ark, 384.4m-76, 1690 watts. The Arlington hotel. Announcer C. Arnoux, Slogan, "Kum to Hot Syrings," J. 21 pm. 7;30. Tues, 6-10-45 pm. Thurs, Sat, 10n. 8-11, Wed, 7;30-41 pm. Sun, 11-12:30, 3-11;30, installed Dec. 20, 1924. Central.

KTNT

MALVA Mousering, Lows. 256,3m-1170kc. 2009 wgate, Norman Raker, Slogan, "The Home of the Calilophama Very of the Issue Farm Union." Announcer Adam Reinemund. Daily ex Sun, 6 am-8 pm. Morros Sprn, 9, 11, Tues, Wed, Thurs, Fri, 11 pm. Sun LTTS A.

Antonio, Tex. 265.3m-1130kc, 2000 watts to Broadcasting Co. KTUE

Houston, Tex. 212.6m-1410kc. 5 watts. Uhalt Elec-tric. Announcer. Bill Arnold. Daily ex Sun. 5:15-6:15 pm. Tues, 8-9 pm. Sat, 8-9:30 pm. Central.

Scattle, Wash. 394.5m-760kc, 1000 watts. F. Preshyteriau church, Announcer, J. D. Ross, S. Gan, "Hear Ye, Hear Ye, the Gospel," Sun, 12:30 pm, 3-4:30, 7-9:30, church service. Pacific. KILL

Seattle, Wash. 199.9m-1500kc, 10 watts. Puger Sound Radio Broadcasting Co. Mon, Wed, Fri, 6-9 put, Sat, 6-12 mid. Pacific.

Fayetteville, Ark. 296.9m-1010kc. 500 watts. University of Arkansas. Patty ex Sun, 12-1 pm. Sun. Mon, 7-9 pm. Thurs, 7-9 pm. Central.

KUOM Missoula, Mont. 461.3m-650kc. 500 watts. University of Montana. Mon. Thurs, 8-9:30 pm. Sun. 9:15-10:30 pm. Mountain.

**KUSD** Vermillion, S. D. 483.6m-620kc. 250 watts. Versity of South Dakota. Aurouncer, Lyman Son. Stogan, "South Dakota Dinversity for Sc Dakotans." Mon. Fri. 6:30-7:30 pm. Sun, 9-10 Central.

KUT Austin, Tex. 232,4m-1290kc, 500 watts. University of Texas, Announcer, J. G. Adams, Mon. Wet, 8 pm. Founded 1925. Central.

KVI Tacoma, Wash. 234.2m-1280kc. 50 watts. Puget Sound Radio Broadcasting Co. Daily ex Sun. 8-10 am, 3-5 pm. 6-8. Sun. 11-12:30 pm, 5-5:30, 7:30-9. Pacific.

KVL Scattle, Wash. 202.6m-1480kc. 100 watts. Arthur C. Dailey, Moore Hotel. Mon, Tues, Wed. Thurs, Fri. 6:30-10 pm. Pacific. **KVOO** 

Tulsa, Okla. 348.6m-860kc. 1000 watts. South-western Sales Corp. Daily ex Sun. 11 am, mar-kets, 12-1 pm, 2-45 pm, 6-915. Central. KVOS

Bellingham, Wash. 209.7m-1430kc. 50 watts. Voice of Seattle. **KWBS** 

Portland, Ore. 199.9 Radio Co.

**KWCR** Cedar Rapids, Iowa. 239.9m-1250kc. 250 watts. Announcer, H. F. Paar. Slogan, "The Voice of Cedar Rapids." Daily ex Sun. 6:30 am, 11:30, 3:45 pm, 4 4:30, 5, 6, 9, 10. Sun, 4 pm, 9:30. Central. KWG

Stockton, Calif. 344.6m.870kc. S0 watts. Portable Wireless Telephone Co. Announcer, George J. Turner. Stogan. Voice of the San Joaquin albey. Daily ex Sun. 4.5 pm. news, concerning the san. 6.7.30. 4.5 pm. 10.7 mm. 6.7.30. 4.0. Snews. Concerning Sat. 10.1 am. annee music. Sun. 7.30.9.30 pm. service; 9.30-10.30. organ. Pacific.

KWJJ Portland, Ore. 228.9m-1310kc. 50 watts. Wilbur Jerman. Slogan, "The Voice From Broadway." Daily ex Sun, 1-6 pm, 6-3, 8-10:30. Wed, 10:30-12 mid, 12-1, Sun, 12-1 pm. Pacific.

KWK St. Louis, Mo. 234.2m-1289kc, 2000 6 am-6 pm. 1000 watts. Greater St. Louis Broadcasting Corp. Announcer. Thomas Patrick Convey. Daily of Announcer. Thomas Patrick Convey. Daily as a part of the Convey. The Convey of the Conve

**KWKC** Kansas City, Mo. 222.1m-1350kc. 100 watts. Wilson Duncan Studios. Announcer, Elmer C. Hodges. Slogan, "Keep Watching Kansas City." Tucs, Wed, Thurs, Fri. 7 pm. 9. Central.

Shreveport, La. 394.5m.760ke, 1000 watts. Henderson Iron Works & Supply Co. Daily ex Sun, Mon, 8:30-12 mid. Sun, 7:30-12 mid. Central. Founded Jan. 8, 1925, KWKH

KWSC Pullman, Wash. 394.5m-760kc, 500 watts. State College of Washington. Amounteer, Harvey Wixson Mon, Wed, Fri, 7:30-9 pm, music, lectures. Pacific KWTC

Santa Ana, Calif. 222.1m-1350kc, 160 watts, Dr. John Wesley Hancock, Mon. Wed. 5:30-7 pm. Tucs. 5:30-7 pm. 8-10. 'Thors. 5:30-10 pm. Fri. Si30-8:30 pm. Sat, 5:30-9 pm. Pacific. KWUC

Le Mars, loven 243.8m-1230kc, 1500 waits, Western Union College, Amounter, Rex Frolker, Dalling 19, 30-11115 am, 12:30, 4, 5, 7, Wed, Sat KWWG.

Brownsville, Texas. 277.6m-1080kc. 500 waits. Brownsville Chamber of Commerce, Slogan, "Kum to the World's Winter Garden." Daily ex Sun, 12 m, 6 pm, Mon, Thurs, 8:30-11:59 pm. Central.

KXA

Portland, Ore. 2204m-1360ke. 50 watts. KXI Broadcasters, Amouncer, A. R. Truitt. Slogan The Voice of Fortland, Daily, 8 am-11 pm. San 11-9 pm. Sun. Facilic.

KXRO therdeen, Wash, 227.1m-1320kc, 50 watts. KXRO

KYA Sau Francisco, Calif. 309.1m-970kc, 500 watts. Pacific Broadcasting Corp. Amouncer, Edward J. Ludes. Daily ex Sun, 10-12 n, 5:30-7:30, 5-11. Tues. Fri, 10:30 am, diet talk, Facific, Founded Dec. 18.

KYW Chicago, Ill. 526m-570kc. 2500 watts, 5000 afte 10 pm, Westinghouse Elec. & Mig. Co. Announcer John Clark, Pally ex Jun, 6, bedlinue story; 6:3d dinner concert; 7-9, W1Z; 9-10.30, program; 10:30 weather; 10:32, orchestra, Conspees Carnival, Tues Fri. 4-5 pm, 10:50 ani, time; 11, gervice 1 pm, W1Z; 2, 4:50, 7:15, W1Z; 9:13, W1Z. Cent.

**KZIB** Manila, P. I. 249.9m-1200kc, 20 watts. I. Beck lnc. Daily, 8:30-10:30 pm.

Oakland, Calif. 245.8m-1220ke, 100 watts. West ern Radio Institute (Hotel Oakland). Announcer Elbert Cowan. Daily ex Sun. 6:33-7:30 pm. Sun 8:10 pm. Pacific. Founded June 29, 1921. **KZRM** 

Manila, P. I. 413m-726.1ke, 1000 watts, Rad-Corp. of Philippines. NAA Washington, D. C. 434.5m-690kc, 1000 watts, Unite States Navy Dept. Daily 10:05 am, 3:45 pm, 10:0. pm. Daily ex Sun, Holidays, 11:155-12 n, weather 9:55-10 pm, time, Fri, 7:45-8 pm. Eastern. WAAD

Cincinnati, Ohio. 230.6m-1300kc, 25 watts. Ohi Mechanics Institute, Sat, 9:45 pm. Eastern. WAAF Chicago, Ill. 389.4m-770kc. 500 watts. Chicago Dally Drovers Journal, Announcer, Carl Ulrich, Daily ex Sun, 8:45 am, 10:50, 11, 12:50 pm, Daily ex Sun. 824, 4:30, live stock and weather reports. Central. Founded May 22, 1922.

WAAM Newart N. J. 267.7m-1120kg. 250 watts. I. R. Newart N. J. 267.7m-1120kg. 250 watts. I. R. Nelson Commany, Anisomore, Jack Van Riper, Daily ex Sun, 7-8 am, 11-1:20 pm, Thes, Wed, 6-8 pm, Fri. Sat. 8-10 pm, Mon. Thurs, 10-12 mid. Sat, 12:30 am-2-30 pm.

WAAT Frence (Ity, N. J. 245.8m-1220kc, 300 watts, Bremer Broadcasting Copp. Announcer, Randolinh Conroy. Slogan, The Vuice at the Gate of the Garden State. Bally ex Sun, 10:30 am, housewives weather; 6:45, sports; 7; nine. Mm, 8:11 pm, Tues, 8:5 pm, Sat, 9: pm, San, 9: 10:30 am; 5:30 pm, 6.7; 7:30, 8. Eastern, Founded Nov. 20:326.

Omaha, Neb. 440.9m-680kc, 500 watts. Omaha Grain Exchange. Aunouncer, James Thompson. Slo-san. Pioueer Market Station of the West; Dally ex Son, 8:30 am, 8:45, 9:15, 9:43, 10:15, 10:15, 11:15, 11:45, 12:15, 1:15, 1:35, 8:30, 8:30, Dally 5:30, 10:15, 10:

Richmond Hill, N. Y. 309. Im-970kc. 2500 watts.
Atlastic Broadcasting Corp., Dally ex Sun., 11:5015:50 pt. 10:30-12:45 pm, 3-9. Eastern,
WABF

Kingston, Pa. 205.4m-1460kc. 250 watts. Markle Brondensting Corp. Announcer, E. L. Jones, Slogan, "The Voice of Wooming Valley: Daily ex Stin, 12-1 pm, 6-7. Sun, 10:30-12, 7:30-9, 9-10:30. WABI

Bangor, Me. 389.4m-770kc. 100 watts, First Universalist church. Announcer. Prof. W. J. Creamer, Jr. Sun, 10:30 am, 7:30-9 pm. Eastern, Founded

WABW

Wooster, Chio. 247.8m-1210kc, 50 watts, The College of Wooster, Dept. of Physics, Announcer, A. W. Coven. Philadelphia, Pa. 247.8m-1210kc, 50 watts. Job Magaldi, Jr. Slogan, "Qouker City Sleep Dodgers, Club, "The American Broadcasting Club," Sun, pm, music: 10:30, "Sleep Dodgers' Session." Eas

WABZ New Orleans, La. 238m-1260kc. 50 watts. The Collegeum Place Baptist church. Announcer, Charles B., Paue. Stogan. "The Station with a Message." Sim. 11-12:15 pm. 7:30-9, church service. Central. WADC

Akron. Ohio. 238m-1260kc. 1690 watts. Aller Theater Broadcasting Station. Announcer, George F. Houston. Daily ex Sun, 11-12 noon, 5:30-6 pm Bally ex Sun, 8a, 8-11 pm. Esun, 10:30-11:45 am 12:30-120 pm. 3-5, 9-11 pm. Eastern.

WAFD stroit, Mich. 230,6m-1360kc, 100 watts, Albert Pariet Co. Announcer. Owen F. Uridge, Daily Sat, 6:45 pm, dinner music, 7:15, 7:30, 8.

WAGM Royai Oak, Mich. 225.4m-1330kc. 50 watts. Robert L. Miller. Amouncer, R. L. Miller. Slogau, "The Little Station With the Big Reputation," Mon. 8-12:30 am. Wed. Fri. 8-12 mid. Founded Oct. 3. 1925. Central.

WAIT Mass. 214,2m-1409kc. 10 watts. A. Co., Inc. Off the air until October. Waite & C

Columbus, Ohio. 282.8m-1060ke. 5000 watts. American Insurance Union. American: Don Bernard. Daily ex Sun, 10:30-11 am. services 11:30-12:50 ma. Daily ex Saft. Sun, 3-4 nm, 6-7. Mon, Fri, 7-11 mm. Ved. 3-10-11 pm. Sun, 3-8 nm, 7:15, 9-11. Eastern WAIZ

Wis, 227.1m-1320kc. 100 watts. WALK

Willow Grove, Pa. 201.2u-1490kc. 50 watts liert A. Walker, portable.

Y A. Min. 222.1m-1350kc. 560 katts. Radisson Radio Corporation. Stanley E. Hubbard. Slogan. The Gall of the North. Daily ex Sun. 10:30 am: 10:45, shopping news; 12, weather; 12:01, organ; 5, 5:39, 6:36, 6:35, farm flashes; 7, weather; 7:01, music, 7:30, 8:30, 9, 10. Sun, 5:55 pm. 6, 2-56. Central.

WAPI Auburn, Ala. 340.7m-880ke, 1090 watts. Ala Polytechnic Institute. Announcer, W. A. Yo Daily ex Sun, 12-1. Tues, Thurs, Fri, 9-10 Installed 1922, Central.

WARS Brooklyn, N. Y. 227.1m-1320kc. 500 watts. Amateur Radio Specialty Co. Daily ex Sun, 4 pm, 12 mid. Sun, 12:30-3 pm. Eastern.

WASH Grand Rapid, Mich. 256.3m-1170kc. 250 waits. Baxter Laundries, Inc. Daily ex Sar, Sun. 12:30-1:30 pm, 5:30-6. Thurs, 6-6:30 pm, Daily ex Thurs, Sun. 7-8 pm, Sun. 10-11:30 am, 4-5 pm, 7-8:30. Central Founded March 13, 1925.

WATT Boston, Mass. 201.2m-1490kc. 100 watts. Edison Elec. Illuminating Co.

WBAA W Lafayette, Ind. 272.6m-1100kc. 500 watts. Pur-due university. Announcer, J. W. Stafford. Daily ex Sun, 11:15 am. stocks. markets, weather. Mon. Fri, 7 pm. special program. Central.

Harrishurg, Pa. 299.8m-1000kc, 500 watts. Penn-sylvania State Police. Announcer, A. E. Poorman. Daily ex Sun, 10:30 ann, 1:30 pm, 4, 7, police report, fire protection, farm news. Eastern. Founded 1919.

WBAL Hattimere Md. 225 Sm-1050bc. 5000 watts. Con-partition of Sm. Elec. Lubt & Power Co. Anneumer, Stanley W. Barnett. Slogan, "The Station of Good Music." Daily ex Sun. Sat. 3:40.5 pm. 6-11 pm. Sat. 6:30-11 pm. Sun. 6:30-8:15 pm. Eastern. Pounded Nov. 1, 1923.

WBAO Decatur, Itt. 267.7m-1120ke, 100 wat(s. James Millikin University, University activities, Mon. Wed, 7-8 pm. Central. Founded 1232.

Fort Worth, Tex. 489.7m-609kc, 5990 watts. Fart Worth Star-Telegram, Announcer, "The Hired Hand," Daily ex Sun, 8, 9, 10, 11, 12 m., 1 un, 2, 3, "Port of Missing Men," Mon, Tues, Thurs, Fri, Stat. 6-7 pm, 8-9, Mon, Thurs, Fri, 10-12 mid, Sun, 11 am, church; 9:30-11. Central.

WBAR Sisilt, Wis. 270.1m-1110kc. 500 watts, Kopp Radio Co. Slogan. "The Station of Northern Wis-cousin." Mon, 9-10 pm. Wed, 8-9 pm. Thurs, 7:30-8:30. Sun, 10-11 pm. Central.

**WBAW** 

Nashville, Tenn. 239.9m-1250kc. 500 watts. WBAW froadcasters. Amhouncer, Harry Stone. Daily ex Sun. 10-115. 5 am. 238-13.0 pm, 5-8. 9-10. Tues. 17-12 mid. Sun. 9-30-10.30 am; 11-12-30 n, 7-9. Founded Feb. 24, 1924. Central, WBAX

ilkes-Barre, Pa. 249.9n-1200kc. 169 watts, Joh. Stenger, Jr. "Slogan, "In Wyoming Valley me of the Anthracite." Tues, 6:30-11 pm. Thurs am. Sun, 5-9 pm. Eastern, Founded May

WBBC

Bronckyn, N. Y. 227 Jun-1330ke, 500 watts, Brook-pen Broadcasting Corp. Mon. 10-3 cm, 7-8, 10-7
 Tues, 9-30-12 n., 3-7 39, 10-39-12. Wed, 10-3 pen, 6-7, 10-12. Thursy, 10-17 n. 4-6, 7-10. Fri, 10-3, 6-3, 10-12. Sat. 9-10-45 am, 3-30-9 pm, Sun, 9-10 am, 3-8 pm, 10-30-12. Eastern.

WDDL Richmond, Va. 234.2m-J289be. 100 watts, Grace Covenant Presbyterian church, Announcer, W. L. Frounded Peh. 1924. Founded Peh. 1924.

WBBM

Chicago, Ill. 389,4m-770kc. 5000 watts. Atlass Investment Co. 5 minosurer, Acta Caldwell. Daily 2-10, 100 minosurer, Acta Caldwell. Daily 2-10, 100 minosurer, 100 minosure

Petoskey, Mich. 239.9m-1250kc. 103 watts. Petoskey High School. Announcer, Carl Bowman. Daily ex. Sun. 12-12-15 nm. weather stocks, news. Wed. 6-7 nm, popular program. Central.

WBBR Russwille, N. Y. 256.3m-1170kc, 1000 watts, Intenstional Bible Students' Association, Mon. Tue Thurs, Fri. 2-4 pm, 7-9. Wed, 2-4 pm, 6-7. Su 10-12 n, 2-4 pm, 7-9. Founded Feb., 1924. Easter WBBW

Noriolk, Va. 236.1m-1270kc. 100 watts. Ruffuer Junior High School, Announcer, Lee M. Klineletter, Slotan. "The School You'd Like to Go To. Mon, 8 pm. Fri. 8-9:30 pm. Eastern.

WBBY

Charleston, S. C. 249.9m-1203kc, 75 watts. Washington Light Infantry, Slogan, "Seaport of the Southeast," Sun, 10-11 pm.

WBBZ

Chicago, 111, 204m-1470kc, 100 watts, C. L. Car

WBCN

Chicago 111: 288.3m-1040kc. 250 waits. Great Libert Chicago 111: 288.3m-1040kc. 250 waits. Great Libert Chicago 111: 250.2m. 2

Takoma Park, Md. 265.3m-1130kc, 100 watts. Elec. School. Announcer, Wm. M. Johnson, Fri. 6-7 mm. Eastern,

Medford, Mass. 288,3m-1040kc, 503 watts. Boston Transcript Co. Announcers, Gerard H. Slattery, Wayne H. Latham, Richard D. Grant, Stoam, "The Boston Evening Transcript-New England's Leading Family Daily," Daily 6:30-11 pm. Eastern. WBIS

Boston, Mass. 461.3m-650kc. 500 watts. Boston information Service. Announcer, Nancy Howe. Daily ex Sun, 8-9:30 am, 2-4 pm. Eastern. Founded Jan. 29, 1927.

Breoklyn, N. Y. 199,9m-1500kc. 100 watts. Arthur Faske, Announcer, L. W. Berne, Daily Sun, 12-5, nm, 3-5, Mon, Fri, 8-10 nm, Tucs, 10-12 and Wed, 12 mid, Thurs, 6-8 pm, Sat, 6-8, Eastern Founder Nov. 22, 1926. WBMH

oit. Mich. 211.1m-1420kc, 100 watts. Braun's ic House.

Union City, N. J. 199.9m-1500ke, 100 watts. General Julius Schowerer, Slogan, "The Voice of Union City Chamas and State of Union City Chamas 22 and Daily ex Sun, 8-12 mid. Sun, 1-3 pn, 7-39-11. Easteru.

WBNY
New York N

New York, N. Y. 236.1m-1270kc. 500 watts. Bary-chrome Corp. Daily ex Sat. 6-12 mid. Sun. 2:30 pm. 6. Founded 1925. Eastern.

WBOQ
Richmond Hill, N. V. 369.1m-970kc. 500 watts.
Atlantic Broadcasting Co. Tues, 7:30-12 mid. East-

WBRC Rimitugham, Ala. 241.8n;12.60kc. 250 warts. Dirmitugham Froadcasting Co. Amounter, Dud. Connolly. Slogac. "The Biggest Little Station in the World." Daily ex Sat. Sun. 1-2 pm. Mon. Tues. Wed. Fri. 8-10 pm. Sun, 10;45 am. service: 6:30 pm. organ; 3, service. Eastern.

Wilkes-Barre, Pa. 249.9m-1200kc, 109 watts. Liberty State Bank and Tinst Co. Announcer, Louis C. Baltimore, Mon. Fii, 12.30-11.5 pm. 6.30-12. Wed. 12.30-1215 pm. 6.30-11.30. Sun, 9-12 mid.

WBRL Tilton, N. H. 232.4m-1290kc. 500 watts. Hooth Radio Laboratories. Tues, Thurs, Sat. 8 pm. Wed, 8;30 pm. Sun, 10;30 am. 7 pm, services. Eastern.

**WBRS** 

Brooklyn, N. Y. 251.1m-1420ke. 160 watts. North American Broadcasting Cop. Amounteer, M. E. Kriegel. Daily ex Sun, 1-2 pm. Mon, Wed, 10-11 pn. Pri. 8-9. Eastern. WBSO

Rahson Park, Mass. 384.4m-780kc, 100 watts. Rahson's Statistical organization. Announcer, Marshall McCarroll Daily os Sun, 4-5 pm, 12-1 am. Eastern, Founded Jan., 1927.

Charlotte, N. C. 288 Sm. 1160kc, 750 1000 warss, 7 am-7 pm. C. Coddinaton, Inc. Announcer, II. W. Burwell, Daily ex. Sun, 12:30 pm. Mon. 2:20 nm, 6:30 WEAF: 8. Tues, 3:50 pm. baseball, Well, 3:50 pm. baseball, Well, 3:50 pm. baseball, Well, 3:50 pm. Section, 7 pm. 10 pm. 10

Springfield, Mgss., 233.1m-900kr, 15000 watt Westinghouse Elec & Mg Co. Announcer All Redword Co. Announcer All Spring Co. Announcer All Spring Grant (5.30-10.30, 10.30, basebalt weather, 6.27 pm, basebal 6. organ; 6.30-10.30, 10.30, basebalt weather, 7-48, must 10.50, weather, Installed Sept. 19, 1921. Easter W B Z A.

WBZA Roston, Mass. 333.1m-900kc, '500 warts. Westing-house Elec. & Mig. Co. Same programs as WRZ. Mausfield, Conn., 535,4m-560kc. 599 watts. Connecticut Agricultural College. Announcer, Daniel E. Noble. Siogan. From the Nuture State. Mon. 7-7:45 pm Wed 6:45-7 pm. Sat. 7-30-8:39 pm Eastern. Founded June, 1923.

www.americanradiohistory.com

#### WCAD

Canton, N. Y. 243.8m-1230kc. 590-1000 watts, St. Lawrence University. Amounter, Ward C. Priest, Slogan. The Voice of the North Country. 12:30 pm, weather, reports, talks, music, time. Wed. 8 pm. Eastern.

## WCAE

Pitisburg, Pa. 461.3m-650kc 590 watts. Pitrsburgh Priesburgh Press. Daily ex Sun, 6:45-8 am, exercises; 8:15, 9:15, 10:15, 12:15 pm, 5:15; 1:30, 3:40 pm, news; 2:30 pm, otyran; 6, dinner music, 7, popular music, 5:50, 7:30, Uncle Kay Bee; 8-10. Sun, 6 pm, 7:15-10. WEAF. Eastern.

