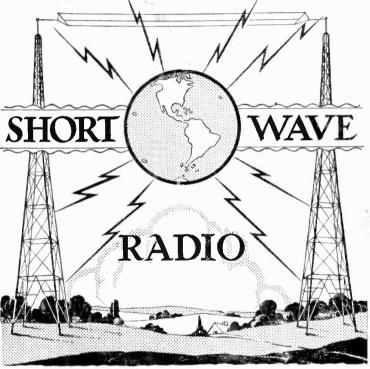
INTERNATIONAL



- Short Wave News.
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- Hourly Tuning Guide.
- Police Stations.
- Aircraft Stations.
- And Other Features.

THE VOICE OF THE

INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO, U.S.A.



ANNOUNCEMENT

Sol Perlman, E. E., Technical Advisor, N. Y. Chapter, International Short Wave Club, has been made Manager of our Technical Correspondence Department.

He will gladly advise you on the proper use of any Lynch Products.



Send for YOUR COPY Today!

NEW NATIONAL CO. CATALOGUE No. 240

The new NATIONAL Company Catalogue No. 240 is ready. Many new items are illustrated and described, including the new HRO Amateur Receiver, new TR 5-Meter Transceiver, new Cathode Ray Oscilloscope, new Transmitting Condensers, new PW Precision Condenser and Micrometer Dial Unit, many other new components for Short Wave Receiver construction; and the latest cataolgue information on the well known NATIONAL SW-3, FB-7A, FB-XA, PSK Preselector, and other SW Receivers and Converters; and Power Units, Dials, Condensers, Transformers, Chokes, etc., for high frequency work.

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you more wave lengths in today's most perfectly developed 16-tube Super de luxe ALL WAVE radios that are proven by four years of success....that carry an iron-clad guar-

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Superior to Any Other Radiol My Midwest is far superior to any I have ever seen. I have owned fifteen radios but never knew what a real radio was until I got my Midwest. Received Australia, Spain, etc. C. I. Wart. 19 Wirslow St. Parland, Me.



Marvelous Foreign Reception!
My friends can hardly believe I
paul so little for my Midwest 16.
My hest foreign stations are LSV,
Buenos Aires ... EAQ, Madrid ...
DJA, Germany ... CSB. England
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Masterpiece III, by any standard of measurement, by any kind of competitive tests, and in the opin-

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Band Spread Tuning with New Watch Dial

Simply pull out the tuning knob and the second dial pointer spreads out the crowded short wave band over the full 180 degree scale! Masterpiece III provides actual band-spread tuning over all four wave bands. Try it 10 full days in any kind of competitive test. Write for details of offer.

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— contains useful circuit information in addition to tables, abbreviations, etc.

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Note:—Readers who may find it more convenient may send their subscriptions to Arthur Bear, 10 St. Mary's Place, Rotherhithe, London, S. E. 16, England.

Readers are asked to be careful not to mistake this organization for others which may have a similar name. This is the original International Short Wave Club and all mail should be addressed to International Short Wave Club, East Liverpool, Ohio.

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ARTHUR J. GREEN, Editor. ADVISORY COMMITTEE

JOSEPH B. SESSIONS Pres. Sessions Foundry Co. Bristol, Conn. JACOB KLEIMANS Meyer Koulish Co. New York City CHARLES SCHROEDER
Radio W3ATR
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This Beautiful Globe for only \$3.25



Here is a rare bargain for the short wave fan. Imagine a 12-inch globe, printed in many colors and up-to-date in every detail, delivered to your door for only \$3.25, if you live in the U. S. A., or for \$3.50 if you live elsewhere.

Here is another pleased customer. He has purchased three for himself and friends. On June 29th, Dr. Gilbert S. Bovard, of Sierre Madre, California, wrote us saying:

"My doctor friend is exceedingly pleased with his globe and now his secretary asks me to get one for her. Hoping that another is available, I am enclosing a check for \$3.25."

Why not get a globe to mark the places where you have tuned-in stations, measure distances to these stations, follow the expeditions and add to the beauty of your radio set as well as add to your pleasure in tuning? Just send \$3.25 (for U.S.A. members), or \$3.50 (for foreign members) and this globe will be shipped. (We do not pay customs tax to foreign countries.)

Address your letters to the-

International Short Wave Club East Liverpool, Ohio

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You KNOW It's GOOD!

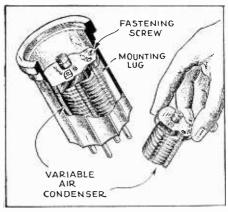
ON the question of mere price. Hammarlund occasionally loses a sale. But no one can afford to undersell Hammarlund OUALITY!

Nothing can ever be too good in radio. The problem, then, becomes one of selecting the best equipment you can buy for the price you can afford