Columbus, Ohio, 234,2m,1280kc, 250 watts. Entre-kin Elec. Co. Daily ex Sun, 12-1 pm; 6-7. Eastern,

University Place, Nebr. 379,5m-790kc. 500 watts, Nebraska Wesleyan University. Announcer, J. C. Jensen. Daily, 10 am. convocation exercises; 4:30 pm. weather, news. Tues, Fri. 12 n. organ. Tues, 7:30 pm. Bible study; Tues, 8 pm. class; 9 pm. musicale. Sun, 11 am. services; 4 pm. vesper. Founded Oct., 1921. Central.

Northfield, Minn, 285.5m.1050kc, Sco watts, Dept. of Physics, St. Olat College, Abnouncer, Hecto Skifter, Slogan, "The College on the Hill." Daily ex Sun, Thurs, 9,45 am, Mon, 7 pm; 8115, Sun, 8,20-939 am; 3-4 pm. Central, Pounded, 1922.

#### WCAM

Camden, N. J. 223.7m-1340ke, 500 watts. City of Canden. Announcer, Harry E. Ehrhart. Mon, Wed. Fri, 7:30-10:30 pm. Eastern. Founded Oct.

### WCAO

Baltimore, Md. 243.8m-1230kc, 250 watts, Monu-ocental Radio, Inc. Announcer, Wm. L. Atkinson, Mon, Wed, Fri. 6-11 pm. Sun, 11 am, service; 3-5. Columbia; 8, service; 9-11, Columbia chain, Eastorn, WCAP

Asbury Park, N. J. 239.9m-1250kc. 500 watts. Radio Industries Broadcast Co. Announcer. Thomas F. Burkey, Jr. Mon, Tues, Thurs. Sat. Sun, 10-12 mid. Eastern. Fonuded July 1, 1927.

Rapid City, S. D. 247.8m-1210kc. 100 watts, South Dakota State School of Mines, Anoouncer, J. O. Kammerinan, Daily ex Sun, 9:30 am, 12:30 pm, weather, reports. Thurs, 7:30 pm, concert. Moun-tain

## WCAU

Philadelphia, Pa. 269.7m-1150kc. 570 watts. Universal Brondcasting Co. Announcer, Stan Lee Broza, Stogan, "Where Cheer Awaits U. Mon. 5:30-11:30 5-30-12 wide. 5-9-12 web. 5-9-12 wide. 5-9-12 wide.

### WCAX

WCHA Burlington, Vt. 254,1m-1180kc, 100 watts. University of Vermont, Stogan, The Voice of the Green Mountains." Fri, 7-8 pm. Eastern. WCAZ

WUAL
Carthage, Ill. 249.9m-1200kc. 50 waits, Carthage
College. Announcer, Raymond Derks. Daily ex
Sat, Sun. 11:40-12:15 nm. Mon. 7-8 nm. Central.

### WCBA

Allentown, Pa. 222.1m-1350kc, 100 watts. Queen City Radio station. Wed, 8:15-11 pm. Fri, 7:30-10:30 pm, Sat, 10-11 pm, dauce music. Sun, 10 am, 5:30 pm, 7, church service. Eastern.

## WCBD

WCBB

Zim, Ill. 344.6m.270kc. 5000 waits. Wilbur Glenn Voliva, Anneumeer, J. H. Belgew. Slogan, "Where God Rules, Man Prospers". Tucs, Thurs. 8-10:30 nm. connect. Wed. 22.30-1 nm. prann. Thurs. 2:30-2:30-6 pm., church services; 8-10:30 pm. Founded May, 1923. Central,

#### WCBE

New Orleans, La, 227.1m-1320kc, 5 watts. Uhali Brothers Radio Co., Announcer, Joe Uhalt, Slo gan, "Second Port U. S. A." Daily ex Sun, 11:30-12:30 pm. Daily, 7:30-8:30 pm, dance. Sun, 12:30 3 pm, dinner concert; 9, dance music, Central.

### WCBM

Baltimore, Md. 225m-1330kc, 160 watts, Hotel Chateau, Announcer, Harry J. Dobe, Tues, Thurs, Sat, 9:30-11:30 pm. Daily ex Sat, Sun, 12-1 pm. Sun, 6-7:45 pm. Eastern, Founded March 25, 1923.

#### WCBR

Providence, R. J. 201.2m-1490kc, 100 watts. Charles H. Messter. (Portable.)

#### WCBS

Springfield, 111, 209.7m-1430kc, 250 watts, Harold L. Dewing, Charles, H. Messter, Slogan, 'Home al Abraham Lincoln,' Mon, 9-11 pm, Tues, Wed. Tlurs, Fri, 8:30-19:30 pm, Sun, 10:45-12 n, 12:30-2 pm, 6-7, 7:30-8. Central, Founded April 8, 1923.

### WCCO

Brooklyn, N. Y. 211.1m-1420kc, 250 watts. Italiau Educational Broadcasting Co.

## WCFL

Chicago, III. 483.6m-620kc. 1500 watts. Chicago Federation of Labor. Announcer, Maurice Wetzel, Slogan, "The Voice of Labor." Daily ex Sun, 10-2 pm, 4-12 mid. Sun, 11-1 pm, 2:30-6:30, 7:30-9:30. Central.

Coney Island, N. Y. 218.8m-1370kc, 500 watts. Charles G. Unger, Daily ex Sun, 1 pm. Wed, Fri, 8 pm. Sun, 11 am. Eastern.

## WCLO

Kenosha, Wis. 227.1m-1320kc, 100 watts, C. E. Whitmore, Announcer, Glenn G. Balcom, Slogen, "The Gateway of Wisconsin, Daily ex Tues, Thurs, 11:33 am, 2:30-5:30, 7-12 mid. Founded Aug. 4, 1925. Central.

Joliet, III. 215.7m-1390kc. 150 watts. M. A. Fel-man Co. Slogan. "Will County's Largest Store." Wed, Fri. 7-11 pm. Tues, 8-11 pm. Sat. Sun. 9-11:30 pm. Sun. 9-30-12-30 pm. Wed, Sat. 11-11:39 am. Central. Founded June 1925.

## WCMA

Cilver, Ind. 269.7m-1150kc, 500 watts, Culver Military Academy, Announcer, C. F. McKinney, Daily ex Stun, 3-4 nm, public service hour, Mon, 8-10:30 nm, Wed, 8-10:30 pm, Fri, 8-10:30 pm, Sun, 11-12:30 pm, chapel service. Founded 1925. Central.

#### WCOA

Pensacola, Fla. 249.9m-1200kc. 500 watts. Municipal Broadcasting Station, Announcer, John E. Frenkel, Slogan, Wonderful City of Advantages.

Daily ex Smi, 10:20 am, 12:30 pm, Mon, Wed, Fri, Smith Common Co

Columbus, Miss. 230,6m-1300kc. 250 watts, Crystal Oil Co. Amounteer, T. C. Billings, Daily 5-6 pm.
WCOT
Oliveria.

omeyville, R. I. 225.4m-l.330kc, 100 watts. Jacob Conn. Announcer, Lewis S. Bellem, Jr. Daily and Sun, 2:30-4 pm. Daily ex Sun, 8-10 pm. Eastern.

Chicago, Ill. 223.7m-1340kc, 500 watts, Clinton R. White, Announcers, C. R. White, Charles P. Hughes, Miss Josephine, Slogan, "For Your Entertainment," Daily ex Sun, 11:30-1 pn, Daily ex 130-1 pn, 9:39-10:30, Central, Founded May, 1936, 57:30 pm, 9:39-10:30, Founded May, 1936, 57:30 pm, 9:39-10:30,

### WCSH

Portland, Me. 365.6m-820kc. 500 watts. Congress Square botel. Announcers. L. T. Pitman, H. C. Wing, Daily ex Sun, 10 am, housewives hour; II. WEAP; 12 u, stocks, weather; 12:10, news; 3, mu-sic hour; 4, news; 6, stocks; 7:45, news. Mon. 8:30 pm, WEAP; 9:30, 30 EAP; 10:30, 10, Thues, 7:30 pm, Fig. 8:30, 9, 9:30 Sat. 8 pm. Sun, 10:30 an, 1:30 pm, 4, 7:30, Eastern, Founded Junc, 1925, MCCS.

## WCSO

Springfield, Ohio. 256.3m.1170kc. 500 watts. Wit-tenberg College. Announcers, John D. Kuhas, Les-ter Crowl. Mon. Wed. Fri. -9 pm. Tues. 6:30-7.30 pm. Sat. 2-4:30 pm. Eastern, Founded Dec.

## WCWK

Fort Wayne, Ind. 214.2m-1400kc. 250 watts. Chester W. Keen. Slogan, "The Home Sweet Home Station. Fri, 7-8 pm. Sat, 8-10 pm. Sun, 11-12 pm. 5130-6130, 6:30-7:30 pm. Founded, 1524, Central.

## WCWS

bury, Conn. 265,3m-1130kc, 100 watts, Dan-Broadcasting Station, Founded Aug. 2, 1926.

## ŴĊX

Detroit, Mich. 440.9n-680ke, 5000 warts. The De-troit Free Frees. Announcer, C. D. Tomy. Club. "Red Apple Club." Daily ex Sun. 4 pm, music. 4:15, news, markets, weather; 5:45, Skeezix time, Eves blue chain. Tues, 10-2 am, club. Eastern. Founded May 1922.

## WDAD

Nashville, Tenn. 225.4m-1330kc. 1000 watts. Dad's Auto Accessories, Inc. Announcer, F. E. Exum. Slogan, The Athens of the South, Mon, Wed. Sat. 11:45 am, 12:45, 3-4 pm, 9-10. Tues, Fri. 11:45 am, 12:45, 3-9 pm. Sun, 3-4:30 pm, 6:30 pm. 12:45, 3-4 pm, 7-9 pm. Sun, 3-4:30 pm, 6:30 pm. 12:45, 3-4 pm, 7-9 pm. Sun, 3-4:30 pm, 6:30 pm. 12:45, 3-4 pm, 7-9 pm. Sun, 3-4:30 pm, 6:30 pm. 12:45, 3-4 pm, 7-9 pm. Sun, 3-4:30 pm, 6:30 pm. 12:45 pm. Sun, 3-4:30 pm. pm.

## WDAE

Tampa, Fla. 267.7m-1120kc, 500 watts, Tampa Daily Times, Announcer, Bruce Lun, Daily ex Sun, 11:30-1 pm, 410, Sun, 11 am-12:30 pm, 7:30-9:30 pm, Eastern. Founded 1921.

Kanaga St. M., 370 2m-410k. 1000 vatts. Kan-Kanaga St. M., 370 2m-410k. 1000 vatts. Kan-Nighhawks. Daily ex Sun, 8:30 am, 9:30, 10;30, 11:30, 12:30, 11:5 mi, grain quotations. Wed. Fri. 10 am, Betty Crocker. Daily ex Sun, 8 am, 10:4 10 am, Betty Crocker. Daily ex Sun, 8 am, 10:4 matinet. 5-7, school of the alr; 7-10, musicaly 11:35-1, Nighthawk trolic. Sun, 2-3 pm, 7:15-9:15 pm, Founded June 5, 1922. Central.

Amarillo, Tex. 263m-1140kc. 250 watts. J. Lau-rence Martin. Daily ex Sun, Fri. 1245-145 pt. weather, markets, Jarms 9-10.30 pm, music. Fri. 8-10 pm. Sun, 9-45-10-45 am, 7-30-9:30 pm. Cen-tral. Friunded May 16, 1922.

## WDAH

El Faso, Tex. 234,2m-1280ke. 100 watts. Trinity Methodist church. Announcer, Louis Gemoets. Wed., 7:30-8,30 pm. Sun, 9:30-12 n, 7:30-9 pm. Founded String 1924. Mountain.

WDAY
Fargo, N. D. \$45,1m.550kc. 250 watts. 500 watts
form. Pun Ruber Equipment Corporation. Annuals: 7.300 news; 10. weather, markets; 1915.
chape; 11, markets; 11,45, music; 2, markets; 4,40 music; 5:50 news; 67:30, entertainment, Mon, Welfer; 7:30-815; ym, N. D. Agri, college, Sun, 10:30 am. service; 1-1 pm, service; 4:15-6:15. Central. Founded 304, 1922.

Roanoke, Va. 230.6m-1300ke. 250 watts. Richardson Wayland Elec. Corp. Announcer, J. W. Johnson, Slogan, "Roanoke Down in Old Virginia," Daily ex Sun, 12-1 pm, music; 5:36-6:45, muslc. news, weather, Mon, 8-9 pm, Wed, Sat, 9 pm, concert, Sun, 7:45 pm, church, Eastern, Founder, May, 1924.

### WDBO

Orlando, Ph. 288.3m-1040kc. 500-1000 watts 6 am-6pm. 550 watts. Orlando Broadcasting Co. Announcer, Harold Danivoltu, Slogan, "Down Where the Oranges Grow." Mon. 7:15 pm;2 am. Tucs. 8:30-11 pm. Thurs, 015-11:30 pm. 74, 7:30-9 pm; Sar, 9-11 pm. Sun, 10:45 am, 3 pm. 4, 7:30. Founded 1221. Eastern

WDEL Wilmington, Del, 296,9m-1010ke, 100 watts. Wil-mington Elec. Spec. Co. Announcer. Harvey Smith, Slogan, The First Broadcasting Station of the First City of the First State. Tues, Thurs, Sat, 6-11 pm. Sun, 10-12 mid. Eastern. Founded 1922.

WDGY

Minneacolis, Minn. 285.5m-1050ke. 500 watts. Dr. George Young. Daily 2-5 pm. Mon, Wed, 7-8 pm. 10-12. Thess, 7-12 mid. Thurs, 7-10 pm. Fri, 7-8 pm. 10-12. Stat, 7-8 pm. Sun, 2-6 pm. Central. Founded 1923.

Chattanopta, Tenn. 291.8m-1230kc. 500 watts. Chattanopta Radio Co., Inc. Announcer, Frank St. Chattanopta Dhily or Sun. 12-115 pm. Tess. St. Chattanopta Chattanop

New Haven, Conn. 282.8m-1060kc, 500 watts. Dou-little Ratio Corp. Announcer, F. M. Doolittle. Daily ex Sat, Sun, 9:30-12 n, 5-10 pm. Sun, 11 am, 3:30-5 pm, 7-8. Fastern. Founded Drc., 1922.

Cranston, R. I. 260.7m-1150kc. 250 wasts Dutee W. Flint, Iuc. Slogan, "Quality First." Eastern.

# Tuscola, Ill. 277.6m-1080ke, 100 watts, James L. Busb. Announcer, G. R. Muir. Daily ex Sun, San, 9:30, 10, 10:30, Ill. 11:30, Ill. 12:30, Ill. 12:31, Ill. 12:31, Ill. 12:31, Ill. 12:31, Ill. 12:31, Ill. 12:31, Ill. 13:31, Ill. 13:31,

VV LAT

New York, N. Y. 491.5ni-610ke, 50,000 watts, National Broadcasting Co., Inc, Slogao, "The Voice to the Millions." Daily or Sun, 6:45-8 am, 8-8:45, 11:115 pm, 4-12 midnight, Sun, 2-10:30 pm. Eastero, Founded July 25, 1922.

## WEAM

North Plainfield, N. J. 263m-1140kc. 250 watts Borough of North Plainfield. Announcer, H. W. Blackford. Slogan, "America's Pioneer Municipal Broadcasting Station." Fri, 8-12 pin, concert, talks. Sun, 11-12 noon. Eastern

### WEAN

Providence R. I. 275.1m-1000kc 500 watts. The Shepard Stores. Announcer, Chester H. Miller Slogan, "We Entertain a Nation." Daily or Sun 12- pm. 4-6 music reports, weather, concert 6:30-10:30. Sun 19:45-11:30 am, 7:30-8:45 pm 9-11, burch service. Eastern. Founded 1922.

## WEAO

Columbus, Ohio, 282,8-1060kc, 750 watts, Ohistate University, Announcer, Robert Coleman Daily ex Sun, 9-45 am, 11, 12:30 pm, 4, Man, Wed, Fri, 10 am, Tues, 7 pm, Wed, 7-8:30 pm; Thurs WEAR

Cleveland, Ohio. 399.8m-750ke. 1000 watts. Willard Storage Battery Co. Daily ex Sun, 12:30-1:30 pm. 2-3. Sun, 11-12:30 pm. Eastern.

Superior, Wis., Duluth, Minn, 241.8m-1240kc, 250 warts, Head-of-the-Lakes Radio Station, Daily ex Sun, 115 pm. 5, markets; 6, ordiestra, Mon, 8 pm., 8 pm., 10:40 pm. Pri, 9 pm. Sun, 10:40 am, Survices, Cuntral,

## WEBE

Cambridge, Ohio. 247.8m-1210kc, 10 watts. Roy W. Waller. Fri, 7:45-9:15 pm. Sun, 7-8:30 pm. First Sun in month, 2:30-3:30 pm. Eastern.

### WEBH

Chicago, Ill., 365.6m-820 kc. 500 watts. Edgewater Beach Hotel-Herald-Examiner. Announcer. Robert Boniel. Slozan. The Voice of the Great Lakes. Daily ex. 100.000 m. 100.000 m.

New York, N. Y. 256,3m-1170kc. 500 watts, Third Avenue Railway Co. Announcer, H. A. Bruno, Slo-gan, "The Red Trolley Station." Wed, 7-11 pm. Fri, 9-11 pm. Eastern.

## WEBQ

Harrisburg. III. 223.7m-1340ke. 15 watts. Tate Radio Co. Announcer. Dr. H. J. Raley. Slogan. "The Voice from Egypt." Daily ex Sun, 7157-736 pm, Mon, Thuts. 7;30-9;30 pm. Sun, 11-12 n, 2-4 WEBR

## WEBW

Beloit, Wis. 258.5m-1160kc. 500 watts, Beloit Callege, Arnouncer, Arthur Weimer. Sun. 4:30 pm.

Chicago, III. 241.8m-1240kc. 500 watts. Emil Denemark, Broad. Station. Daily, 6-7-30, 9-30-11-30. Daily, ex. Sun. 6:30-7:30 pm. Jewish hour. Fri. 6:30-7:30 pm, Bokemlan hour. Central.

#### WEEL

WEEI
Boston, Mass, 508.2m.500kc. 500 watts. Edison
Electric Illuminating Company. Announcers, Robert
Burlen, Carlton II, Dickerman, Walter Myers, Willam Felton, Stoom, 'The Friendly Voice,' Daily
Illuminating Stoom, 'The Friendly Maids,' Daily
Illuminating Stoom, 'The Friendly Maids,' Daily
Illuminating Stoom, 'The Friendly Maids,' Daily
Illuminating Announcers,' 113:1-12 Friendly Maids,'
Illuminating Angarden respects,' 2-3 worder musically
Inarket and garden respects,' 2-3 worder musically
Inarket and Stoom Red Network NBC. Sun. 10:55-12:15 Clurical
Inarket and Stoom Red Network NBC. Sun. 10:55-12:15 Clurical
Inarket and Stoom Red Network NBC. Sun. 10:55-12:15 Clurical
Inarket and Inarket and

Evanston, Ill. 215.7m-1390kc. 100 watts. Victor C. Carlson. Daily ex. Mon. 5:45-9 pm. 11-12 mid. St. 15:45-9 pm. children's hour; 6, sports, 6:30, 8-9.

Berrien Springs, Mich 483.6m-620kc, 1000 watts, Emanuel Missionary College, Announcer, Wm. A. Weitworth, Siogao, "The Radic Lighthouse," Paily 202 am, 10-11, Mon, 7-11 pm, Yues, Thurs, 30, 7-20 am, 10-11, Mon, 7-11 pm, Yues, Thurs, 30, 7-20 am, 10-20 am, 1

## WENR

Chicago III. 288.3m-1040kc. 500 watts. Grace Lakes Radio Broadcasting Co. Slognm. "The Verse Lakes Radio Broadcasting Co. Slognm." The Verse of Service." Daily ex Snn, Mon. 11:30 am. Mrs. Peterson. 12:1 pm. concert; 2-5, popular recursion; 6-7, diuner concert; 8-9:30, classical; 9:30-12 mid. Mon. 12:1 pm. 2-5, 6-7. Sun, 2-4 pm. 6-7, 9:30-11.

## WEPS

Gloucester, Mass. 296.9m-1010ke, 100 watts, Mathe son Radio Co., Inc. WEVD

## Woodhaven, N. Y. 245.8m-1220kc, 500 warts Debs Memorial Radio Fund. Daily ex Sun, Sat 1-6 pm, Thes, Thurs, 9-12 mid. Sat, 7-9:30 nm Sun, 12-30-4 pm, Eastern. Founded Oct. 1, 1927.

## WEW

YY L. VY

St. Louis, Mo. 352.7m-850kc. 1000 watts.
Louis University. Announcer, C. G. Dahm. Da
ex Sun, 9 an, 10, 2, reports. Tues, Thurs, 5 p
lectured, music. Mon, Wed, Fri, 5, U. S, is
school, Sun, 9:35 am, 11, 2 pm, 5, Founded Ap
26, 1921, Central.

Dallas, Tex. 545.1m-550kr. 500 watts. Dallas News and Dallas Journal. Slogan, "Working for All Allke," Dally 6.30-7.30 am, exercises: 7:30, 8:10, 2:30, 1:30, 2:30

St. Cloud, Minn. 252m-1190kc. 10 watts, St. Cloud Daily Times. Off the air temporarily, WFAN

Philadelphia, Pa. 223.7m-1340kc, 500 watts. Keystone Broadcasting Co. Hotel Lurraine. Mon. 5-6 pm. Tues. Thurts, 5-30-1 am. Wed, 5-6 pm. Fat, 6-7:30 pm. Sun. 11 am-4:30 pm. 5-1 Eastern. WFBC Knoxville, Tenn. 234.2m-1280kc. 50 watts. First Baptist church. Announcer, St. John Reynolds. Sun. 10:45 am; 7:30 pm, services; 4 pm, sacred music. Central. Founded 1925.

## WFBE

VY FIG.

Chacimati, O. 245.8m-1220kc. 250 watts. Hotel
Garfield Daily ex Sun, 12-1 mm, Mon, 5:30 pm, 9.
6-8:30 pm, 9, 10, 113, 12:30. Thurs, 6 pm, 8, 10,
10:30, 11, 12:30. Fri, 5:30 pm, 6:30, 5:31, 3-4 pm,
6-8, 9-10, 11, 2:30. Sun, 1-2 pm, 6:30-7:30 pm, 11,
12:30, Central.

## WFBG

Altoona, Pa. 267.7m.1120kc, 100 watts. The Win.
Cable Co. Announcer, Roy F. Thompson. Slo-an, "The Original Gateway to the West." Daily Sun, Mon. 11-55 ant; 12, n. p. nr. 620, 7-39, 8, councid Aug. 22, 1924.

#### WFBJ

Collegeville, Minn. 272.6m-1100kc, 100 watts. St. John's university. Announcer, Hilary Doerfier. Stogan, "In the Heart of the Landscape Paradise." Wed. 8-9:30 pm. Fri. 4-5 pm. Central. Founded Oct., 1922.

#### WFBL

Syracuse, N. Y. 258.5m-1160kc. 750 watts, Onon-daga company, Mon. Sat. 6:20-12 mid. Tues, Wed. Fri, 6:20-11 pm. Sun, 2-11 pm. Eastern.

#### WFBM

Indianapolis, Ind. 275.1m-1090kc, 250 watts. Indianapolis Power and Light company. Announcer, Bailey Fesler. Slogan, "The Crossroads of America."

### WFBR

Baltimore, Md. 243,Sm-1230kc. 100 waits. Fifth Infantry, Maryland National Guard, Slogan, "Home of the Star Spannled Banner." Announcer, S. R. Kennard. Tues, Thurs, Sat, evening programs. Fastern. Founded Oct. 1, 1924.

WFBZ
Galeshurg, III. 247.8m-1210kc. 50 watts. Knox college. Announcer, George B. Strain. Slogan, "At Old Siwash." Wed. 8-10 pm. Central.

#### WFCI

Pawtucket, R. I. 241.8m-1240kc, 100 watts, Frank Crook, Inc. Announcer, H. E. Stafford XYZ, Slogan, "The City of Diversified Industries." Mon, Wed, Fri. 8-11 pm. Eastern.

#### WFDF

Flint, Mich. 272.6m-1100kc. 100 watts. Frank D. Fallain. Slogan, "The Motor City." Mon, Wed. Fri, 8-11 pm. Eastern, Founded May 25, 1922.

#### WFI

Philadelphia, Pa. 405.2m-7.40c. 50 wasts. Straw. Philadelphia, Pa. 405.2m-7.40c. 50 wasts. Straw. Bally ex Stin, 103.1 Amounter, 1,20h. Nulley stock, Daily ex Stin, 103.7 30 pm. These, 8-11:30 pm. Thurs, Sat, 8-11 pm. Sun, 102.20 am, 7:30, 4:30 pm. Eastern. Founded March 18, 1022.

### WFIW

Honkingville, Ky. 260.7m-1150kc. 750-10500 wqus. Acme Mills, Inc. Announcer, Hal Fifer. Mon. Sal. 8-11 pm. Wed. 8-11 pm. Fri. 8-11 pm. 10.10 am. 9-31 10.30 am. 9-10 pm. Daily ex Sun. 42-1 n. 3-4 pm. 6-7. Central. Founded Feb. 12, 1927.

## WFJC

Akron, Ohio. 227,1m-1320ke, 500 watts. Joues Broadcasting, Inc.

#### WFKB

Chicago, Ill. 223.7m-1340kc. 500 watts. Francis K. Bridgman, Founded April 22, 1925. WFKD

## Philadelphia, Pa. 247.8m-1210ke. 50 watts. Foulk-rod Radio Eng. Co. Mon, Tburs, 8-11 pm. Eastern.

WFLA Clearwater, Fla. 516.9m-580kc, 750 watts. Chamber of Commerce. Announcer, Walter Tisoo. Daily ex Sun, 7:45-12 mid. Founded Dec. 25, 1925. Eastern.

## WGAL

Lancaster, Pa. 252m-1190kc. 15 watts. Lancus Elec. Sumbly & Construction Con Amount of the dens at Lancaster. Daily ex Sum. 9-915 am 12-15 pm, 5:30-5:45. Tues, Thurs, Sat, 7-10:30 r Sun, 11 am. Eastern. WGBB Freeport, N. Y. 245.8in-1220kc, 400 watts. Harry H. Carman. Mon. 7-8 pm. Wed, Fri, 7-11 pm. Sun, 10:40-12:30 pm. 4-5:30, Eastern. Founded Dec, 13, 1924.

WGBC Memphis, Tenn. 228.9m-1310kc, 15 watts, First Baptist church, Announcer, A. L. Cowles, Sun, 9:30 am, 7:30 pm. Central.

WGBF Evansville, Ind. 236.1m-1270kc. 250 watts. The Finke Furniture Co. Announcers. Harold Finke. H. L. Thompson. Slogan. "The Gateway to the State of the Co. The

WGBI Scranton, Pa. 230.6m-1300ke. 250 watts. Scranton Broadcasters, Inc. Daily ex Sun, 10-12:30 pm, 6 pm, Sun, 7-10 pm. Eastern.

## WGBS

Astoria, N. Y. 348.6m.860kc. 500 watts. Gimbel Brothers. Announcer, Dailer Packenan. Daily es 10:30 and, 7:30-10 pm. Wed, 10 am. p pm. Thus, 10:30 am, 10 pm. Fri. 10 am. Sat, 10:30 am, 7:33-0 pm. 11:20. Eastern. Founded Oct. 26, 1924. WGCP Newark, N. J. 267.7m-1120kc, 250 watts. Paramount Broadcasting & Artists Service, Inc. Aumouncer, England Browne, Tues, Thurs, 11-1, 3-6 pm, 9-12. Mon, Fri, 1-3 pm, 6-2. Wed, 12-3 pm, 6-9, Nat, 20-2 n, 9-12 mid. Sun, 12-6 pm, Eartern,

## WGES

Chicago, III. 241.8m-1240ke, 500 watts, Guyons Faradise, Baltroom, Announcer, D. K. Pratt, Tues, Churts, Sat, 6-7-13 pm, 8-1, Wed, Fri, 6-7-15 pm, 10-1, Sun, 10-13-11-39 am, 11-40-1 pm, 2-30-4, 6-7-15, 8-1, Founded Aug., 1920. Central. WGHP Mt. Clemens, Mich. 277:n-1080kc. 750 wnits. George The Clemens, Mich. 270:n-1080kc. 750 wnits. George Parkers of the Computer Control of the Control Daily of Steel Steel of the Control of the Control Daily of Ties. Thurs. 8-10 pm. Stut. 10-30-12:15 pm. 2:30-5 pm, 9-11. Eastern. Founded Oct. 10, 1925.

WGL New York, N. Y. 293.9m-1020kc. 500 watts. 1000 watts. 7 am-1 pm. International Broadcasting Corp. Daily ex Sun, 10-12 n. 2-4 pm. 6. Mon. Wed. Fri. 9-12 mid. Thes. Thurs, Sat. 6-9 pm. Sup, 7-12 mid. Eastern. Founded Jan, 30, 1927.

## WGM

Jeannette, Pa. 208.2m-1440kc, 50 watts. Verme & Elron Spencer, Announcer, Verme Spencer, Slogan, "Voice from Glass City." Mon, Tues, Thurs Fr. 7:30.9 pm, Sun, 1:30-4 pm. Eastern, Founder WGMS Minneapolis, Minn, 245.8m-1220kc. 500 watts.

## WGMU

New York, N. Y. 201,2m-1490kc, 100 watts, At-

#### WGN

Edgin, III. 416.4:n-720kc. 500 watts. Chicago Tributation, Juniqueers, 113. Volume 13. V

### WGOP

ashington, N. Y. 199,9m-1500kc. 100 wattek B. Zittell, Jr. Founded Sept. 15, 1925. WGR

Buffalo, N. Y. 392,8m-950kc, 750 watts. Federal Radio Corp. Admonucer, Kenneth Fickett. Datly ex Sun, 6:45-8 am. Daily ex Sun, Sat, 12 p. stucks, 1 1 pm, 2:39-4;30. Thes, Thurs, 8-11 pm. Mon. Wed Fri. 8-12 mid. Sun, 10:45-12 n, 7:45-9 pm, 9:15-10, Eastern. Founded May 21, 1922.

### WGST

Atlanta, Ga. 270.1m-1110kc, 500 watts. Georgia School of Technology, Amnouncer, Walter W. Mer-kle, Slogan, The Southern Technical School with a National Reputation." Mon. 9:30-10:39 pm. Thurs, 2-8 pm. Central, Founded Jan., 1930-

## WGWB

Mitwatke, Wig. 218.8pp-1370ke. 500 watto. Radio-cast Corp. of Wisconian. Announcer, John Sulfi-van. Slogan. "Make Milwankee Mightier. Daily ex Sun. San, 10.304-1230 mm. Ann. 8-10:30 pm. Wed, 8-9 pm. Fri, 9-10:30 pm. Sun, 10-11 am, 6-7

Schenectady, N. Y. 379.5m-790ke. \$0,000 watts. General Electric Company. Amnouncer, Kohn Hager. Stogan, "Good Evening: to You All." Daily or 1990 and 1990 a

Wis. 333.1m-900kc. 750 watts. Univ. of on, Wed, Fri, 7:30-9:30 pm. Central. Madison, Wis. M

#### WHAD

Milwaukec, Wis. 270,1m-1110ke. 500 watts. Mar-quette University. Cy. Poster, Ed. Rauft. Harry Friedman, Mon, Tues, Wed, Tiurs, Fri, 3:10-4, 2:50-8. Fri, 3:4:20 pm. Sun, 4:20-5 pm. Eastern. Frunded Cd., 10:21.

## WHAM

Rochester, N. Y. 280.7m-1670ke, 5600 watts, Stromberg-Carison Tel, Mig. Co. Announcer, E. Chappell, F. W. Reynolds, Donald Clark, Daily ex. Sun, 6.38-11 pm, Tues, 2:30-4 pm, Sun, 10:30-12 n, 3:30-5, 6:30-11. Eastern

Carlstadt, N. J. 236,1m-1270kc, 1089 watts, Defenders of Trath Society, Inc. Mon. Thurs, 6-9 pin, Wed. 9-11:30 pin, Sat. 7-11:30 pin, Sun. 239-239 pin, Eastern. Founded May, 1925, Sun. WHAS

Louisville, Ky. 322.4m-930kc. 500 watts. Courier-Journal and Louisville Times Co. Daily ex Sun. 3-5 pm. 7-9. Sun. 10 am. service: 2-3. 4:30-5:30. 6:20-8:15, 8:15-9:15, Founded July, 1922. Central.

WHAZ
Troy, N. Y. 295.9m-989kc. 500 watts ReusscharPolytechnic Inst. Amounter, Rutherlord Hayner,
Slogan, Transcentinental and the Older College of
Science and Engineering in America. "Club, R. P.
I, students, Mon. 8-12 midnight, concert, educatentier Rutherlord College of College o

#### WHB

(N TLD

Kansas City, Mo. 340,7m.890kc, 500 watts.
Sweeney Auto & Electrical School, Aunouncer, John T., Schilling, Slogan, Theart of America. Daily sch.

11:56, State of America. Daily sch.

11:56, market reports; 2-3, Jadies hour, Daily ex Sun, Sat. 12:15 pn, 12:30, 12:5; 1:40, stocks.

Daily, 7-8, pn, Mon, 8-9 pm, Tues, Thoris, 8-10 pm, Sat, 12:05 pm, 12:30, 1:25, market, 8-10 pm, Sat, 12:5 pm, 12:30, 1:25, market, 8-10 pm, 12:30, 1:25

## WHBA

Oil City, Pa. 260.7m-1150kc. 10 watts, Shaffer Alusic House. Tues. 9-10 pm. Eastern. Founded

## WHBC

Canton, Ohio, 236.1m-1270ke, 10 watts. Rev. E. P. Graham. Slogan, "Ignorance Is Our Greatest Foe." Mon. 8-8:30 pm, Central.

#### WHBD

Rock Island, Ill. 222,1m-1350kc. 102 watts. Beards-ley Specialty commony. Announcer, C. L. Beardsley. Stogan, "Where Histories Bluckhawk Fought." Daily ex Sun. 12-2 pm. Mon. Wol. 9-11 pm. Sat. 2-4 pm. 7-9. Central. Founded Pcb. 1925.

## WHBL

. 204m-1470kc. 100 watts. C. L. Carable.) Founded, 1925, WHBM

111. 201.2m-1490ke, 100 watts, C. L. (Portable.)

## WHBN

Gainesville, Fla. 202,6m-1480kc. 5000 watts. U. of Florida, Not on air.

## WHBP

Johnstown, Pa. 228.9m-1310kc, 250-500 watts. Johnstown Antomobile Co. Amounter, J. C. Tully, Slognar, "The Voice of the Friendly City." Daily ex Sun, 1:15 pm. Mon, 11 pm. Thurs, 10 pm. Sat, 10 pm. Eastern.

Memphis, Tenn. 232.4m-1290kc. 100 watts. Broad-casting Station WHIO, Inc. Announcer, Thomas Thomason. Daily ex Sun. 7-8 pm. Sun, 10:45 am. Central. Founded March, 1925.

#### WHBU

Anderson, Ind. 220.4m-1360kc. 15 watts. Citizen's Bank. Announcer, A. L. McKee, Slogau, "First Bank on the Air,"

## WHBW

Philadelphia, Pa. 220,4m-1360kc, 100 watts. D. R. Kienzle. Mon, Wed, Sat, Sun, evenings.

## WHBY

West De Perc. Wis. 249,9m-1200kc. 50 watts. St. Norbert's College. Green Bay-De Pere Broad-acting Station, Daily 6.30 pm. weather, maineds. Wed. Fri. Sat, Jun. 5-6 pm. Fri. 7-8 pm. Sun. 19-3m. Savijec. Central, Founded Jan., 1925.

## WHDI

Winneapolis, Minn. 245,8m-1220kc. 500 waits. Wm. Hood Dunwoody Industrial Institute. Amouncer, M. R. Bags. Sloyan, "Northwest Leading Trade School," Mon. 8-9 pm. Wed, 8:20 pm. 8rl, 9-10 pm. Daily ex Sun. 6:57-9:30 am, time. Central. Founded May 22, 1922.

#### WHEC

Rochester, N. Y. 254.1m-1180kc. 569 watts, Hickson Electric company, Inc. Slogan, "The Magazine of the Air," Aunounce, Elmer L. Wheeler, Daily ex Sug, 12-3 pm, 6:30-10, Sun, 10:30-12 n, 7:30-10 pm, Eastern, Founded Jan, 1924.

WHFC

Chicago, III. 215.7m-1390kc. 200 watts. Triangle Broadcasters. Daily ex Mon. 8-12 mid. Central

#### WHK

Cleveland. Ohio. 265.3m.11.30kc. 500 warts, J.COC watts Games of ph. Radio Air Service Corn. Signature Corn. Signature Corn. Signature Corn. Signature Corn. Signature Corn. Signature Corn. Daily. 12 n-1 pm. music; 3:30. house-keepers; clari; 5:30. 10, 11-12, Sat, 12 n, 6, 8-9, 9-13 mid. Sun, 10 am. 5 mp. 5:15, 6, 7:39, 8:15-9:30. Eastern. Founded 1921.

New York, N. Y. 394,5m-760kc. 500 watts. Loew's State Broadcasting Station. Aunouncers, N. T. C., Edward B. Hussing, I. Lewis Reid, Slogan, "The Voice of the Great White Way," Daily ex Sun. 1-2 pm, 6-1230 am. Sat. 12-11 pm. Sun, 9-11 am. 12:309, 5pm, 5-7:30, 9:45-12 mid. Eastern. Founded

#### WHO

Des Moines, In. 515.4m-560kc. 5000 watts. Barkers Life Co. Aunouners, N. Dean Cole. Daily ex Sun. 8-9 ann. 10. 10:30-12 n. 12:15-115, 2:15-4:30. 6:33-12. Sun. 11 am. 2:5 pm, 6:30-9:30. Central. WHPP

York, N. Y. 206.8m-1450ke, 10 watts. Brondensting Co.

#### WHT

Deerfield, 111. 305.9m-980kc, 5030 warts, Radio-phone Broadcasting Corp. Announcer, Fat Barnes, Storan, Write Home Touthu, Daily and Sun, 2.30 pm. Daily and Sun ox, Mon, 8:39-10 pm. Carried, Pounded April 25, 1925.

Philadelphia, Pa. 288.3m-1040kc. 100 watts. How ard R. Miller. Slogan, "The Voice from the Birth place of Liherty." Tues, Thurs, Fri, 6-12 mid Eastern. Founded June, 1922.

## WIAS

Ottomwa, la. 322.4m-930kc, 400 watts. Poling Electric Co. Amouncer, Frank B. Orf. Daily, 5-6 pm. Central. Founded Jone 12, 1922.

## WIBA

Madison, Wis. 239,9m-1259kc. 100 watts. The Capital Times Strand, theater. Announcer, Kenneth F. Schmitt. Slogan, "Four Lakes City." Mon. 8-11 pm. Wed; 7-9 nm. Fri. 6:15-7 pm. Sun. 12-1 pm. Cerbin. Founded June, 1924,

Elkins Park, Pa. 440.9m-680kc, 50 watts. St Paul's Protestaut Episcopal church, Announces W. Le Roy Anspach, Sun, 10:55 am, 3:55 pm Eastern, Founded 1925.

## WIBJ

Chicago, Ilt. 201.2m-1490kc. 100 watts. C. L. Carroll. (Portable.)

## WIBM

Chicago, III. 201.2m-1490kc. 100 watts. C. L. Carroll. (Portable.)

## WIBO

Chicago, III. 305.9m-980kc. 5000 watts. Ne Brothers Bond and Mts. Co. Announcer, W. Preston, "Stur Dawson, Daily es Son, 2:30-6. Daily ex Mon, 7-8:30, 10-11 pm. Sun, 8:45-10 Sun, Tues, Wed, 11-12:30 am. Central. Fon May 20, 1925.

#### WIBR

Steubauville. Ohio. 249.9m-1200kc. 50 watts. Thirman A. Owinss. Annunneer. Robert Merry, man. Slogan, "Where Investments living Results." Daily ex Sun, 6:30-7:30 pm. Wed, 11:15-12-45 an, 1025 Eastern.

Elizabeth, N. J. 204m-1470kc, 250 watts, New Jersey Broadcasting Corp. Mon, Wed, Fri, 3-5 nm, 6-12:30. Tues, Thurs, 3-5 pm, 6-7:30, 11-12. Sar, 6-11 pm, Sun, 5-30-7:30 pm, Eastern. Founded

## WIBU

Poynette Wis. 217.3m-1389ke. 20 watts. The Electric Farm. Wisconsin State Journal. Mon. 9 pm. Son. 2 pm. 4. Central. Founded July 10, 1925.

Topeka, Kan. 204m-1470kc. 103 watts. C. L. Car-roll, Founded 1926, Announcer, Royd Shreffler, Daily sex Sun, 10330 cm, 532-8330 pm. Mon, 11 pm. Sun, 12:15-6-15 pm. Central.

WIBX

Wiea, N. Y. 238m-1260ke, 150 watts. WIBX Inc.
Daily ex Sun, 9:30-11 am, shopping thur; 12-1, news,
stocks, markets, music, farm news, 3-4, music, 6-11.
Wed, silent night, Sat, 6-1 am, Sun, 10:30-1 pm,
6-11. Eastern, Founded 1923.

Montgomery, Ala. 230.6m-1300ke, 15 watts, A. D.

#### WICC

Bridgeort Hill, Conn. 265,3m-1130ke, 500 walks hide Bridgeport Broadcastium Station, Inc. Assistance Charles W. Schein, Slagan, "The Indus-trial Capitol of Connecticut," Mon, Tues, Thurs. Fri. 8-10 pm. Sun, 10:50 am. Eastern, Founded Aug. 2, 1926.

## ŴĨĽ

St. Louis, Mo. 258.5m-1160kc, 250 watts. Benson Broadcasting Co. Announcer, L. A. Benson, Daily and Sun, 9:30-11:30 an, 2:45.5 m. Daily ex Wed 8-11 pm. Central. Founded Sept., 1922.

Miami Beach, Fla. 247.8m-1210ke. 1000 watts, Carl G. Fisher. Announcer, Jesse H. Jay. Slogan. Wonderful Isle of Dreams.

hiladelubia, Po. 348.6m-850kg, 500 watts. Gimberos, Announcer, E. A. Davies, Slogan, "Watel is Progress." Daily ex Sun, 1-2 mn. 3-4;30, 6-7;30 kg, Thurs, Sat. 10-10;30 nm. Tues, Thurs, Sat. 1-2 mid. Sun, 10:45-12 mid. Sun, 10:45-12 mid. Sun, 10:45-12 mid. alternate Sunays, 7:15-12 mid.

Waco, Tex. 333.1m-ccckc. 500 watts. Hotelsth. Mon. Tues. Thurs. 6:30-7:30 pm. Mon. Tues. Thurs. Fri. 8:30-10 pm. 1st and 3rd Wed, 8:30-9:30 um. Central.

## WJAG

Nortalik, Nehr. 285 Sm.1050hr. 250 S00 warts. Nortalik, News. Announcer. Karl Stefan. Slovan, "The World's Gractest Country Daily, and Home of Printer's Devil." Bully ex Sun. 12:15 pm; 4 pm; West. Sat. 6:30-7:30 pm, orchestra. Sun, J pm. UTAL Stefan Donaled 19:22

Kokomo, Ind. 234.2m-1280kc. 50 watts. Kokomo Tribune, Daily ex Sun, 11-45 am, chapel, Mon, 7:30 pm, mpsic. Wed. Thurs, 5:30 pm, concert. Fri, 7:30 pm. Founded Sept., 1921. Central WJAM WKBC
Rayids, Iowa, 230 5m; 12501c. 250 watts, D
Rayids, Mon. Wed, Fij. 7-9 nm. Thes. Thurs, markets, Mon. Wed, Fij. 7-9 nm. Thes. Thurs, Stat. 9-11 pm. Central. Founded July 29, 1922.

## **WJAR**

Providence, R. I. 483.6m-620kc, 500 waits, The Outlet Co. Amouncer, J. A. Reilly, Slogan, The Southern Cateway of New England, Daly, exception of the Conference of the Confer

Pittsburgh, Pa. 270,1m-1110kc. 500 watts. Pittsburgh Radio Supply House. Pickering's Studio. Announcer. Howay, Chris. Stogan. "World's Johnson Williams, John Stogan, "World's Johnson John Stogan, "World's Johnson John Stogan, "World's Johnson John Stogan, "World's Johnson John Stogan, John

Jacksonville, Fla. 340.7m-880ke, 1000 watts. City of Jacksonville. Daily ex Sun, 11:55-12:05 pm. Daily ex Sun, Wed. 7:30-11 pm. Sun, 11 am, 6:30-7:30 pm, 8-9, 10-11. Eastern. Founded Nov. 26

## WJAY

Township of the Control of the Contr

## WJAZ

Mt. Prospect, Ill. 263m-1140kc, 5000 watts. Zenith Radio Curp. Amounter, George G. Smith. Daily ex Sun, Mon, Thurs, 7-8 pm, 9-11. Thurs, 9-12 mid. Sun, 7-9 pm. Founded 1922. Central.

## WJBA

liet, III. 247.8m-1210kc. 50 watts. D. H. Lentz Tues, Thurs, Fri, Sat, 7-12 mid. Central. WJBB

## Sarasota, Fla. 238m-1260kc. 250 watts, Financia Journal, Daily ex Sun, 11:30-2 pm, 4:30-6, 6-7 9-12. Eastern.

WJBC La Salle, III. 227.1m-1320kc. 100 watts. Hummer Furniture Co. Aunouweer, LeRoy Streuhau, Slo-gan, "Better Home Station." Daily ex Sun. 1230-1330 pm. Mon. 8-10 pm. Sat. 4-5 pm. Sun. 10-11:50 am. 330-4:45 pm., 7:30-9:30 pm. Founded May 4, 1925. Central.

## ŴĴĔĨ

Bank, N. J. 263m-1140ke, 250 watts. Rober

Ypsilanti, Mich. 220,4m-1360kc. 15 watts Goodwin, Announcer, H. T. Augustus, pm. Tburs, 10-12 mid. Sat. 11-12 mid. Founded Oct. 7, 1925.

## WJBL

Decatur, Ill. 212.6m-1410kc. 250 watts, William Gushard Dry Goods Co. Announcer, W. H. Wiley, Mon. 9-10:30 pm. Wed. 9-11 pm. Sat. 9-11:30 pm. Sun. 10:45-12:15 pm. Central. Founded Scnt. 24. WJBO

New Orleans, La. 263m-1140kc, 100 watts. Valdemar Jensen. Founded 1922.

Chicago, Ill. 389, 4m-770kc, 500-5000 watts. J. S. Boyd. Inc. Announcer. Bolby Criffin, Daily ex Sun, 1105 5 am, 3 pm, 5, 40m, 10-11 om. Tues. Wed. Pri, Sai, 11 pm. Thurs, 12 mid. Sun, 10:30-12a, 2;30-12 mid. Central.

Lewishurg, Pa. 2142m-1400kc, 100 watts. Duck-nell University, Announcer, A. B. Lauderbaukh, Slo-gan, "In the Heart of the Keystone State. Thurs, 8 pm. Eastern. Founded 1925. ŴĴBŴ

## New Orleans, La. 238m-1260kc. 30 watts. C Carlson, Jr. Tues, Fri. 7-8 pm. Sun, 9-10 pm

Gadsden, Ala. 234,2m-1280kc. 50 watts. Electric Construction Co. Mon, Wed, Frl, 8-9 p.m. Central, Founded Aug. 11, 1926. WJBY

Chicago Heights, III. 208.2m-1440ke. 100 watts. Roland G. Palmer. Anthony Coppotelli. Mon. Wed. Fri. 7-12 mid. Central. ŴĴĴĎ

MJJD
Monacheart, Ill. 365 6m-820kc, 1000 watts. Loyal Order of Moose station. Palmer House, Herald Examiner, Announcer, Gene Rouse, Stogan, "The Call of the Moose." Daily ex Sun, 10 am, news; 10:20, organ; 11:12 n., Pradence Penny; 12, music; 4 pm, piano revertes; 4:345, Palmer house soluists; 5:45, music; 6, symphony; 6:15, talk, Daily ex Sun, 10:20, pm, 12:2 am, Sun, 7:30:10:30 am, services; 1:30:2 nm, inunies; 2:4, Bible classes; 9, studio program; 10, news. Central, 3.118.

Gary, Ind. 232-4m-1290kc. 593 watts. Thomas J. Johnson and Frances Kennedy Radio Corp. Mon. 7-21 am. Thes. 7-9 m., 11-12. Wed. 7-9 pm. 11-1 an. Thurs. 7-9 m., 11-12. Fri. 7-9 om. 11-12. Sat. 3730-5 m., 7-9, 11-1 am. Son. 3330-5 m., 7-9, 11-1 an. Son. 330-5 m., 7-9, 11-12. Central. Founded Aug. 16, 1927.

Ashtabuta, Ohio. 208.2m-1440kc, 30 watts. J. P. Wilson. Mon. Weil, Fri, 7-45 pm. 8:30-11. Sun, W.J.R. P. J. P. S. S. S. Central.

WJK
Pontiac, Mich, 440.9m-680kc, 5900 waits, 8xA O.
32 m. The Richardis-Oakhand Co., Slogan, Tile,
Good Will Station." Announcers, Leo Fitzuatrick,
John F. Patt, Daily ex Sun, 12:45-2 pm, 6-12 mid,
Mon, Wed Fri, 10 am, 11. Sun, 10 am, service;
2-4 pm, service; 6-10:30 pm. Eastern. Founded
August, 125.

## WJZ

Dound Brook, N. J. 454.3m.660kc, 30,000 watts R. C. A. Manased by National Broadcasting to Authorities of the State of the Authorities of the man Sweetser. Curr Peterson, Daily ex Sal. Sun 1-2:40 pm, 4:30-12, Sar. 12:454-4 pm, 430-5:30, 6-12, Sun, 9:10 m, 1-10-48; onn. Founded 1921. Eastern

WKAQ
San Juan, Porto Rico, 3224m-930kc, 500 waits,
Radio Corporation of Porto Rico, Announcer, Joagoin Agust, Slogan, "The Island of Enchantment,
Where the World's Best Coffee Grows." Wed, 8-10
pm. Intercontal.

East Lasting Mich. 277.6m-1090kc. 500-1696
East Lasting State College Amouncer, Keill Himebaugh, Daily es Sun. 120-123 pm, weather markets, agricultural topics. 7:15-8, tarm school Wed. 89 pm. Music. Eastern.

## Laconia, N. H. 223.7m-1540kc, 50 watts, Laconia Radio club. Fri. 7:30 pm. Sun. 5 pm. Eastern Founded Oct. 1, 1922.

WKBB Joliet, III. 215.7m-1390ke, 150 watts, Sanders Brothers, Moo, 7-9 pm. Tues, Thurs, 8-12 mid. WKBC

## WKBE

Webster, Mass. 228.9m.1310kc. 100 watts, K. & B. Electric Co. Thurs, Sai, 8-10;30 pm. Eastern daylight, Founded Feb. 27, 1925.

Indianaraliis, Ind. 252n-11930c, 220 watts, Noble B. Watson, Daily ec. Sun, 10 an, 10-30, 10-30, pn, 7, 7-10, Daily ex. Sun, 12 n, Mon, 7-39 pn, 8-30, 9, Tres, 8-30-10-30 pm, Thurs, 7-39-10 pn, Eri, 7-30, 8-9-30 pn, Sun, 10-45 an, 3 µm, 7-30. Founded Oct, 1925, Central,

#### WKBG

Chicago, Jii. 201.2m-1490kc, 100 watts, C. L. Carroll. (Portuble.)

#### WKBH

LaCrosse, Wis. 220.4m-1360kc. 500 watts: Calla-way Music Co. Daily ex Sun, 10 am, Aunt Sammay 12 n., weather, U. S. Farm talks, Mon, 3:30 pm, Wed. 6:30 pm, Fri, 7:30 pm, Sar, 8:30 pm, Sun, 10:30 am, 6:30 pm, Central, Pounded 1924.

## WKBI

Chicago, II. 215.7m-1390kc. 50 watts, Fred L. Scheenwolf, Daily, 8-10 pm. Fri, Sat. Sun, 10-12 mid. Central.

## WKBL

Mich. 205.4m-1460kc. 15 watts. Mon-lio Mfg. Co. WKBN Youngstown, Ohio. 214,2m-1400kc. 50 watts. Radio Electric Service Co. Daily ex Sun, 7:30 am, exer-cises. Tuev, 5:45 pm. Thurs, Sat. 6 pm. Eastern, Founded Sept., 1926.

## WKBO

Jersey City, N. Y. 218.8m-1370kc, 500 watts. Camith Corp. Mon. 12-1 pm, 6-9. Tues, 12-1 pm, 6-8. Wed, 12-6 pm, Thurs, 10-1 pm, 9-13, Ft, 10-pm, 9-12 mid. Sat, 12n-3 pm, Sun, 2-6 pm, East-ern, Pounded Sept, 11, 1926.

## WKBP

Creek, Mich. 212.6m-1410kc. 50 watts. Bat-ek Enquirer and News.

WKBQ
New York, N. Y. 218.8m-1.370kc 550 watts. Standard Cabill Co., Inc. Announcer, Allan Cabill, Mon. 9.12 n. Tuess, 9.12, 1.5 pm, 9.12. Wed. 9.13 mid. Thurs, 1-3 pm, 5-12. Fr, 3-5 pm. Str, 3-8 pm. San, 8-12 mid. Eastern, Founded Sept. 1926.

Galesburg, 10. 217,3m-1380kc. 100 watts. Permil N. Nelson. Amouncer, Paul W. Palmquist. Slogan, The Markhwe, Station in the Renowned City of Colleges. Mon. Wed. Fri. 10-11 am. 12-36-1 pm. 2:30-330, 7-11. Tuns. Thurs, 10-11 am. 12-36-1 pm. 2:30-330, 7-11. Tuns. Thurs, 10-11 am. 12-36-1 pm. 2:30-3-30, 7-30, 10-11. San, 12-30-1 um, 7-9 nn. 40-41. San, 12-30-5 pm. Central. Founced Oct. 12-6. WKBT WW. D1 New Orleans, La. 252m-1190kc, 50 watts. First Baptist church, Announcer, W. H. Green, Slo-gan, "We Kast Bible Truth." Sun, 10:45 am, 7:20 pm, service. Central.

Brookville, Ind. 217.3m-1389kc, 100 watts. Knox Battery & Electric Co., Fri, 7-9 pm. Sun, 7-9 pm.

WKBW Buffalo, N. V. 217.3m-1380kc, £00-750 w2115. Churchill Evangelistic Assn. Inc. Daily ex Sun, 7:10 pm. Sun, 9:130 am. 10:30, 3 pm, 7-9, 10:15-12 mid. East-ern. Founded 1926.

## WKBZ

Ludington, Mich. 199,9m-1500kc. 15 watts. The Toggery. Mon. 8-10 pm. Sun. 10:30-12 n, 7-8;30 pm. Central. Founded Nov. 23, 1926. WKDR

## Kenosha, Wis. 247.8m-1210ke. 15 watts. Edward A. Dato.

WKEN Kenmore, N. Y. 20tm-1470kc, 250 watts, WKEN, Inc. Daily ex Sun, 11:45 am. Mon. Thurs, 6-12:30 pm. Tues, 8-12 mid. Sat, 6:30 pm. Sun, 9:30 am. Il. 2:30-3:30 pm. 7:30. Eastern. Founded Pail 1925.

## Lancaster, Pa. 252m-1190kc, 50 watts, Kirk Johnson & Co, Mon, Wed, Yri, 6-10 pm, Fri, 11-12 mid. Sun, 10:45-12 n, 7:30-8:30, Eastern, Founded

WKRC Cincinnati, Obio. 245.8m-1220kc. 550 waits. Kodel Radio Corp. Mon. Wed. 6-8 pm, 9-11, 12-2. Tues, 6-7 pm, 9-12 and. Thurs, 8-10 pm, Pri, 9-11 pm, Sat. 6-7 pm, 9-12. Sun. 11-12 n; 3-5 pm, 7-8, 9-11, 12-3-1. Eastern. Founded May, 12-3.

# Oklahoma City, Okla. 288.3m-1040ke, 150 watts. WKY Radiophore Co. Daily 10-11 am, 6-7:30 pm. Mm, Wel, Fri, 9-11 pm. Central. Nashville, Tenn. 225.4m-1330kc, 1000 watts. Life and Casualty. Aunouncer, Walter N. Campolell. Daily 6:45-7:45 am. Daily ex Sim. 12.25-12:55 pm. Mon, Wed. 6-9 pm. There, 6:7 pm, 9:11-5. Sat. 6-9 pm. Sun. 6:39-7:30 pm, 9:15-10:15. Cen-tral. Onesicd Nov. 24, 1926.

## Louisville, Ky. 267 7m-1120kc, 30 watts. 100 watts 6 am-6 pm. Virginia av. Baptist Church, Sun, 11 am, 7:30-8:45 pm. Central.

## WLB

## Minneapolis, Minu. 245.8nn-1220kc. 500 watts, U. of Minnesota, Mon. 7:15-8, Tues, 6-7 nm, 8-9 Wcd, 6-415-7 pm, 7:30-8, 200 Fri, 4-5 pm, 7:30-8, Central. Muncie, Ind. 209.7m-1430ke, 50 watts. D. A. Bur-fon, Slogan, "Munce, Ind. The Ideal American Ciry," Wed, 8-12 mid, Thurs, 9-12 mid, Fri. 8-11 pm. Sat, 7-11 pm, Sun, 2-4 pm. Central.

## WLBF Kansas City, Mo. 209,7m-1430kc. 50 watts. Everett L. Dillard. Slogan, "Where Listeners Become Friends," Daily ex Son. 9-12, n, 2-4 pm, 7-10:30. Central. Founded Nov. 13, 1925.

### WLBG Petersburg, Va. 214,2m-1400kc, 100 watts. R. A.

## WLBH

Farmingdale, N. Y. 232,4m-1290kc. 30 watts. Jos. J. Lombardi. Announcer, H. J. Martin. Daily, 10-11 am. Mon, Wed, Fri. 7:30-11 pm. Eastern. WLBI Wenona, III. 238m-1260kc. 250 watts. Wenona Legion Broadcasters, Inc. Mon. 7-12 mid. Wee, Fri, 7-9 pm. Sun, 9 am. Central,

## WLBL

Stevens Point, Wis, 333.1m-900kc, 1000 watts, 2000 watts 6 ann-6 pm, Wisconsin, Dept. of Markets, Stogan, "Wisconsin, Land of Beautiful Lakes," Daily ex Sun. 8 an, 9, 10,11, 12 n, weather, markets; 1 pm, news, Thures, Sat, 8-10 pm. Central,

Cambridge, Mass. 230,6m-1300kc, 50 watts. Browning Drake Corporation.

## www.americanradiohistory.com

WLBN

Chicago, Ill. 204m-1470kc. 100 watts. William Evert Hiler (Portable). Daily ex Sun, 12-1 pm, 5-7; 9-11. Central.

WLBO

Galesburg, 19, 217.3m-1389kc, 160 waits. Frederick A. Trelibe, Jr. Tues, Thurs, Sat, 9-10 pm. Central. Founded Ian. 16, 1927. WLBQ
Attword, Ill. 218.8m-1370kc. 25 watts. E. Dal.

WLBR

WLBT

Mansfield, Ohio, 206.8m-1450kc, 59 watts, Mansfield, Broadcasting Association, Announcer, Ray Davis, Mon, 6-7 pm, 9-11 pm, Wed, 9-11 pm, Sat. 9-35-12 mid, Sun, 10:39-12 n. Central, Pounded Jan, 1, 1927.

Oil City, Pa. 293.9m-1020kc, 590 watts, Petroleum Telephone Co, Daily ex Sun, 12:15-1:15 mm, 5:17 pm, Mon, 12:4:30 am, Mon, 9:30-11 pm, Thurs 19:41:30 pm, San, 3:30-5 pm, Eastern, Founder

WLBX

Long Island, N. Y. 204m-1470kc. 250 watts. John N. Brahv WLBY

iron Mountain, Mich. 209.7m-1430kc, 50 watts. Aimone Electric, Daily and Sun, 12-1 pm. Central. WLBZ

Foxcroft, Me. 208.2m-1440kc, 250 watts. Thompson L. Guernsey. Irregular achedule. WLCI

Thaca, N. Y. 247.8m-1210kc, 50 watts, Lutheran Assn. of Ilhaca, Aunouncer, Robert F. Schuetz, Slogga, "The Church at the Gate of the Campus," Sun, 10:45 am, 7:45 pm. Eastern, Founded 1926, WLEX

Lexington, Mass. 215.7m-1390kc, 50 watts. Lexington Air Statinn. Daily ex Sat. 3:30-10:30 pm. Sat. 11 pm. Eastern. Founded Oct., 1925. WLID Elgin, III. 416.4m-720kc, 15990 watts, Libert Magnaine, Announcers, Bill Hay, Art Smith, Dad-ex Sun, 1030-1; am, 11:30-1157, 12:01-12:40 pm 7-8, 11-12:30, Sun, 5:15-6, Central.

WLIT Philadelphia, Pa. 405.2m-740ke. 500 watts. Lit Bros. Mon. Wed. Fri. 13-2 pm, music. 2-3, 4-30. music. 5-30, stories. 7:30-mid. Tues, Thurs. 1 am. Tues. Thurs. Sat. 12n. 2 pm, 4:50, 5:30. 7:30. Eastern, Founded Mar. 18, 123.

WLOE

Chelsea, Mass. 211,1m-1420he, 100 watts. William S. Pote.

Chicago, H. 344 (sin-370bc, 250) varie, Sears; Co. S. Co.

Providence, R. f. 260.7m-1150kc, 250 watts. Lin-coln Studios Inc. Mon. 6:45 pm. Tues. 6:30 pm. Wed, 7 pm. 9. Thurs. 6:30. Fri. 7 pm. Sat. 6:30 pm. Sun. 6:30 pm. Eastern.

WLTH

William Brooklyn, N. Y. 256.3m-1170kc, 250 watts. Voice of Brooklyn, Inc. Mon. 10 am, 5-6 mn, 9-11. Tues. Wed, Thurs, 4-7 pm, 9-12. Fri, 5-7 pm, 11-1 am. Sat. 4-6 pm, 9-12 mid. Sun, 1-2 pm, 5-6, 9-11.

WLTS

Chicago, Ill. 483.6m-620ke. 100 watts. Lane Tech-uical High School, Mon. 9-10 am, 2-4 pm, 6-7. Tues, Woll. Thurs. Fri. 9-10 am, 2-4 pm. Central.

WLW

WLVV
Harrison, Ohio. 428,3m-760kc, 5000 watts. \$2m-5764kc, 250 watts. The Crosley Radio Corp. Annuncer. Fred Smith. Daily ex Sat. Sun. 8 and exercises: 16, woman's hour; 11:15, markets; 11:55, science; 3:30, with the control of the

WLWL

New York, N. Y. 370,2m-810kc, 1000 warts, The Paulist League, Announcer, Joseph A. Bier, Slo-gan, "For God and Country," Tues, Three, 8-11 pm, Sat. 7-9 pm, Sun, 8-9:15 pm, Eastern,

WMAC

Cazenovia, N. V. 225.4m-1330kc. 500 watts. C. B. Meredith. Announcer, C. R. Jones. Thurs, 12 n. farm program: 8 pm, popular studio. Founded 1922.

WMAF

South Dartmouth, Mass. 438-3m-700kc. 500 watts Round Hills Radio Corp. Not operating.

WMAK Studios, Inc. Amouncer, William Fay, Daily ex Sun, 11 am, menn period, 12n, news; 12:15; mysic, Daily ex, Sun, 6:15 pm, 7-12. Sun, 10:25 sm, 2:36, 3:5, -11. Eastern, Founded Sept. 22, 1922.

WMAL

Washington, D. C. 241.8m-1240ke, 500 wafts. M A, Leese Radio Co. Daily 6:39 pm. Eastern.

WMAN

Columbus, Ohio, 234.2m-1280kc, 50 watts. First Baptist church. Announcer, John Bohannan. Sun. 10:39-12 n, 7:30-9 pm. Eastern. Finanded Sent. 1922.

WMAQ

Chicago, JH, 447.5m-670kc, 1009 watts. The Chicago Daily News, Announcer, Harry Goise, Daily ex Sun, 6.39-11 an, 12 u.2 nn, 4-7, 8-10, 10145-12 n, 7 pm, 8-10, Daily ex Sun, 5a, 221-1225 nn, farm, Gentral, Founded April 13, 1223.

WMAY

St. Louis, Mo. 234.2m-1280ke, 100 warls, Kinga-highway Presbyterian church, Slogan, "May Every By-Way Hear Kingshighway." Sun. 11 am, 8 pm. Central

WMAZ

Macon, Ga. 270,tm-1110kc, 500 watts, Mercer University, Announcer, E. K. Cargill, Tucs, Wed. Thurs, 8-0;15 pm, Fri, 11-12;18 am, Eastem. Founded 1925.

WMBA

Newport, R. I. 204m-1470kc. 100 watts. LeRoy Joseph Beebe.

WMBB

Homewood, Ill. 252m-1199kc, 5000 watts. American Band & Mottsage Co. Trianon. Asnouncer, Bailroom, Daily ex Suu, Mon, 6-10:30 pm. Sun, 3-6 pm, 7-10:30. Central, Founded 1925.

Detroit, Mich. 243.8m-1230kc. 100 watts. Michigan Broadcasting Co. Announcer, Gordon Higham Daily ex Sun, 6-10 pm, Eastern, Founded 1925. WMBD

Peoria Heights, Ill. 205.4m-1460kc, 250 watts. Peoria Heights Radio Laboratory. Daily ex Thurs, musicale. Sun, service.

St. Paul, Minn. 208,2m-1440kc. 10 watts. Dr. C. S. Stevens, Mon. Fel, 10-12 n, Wed, 8-10 pm. WMBF

Miami Beach, Fla. 384,4m-780kc, 500 watts. Fleet wood Hotel. Daily, 7-8 pm; 7:30-9. Eastern Founded 1924.

Founded 1926.

WMBG
Richmond, Va. 220.4m.1360kc. 15 warts. Haven and Martin, Spann. The Public He Pleased. An exercise of the Public State of the

Y IVLD 14
Joplin, Mo. 204m-1470kc. 100 watts. Edwin Dudley Aber. Aonouncers, M. E. Jones, E. D. Alex. Slogan, "Where Memories Bring Happiness" Mon. Tues, Wed. Thurs, 12:15-1 pm, 5:30-7:30, 8:36-10:30. Fri; 12:30-1:15 pm, 5:30-7:30, Sand-10:30. Sun, 10:50-12 n. 6, 7:30.

WMBI

Chicago, Ill. 263m-1140kc, 500 watts. Moody Bible Institute. Slogan, "The West Point of Christian Service," Announcer, Wendell Loveless, Daily ex-Sun, 7-7-40 am, 10-30-41-30, Tues, Wed, Fri, Sat, 8-9 pm, Thurs, 7-9 pm, Sun, 3-30-7 pm. Central, Founded July 28, 1926.

WMBJ

en, Pa. 232.4m-1290kc. 50 watts. Stat Fri, 9:45-11 pm, Eastern.

WMBL

WWIBL

Lakeland, Fla. 228.9m-1310kc. 100 watts. Ben
furd's Rattin studios. Daily ex Sun, 10:30-1;30 pm
7:30-9, 5-10, 10-11. Sun, 11-12 n., 7:30-8.30. Eastern WMBM

**WMBO** Auburn, N. Y

WMBQ
Brooklyn, N. Y. 204m-1470kc. 100 watts. Paul J. Gollhofer.

WMBR

Tampa, Fla. 252m-1190kc. 100 watts. F. J. Rey-nolds. Daily ex Sun, 1-2 pm, 2-3, 7-8, 8-9, 10-11.

WMBS

Lemoyne, Pa. 234.2m-1280ke. 250 watts. Mack's Battery Co. Announcer. W. S. McCachren. Slogan. The Voice of the Susqueianum. Pathy ex Sun, II:30 au. musicale, 12 n. orsan; 6, time, 6-11:30 pa. music. Sar. 11:30-3 am. Knut Kracker Klub frolic. Sun, 8:30 am-9 um. Eastern. Founded March 1, 1920.

WMBW

Youngstown, Ohio. 214,2m-1400kc, 50 watts Youngstown Broadcasting Co., Inc. Mon, Wed. Fro 2:30-3:30 pm, 6-12. Sat, 10:30-12:30 am. Founder Jan., 1927.

WMC

Memphis, Tenn. 516.9m-580kc. 500 watts. The Commercial Appeal. Announcer, Francis S. Cham-chamber and Appeal. Announcer, Francis S. Cham-pier, Station W.M.C. Memphis. "Down in Disie." Daily se Sun, 9:45 am, 12 n, 2:30 pm, weather, markets, music. Daily, 8 pm, program Sun, II am, church service. Founded Jan. 20, 1923. Central.

WMCA-

Hoboken, N. J. 370.2m-810kc, 500 watts. Hotel McAlpin. Assouracer, Spealden Weir. Sleyan, Where Spealing Strategisters of the Spealing Spe

WMES

Roston, Mass. 211.1m-1420ke. 50 watta. Mi Educational Society, Mon, Thurs, 8-10:30 pm. 5 10:45-12 n., 7:45-9:30. Eastern. Founded Aug. 1927

WMPC

Lapper, Mich. 234,2m-1289kc. 30 watts. First Methodist Protestant Church. Daily ex Snt, 12-1 pm. Daily ex Sat, Thire, 7:33-10 pm. Daily ex Sat, 4-5 pm. Sun, 10:30-12 n, 12-1 pm. 4-8:30, 7:30-10, Central, Founted Dec. 6, 1928.

WMRJ

Jamaica, N. Y. 206.8m-1450kc. 10 watts. Peter J. Prinz. Tues, Thurs, 8-11:30 pm. Sat, 12-2:30 am. Sun, 12-2:30 pm, 9-11:30. Eastern.

New York, N. Y. 236,1m-1270ke, 500 watts. Mad ison Square Garden. Announcer, Horace E. Beaver Mon, Wed. Thurs, 9-12 mid. Tues, Fri. 6-9 um Sun. 7-9 pm. Eastern.

WNAC

Boston, Mass. 461.3m-650kc. 500 watts. The Shepard Stores, Aurouncers, Ben Hadfield, E. Lewis Puuham, Joseph Lopez, Jean Saurgent, Daity ex Sun, 7:45 am-12 mid. Sun, 10:45 am-5 pm; 7:30-11. Eastern, Founded July 31, 1922.

WNAD

Norman, Okla. 239.9m-1250kc. 500 watts. University of Oklahoma. Mon, Wed, Thurs, 7:15-9:45 pm. Tues, Fri, 12:15-1 pm. Sat, 2-5 pm, Central.

WNAL

Omaha, Nebr. 258.5m-1160ke, 250 watts. R. J. Rockwell. Announcer, Rouald J. Rockwell. Slo-gan, Proneer Station of Omaha." Fri, Sat, 7-9 pm. 9-11 pm. Central. Founded 1921,

WNAT

Philadelphia, Pa. 288.3m-1040ke. 100 watts, Lenning Bros. Co. Slogan, We Never Are Tired. Wed, 7:30 pm. Sat, 8 pm. Eastern. Founded 1921.

WNAX

Vankton, S. D. 277.6m-1080kc, 1000 watts, 6 am-pm, 250 watts after 6 pm, Gurney Seed & Nursery Co. Daily and Sun, 11 am-10 pm, Sun, 11-12 n, 2-7 pm, Central, Founded Aug, 22, 1927.

WNBA

Forest Park, III. 208.2m-1440kc, 200 watts. Mich ael T. Pafferty. Irregular hours. WNBF Endicott, N. Y. 206.8m-1450kc. 50 watts. Hewitt-Wood Radio Co. Irregular schedule.

WNBH

New Bedford Mass. 247.Sm-1210kc. 250 warts. New Bedford Hotel. Announcer, I. Vermilya. Mel-6-10:30 pm. Thes. Thurs. 7-8 pm. Wed. 6-10 nm Fri. 6-10:30 pm. Sun, 11-12:15 pm. 7:30-9 pm Eastern. Founded 1923.

WNBJ

Kuaxville, Tenn. 206.8m-1450kc. 50 watts. Lons dale Baptist Church. Sun, 9:45 am, 10:45. 5-6 pm 7, 9-10. Central. WNBL

Bloomington, Ill. 199.9m-1500kc. 15 watts. Gray, Trimble and Smith Elec. Co. Sun. 2-4 pm. Mon. 8-12 mid. Central. WNBO

Washington, Pa. 211.1m-1420ke, 15 watts. John Brownlee Spriggs. Daily ex Sun, 2-4 pm, 9-11 pm. Sun, 11 am, 7 pm, services. Eastern.

Sun, 11 am, 7 pm, services. Eastern,
WNBQ
Rochester, N. Y. 205,4m-1460kc. 15 watts.
don P. Brown,
WNBR

Memphis, Tenn. 228,9m-1310kc, 100 watts, Popular Radio Shop, Daily ex Sun, 6:30 pm. Sun, 2:30 pm. Central.

Pa. 199.9m-1500kc. 5 watts. Home WNBX

Springfield, V Broadcasters, WNBZ

Newark, N. J. 267.7m-1120kc, 250 watts, Herman Lubinsky, Announcer, W. A. Bingenbeimer, Slogan, "The Voice of Newark. Tues, Wed, Fri. Sai. Sun, 6-6:30 pm, 8:30-12 midnight, dance music. Eastern.

WNOX

Knoxyille, Tenn. 295,3m-1130kc. 1,000 watts. Peoples Telephone & Telegraph Co. Mon. Wed, 7-10 nm. Fr., 7-11 pni. Tues. 9-9:30 pni. Central. WNRC

Greenshure, N. C. 223.7m-1340kc, 500 watts Wayno M. Nelson, Mont, Wed, Fri, 12.39-130 on 6:45-9. Tues, 7-9 pm, Thurs, 7-10 pm, Sun, 11.11 am, 8 nm, services, Eastern, Founded Mar, 24, 1926 New York, N. V. 526m-570kc. 590 watts. New York Municipal Radio station. Announcer. Christic Robinsack. Slogan, "Municipal Broadcasting Station of The City of New York." Daily, 7-10 pm.

WOAI

Sau Marioni, Texas, 499, June 2004c. 5055 water mountain manipular Ca. Creating News Express), An nouncer, J. G. Cummings, Slogan, "The Winter Playground of America, Where the Sunshine Spends the Winter," Daily ex Sun, 92,5 am, weather, night markets, news, sports, Mun, 72, 500, Tues, Weld, Thirts, Fri, 9-10 nm, Sun, 11 am, 7:30 pm, Central, Founded summer 1923.

WOAN

Lawrencehurg, Tenn. 239.9m-1250kc. 500 watts. James D. Vaughan. Announcer, James D. Vaughan. Sun. 11-12 n. 7:30-8:30 pm. Central.

Trenton, N. J. 239-9m-1259kc. 500 waits, F. J. Wolff, Slogan, Trenton Makes, the World Takes, Daily ex Sun, 12:15-115 pm. Daily ex Sun, 52:46-115 pm. Daily ex Sun, 52:46-115 pm. Daily ex Sun, 52:30-9 pm. Eastern: Founded March 2, 1923.

WOBR

WOBT Union City, Tenn. 205.4m-1460ke, 15 watts, Titts worth Radio Music Shop.

WOBU Charleston, W. Va. 267.7m-11.20ke, 50 watts Charleston Radio Broadcasting Corp.

WOC Davenport, lowa. 374.8m-800kc. 5000 watrs. The Palmer School of Chiropractic. Slogan, Where the West Begins and in the State Where the Tail Corn Grows. Daily ex Sun, 7 am. Happy hour. 39-25, markets 11, 1125, 1-57 cm, time 2 markets, 17, 1125, 1-57 cm, time 2 markets, 7, 339-330, WEAN; 9-331-10-30, Tues, 7-8 pm, 8-9-30, WEAN; WEAN; Web. 6:45-9-30, N. B. C. 1930, raiks. Thurs. 7 pm, 7:30-10, N. M. C. Fri, 7-10 pm, R. B. 250, 341, 7-9 pm, WZ, Sun, 11 nm, 12:15 cm, 12 mm, 12:30-10, N. M. C. Crownell Control of the School of the Sch

WOCL Jamestown, N. Y. 223.7m-1340kc, 25 watts, A. E. Neroton, Announcer, Boh Page, Tues, Fri. 6:30-7 pm. Sun, 10:30 am, 7-9 pm. Eastern.

WODA

Paterson, N. J. 293.0m.-1020kc. 1000 watts. O'Dea Tomule of Music. Slogan, "Voice from the Silk City." Daily ex Sun, 9-10 am, 12-2 µm; Mon. 5:30-9 µm, Turs, 4:30-6 µm, 9-11. Wed, 5:30-9 µm, 11-12. Thurs, 4:30-6 µm, 9-12. Fri, 5:30-9 µm, 11-12. Sat, 4:30-6 µm, 9-12. Sun, 9 am, 7 µm. Founded April 13, 1925. Eastern.

Ames, Jowa. 265.3m-1130kc. 2599-5000 warts, Iow State College, Aunouncer, A. G. Woolfries, Dail ex Sun, 7 an, 7:10, 8:45, 9:30, 10, 10;30, 12;10, 12; 1 pm, 12:30, 12:40, 12:45, 1 pm, 1:30, 9:30. Mon 7, 7:30 pm, 7:45, 8, Thres, 7:30, 7:45, 8, Sat, 4:1 nm, Boy Scouts, Sun, 10:45 am, 3:15 pm, Pounde April, 1922. Central,

WOK

Homewood, III. 252m-1190kc. 5000 watts. Karzas-Chicago Beach Hotel. Aunouncer, Hugh Asninwall, Daily ex Mon, 11-12:30 am. Founded July 20, 1925. Central.

woko

Peekskill, N. V. 215.7m-1390ke, 250 watts. H. E. Smith. Daily ex Sun, 10 am. Daily ex Sun, 10-11 am. 6-8 pm. Sat. 9-11 om. Sun, 11 am, 12:30 pm. 33:30. Eastern. Founded Mar., 1924. WOKT

Rochester, N. Y. 209.7m-1430kc, 500 watts, Titus-Ets Corp. Announcer, S. C. Hitelsenek, Daily ex Sun, Mon, II:30 aur.2 pm, 6:45-10, Mon, 11:30-2 pm, 6:45-11 pm, Sun, II-12:30 pm, Eastern. WOMT Manitowoc, Wis. 223.1m-1350kc. 100 watts. The Mikadow theater. Daily ex Sun. 11:50 am-1:10 pm 5:45-7. Mon, 10:30-1:30 am. Central,

WOO

Philadelulia, Pa. 348.6m-866kc. 500 watts, Iohn Wanamaker. Dally ex Sun, II am, organ recital; 1255, time; 12-1 pn, concert: 4-40, weather: 4-45, organ recital; 7-30, pnilee reports; 10-55, time; 11-02, weather: Mon. Wed. Fri. 7-30-11 pm, music, 11-02, weather.

WOOD

Grand Rapids, Mich. 260.7m-1150kc. 500 watts. Walter B. Stiles. Inc. Mon. Tues, Wed. Thurs. Seri. 9-11 pm. Sun. 9-1-9 pm. Central. WOOQ

Kansas City, Mo. 340.7m-880kc. 500 watts. Unity School of Christianity. Daily ex Sun. 11-11:30 am. Sun. 9-1-9 pm. 40, 19-12 pm. Wed, Fri. 8-10 pm. 510 pm. Mon. 9-10 pm. Wed, Fri. pm. 10-12 pm. 10-12

WOR

WUN
Newark, N. J. 422.3m-710kc, 3500 watts, I., Bamberger & Co. Daily ex Sun, 6:45-8 am, 2:30-4 pm.
Daily and Sun, 6:15-12 mid. Founded 1922. Eastern.

WORD

Batavia, III, 252m-1190ke, 5000 wattis, Peoples Pulpit association, Announcer, B. M. Rice, Slogan, Watchiower Station WORD, Daily 6-7:10 pm.

Jefferson City, Mo. 422.5m-710kc. 500 watts. Missouri State Marketing Bureau. Announcer, Jack Heiny. Slogan, Watch Our State. Daily ex Sun. 9 nm, 10. 102.50, 11. 12 u, 1 gm. 2. markets; stocks. seattlee Both. Thes. Wed. Blurs. Fr. 7 pm. markets stocks. State Both. The State Control of the C

O'maha, Neb. 508.2m-590ke. 1000 waits. Wood-nen of the World. Announcer, lester Palmer. Slo-gan, "Where the West is at It's Best. 'baily ex-sum 3.15 am, 8:55, 16:30, 12:30 pm, 1:45, 3:15, 5; Sun, Wel. 6-7, 30, 9:11, 8m, 9:10:35 am, 1-4:38 pm, 6-8:13, 9:15. Founded April 2, 1923. Central.

WOWO

Fort Wayne, Ind. 228.9m-1310kc, 5000 watts, 6-6 pm, 2500 watts after 6 pm, Main Auto Sunply Co. Daily ex Sar, Sun, 10.39-12 n, home news, farin flashes, Daily ox Sun, 12-1:30 pm, music, Mon, 6-15-11:20 pm, Wed, 7-11 pm, Thurs, Fri, 7-11 pm, Fri, 4-5 pm, Net, 7-11 pm, Thurs, Fri, 7-11 pm, Fri, 4-5 pm, Net, 6-10, 10-10, 4-5 pm, service; 8-10, Central, Founded April, 10-4-5 pm, service; 8-10, Central, Founded April, 10-4-5 pm, service; 8-10,

WPAP

Palisade, N. I. 394,5m-760kc, 300 watts, Palisades Amusement Park, Aunumuer, Perry Charles, I. Lewis Red, Mon, Wed, Sat, 8 pm. Tues, Fri. 8:30 pm. Thire, 9 pm, Eastern,

Chicago, III. 223.7m-1340kc. 500 watts. North Shore Congregational church. Announcer. Ralph E Briggs. Wed, 7:330-330 pm. Fri, 7:309-330 pm. Sun, 11-12:30 pm, 3:30-5:30, 8-9:39. Central. Feunded July, 1924.

**WPCH** 

Hobaken, N. I. 325.0m-920kc, 509 watts, Concourse Radio Corp. Mon. 7-12 mid. Trees, 4-7 pm, Wed, 6-9 pm, Thurs, 4-12 mid. Sat, 4-7 pm, 9-2 wP. Lin 6-30-12 mid. Eastern.

Wulkeren, Ill. 215.7m-1390ke, 250 wartts, Au-pouncer, Jaurice Mayer, Slogan, "Wulkegen For Station," Daily ex Mon, 3-5 pm, 6:39-9, 9:39-12, Mon, 3-5 pm, 6-9, Central, Founded Dec, 1, 1926. WPG Atlantic City, N. J. 272-6m-1109kc. 5000 watts. Municipality of Atlantic City. Slogan. World's Playgrounds. Daily ex Sun, Fr. J. pm; 6:45-12.23 an. Sun, 3:15 pm, 4:15 pm, 5:15, 9:15, 10:30. Extern Founded Jan. 3, 1924.

WPRC Harrisburg, Pa. 209.7m-1430kc. 100 watts. Wilson Printing & Radio Co. Suu, 9-11 pm. Eastern.

State College. Pa. 299.8m-1000kc. 500 watts. Pa. State College. Slozan. The Voice of the Nitrany Lion. Mon. Wed. Fri. 8 pm. Frt. 12 mid. Sar-wing workers. Founded New., 1921. WPSW

Philadelphia, Pa. 206.8m-1450ke, 50 watrs. Philadelphia School of Wireless Telegraphy. Slogan. "First Wireless School in America." Wed, Fri. 7 pm. Eastern. Founded 1920.

WPTF Rateigh, N. C. 545,1m-550ke, 500 watts. Durham Life Ins. Co. Slegan, 'We Protect the Family.' Mon, Wed, Fri. 6-8 pm. Sun, 11 am, 7:30 pm. Eastern, Founded Oct. 1, 1927.

Miami, Pia. 384.4m.780kc. 750 matts, Electrical Equits, Co. Announcer, Frederick W. Mizer. Slosan, The Most Spottnern Radioasting Station in Founded Fo. 1922 un. 11sts 12:28 pm. 1938.

WQAN

Seranton, Pa. 330 6m-1300ke, 250 watrs. Scranton Times Assimineer, T. V. Neafon, Slegan, "The Voice of the Anthracite," Daily ex Sun, 12-33-1 min, 4:39-5, news, renorts, sports, music, Tues, Fri, 8 pin, entertainment, Sat, 6:30-7:15 pin, dance music, Sun, -55 pin, Eastern, Opened Jan, 8, 1923, WQAO Pallesde, N. 1. 304,5m-760kc, 500 witts, Cal-wess Baptists church, Amounter, G. R. Withdam Slogan, "The First Church Gwned and Operated Broadcasting Station in the World," Wed 7:30 cm, church service. Sun, 11:15 am. 3 pm, 7:30, church service, Founded 1922. Eastern,

WQBA Tampa, Fla. 238m-1260kc. 250 watts. WQBA In Utica, Miss. 215.7m-1390kc, 100 wates, I. R. Jones Daily ex Sun, 7 am-7 pm, Central, WQBJ

Clarksburg, W. Va. 239.9m-1250kc, 65 watts. John Raikes.

Chicago III. 447,5m-670ks. 509 wates. Calumet Baking Coveder company-Chicago Dally News. Indiv-sery. 1882 (1992). Chicago Dally News. Indiv-pression Dally ex. Lim. Mon. 78-pp. 10-1 am. Sun. 10-45-12:30 pm, 2-4, 6-7. Founded WRAF

La Porte, Ind. 208.2m-1440lic. 100 watts. Radic Club. Inc. Announcer. Charles Middleton. Slogan. "The Voice of the Maple City." Daily ex Sun. 12-1 pm, 7-9. Sun. 10:45-12:15 pm. Founded April.

1 pm, 7-9. 1923. Centr WRAH

ovidence, R. I. 199.9m-1500kc. 250 waits. Stan-N. Rend. Providence. ley N. Read WRAK Escanaba, Mich 282.8m-1090kc, 50 watts, Economy Light Company, Announcer, H. E. Flath, Slogan, The Gateway to Cloverland, Mon, Fri, 8:30 pm. Eastern, Founded 1924,

WRAM Galeshurg, III. 247,8m-1210kc. 50 watts. Lombard College. Mon. 7-11 pm. Founded 1922. Control.

WRAW Reading, Pa. 238m-1260kc. 100 watts. Avenue Ra-dio & Elec. Shop. Slogan, "The Schuylkill Valley Echo." Announcer, C. M. Chafey. Tues. 9-11 with Thurs, 3-12 wid. Sun, 11 am, 3-4, 7;30. Eastern, Pounded Lune 5, 1933. WRAX

Philadelphia, Pa. 212.6m-1410kc. 250 watts Berachta Church, Inc. Tues, Thurs, 7:30-9:30 pm. Sum. 11-12-1215 pm. 4-5, 9-10. Eastern. Founded WRBC

Valparaiso, Ind. 238m-1260kc. 250 watts. Immunuel Lutheran church. Announcer, Gerhard Schutes. Slogan, World Redeened by Christ." Mon. 7:30 pm. Sun, 7:30 pm., church service. Central. Founded March. 1524.

Washington, D. C. 468.5m-640kc, 500 watts, Radio Corp., of America, Amouncer, John B. Dagiel, Stogan, The Voice of the Captiol. "Daily ex Sun, 6:45 and pm, WEAF; 1-2, organ; 5-11 pm, Sun, 11 and 2:00 pm. Eastern, WRCV

Norfolk, Va. 209.7m-1430ke. 100 watta. Radio Corporation of Virginia. Slogan, "The Voice of the Business District." Mon, Tues, Thurs, Fri, 7-8 pm, Sun, 10:30-12:15 pm, 7:15-8:45. Eastern.

WREC

Memohis, Tenn. 249.9m-1260kc. 100 watts. WREC Inc. Daily ex Sun. 7-8 pm. Sun. 4-5:30 pm. Cen-tral. Founded 1924.

WREN

Liverence, Kan. 254,1m-1180kc. 750 watts. Jenny Nero, Daily ex Sun, Mun, 9-10 µm. Mon, 8-9 µm. WRES

Quincy, Mass. 217.3m-1380kc. 50 watts. Harry Leonard Sawyer. Tues, Wed, Thurs, Fri, 8-11 pm, Eastern. Founded Nov. 1926.

WRHF

D. C. 322.4m-930kc. 150 watts. Amer-sting Company. Dally ex Sun, 10-12 n. I 1924. Eastern. WRHM

Minneapolis, Minn, 260,7m-1150kc 1000 vatts. Rozedale Hospital, Inc. Announcer, Troy S. Miller, Wed, Frt, 8-10 pm. Thurs, 10-12 mid. Sat, 6-11 pm. Sun, 9:15 am, 11, 7:45 pm. Central.

Hamilton, Ohio. 205.4in-1460kc. 110 watts. John C. Slade, S. W. Doran, Mon, Wed. Fri, 1-2 pun, 6:45-10. Tues. Thurs. 1-2 pun, 6:45-2 ain. Srt. 1-3 pn., 2:30-5, 6:45-2:50 ain. 10:30. Eastern. Pounded 19:19

WRM

Urbana, Ill. 272.6m-1160kc. 500-1000 watts, Univ. of Ill. Announcer, John Bayles. Daily ex Sun, 5-6 pm, 7-8 pm, musical. Sun, 3:45-5 pm. Central.

WRMU

New York, N. Y. 201,2m-1490ke, 100 watts. Arkanic Broadcasting Corp.

Coytesville, N. J. 325.9m-920kc, 560 waits, Experimenter Puli, Co. Daily ex Sun, 11-1 pm, 2:30-4, 7-41 pm, Sun, 11 am, 1-6:30 pm. Exstern. Founded June 12, 1925.

WRPI

Terre Haute, Ind. 208.2m-1440kc. 100 watts. Ro Polytechnic Institute Broadcasting Assn.

WRR

Dallas, Tex 461.3m-650kc, 500 watts City of Dallas, Announcer, John Thorwald, Slogan, City of Achievements. Dally ex Wed, 11:22.00 pm, 6-7, 8-9, 10-11. Sun, 11-12 n., 7:30-9 pm, 9:30-1300. Central

WRRS

Racine, Wis. 247, 8m. 1210kc. 50 watts. Racine Broadcasting Corp. Announcer, F. G. Leavenworth. Daily ex Sup. Sat. 6-7 pn. news. Mon, Wed. Fri. 12-1 pm. organ; 8-10. Ceutral, Founded Dec. 1, 1926, 6. Sept. 1, 1926, 1, 1

WRST

Bay Shore, N. Y. 211.1u-1420ke, 150 ways. Radiotel Mig. Co., Inc. Sickan, Bay Shore, the Garden Spot of Long Island. Daily ox Shore, the Hard Spot of Long Island. Daily ox Shore, 12-1 pm, 4-5, 5-12. pm, 4-5, 6-12. Eastern. Founded 1925.

WRVA

Richmond, Va. 254.1m-1180kc. 1000 watts. Larus & Bro, Co. Inc. Slugan, "Carry Mc Back to Old Virginy," Announcer, 1. Robert Beadles, Daily ex Sat. Sun, 12-1:20 pm, Mon, Wed. Taurg, Fri. 2 mid. Sun, 11-12 n., Sun, 11-12 n., Sun, 11-12 n., Sun, 11-12 n., Sey. Eastern.

WSAI

Mason, Ohio. 361.2m;-830kc, 5000 watts. United States Plnying Card Co. Daily and Sun, 7-12 mid. Fri, 8-9 pm. Eastern. WSAJ

Grove City, Pa. 223.7m-1340kc. 250 watts. Gr City College. William L. Harmau, activities. regular schedule. Founded April 1920.

WSAN

Allentown, Pa. 222,1m-1350ke, 100 watts. Allentown Call Pub. Co. Announcer, Charles Walp. Tucs, Thurs, 8:15 pm. Eastern.

WSAR

Fall River, Mass, 252m-1190kc, . .250 watts, Doughty & Welli Elec, Co., Inc. Announcer, Bar-ton G. Albert, Daily 12-1 pm, 5:30-6:30. Founded Jan, 1923. Eastern.

WS AZ Zasieto,
WS AZ Chicago, Ill. 204m-1470kc, 100 warts, Zenirt Radio Corp.

WSAZ

Huntington, W. Vo. 249.901-1249kc. 100 watts. McKellar Elec, Co. Announcer, F. B. Santth, Dally ex Sun, 12-4 pm, 6-10. Sun, 10-12:30 pm, 3-4, 6-10. Eastern. Founded Feb., 1927.

WSB

N 31D

Adhatta, Ga. 475.9m-633kc. 1000 watts. Atlanta fourna Amouncer, Lanthdu Xvy. Slogan, Tan Light and Amouncer, Lanthdu Xvy. Slogan, Tan Marker half how: 12-1 pm, music, weather; 1, farm service, 2:30, reports; 8-9, concert; 10:55-12, connects; 2:30, reports; 10:55, reports; 1

Chicago, Cll. 232 4m-1290kc. 500 watts. World haitery Cof. Dalily ex Sun. Mon. Thurs, 6:30-8 pm. Bally ex Mon. 9-1 am. Sat, 2-4 am. Sun, 5-7 pm. WSBF

St. Louis, Mo. 258.5m-1160kc. 250 watts, WSBI

WSBT

South Bend, Ind. 399.8m-750kc, 500 watts. South Bend Tribune, Announcer, C. G. Livengood, Daily ex Sup. 6-7 pm. Mon. 9:30-11:30 mn. Thirs, 9-11:30 pm. Fri, 10-12 mid. Founded Anril, 1922. Central. WSDA

New York, N. Y. 227.1m-1320kg. 250 watts. City Temple, Thurs, 7:45-9:30 pm. Sat. 10:45-1 pm. Sun, 7:30-9:30 pm. Eastern.

Virginia Beach, Va. 263m-1140kc. 500 watts. Virginia Beach Broadcasting Co. Announcer, George L. Sutherland. Stogan, "The Voico of Tidewater Virginia." Daily ex Sun, 11-1 pm, 1-3, 5-6, 6-3 m, 7-8, 8-11 pm, 11. Sun, 9:20 am, 4-5 pm, 7-9,

ŴŜĨX

Springfield, Tenn. 249.9m-1200kc. 150 watts Tire and Vulc. Co. Announcer, George H. Law Daily ex Sup., 12:30-1:30 pm., 7-8. Sun. 1. Central. Founded Jan. 7, 1927.

Bay Cliy, Mich. 272,6m-1100kc. 256 watts. World's Star Knitting. Ch. Announcer S. Morthout Northout ex Snn, 12-19 m, Hardy hout of music. Tues, Thurs. Sat. 9-11 pm. Sat. 12-2 am. Sun, 11 am. Eastern. Founded June 15, 1252.

Nashville, Tenn. 336.9m-880kc. 5000 watts. Na-tional Life and Accident Iosurance Company. An-nouncer, Goorge Hay. Daily ex Sun. Sat. 11:45 and 12:30 pm. 1-1:30 ps.540-6. Mon. 6:15-11 pm. Thes. 12:30 pm. 1-1:30 pm. 5:40-12 pm. 8:16-12 pm. Sun. 4:40-5:30 pm. 6:20-7:15, 8:15-9:15. Founded Vot. 5, 1925. Central.

ŴŠMB

New Orleans, Ls. 96.4m-1010kc, 750 watts, Saenger Theaters, Inc., and The Malson Blanche Co. Dailer ex Sun, 12:30-1:30 pm, 6-7 pm, Mon, Wed. Thurs, Sat, 8:30-10:30 pm, Founded April 21, 1925.

WSMK

Dayton, Ohlo. 296.9m.1010kc. 200 watts. S. M. Krohn, Jr. Sjogan, "The Home of Aviation," Daily ex Sun, Thurs, 9.10 am, womin's hour; 12.1 pm, 6-11. Thurs, 9 am, 12 pm, 6, 11-3 am, Sun, U3-30-12 n, 7-9 pm. Central.

Middlerown, Ohio. 236m-1270kc, 100 watts. Middle-town Broadcasting Cu. Amounteer, Hary W. Fahr-lander: Singan, We-Sell Radio Only. Tues, Fri 10:30-11 am, 8-10 pm, Sua, 2-4 pm, Ceutral Founded 1926.

WSSH

Boston, Mass. 288.3m-1040kc. 100 waits. Tre-mont Temple Baptist church. Announcer, Raymone B. Meader. Fri. 7:30-9 pm, Sun, 10 am, 6:30 pm Eastern. Founded June 8, 1924.

WSUI

lowa City, Iowa. 475.9m-630kc. 500 watts. Univ. of Iowa. Announcer. Carl Menzer. Daily ex Sut. 9 am, 10:30. Daily ex St. 8tt. Sun. 12:25 pm. 5 pm. 6. Mon. 7 pm. 9, 11. Wed. 7 pm. Mon. 11:15 pm. 4. Sat. 7:30 pm. Sun. 9 pm. Founded Feb. 12. 1924.

WSUN

St. Petersburg. Fla. 516.5m.580ke. 750 watte. Chamber of Commerced. Annauncer. George Schle-gle. Daily ex Sun, 7-12 mid. Eastern. Founded Nov. 1, 1927.

Buffalo, N. Y. 204m-1470kc. 50 watts. Sence Vocational School, David Warnhoff, announcer Slogan, "Watch Sencea Vocational School' Wd. Fri, 8-9:30 pm. Eastern, Founded Nov. 9

WSYR

Syracuse, N. V. 203.9m-1020kc, 500 warts. Clive B. Meredith. Slogan, "Voice of Central New York." Daily ex Sun, Thurs. 6:20-01-30 pm, Sun, 6:20-9:18 pm, Eastern, Founded 1922.

WTAD

Quincy, III, 236, in-1270ke, 250 watts, 500 watts 6 am: 7 pm. Illinois Stock Medicine Broadcasting Corporation Slogan, The Voice of Agriculture, Daily ex Sun, II:30-12:30 pm. Central Founder Dec. 29, 1926,

WTAG

Worcester, Mass. 516.9m-\$80kc. 250 walts. Worcester Telegram Gezette. Amouncer, Chester Gaylord, Slogan, "The Voice from the Heart of the Commonwealth." Dully ex Sun, Sat, 10:30 am. 12:30, 12:35, 1 pm., 7, 230, 8, 8, 30, 9, 10, 11. Sat, 12:30, 1 pm. Sun, 3, 4, 5:30, 7:20-9:16 pm. Eastern. Frameded May 12, 1924.

WTAL Toledo, Ohlo. 239.9m-1250kc. 250 watts. The Toledo Broadcasting Co. Announcer. Karl Beinke, Slogan, "The Cateway to the Sea." Daily, 8 pm. Sai, 9 pm. Sun, 10:45 pm. Eastern.

WTAM

Cleveland Ohio. 399.8m.-750ke, 3500 watts, 5000 watts 6 am-6 pm. Williard Storage Battery. CA. Announcer, R. B. Humphrey. Slogaa, "The Voice From the Storage Battery." Daily ex Sun, 6-12 mid. Sun, 11 am, 6, 7, 8, 9, 10 pm. Founded Sept. 26, 1923. Esatera.

WTAQ

YY 1.1.\(\sqrt{1}\)
Raw Claire, Wis. 254.1m-1180kc, 500 watts, Cillette Rubber Co. Amounter, C. S. Van Gorden, Stogan, "The Voice of the Wilderness." Mon. 12:15 pm, weather, news, market; 6:30, 7:30, 10. 12:15 pm, weather, news, market; 6:30, 7:30, 10. 12:15 pm, 6:45.30, 10. 12:15 pm, 6:45.30, 12:15 pm, 6:45.30,

WTAR

WSUF Norfolk. Va. 236,1m-1270kc. 500 wsits. Reliance Electric Co. Announcer, J. K. Bohansm. Sloggau, Down in Old Virginia. Daily ex Sun, 6; N pm. weather, markets, mess. Tues, 8-9 pm. music. Eastern.

WTAS

Chicago, Ill. 275.1m-1090kc, 3500 watts. Illinois Broadcasting Corp.

WTAW

College Station. Tex. 483.6m-620kc. 500 waits. Agricultural and Mechanical College of Texas. Daily ex Sun, Sar. 12:10 pm. Wed, Fri, 7 pm. Founded 1922. Central,

WTAX

Streator, III. 247.8m-1710kc. 50 watts. Williams Hardwara Co., Raddi Division, Amgoiner, N. B. Brandson, March Co., Raddi Stream, Co., Amgoiner, N. B. Brandson, M. B. Brandson, S. 10:30 pm. Thors, 9-11 pm. Central Founded 1922.

Richmond, Va. 220.4m-1360kc, 15 watts, W. Reynolds, Jr., and T. J. McQuire, WTFF

Washington, D. C. 202.6m-1480kc, 10.000 watts Independent Pub. Co.

WTFI Toccoa, Ga. 209.7m-1430kc. 250 waits. Toccoa Falls Institute. Announcer, Kelly Barnes. Tues. Thurs, 7-8 pm. Sun, 9-10 pm. Eastern. Founded Oct. 4, 1927.

WTIC

Hartford, Conn. 535.4m-560kc. 500 waits The Travelets lassrance Company. Slogan, 'The Lasur-ance City, 'Daily, 6:30-11 mm, Sun, 4:39-7:30 pm. Founded Feb. 10, 1924. Eastern.

Milwaukee Wis, 293.9m-1020ke 1000 watts. Mil waskee Fournal. Announcers, Pred Jeske, Jarry Robert Wilson, Month and Milwaukee States, Month and Milwaukee Mi

WTRL Midland Park, N. J. 206.8m-1450kc. 15 waits. Technical Radio Laboratory, Tues, 7-9 pm. Fri, 7-8 pm. Sun, 2-4 pm. Eastern.

Chicago, Ili. 227,1m-1320kc. 500 watts. Dr. George F. Courrier. Daily ex Sun, Mon, 7-9 pm. Central.

Detroit, Mich. 182.7m.850kc. 1000 watts. The Detroit News. Announcer, E. L. 75com. F. F. Walson, Mon. Word, Fri. 7-10 am. exercises; 9:39-10, and provided the state of the st

New Orleans, La. 245.8m-1220kc. 500 wstts. Loy-ola Univ. Announcer. O. L. Abell. Sat, 7:30-8:30 pm. Central. Founded March 31, 1922.

Asheville, N. C. 296.9m-1010kc, 1000 watts, Asheville Chamber of Commerce, Announcet, J. Daled, Stentz, Dally ex Sun, 1 pn. 2, 7.8, Mon. 8-12 Daled, Thurs, 8-10-8 pm. Sun, 11 am-4 pm, 7:30 pm. Eastern, Evanded Feb. 22, 1927.

**WWRL** 

N. Y. 199.9m-1500kc, 100 watts. W

Wheeling, W. Va. 516.9m-580kc. 250 watts. John C. Stroebel, Jr. Daily ex Sun. 7 am. 8, 11, 2 pm. 6. Mon. 7-11 pm. Sar, 11-1 sm. Sun, 11 am. 1-4 pm. Eastern. Pounded Dec. 6, 1926.

Canada

**CFAC** Calgary Alta, Can. 434.5m-690kc. 590 watts. Calgary Heraid. Amouncer, Fred Carleton, Daily ex Sun. 1:15 pm, weather, markets. Mon. 3:30-4:30 pm; 9:30-10:30. Tues, 6-7 pm. Wed. 3:30-4:30 pm; 7:45-8:45. Thurs. 9 pm. 9:30-10:30, 12. Fri. 3:30-4:30 pm. 3:30-5 Sun. Il am. 7 pm. service.

CFCA Toronto, Ont., Can. 356.9m.840kc, 500 watts. Toronto, Ont., Can. 356.9m.840kc, 500 watts. Toronto Star. Announcer, Gordon W. McClain, Daily ex Sun. 12, n. 5.456. 6.29, weather, stocks. Moni. 6:30-8 pm. Wed, 6:30-12 mid. Thurs, 6:30-9 pm. 10:30-12 mid. Sat, 6:33-9 10 pm. Sun. 11 am, 7 pm, 8:15. Eastern. Founded March. 1922.

CFCF Montreal, P. O., Can. 410.7m-730kc. 1650 watter. Causalian Marconi C., Announcer, C. Wulter Darling. Baily ex Sun. 12:45-1:40-pm. stocks. music. Mon. Fri, 77:30-pm. bedtime stories; 7:30-8:30, music: 9-10, 10:30-11:30, orchestra. Wed. 7-8 pm. orchestra. Eastern.

CFCH

Falls, Ont. 499,7m-600kc. 250 watts. Abiter and Paper Co., Ltd. CFCN

Colgary Alta, Can. 434.5m.690kc. 1800 watts, W. W. Grant, Ltd. Slogan, Voice of the Pexities. Tucs, 9.10 pm. 191-2, 7 husr. 7:45.8-45 pm. Pri, 5-10 pm. Sun, 11 am. 7:15 pm, servete. 1 pm. CFCQ

Vancouver, B. C. 410.7m-730kc, 10 watts. Sprott Shaw Radio Co. CFCT

Victoria, B. C., Cap. 329.5m-910kc. 500 wetts. The Deaville Station. Stopan, "The Mecca of Tourists: Daily and Sun, 320 am. Ved. Ir., & 730 pm. Every 6: 307.30 pm. Sun, 320 am. 7:30 pm. Sun, 320 pm. Sun, 320 pm. Sun, 320 pm. Sun, 320 pm. Pacific. On CFCY.

Charlottetown, P. E. L. 312.3m-960ke. 100 watts. Island Radio Co. Wed. Thurs, 7-8 pm. Sun, 11

Brantford, Ont., Can. 296 9m-1010kc. 50 watts. The Brantford Supply Co., Ltd.

Kamboos, B. C. 267/m-1120ke, 15 watis, N. S. Bulgleish and Sons, Weller and Weller, Mon, Fri. CFLC

Prescott. Ont. 296.9m-1010kc. 50 watts. Radk Association of Prescott.

Kingston, Ont., Can. 267.7m-1120kc. 20 watts Monarch Battery Mig. Co., Ltd. CFNB

Fredericton, N. B. 247.8m-1210kc. 25 watts. James CFQC Saski Ison, Sask., Can. 329.5m.-910bc. 500 watts.
The Electric Stap, Ltd. Announcer, Grant Stevenson, Slogan, 'The Hub City of the West Where No. 1 Northern Hard Wheat Crows.' Daily ex Sun. 910 wn: 11.522 pm, markets, report, music, property, music, programs, and the state of t

CFRB

Toemship of King, York County, Ont. 291.1m; 1630kc. 1000 watts. The Ropers-Batteryless Station. Announcer, Charles Shearer, Slogan, "Institution, Announcer, Charles Shearer, Slogan, "Institution, Interpretation, and the State State of the Play in the State State of the State State of the State State of the State of

Kingston, Ont., Can. 267.7m.-1120kc, 500 watts. Queen's University. Announcer, H. J. D. Minter. Inc. Oct., 1923,

Vancouver, B. C. 410.7m-730kc. 500 watts. International Bible Students' Assn.

CHCS
Hamiltonia CFYC

Hamilton, Ont., Can. 340.7m-880kc. 10 waits. Hamilton Secretaror.

CHCY
King Edward Park, Edmonton, Alia. 516.5m-880kc.
250 water international plant of the control of the

Summerside, P. E. I. 267.7m-1120kc. 25 watts, R. T. Holman, Ltd. Dally ex Sun, 12 n. Sun, 11 am, 7 pm.

CHIC

Toronto, Can. 356.9m.840kc. 500 watts. Northern Electric Company, Ltd. Annooncer, R. W. Lowman, Mon. 8-9 pm. 11-1 am. Sat. 10-11 am. 10-12 mid. Sun. 5-6 pm. Eastern.

CHMA

Edmonton, Alta. 516.9m-580kc, 250 watta, Christian & Missionary Alliance. Sun, 11 am, 1:15 nm, 2:15, 2:30, 5, 5:30, 5:45, 10:30. Tues, Thurs, 6:15-6:45 pm. Sat, 6 pm. Mountain. CHML

Mount Hamilton, Ont., Can. 340.7m-880kc. 50 Watts, Maple Leaf Radio Co., Ltd.

Torouto, Can. 356,9m-840kt, 500 watts, Tor Radio Research society, CHNS

Halifax, N. S. 322.4m-930kc, 100 watts. Northern Elec, Cn., Ltd. Sun, Mon, Wed, evening program. Atlantic. Founded May 12, 1926.

B. C. 410.7m-730kc. 1600 waits. Centeriau Church. Vancouver, tral Presby

Quelec, Que. 340.7m-880kc. 45 watts. E. Fontaine

Unity, Sask. 267.7m-1120kc. 50 watts. H. N. Stovin Radio Sales, Mou. Toes, Wed. Thurs. Fri. Stovin Radio Sales, Pon. Thurs. 10.30-11:30 pm. Sat. 12 md 1:30 pm, Sun. Sun, 7:30-6:45 jm. CHUC

Saskatoon, S International nouncer, C. 8:30-10 pm, 8:30-10 pm, CHWC ask., Can. 329.5m-910kc. 250 watts, Bible Students' association. An-Roberts. Tues, 7:30-10 pm. Thurs, Fri, 9-10 pm. Sun, 12:45-2:15 pm.

Regina, Sask., Can. 312,3m-960kc. 500 watts. R. H. Williams & Sons, Ltd. Daily ex Sun, 12-1 pm. 5-6. Wed, Sat. 3-10. pm. Mountain.

Chillwack, R. C. Can. 247.8m-1210kc. 5 watts. CHYC

Montreal, Que., Can. 411m-730kc, 750 waits, Northern Elec. Co., Ltd. Announcer, N. S. Richards, Wed, 612:30 am. Thurs, 8-8:30 pm. Sun, 11 am, 7-pm. CNRM programs occasionally. Eastern.

CJBC

Toronto, Ont. 291,1m-1030kc. 500 watts. Baptist

CJBR Regina Sask. 312.3m-960kc, 500 watts, Saskache-wan Co-operative Wheat Producers, Ltd. Thurs, CJCA

Edmonton, Alta. Ca. 516.9m-580kc. 500 watta. Edmonton, Alta. Ca. 516.9m-580kc. 500 watta. Ca. 516.9m. Sat. 10-12 mid. Sun, 11 att. 7:15.9m. Moutants.

ĊĴĊĴ Calgary, Alta. 434.5m-690ke. 250 watts. Radio Service & Repair Shop.

**CJCR** Red Deer, Alta, Can. 356,9m-840kc, 1000 wat's. The North American Collieries, Ltd. CJGC

London, Ont., Can., 329.5m-910kc. 500 watts, Lo., don Free Fress. Dally ex Sun, 1-2 pm, stocks, music. Man. Tues, Wed. Thurs, Fri. 7-9 int. I'llies. Eastern. Sun, il am, 2-3 nm, 7, church ser CJGX

Yorkton, Sask. 475.9m-630kc. 506 watts. The Winnipeg Grain Exchange. Dally ex Sun, 9:30 am, 11:30, grain; 1:45 pm. Tues, Fri, 8:30-10 pm. Central. **CJOR** 

Sea Island Chandler. CJRM Mooso Jaw, Sask. 296.9m:1010kc, 500 watts, James Richardson & Sons, Ltd. Daily ex Sun, 8:30-10:15 am, 11:35-2:30 pm, weather, markets, Mun, Wed. Fri, 6:30 pm, Sat, 10-12 mid. Sun, 9:30 am, 1:30 pm, Mountain.

CJSC Toronto, Coning Teleg Can. 356,9m-840kc, 500 watts, The Eve-

Saskatoon, Sask., Can. 329.5m-910ke, 250 watts. Wheaton Elec. Co. Announcer, Martina Bowes, Daily ex Sun, 31:45-1 pm, Mon, 7 pm, Tines, Weil, Thurs, Sat, 6-7 pm, Sun, 3:45-5 pm, Founded Sept. 28, 1925. CĴŶĈ

Toronto, Can. 291.1m-1030kc, 500 watth. Universitat Radio of Canada, Ltd. Mon, 6-12 mid. Tues, 10-12 pm. Wed, Sat, 6-8 pm. Fri. 10-12 mid. CKAC

Montreal, Que., Can. 410.7m-730kc, 1200 watts. La Presse, Announcer, Jacques Cartier. Daily ex Sun, Stt. 4 pm, Moo, Thurs. Frl. 1:45 pm. Tues, Thurs, 11 nm. Incs. 7 pm, 7:15, 8:20, 8:30, 9:30, 10:30. Thurs, 4:45 pm. Eastern. CKCD

Vancouver, B. C. Can. 410,7m-730kc. 1000 watts. Vancouver Dally. Province. Announcer, W. G. Hassell. Sloyan, Cauda's Western Gateway. Mon. Tues, Wed. 8:30-9:30 pm. Thurs, Fri, 8:30-8:50 pm. Sat. 8:30-10:30 pm. Patric. CKČĨ

Quelec, Que, 340.7m380kc, 45 watts, Le Soleil, Ltd. Regina, Sask, Can. 312.Jm-960kc. 500 waits. Leader Pub. Co. Announcer, A. W. Hooper, "The Queen City of the West," Mon. Thes. Thurs. Fri. July 20 graph of the West, "Mon. Thes. Thurs. Fri. 10:30 gm, 1-1:45 pm. Sun, 9-10 pm. Montain.

Toronto, Caa. 356.9m-840kc. 500 watts. The Dominion Battery Co., Ltd. Dally ex Sun, 12-45-1-13, pp. Dally ex Sat. Sun, 0.030 au, 10-55, line; 7 3-4-20 pm, Cable Sat. Sun, 0.030 au, 10-55, line; 7 3-4-130 pm, Cable J., Wed, 12-30 pm, 3-4-30 pm, Thus, 2-3-4-30 pm, G-49-1, Wed, 12-30 pm, and 24-30 pm, Sun, 2-3-4-30 pm, Sun, 2-3-4-30 pm, Sun, 2-3-4-30 pm, Sun, 2-3-4-30 pm, Sun, 3-5-5 pm, Sun, 3-5-

CKCO Ottawa, Ont., Can. 434-5m-690kc. 100 watts. Dr. O. M. Geldert Oftawa Radio Assn.). Announcer. Dr. O. K. Gisbon. Slogans, "Ottswa's Radio Voice "The Community Voice of Canada's Capital." Tucs. 8-10 pm. Sun., 7 pm. services. 9. sacred concert. Eastern, Founded March, 1924.

CKCR St. George. Ont., Can. 257.7m-1120ke. 25 v. John Pattersop.

# An Evening at Home With the Listener

IN CENT	TRAL TIME		IN EASTERN TIME											
Call Met. Kc. Watta Saturday Sunday CFCA 356.9 840 500 Silent 7:00-7:15	Monday Tuesday Wed. 6:15-8:15 Silent 7:00-11:48 7:30-10:00 Silent 7:30-10:00	Thursday Friday 6:25- 9:30 Silent Silent 7:30-10:00	Call	Toronto 35		Ke. Watts	Silent	Sunday 8:00-10:15	Monday 7:15- 9:15	Tuesday	Wed. 8:00-12:45	Thursday 7:25-10:30	Friday	
C.IRM 296.9 1010 50 11.304-12.30 7.30-11.70 CKAC 410.7 730 7300 60 00.00 72.30 73.5-1.5-1.23 0.00 73.5-1.5-1.23 0.00 73.5-1.5-1.5 0.00 73.5-1.5-1.5 0.00 73.5-1.5-1.5 0.00 73.5-1.5-1.5 0.00 73.5-1.5-1.5 0.00 73.5-	Silent 7:15-11:30 Silent 7:00-100 8:00-9:30 Silent Silent 5:00-10:00 F:30-10:00 Silent 8:00-10:00 Silent Silent 9:30-10:00 Silent 9:00-10:00 9:00-10:00 9:00-10:00 9:00-10:00 9:00-10:00 9:00-10:00 9:00-10:00	8:30- 9:30 Silent Silent Silent 8:00- 9:30 Silent 7:30- 9:00 Silent Silent Silent Silent 9:30-10:30 9:00-10:00 9:00-10:00 5:00- 9:00 5:00-11:30	CKAC CKCL CKNC CKY CNRO CYH CYJ KDKA	Montreal 41 Toronto 35 Toronto 35 Winnipeg 38 Ottawa 43 Monterey 31 Mexico City 40 Pittsburgh 31		730 7500 840 5000 840 500 780 500 690 500 964 250 750 1000 950 50000	12:30 - 1:30 8:15 - 1:00 7:00 - 8:00 Silent 8:30-11:30 Silent Silent 10:00-11:00 7:00-10:00	8:30-12:00 3:45- 6:45 3:00- 4:00 Silent 7:00-10:00 Silent 0:30-12:00 Silent 2:00-11:15		Silent 8:15-12:30 6:00-12:00 Silent Silent Silent Silent 10:00-11:00 6:00-10:00	8:30-11:00 Silent Silent Silent 9:00- 1:00 7:00-12:00 10:30-12:30 10:00-11:00 6:00-10:00	Silent 9:30-10:30 Silent 9:00-10:30 8:30-10:00 Silent Silent 10:00-11:00 6:00-10:00	8:30-11:00 Silent Silent Silent Silent Silent 10:30-11:30 10:0011-00 6:00-12:30	
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Blytheville .KLCN 285.5 1,050 50 — — — Fayetteville .KUOA 296.9 1,010 500 — — — Hot Springs .KTHS 384.4 780 1,000 — — —	WKBB 215.7 1,390 150	Mississippi	AkronWADC 238 1,260 1,600
California Avalon KFWO 299.8 1,000 250 — Burkadey KRÉ 256.3 1,170 100 — Burkade KELW 223.9 1,310 250 — El Centro KELW 223.9 1,310 250 — El Centro KGEM 225.1 3,330 130 — Holy Clu KFQU 249.9 1,200 100 — Holly Clu KFQU 242.4 1,290 100 — Hollywood KFQZ 232.4 1,290 100 — Hollywood KFWB 361.2 830 500 — Inglewood KFWB 361.2 830 500 — Long Beach, KFON 241.7 1,470 120 — Long Beach, KFON 241.8 1,240 500 —	Mooseheart   W.JID   365.6   820   1,000	Columbus   WCOC   230.6   1.300   259	Belletontaine WHBD 222:1 1,350 100
KFSC 275.1 1,090 500 — — — KGF 280 1,140 500 — — — KGFJ 208.2 1,440 100 — — — KHJ 416.4 720 500 — — KMTR \$226 \$70 500 — —	Anderson WHBU 220.4 1360 15	WOQ 340.7 880 500	WMAN 234.2 1,280 50
KMTR \$26	Culver WCMA 200.7 1.150 500 Evansville WCBF 261.2 1.270 250	St. Louis. KCOX 288.3 1,040 100	Mansfield WLBV 206.8 1,450 50
KPSN 315.6 950 1,000 — — — —	Iowa	Montana  Hardin KGHP 263 1,149 50	Chickasha KOCW 252 1.190 250 — — Norman WNAD 239.9 1.250 500 — — Okia. City KFJF 272.6 1.100 750 — — KFJF 272.7 1.340 15 — — KGCB 215.7 1.390 50 — — KGCG 215.7 1.390 50 — —
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KCTT   206.8   1,450   50	Council Bluffs.KOII. 318 940 5,000 —— Davenport. WOC 374.8 800 5,000 —— Decorab KOCA 247.8 1,210 10 —— Des Moines WHO 535.4 560 5,000 —— Fort Dodge. KFJY 232.4 1,230 100 —— Iowa City KGFB 223.7 1,340 10 —— WSUI 475.9 630 500 —— LeMars KWUC 243.7 1,230 1,500 —— Marshalltown.KFJB 247.8 1,210 250 —— Muscallae KFMY 211.1 1,200 250 —— Muscallae KFMY 211.1 1,470 2,00 ——	Columbus N.CEC 2221 1.880 30	Asteria KFJI 249-9 2,700 15 — — — — — — — — — — — — — — — — — —
Colorado  Colo. SpgsKFUM. 22.8 1,060 1,000 — — — — — — — — — — — — — — — — — —	Oskalocsa	WAAW 40.09 680 500	KTBR 282.8 1,060 50 — — — KWBS 199.9 1,500 15 — — — KWJJ 228.9 1,310 50 — — — KWJJ 228.9 1,360 50 — — —
KLZ 286.9 1,010 1,000	Sioux City. KFM 294.5 760 1.000   Sioux City. KFMR 224.2 880 100   Sioux City. KSCJ 243.8 1,220 500   Sioux City. KSCJ 243.1 1,180 500   Sioux City. KSCJ 243.1 1,180 500   Sioux City. KFKB 241.8 1,240 1,500   Sioux City. KFKB 241.8 1,240	York	Pennsylvania
Connecticut  BridgeportWICC 285.3 1,130 500	Kentucky  Hopkinsville.WFIW 260,7 1,150 750 — — — LouisvilleWHAS 322.4 930 500 — —	WQAO 394.5 760 500 — —	Lancaster WGAL 252 1,190 '15 — — WKJC 252 1,190 50 — — Lemoyne WMBS 234.2 1,200 259 — — Lewisburg WJBU 214 2 1,400 100 — —
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Wilmington .WDEL 296.9 1,010 100 — - — — District of Columbia	New Orleans WABZ 238 1,260 50	- Nawark WAAM 267.7 1.120 250	Philadelphia WABY 247.8 1.210 50 — — — WCAU 260.7 1,150 500 — — — WFI 405.2 740 500 — — — WFI 405.2 740 500 — — — WFK 247.8 1,210 50 — — —
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Florida  Gainesvillo WHBN 202.6 1,480 10 — — — — — — — — — — — — — — — — — —	KGDX 212.6 1,410 250	N. Frint   J. W.E.M.   23.53   1.00   1.000	WIAIT 405.2 740 590 — — — WNAT 288.3 1,040 100 — — — WOO 349.6 860 500 — — — WPSW 206.8 1,450 50 — — — WPSW 206.8 1,450 50 — — — WPAX 212.6 1,410 250 — — —
Gainesville Wifes 24.2 1 50 50 50 50 50 50 50 50 50 50 50 50 50	Maine .	New Mexico	WFKU 247.5 1,210 50
	Foxeroft WLBZ 206.2 1,440 250 — — Portland WCSH 365.6 820 500 — —	New York	Scranton WGBI 230.6 1,300 250
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Georgia  AtlantaWGST 270.1 1,110 500 WSB 475.9 630 1,000 MnconWMAZ 270.1 1,110 500 ToccoaWTF1 209.7 1,430 250	Massachusetts	WBKN 199.9 1.500 100 — — WBRS 211.1 1,420 100 — — WBRS 211.1 1,420 250 — — WCDA 211.1 1,420 250 — — WLTH 256.3 1,170 250 — —	Rhode Island  Cranston WDWF 260.7 1,150 250 Newsort WMBA 204 1,470 100
Idaho	Babson Park, WBSO 384.4 780 100 — Boston WBIS 461.3 650 100 — WATT 2021.1 480 100 — WATT 2021.1 480 100 — WATT 2021.1 480 100 — WEEL 508.2 590 500 — WEES 508.2 590 500 — WMSO 461.3 650 500 — WMSO 461.3 650 500 — WMNAC 461.3 650 500 — Cambridge WLBM 20.6 1,300 50 — Chelsea WI.OE 211.1 1,420 100 — Fall River WJAS 222 1,1 1,00 250 — Fall River WJAS 222 1,1 1,00 250 — Leshieton WI.EX 21.5 7, 1330 50 — Mediord WNBE 21.5 7, 1330 50 — S.Darimouth WAF 425.3 700 650 — S.Darimouth WAF 425.3 700 650 — S.Darimouth WAF 425.3 1,500 — S.Darimouth WAF 425.3 1,500 — Taunton WATT 214.2 1,400 10 — Worcester WTAG 15.9 550 250 — Worcester WTAG 15.9 550 250	Auhum	Canaltan   WDWF   20.7   1.150   250
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Illinois	Chelsea WLOE 211.1 1,420 100 Fall River WSAR 252 1,190 250	Coney Isl'nd.WCGU 218.8 1,370 500 — — Endicott WNBF 206.6 1,450 50 — — Fringa'le WLBH 232.4 1,290 30 — — Freeport WCBB 246.8 1,220 400 — —	South Carolina Charleston .WBBY 249.9 1,200 75
BloomIngton, WNBL   188.9   1.500   18	Bosloo	Ithuca	South Dakota   Special Control of Control
WAAF 389.4 770 5000 — — — WBBM 389.4 770 5,000 — — — WBEZ 204 1,470 100 — — WBCN 288.3 1,040 250 — —	WRES 217.3   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   1.80   50   50   1.80   50   50   50   50   50   50   50	Lockport . WMAR 3495.1 530 500	Brookings . KFDY 545.1 \$50 500 ——  Boll Rapids . KGCR 208.2 1,440 15 ——  Doll Rapids . CGCR 208.2 1,400 15 ——  Olthan
WCFL 483.6 620 1,500 WCRW 223.7 1,340 500 WEBH 365.6 820 500 WEDC 241.8 1,240 500	Michigan  Battle Creek WKBP 212.6 1.410 50 — — Bay City WSKC 272.6 1,100 250 — —	WGBS 348.6 860 500 — WGL 500 — WGL 500 — WGL 500 — WGMU 201.2 1,490 100 — WHIN 394 5 760 500	Sioux Falls. KSOO 209.7 1.439 250 — — Vermillon KUSD 483.6 620 250 — — Yankton WNAX 277.6 1,080 1,000 — — Tennessee
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WIBJ 201.2 1,490 100 WIBM 201.2 1,490 100 WIBM 201.2 1,490 100 WIBM 201.2 1,490 100 WIBM 201.2 1,490 100 WIAZ 263 1,140 5,000 WIAZ 263 1,770 500	E. Lansing WKAR 27.6 1.600 500 —  E. Lansing WKAR 27.6 1.600 500 —  E. Escanaba WRAK 282.8 1.600 500 —  E. Escanaba WRAK 282.8 1.600 500 —  E. Escanaba WRAK 282.8 1.600 500 —  Crand Rapids WASH 286.3 1.170 280 —  U. Cran Maurit WRO 230.6 1.300 500 —  Lansing WREO 230.6 1.300 500 —  Lapeer WMPC 230.6 1.500 15 —  Monroe WKBL 199.9 1.500 15 —  Monroe WKBL 251.4 1.460 15 —	WHAD   284   1,470   100	Yankton WNAX ' 277.6   1,080   1,090
WJAZ 283 1,140 5,000 — — — WJAZ 283 1,140 5,000 — — — — WJBT 389.4 770 500 — — — WKBI 322.4 930 50 — — — WLBN 204 1,470 50 — — — — WLSN 204 1,470 50 — — — — — — — — — — — — — — — — — —	Iron Mountain WLBY 209.7 1,430 50	Peekskill WÖKÖ 215.7 1.390 250 — — — — — — — — — — — — — — — — — — —	Nashville
WLBN 204 , 1470 50	Michigan	WHN 39415 760 500	Union City. WOBT 205.4 1,460 — — — — — — — — — — — — — — — — —
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Canada (Continued from Page 43)	CNRR  Regina, Sask., Can., 312.3m-960kc. 500 watts. Canadlan National Railways. Tues, 8-10 pm. Moun-	5EV Colon, Cuba, 360m-833kc. 5 watts. Leopoldo V. Figueroa, Sun, 9-11 pm. Eastern.	CYB  Mexico City, Mex. 270m-1110ke, 500 watts. El Buen, Touo. Tues, Thurs, Sat, 7:30-9 pm, concert.
Quelicc, P. Q. 540.7m-880kc, 100 watts. G. A. Vandry,	CNRS	6BY Cientueges, Cuba, 260m-1153kc, 200 watts, Jose	CYF
CKCX Toronts, Ont. 201.1m-1030kc. 500 watts, luter- room of the control of the co	Sarkatoon, Sank., Can. 229.5m-910ke. 500 watts. Canadian National Railways. Daily, 2:30-3:30 pm. CNRT  Toronto, Ont., Can. 356.9m-840ke. 500 watts. Canadian National Railways. Announcer, E. W. Jackson. Fri., 26 pm. 9-11. Eastern. First broadcast May 16, 1924.	Garduces, Child Control of the Control of the Calbarien, Cuba. 250m-1200kc. 50 watts. Maria Josefa Alvarez. Daily, 10:30 pm.  6HS S. La Grande, Cuba. 200m-1500kc. 10 watts. Santiago Ventura.	Oaxaca, Oax, Mex. 270m-1110ke, Federico Zorrilla. "The Voice from South of Mesto." Tues, Tues, Tues, Tues, Signature, Signature, Tues, Tue
CKGW  Bowmanville, Ont., Can. 312,3m-960kc. 5000 watts.  Chaderinan & Worts, Ltd.	Vancouver, Can. 291.1m-1030kc. 500 watts. Can- adian National Railways. Announcer, G. A. Wright. Daily ex Sat, Sun. 10-11 am. Mon. Wed. 10-11 pm. Tuest. 9-12-45 am. Thurs, 10-11 pm. Fri, 9-11 pm.	Cienfuegos, Cuba, 240m-1250kc, 10 watts. Carlos Hernandez,	Monterey, Mexico. 311m-964kc. 1000 watts. Tar- nava & Cia. Slogan, "The Industrial Center of the Mexican Republic." Daily ex Sun. 7:55-8-10 pm. Wed. Frl, 8:30-10 pm. Sun. 8-10 pm. Mountain.
CKLC  Fed Der., Alia, 356.9m-840ks, 1003 waits, Alberta Fed Der., Alia, 356.9m-840ks, 1003 waits, Alberta Fed Edition Co., Ltd. Denly ox Sun, 12 n. music, news, weather, markets, Dally ox Su, 12 n. 74.3 pm, news, markets; 8, studio program. Mon, Wed. Fri. 9:30 pm, Sun, 11 am, 7:30 pm, service. Moun- tain.  CKMC	Winnipeg, Mau., Can. 384.4m-780kc. 500 watts. Canadiau National Railways: Announcer, R. H. Roberts, Mon. Thes. 6:30 pm. Wed. 10 pm. Thurs. Pri. 6:30 pm. Sun. 9 pm. Central.	6KP Sanctl Spiritus, Cuba. 195m-1540kc. 20 watts. Anomo Gatgwera. 6KW Tuinucu, Cuba. 340m-350kc. 100 watts. Frank H. Jones, Slogan, "1 Con Bear the Koo of the Cube on the Cube of the Cub	CYJ  Mexico City, Mex. 410m-730kc, 1000 watts. General Electric Co. Daily ex Sun, 8 pm. Mountain.  CYL
Cohalt, Ont. 247.8m-1210kc 5 watts, R. L. MacAdam.	PWX	6LO Caibarien, Cuba. 325m-920ke, 250 watts. Manuel	Mexico City Mex. 480m-625kc. 500 watts. La Casa del Radio. Announcer. George Marron. Stogan. "The Land of Eternal Summer." Daily ex Sun. 1:30-2 pm, weather, financial reports, inusic. Tues. Fri. 8-9:30 pm, church.
Toronto, Ont., Can, 356.9m-840ke, 500 watts. Canadian National Carbon Co., Ltd. Announcer, Ed. J. Stafford, Mon, Thurs, 9 pm. Eastern. Founded May 2, 1924,	Havana, Cuba, 400m-750kc, 500 watts, Cuban Telephone Co, International Tel. and Teleg. Corp. Wed. Sun, 8:30 pm, music, Eastern.  ZCT  Havana, Cuba, 350m-855kc, 50 watts, Casimiro Fujidas,	A. Alvarez. 6RG Santa Clara, Cuba. 200m-1500kc. 20 watts. Ra- fiel Garcia Perez.	CYR Mazatlan, Sin., Mex. Rosseter y Cia.
Itaminon Ont. Can. 340,7m:820hc. S0 watter, the control of the con	2FG. Hershey, Cuba. 200m-999.4kc. 20 watts. Alberto A. Ferrera, 2GF	Tuinueu, Cuba. 278m-1080kc. 100 watts. Frank H. Jones.  6YR Camaguey, Cuba. 200m-1500kc. 20 watts. Diege liborra.	Mesico City, Mex. 33m-500ke, 500 watts. Ev- letion & Havista de Revistas, Announcer, Rafael Hermandie dez Dominguez, Slogan, "Laud of the Aztes." Mon, 8-9:30 pm. Mexican.
CKPC Preston, Ont. 247.8m-1210kc. 7½ watts. Wallace Russ. Mon, Fri, 8-11 µm. Sun, 11-12:30 pm, 3-4:30. CKPR	Havana, Cuha. 192m-1540kc. 5 watts. Francisco  2HP  Havana, Cuha. 205m-1460kc. 200 watts. Cristina W. Vda. Crucet.	7AZ Camagucy, Cuba, 225m-1333kc, 10 watts. Pedro Nogueras.  Mexico	CYZ  Mexico City, Mex. 400m-750kc. Liga Central  Mexicana de Radio. Mexican.  CZA
Midland, Ont. 267.7m-1120kc. 50 watts. E. O. Swan.	2JF	CYA  Mexico City, Mex. 265m-1130kc, 500 watts, Mon, Fri, 6:45-8 pm, Sun, 4-6 pm, Partido Liberal Avauzado, Mexican.	Mexico City, Mex. 70-500-1070 meters. Aviation Dept., War Ministry. Aunouncer, Ricardo S. Bravo, Daily, 12:30-1 pm, time, weather, news; 6:30-7:30, time, markets, music. Mexican.
CKSH St. Hyacinthe, P. Q. 312.3m-960ke, 50 watts. City of St. Hyacinthe, CKSM Toronto, Ont. 291.1m-1030ke, 1000 watts. St.	LJI Havana, Cuba. 46m-650kc. 5 watts. Jose A. Terry.  2JL Havana, Cuba. 294m-1020kc. 5 watts. Jose Leiro.	I I Improves	FROST-RADIO
Michael's Cathedral.	2MA Havana, Cuba, 305m-980kc, 50 watts, Modesto 2MF	tone fidelity, clarity, sensitivity - by auto- matically keeping tube filament voltage	Osk Your Heighbor  DE LUXE APPARATUS
Edmouton, Alfa, 516.9m-580ke, 500 watts, U, of Alberta, Announcer, Harold P, Brown, Monn, 4:45 pm, organ; 5:45, dinner music; 6:30, children; 8. Thurs, 3:4 pm; 8:30. Mountain.	Madruga, Cuba. 100m-299kc. Moises Fernandez.	AMPERITE	690
Vancouver, B. C. 410.7m-730kc, 100 watts, Sparks Company, Announcer, H. W. Paulson, Daily ex- Sun, 11-12 n, 4:30-5:30 pm, 6-7:30. Wed, 9:30-12 mid. Thurs, 11-12 mid. Fri, 9-10:30 pm. Sat, 11:30-1 am. Pacific.	Hayana, Cuba, 284m-1055kc, 20 watts, Manuel Y Guillermo, Salas Music Store, Annuncer, Roger Morales, Daily 3-4 pm, music. One day each week, 8-11 pm, Eastern.	The "SELF-ADJUSTING" Rheastat eliminates hand rheostate. Simplifies wir- ing, tuning, panel design. Particularly essential with BattervEliminators. Accept	
CKY Wisnipser, Man. Can. 184,4m-780hc. 500 watts. Maniroba Tel System, Aunouncer, F. E. Rutland. Slogan, "Manitoba S Own Station, Daily ex Nun, 10:50-11 am. 12:1:45 pm, 3-4:30, 8:30, 9. Wed. Sat. 9-11 pm, CNRW. Ccurral.	Havena, Cuba. 85m-349ke. 100 watts. R. V. 2MU Havens, Cuba. 265m-1330ke. 10 watts. Ulplano	only Amperite. \$1.10 mounted (U.S.A.)  FREE—"Amperite Book" of latest circuits and construction data.  Write Days R.D.1.	EDOST-DADED FROST-RADEO
Sat, 9-11 pm, CNRW. Ceutral.  CNRA  Moneton, N. B., Can, 322.4m-930ke. 500 watte. Canadian National Railways. Announcer, W. V. George. Slogan, "Voice of the Maritimes," Daily ex Sun, 2:30-4 pm, Tues, Fri, 9 pm. Atlantic. Started Nov. 8, 1924.	Munix.  20K  Havana, Cuba, 360m-833ke, 100 watts, Mario Garcia Velez,		GEM RHEOSTATS RESISTANCES TSc and \$1 TSc and \$2 TSc and \$1 TSc and \$2 TSC and \$1 TSC and \$2 TSC and
CNRC	Collado,	Bring Back Original Color to	HERBERT H. FROST, Inc.
Calgary, Alta, Can. 434.5m-690ke, 500 watts. Canadian National Railways, Mon. Thurs, 9:30-10:30 pm. Mountain. CNRE	2RK Havana, Cuba, 315m-950kc, 100 watts, Raoul Karman, Casa De La Porte, 2TW	TALLY.	Herburt H. Freet, Infr.  160 North La Salio Street, Chicago, 160 North La Salio Street, Chicago, Ficase send me your free books. What Set Shall I Build." sud Fror Better Recuption," as offered in Radio Digget for January.  Name
Edmonton, Alta, Can. 516.9m-590ke, 500 watts. Canadian National Rallways, Mon, 10:30-12 mid. Fgi. 10:30-12 mid. Mountain,	Havana, Cuba. 270m-1110kc. 20 watts. Roberto E. Ramirez.	Guick Acting "YOUTHRAY" For MEN and WOMEN Not a dye or henne. Not just a darkener	Address
CNRM  Montreal, Que., Can. 410,7m-730ke. 1.000-1.650 watts. Canadian National Railways, Announcer. J. S. McArthur, Thurs, 8:30 pm. Eastern.	The state of the s	that colors hair down to the scalp then leaves it gray again as it grows out. Not something you have to keep on using. Entiroly different. Perfectly harmless. 30 Streaks, No Affor-Braying at Roots	MAKES A COMPLETE MACHINESHOP EVRY-USE Electric MOTOR ATTACHMENT

# Official Wave Lengths Table

L_										<u> </u>														
Wave length	Prequency (kilocycles)	Power (watts)	Call Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Prequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	Wave length	Frequency (kilocycles)	Power (watts)	Call signal	Location	
199,	9 1,500	15 10 15 15 100 100 100 15 5 250	KCFN Ancta, N. D. KUJ Seattle, Wash, KWBS Portland, Ore. WKBZ L'd'Un, Mich. WKBK, N. Y., N. Y. WKBK, N. Y. WKBK, N. Y. WKBK, N. Y. WKBK, N. Y. WKAH, Prvdce, R., WKRH, WKAH, Prvdce, R., WKRH, WKAH, V.		1,360	500 25 100	WKBQ WLBQ	F. Mrgn., Col. Coney Is., N.Y. Milw., Wis. Bgmhant, Ala, Jsy, C., N. J. N. Y., N. Y. Atwood, Ill.	238	1,260	50 50 1,000 150 250 30 250 250 250	WADS WADS WIBX WIBB WIBW WLBI WQBA WRAY	Houston, Tex. Z N. Orl'ns. La. C Akron. O. Ulica, N. Y. Sarasota, Fla. V N. O'l'ns. La. E. W'n'a, Ill. W Reading, Pa. V Yp'raiso, Ind.	263	1,140	50 500 10 50 250 250 5,000 250 100	KFPW KGEF KGEK KGHP WDAG WEAM WJAZ WJBI WJBO	Car'ville, Mo. Los A., Calif. Yuma, Colo, Hardin, Mont, Amarillo, Tex. N. Pinfd, N. J. Mt, Prosp., Ill, Red Band, N. J. N. Orleans, La. Chicayo, Ill. Va. Bch., Va.	312.3	960	50.000	KDKA	Ch'rl'tet'n, Can. Can. Regina, Can. Regina, Can. Regina, Can. V Brwmnvle., C. St. Hycnthe., C. Regina, Can.	
201.:	2 1,490	50 250 50 100 100 100 100 100 100	WWRL Woodside, N.Y. KCEH Eugene, Ore, KCEY Danwer, Colo, WALK W. C. Ga, WATT Boston, Mass. WCBR Prvdee, R.I. WGMU N. Y., N. Y. WHBM Chicago, Ill. WIBM Chicago, Ill. WIBM Chicago, Ill. WKBG, Chicago, Ill. WKBG, Chicago, Ill. WKRMU N. Y., N. Y.			15 100 50 50 50 15 100 15 500 15	KRAC S	Angelo, Tex. San Ant., Tex. San Ant., Tex. San Fran., Cal. shrevep't, La. striland, Ore. Anders'n, Ind. Phila., Pa. (psint., Mich. La Cr., Wis. Richmond, Va. Auburn, N. Y. Richmond, Va.	239,9	1.250	2,500 100 100 250 500 500 100 250 500	KEX KGCU WBBP KWCF WBAY WCAF WIBA WJAM WNAD	Portland, Ore, Mondan, N. D. P't'key, Mich. Codar R., Ia. W Nshvle, Tenn. Ash. P., N.J. Madison, Wis. I Cedar R., Ia. Norman, Okla. N.Lrncebg, Tenn. Trenton, N. J. Ciksbg, W. Va. Toledo, O.	265.3	1,130	15 2,000 100 100 500 500 1,000 2,500	KKP S KTSA: WBES WCWS WHK WICC: WNOX WOI A	Chicago, III. Va. Bch., Va. Sant Aut., Tex. To'ma P., Md. Brdgpt., Con., Cleveland, O. Sport H., Conu. K'ville, Tena. nes, Ia,	319	940 930	0000 5,000 000,1	KFAB KOIL KOIN	Pasada, Calif. Lincoln, Nebr. Coun. Bluffs, la. Portland, Ore. Halifax, Can. Moneton Atlantic, Ia. Louisville, Ky. Ottumwa, Ia. San Juan, P. R. Wash., D. C.	
		100 5,000 10,000	KVL Seattle, Wash. WHBN G'nsv'le, Fla, WTFF Mt.Vn.Hls.,Va.	222.1 .	1,350	250 100 50 50	KFWC KGBY C KGFL	St. P'I, Minn. Pomona, Cal. 'l'mb's, Nebr. Raton, N. M.	ļ	1,240	500 65 250 1,500 500 250	WOAX WQBJ WTAL KFKB KFON WBRO	Trenton, N. J. Clksbg., W.Va. Toledo, O. Milford, Kan. L. Beach, Cal. Bmshm., Ala.	267.7	1,120	15 20	CFJC :	Kamloops, B.C. Kingston, Can.	325.9	920	2,500 500 500	WPCH WRNY	Denver, Colo. I J'r'y C'y,N. J. 7 N. York, N.Y.	
204	1,470	15 50 100 100 50 100	KFXD Jerome, Idaho, KGES Cen. City, Neb. KGEQ Minpls., Minn. KGFO Tre. Hte., Ind. KGGM Inglwd., Calif. KHAC Pible on 'Plue. WBBZ Chicago, Ill.			100 100 500 100 100 100	WCBA WHBD WHBF WOMT	Allent'wn, Pa. Belleintne., O. Rock Isl., III. Mniwoc., Wis.	241.0		250 200 500 100 500 500	WEBC WEBC WFCI WGES WMAI WNBX	Millord, Kan. L. Beach, Cal. Bmghm., Ala. Superior, Wis. Buffalo, N. Y. Chicago, Ill. Pawtucket, R.I. Chicago, Ill. Wash, D. C. Sprefield, Vt.			25 50 100 100 500 1,000 250 100	CKPR KFIZ F KFLV KFWI KSBA WAAM WBAO	Kingston, Can. Sim'r side, Can. Unity, Can. St. Ccorne Midland, Can. J. du Lac, Wis. Rockford, Ill. S. Fran., Calif. Shreveport, La. Newark, N. J. Decatur, Ill.	333.1	900	500 500 250 500	CHÚC CJGC CJWC CNRS	Saska'in, Can, London, Can, Saskat'n, Can, Saskat'n, Can,	
		100 250 100 250 50 250 100 100	KFXD Jerome, Idahe, KCES Cen. Gily, Neb. KCES Cen. Gily, Neb. KCEO, Minjia, Min, Ind. KCEO, Minjia, Min, Ind. KCEO, Minjia, Mi	223.7	1,340	=-	KEDI I	Allent'wn, Pa, Ev'r't, Wash, Girard., Mo, ok. City, Ok. Pueblo, Colo, own City, In. a Cres., Cal. Isllock, Mich.	243.8	1,230	125 10 250 50 500 1,500 500 250	KFCB KGCX KGRS KGY I KSCJ KWUC WCAD WCAD	Phoenix, Arlz. Vida, Mont. Amarillo, Tex. Lacey, Wash. Sioux City, In. LaMars, Ia. Canton, N. Y. Baltimore, Md. Othngo, Tenn. Balt'm're, Md. Datroit, Mich.	270.1	1.110			S. Fram., Calif. Shreveport, La. Newark, N. J. Decatur, III. Newark, N. J. Tampa, Fla. Altoona, Pa. Louisv'le, Ky. Newark, N. J. Chisto, W.Va.			1,000 500 250 15,000 500 750 500 1,000	KFQB, KSAC KSEI WBZA WBZA WHA WJAD	Cr. Fks., N.D., Ft. Wth., Tex. Manhat'n, Kan, Pocutello, Ida. Spring!'d, Mass. Boston, Mass. Madison, Wis. Waco, Tex. Styes. Pt., Wis.	
205.4	1,460	100 100 100 50 25 50 100	WMBQ Briklyn, N.Y. WOBR Ohio (Port.) WSAX Chicago, III, WSVS Buffalo, N. Y. KFXY, Flagstaff, Ariz. KGDE Barrett, Minn.			50 250 500 500 15 500 500	WCAM WCRW WEBQ I	La Cres., Can. Hallock, Mich. Inglewd., Cal. Camden, N. J. Chicago, Ill. H'rrisb'g, Ill. Phila., Pa. Chicago, Ill.	245.8	1,220	100 100			270.1	1.110	500 1,500 1,500 500 500 500	KGU E KLDS KMBC KOAC KQV P WGST WHAD	C'veston, Tex. lonolulu, T. H. Ind'p'nce, Mo. K. C., Mo. Corvallis, Ore. ittsburgh, Pa. Atlanta, Ca. M'w'kee, Wls. P'tt'burgh, Pa. Macon, Ca. M'w'kee, Wis.	336.9 340.7	89 <b>0</b> 880	500 5,000	KNX WSM	L. Ang., Calif.	
		25 250 15 250 15 15 15	KFXY, Flagstaff, Ariz. KGDE Barrett, Minn. KGEO Grand In., Neb. KGFF Alva, Okt. WABF Kingston, Pa. WKBL Monroe, Mich. WMBD Peoria H., Ill. WNBQ Roch'tr, N.Y. WOBT Un. City, Tenn. WKK Hamilton, O.	225.4	1,330	***	VETTI T	nglewd., Cal. Camden, N. J., Chicago, III. Trisb'g, III. Philla, Pa. Chicago, III. Laconia, N. H. Crasbo, N. C. Imstan, N. Y. Lifeago, III. rove Cy., Pa. meau, Alaska.			100 300 500 250 400 500 500	WAAT WEVD WFBE WGBB WGM! WHD!	Wichita, Kan, Spokane, Wash, Spokane, Wash, Spokane, Calif, Oakland, Calif, J. City, N. J. Widh'n, N. Y. Cincianatt, Fr'sort, N. Y. M'p'lis, M'on, Cinct., Ohio, M'p'lis, Minn, N. Orleans, La,	272.6	1,100	500 500 250 500 750 100	WJAS WMAZ WSOE KFAD KFJF KSMR	P'tt'burgh, Pa. Macon, Ga. M'w'kee, Wis. Phoenix, Ariz. Okla., Okla. S. Maria, Cal.			22½ 50 100 50 1,000 500 1,000 250	CKCI CKCV CKOC CNRQ WAPI WHB WJAX	Hamilt'n, Can. Mt. H'lt'n, C. Quebec, Can. Quebec, Can. Quebec, Can. Quebec, Can. Quebec, Can. Auburn, Ala. K. C., Mo. J'k'nville, Fla. K. C., Mo.	
206.8	1,450	15 15 100 50 10	KGDR San Ant., Tex. KGDY Oldham, S. D. KGGF Picher, Okla. KGTT Sun Fr., Callf, KLIT Portland, Ore. WHPP N. Y., N. Y.			500 - 50 15 50	KFKZ K KFUR ( KFVC I KGEN E WAGM I	lirksvle., Mo. Ogden, Utah. ndpdce., Kan. 1 Centro, Cal. Ryl. O., Mich.	247.8	1,210	5	CKMC	Cobalt, Can.	275 1	1,090	500 100 100 5,000 250 250	WBAA WFBJI WFDF WPG A WRM I WSKC	Phoenix, Ariz. Dkla., Okla., S. Maria, Cal. W. Laf., Ind. Collegev., Minn. Filint, Mich., tl. City, N. J. Jrbana, III, Bay C'y, Mich.	344.6	870 860	50 5,000 5,000	KFQD KWG WCBD WLS (	Anchre, Alas. Stockton, Cal. Zion, III. Chicago, III.	
205.2	1,140	50 50 50 15	WNBF Endicott, N.Y. WNBJ Kn'xv'e, Tcun, WPSW Phila., Pa. WTRL Midl., P. N. J.	227.1		100 50	KFUP I	altimore, Md. Baltimore, Md. Dinvle., R. I., Nshvle, Tenn. Vishvle., Tenn. Cazen., N. Y. Denver, Colo., wr. L., Cal. onolulu			250 100 10 250 50 50	KFEL KFJB KGCA KOW KWLC WABW WABW	Preston, Can. Conline k. Can. Conline k. Can. Conline k. Can. Denver, Colon Denver, Colon Denver, Colon Denver, Colon Denver, Colon Power, Colon Wooster, O. Wooster, O. Wooster, O. Wooster, O. Wooster, O. Wooster, O. Willian, Pa. R. City, S. D. Cambridge, Ol. Phila. Pa. Miami B., Fla. Joint Hill. Crown Pt., Ill. Crown Pt., Ill. Crown Pt., Ill. Crown Pt., Ill. Action. Colon Streader, Wis. Streater, Ill. Streater, Ill.		1,080	15 500 500 250 3,500	WTAS	Havre, Mont. Dublin. Tex. L. Ang., Calif. Providence, R. I. Indapls., Ind. Chicago, Ill.	352.7	850	500 500 500	WGBS WIP P WOO	Seattle, Wash, Tulsa, Okla, Seattle, Wash, N. Y., N. Y. Philadelphia, Pa, Phila, Pa. St. Louis, Mo, Delroit, Mich.	
		100	KFVD Venice, Calli, KCFL Los Ang., Cal. KCFL Cos Cinc ridia, Kan. KCCR Brik'ss, S. D. WGCR Brik'ss, S. D.			500 100 500 500	KSO Cla KXRO A WAIZ A WARS E WBBC E	rinda, Ia. berdeen, Wa. ppleton, Wis. Brikl'n, N.Y. Brikl'n, N. Y.		:	100 50 50 1,000 50 15	WCAT WEBE WFBZ WFKD WIOD WJBA WKDF WLBR	R. City, S. D. Cambridge, O. Calesburg, Ill. Phila., Pa. Mismi B., Fla. Joliet, Ill. Kenosha, Wis. Bulvidere Ill.		1,070	750 100 500 250	WNAX	B'ville, Tex. Detroit, Mich. uscola, Ill. E. Lan, Mich. Yankton, S. D. Oakl'd, Calif. Roch'er, N.Y.	356.9	840	500 500	CFCA	Toronto, Can.	
209.7	1,430	200 100 100 100 10 15 15 250 250	WNBA For. Pk., III, WRAF La Porte, Ind. WRPI Tre, Hte., Ind. KFGQ Boone, Ia. KGHC Slayton, Minn. KGHF Pueblo, Colo.	228.9	1 210		" "AL	Kenosha, Wis, Akron, O. Icveland, O. aSalle, III. N. Y., N. Y. Mienta, Ca. Chicago, III.	249.9	1,200	50 50 250 50 50 50	WLBT WLCI WNBF WRAM WRRS WTAX	Crown Pt., [1]. Ithaca, N. Y. I N. Bed., Mass. Galesburg, Ill. Racine, Wis. Streator, Ill. Astoria, Ore.	282.8	1,060	100 1,000 500	KFJR KFUM KFXF	Portland, Ore. Colo. S., Colo. Denver, Colo. Portland. Ore. Columbus, O. N. Haven. Cn. Columbus, O. Esca'ba, Mich.	361.2	830	500 1,000 500 500 500 500	CKCL CKLC CKNC CNRT KFWB WSAI	Toronto, Can. Toronto, Can. Red Deer, Can. Toronto, Can. Toronto, Can. Red Deer, Can. Toronto, Can. Toronto, Can. Toronto, Can.	
		50 1 250 5 50 5 50 1 50 1 10 1	KFCQ Boone, Ia. KGRC Slayton, Minn. KGRC Slayton, Minn. KGRF Pueblo, Colo. KSOOS Sx. Falls, S. D. KSOOS Sx. Falls, S. D. WCBS Simple Si	220.9	1,310	500 50 20 60 15 250	KCBU K KPPC P: KTAP S: KWJJ P WGBC ! WHBP J	Burbank, Cal. 'ch'k'n, Alas. asadena, Cal. an Ant., Tex. ortland, Ore. Mphs., Tenn. obust'n, Pa. Whstr., Mass.			50 200 100 500 50 250 50	KFJZ I KFKA KFQU KFRU KFUT KFYR KMED	Astoria, Ore, Ft, Worth, Tox. Greeley, Colo. H. City, Caiff. Columbia, Mo. Salt Lik, C., U. Bism'k, N. D. Medford, Ore, Manlia, P. I. W. Barre, Pa. Charl'ton, S. C. W. Barre, Pa. Carthage, Ill. Pensacola, Fla. W. dePere, Wis. Steubenvile, O. Steubenvile, O. Steubenvile, O. Steubenvile, O.	285.5	1,050	750 50 2,000 50 250 5,000 500	WRAK KFAU KLCN I KMMJ WBAL	Esca'ba, Mich.  Bolse, Idaho Bolse, Idaho Clay C., Neb. Bal'more, Md. Nihild., Minn. Mpls., Minn. Norloik, Nebr.	365.6	820 810	50 600 500 1,000	KMJ F WCSH WEBH WJJD	resno, Calif. Portland, Me. Chicago, Ill. Mooseht., Ill.	
211.1	1,420	100 N 250 N 50 H 15 H 100 H	WRCV Norfolk, Va. WRCV Norfolk, Va. WTF1 Toccoa, Ca, KFCR S. Barb., Cat. KFYO B'k'ridge, Tex. KPNP Muscatine, Ia. KRSC Seattle. Wash.	230.6	1,300	100 100 2,600	WNBR WOWO	Lakel'd, Fla. Mphs., Tenn. Ft. We., Ind.			100 75 100 50 50 50 50	WBAX WBBY WBRE WCAZ WCOA WHBY WIBR	Mania, P. I. W. Barre, Pa, Charl'ton,S.C. W. Barre, Pa, Carthage, III. Pensacola, Fla. W. dePere, Wis. Steubenv'le, O.	288.3	1,040	100 500 250	KGBX KTBI I WBCN	St. Joseph, Mo. Ang., Calif. Chicago, Ill.	374.8 379.5	500 790	500 5,000	KNRC WOC	Spokane, Wash, Kan, C., Mo. L New Y'k, III. I Hoboken, N.J. So. Mon., Cal. Davenport, la.	
		100 \\ 100 \\ 100 \\ 250 \\ 50 \\ 15 \\ 250 \\	KFCR S. Barb., Cat. KFYO B'k'ridge. Tex. KFYO B'k'ridge. Tex. KRSC Svattle. Wash. WBM Detroit. Mich. WBM Berklyn. N. Y. WBOS Brklyn. N. Y. WBOS Brklyn. N. S. WHOS Boston. Mass. WMES Buston. Mass. WMES Buston. Mass. WMSO Wash., Pa. WRST Bay Sh., N. Y.		-	15 50 50 25 100 250 250 250	KGCL S KPCB Se WAAD WAFD D WCOC C WDBJ R WCBI Se	L. Jas., Mo. r'nv'le, Tex. eattle, Wash. cincuti., O. etrott, Mich. l'mb's, Miss. oanoke, Va. cranton, Pa. ambrg, Mass.	. <b>25</b> 2	1.190	100	WSAZ	W. dePere, Wis. Steubenv'le, O. Mhps., Tenn. H't'n. W. Va. Spgtld., Tenn. C'k'sha, Okla. Los. A., Calli. S. C'd, Minn. Lancaster, Pa. Ind'n'fs, Ind. N. O'I'ns, La. Lancaster, Pa.			500 600 100 150 100 100	WDBO WENR WIAD WKY O WNAT WSSH	Orlando, Fla. Chicago, Ill. Phila., Pa. kla City, Okla. Phila., Pa. Boston, Mass.	384.4	780	500 . 500 5,000 1,000	CKY Y CNRW KGO ( KTHS WRSO	Lincoln, Nebr. Schn'dy, N. Y. Winnipeg, Can. Win'p'g, Can. Oakland, Calif. Ht. Sp'gs, Ark. Bbsn.Pk., Mass.	
212.5	1,410		CFHL Oskaloosa, Ia. CGBZ York, Nebr. CGDX Shrevep't, La. CGFP Mitchell, S. D. CGGH C. Grove, La. KTUE Houston. Tex. WJBL Decatur, III. WKBP B'tle C., Mich. WRAX Phila., Pa.	232.4	1,290	200	mann.	scratton, Fa.		· .	5,000 5,000 5,000 250	WMBB WMBR WOK ( WORD WSAR	Homewood, III, Tampa, Fla, Chicago, III, Batavia, III. Fall R. Mass		1,030			King, Can, Foronto, Can, Sea Isl'd, Can, Scarboro, Can, Scarboro, Can, Toronto Vancouver	389.4	770	750 500 100 5,000 500	WAAF WABI WBBM WJBT	Mi, Bch., Fla. 1 Miami, Fla. Chicago, III. Bangor, Me. I Chicago, III. Chicago, III.	
214,2	1,400	En h	WRAX Philis., Pa.  CFEC Portland, Ore.  KFIF Portland, Ore.  KFWF St. Louis, Mo.  KPJM Prescott, Ariz.  WAIT Taunt in, Moss.  WCWX F. Wayne, Ind.			100 500 500 100 500 30	KFOZ H KUT Aus WBRL T WHBQ M WJKS G WLBH F WMBJ M	cellogy, Idaho L Dodge, Ia. A Calif. Coux City, Ia. Iyw'd, Calif. City, Ia. Iyw'd, Calif. City, Ia. Iyw'd, Calif.	254.1	1,180	_50	KFHA	Gun's'n, Colo. L'wrence, Kan. Dell Dap. S.D. Pierre, S. D. Facoma, Wash. Rochstr, N.Y. B'l'ngton, Va. Roch, N. Y. M'phis, Tenn. L'rence, Kan. Richmond, Va. E. Cl're, Wis.	293.9	1,020	1,000	WCLN	Wayne, Neb. Kalisp'l, Mont. Hmbldt., Neb. Jouston, Tex. ew Y'lr, N. Y. Oil City, Pa. Paterson, N.J. Syese, N. Y.	394.5	760	1,000 5,000 1,000 1,000 500 500 500 500	KMA S KOB S KTW S KWKH KWSC WHN I WPAP	Shenandozh, Ia, t. Col., N. M. Seattle, Wash. I Shrevep't, La. Pullm'n, Wh. N. York, N. Y. Cl'l's'd, N. J. Cl'l's'd, N. J.	
215.7	1,390	50 \ 100 \ 50 \	WKBN Y'ngst'wn, O. WLBG Petersb'g, Va. WMBW Y'ngst'n, O.	234.2		500 1,000 100	WNBZ S WSBC CI KDYL S. KFQA S KGAR T KVI Taca	L. City, U. t. Louis, Mo. urson, Ariz.	256.3	1,170 ^	50 750 1,000 500 50 100 2,000	WREC WREN WRVA WTAQ KFUS KRE B KTNT	M'phis, Tenn. L'rence, Kan. Richmond, Va. E. Cl're, Wis. Oakland, Calif. orkeley, Calif. Muscatine, Ia	295.9	1,010	50 50	CFCC I	Milw., Wis. Brantfd Can. Prescott, Can.	399.8 405.2		500 1.000 500 3,500	PWX ( WEAR WSBT WTAM	Cuba Cl'v'l'd, O. So. Bend, Ind. Cl'v'l'd, O.	
		50 K 50 K 100 K 50 K 250 K 250 K 150 V	GEDZ Mapls, Minn. GEGZ Mapls, Minn. GEGZ Marker Colo. GEGR Obla. C. Obla. GER Obla. C. Obla. GER Obla. C. Obla. GER Obla. C. Obla. GEG Obla.	۳.		1,000 100 250 100 50 50 50	WBBL I WCAH C WDAH E WFBC K WJAK K WJBY C WMAN I	L. City, U. t. Louis, Mo. urson, Ariz. Dona, W. Mo. Rchmd., Va. olumb., J. Couls, Mo. Rchmd., Va. olumb., J. Swile, Tron. dsden, Aka. olumbus, O. t. Louis, Mo. cemoyne, Pa. aspeer, Mich.	258.5		250 1,000 500 500 250	WASH WBBR WCSO WEBJ WLTH KFOX	E. Ci're, Wis. Oakland, Calif. orkeley, Calif. Muscatine. Ia G. Rap., Mich. R'ville. N. Y. Springfield. O. N. Y. N. Y. Br'klyn. N. Y. Omal.a, Neb.			500 500 100 100 750 200 1,000	KÜZ DE KUOA WDEL WEPS WSMB WSMK WSMK	Ioose Jaw, Can. Ravenna, Neb. Jose, Calif. enver, Colo. F'ettev'le, Ark. Milm'ton Del. Clouc'er, Mass. New O. L Dayton, O. Ashev'le, N.C.	410.7	730			MnS. P. N. hila., Pa. Phila., Pa. Montreal, Can. Vanc'v'r, Can. Burnaby, Can. Wontreal, Can. Montreal, Can.	
		100 V 200 V 50 V 150 V 250 V 250 V 100 V	WHFC Chicago, III. WKBI Chicago, III. VKBB Jollet, III. VKBB Jollet, III. VKBB Jollet, III. VKBC WKSkI, N. Y. VPEP Waukegun, III. VQBC Utica, Miss,	:		' !	X SI	field, Minn.	2		500 250 1,000 500 750 250 250 250	KFUL KOCH WBT C WEBW WFBI. WIL SI WNAL	Omalia, Neb. C'veston, Tex. Oranha, Neb. Asrlotte, N. C. Beloit, Wis. Sy'c'se, N. Y. Louis, Mo. Omaha, Neb. St. Louis, Mo.	299.8 302.8		5,000 500 500 1,000	KFWO KMOX S WBAK WPSC S	Avalon, Calif. St. Louis, Mo. Harrish's, Pa. State Col., Pa.	413		50 ( 50 ( 1,000 (	CKFC CKWX CNRM KZRM	Vanc'y'r, Can. Vanc'y'r, Can. Vanc'y'r, Can. Montreal, Con.	
217.3	1,380	100 K	FOR Lincoln, Nehr, FQW Scattle, Wash, GDM Stockton, Call, VIBU Poynette, Wis. VKBS Calcaburg, Ill. VKBW Buffalo, N.Y. VLBO Calcaburg, Ill. VLBO Calcaburg, Ill.				WYES CON	orfolk, Va. Y., N. Y. v'sville, Ind. aristadt, N.J. anten, Ohio. I. Y'k, N. Y. Middlet'n, O	260.7	1.150	500 500 500	WCAU WCMA	pokane, Wash, Phila., Pa. Culver, Ind. Cr'nst'n, R.I. Huknsvie, Ky. Oil City, Pa. Cr'nst'n, R. I. G. Rap., Mich, M'e'lis, Minn.	305.9		1,000 500 5,000 5,000	KOMO S WHAZ WHT C WIBO (	uffalo, N. Y. Seattle, Wash. Troy, N. Y. hicago, III. Chicago, III.	422.3				os Ang., Callf. chicago, III, Chicago, III. chicago, III. in Fran., Cal., Newark, N. J. effu, City, Mo.	
		100 V	VEBO Galesburg, III.				20	lorfolk, Va.	v an				G. Rap., Mich. M'r'lls, Minn.	309.1	970	500 2500 500	WABC	Fran., Calif. N. Y., N. Y.	428.3				Harrison, O.	

Wave length	Frequency (kilocycles)	Power (watts)	Call signal Location	Wave length	Frequency	Power (watts)	Call Location	Wave length	Frequency (kilocycles)	Call Location	Wave length	Frequency (failocyales)	Power (watts)	all Location	Wave length	Frequency (kilocycles)	Power (warta)	Call Location
434.5	690	1,800 250 100	CFAC Calgary, (CFCN Calgary, CJCJ Calgary, CKCO Ottuwa, CNRC Calgary,	Can. an. Can. 461.3		2,000	KFRC S. Fran., Cal. WJZ Bound Br'k, N.J. KFNF Shenandh, Iz.	483.6	620 500 500 250 1,500	KFDM Beaum'l, Tex, KUSD Vermillion,S.D. WCFL Chicago, III.		590	500 WE	X Oakland, Cal. EI Boston, Mass. OW Omaha, Neb.	526	570	2,500 500 2,500 500	KFKX Chicago, III. KMTR Los Ang's.Cal. KYW Chicago, III. WNYC N. Y. N. Y.
440.9	680	500 1,000 500	CNRO Ottawa, NAA Radio, Va. KFSD S. Diego, WAAW Omaha,	Cal.		500 500 500 500 500	KRLD Dallas, Tex. KUOM Missula, Mont. WBIS Boston, Mass. WCAE Pittsb'gh, Pa. WNAC Boston, Mass. WRR Dallas, Tex.		1,000 500 100 500	WJAR P'vid'ce, R. I. WLTS Chicago, IIL	516.9	580	250 CF 500 CJ 500 CK	ICY Edm'nt'n, Can. IMA Edm'nt'n, Can. CA Edm'nt'n, Can. UA Edm'nt'n, Can.	535.4	560	5,000	KFBK Sacram'to, Cal. WCAC Mnsfld., Conn. WHO Des Moines, Ia. WTIC Hartford, Conn.
		50 5,000	WIBG Elk's Pk. WJR-WCX Pnc,l	. Pa	640	5,000 500	KFI Los Angeles, Cal. WRC W'shing'n, D.C.	491.5	610 1,000 50,000	KCW Portland, Ore. WEAF N. Y., N. Y.			750 W	RE Edm'nt'n; Can. FLA Clrwtr., Fla. MC Memphis, Tenn.	545.1	550	500	KFUO St. Louis, Mo. KSD St. Louis, Mo.
447.5	670	7.000	KFOA Seat., Wa WMAQ Chicago, WQJ Chicago, III	131	630	500 1,000 500	CJGX Yorkton, Can. WSB Atlanta, Ga. WSUI Iowa City, Ia.	499.7	600 250 5,000 5,000	CFCH Ir'q's F'ls, Can. WBAP Ft, Worth, Tx. WOAI San Ant Tex.			750 W 250 W	SUN St.Ptshg., Fla. TAG Wrestr., Muss. WVA W'l'g, W.Va.			250 500 750 500	WDAY Fargo, N. D. WFAA Dallas, Tex WMAK Lockport, N. Y. WPTF Raleigh, N. C.

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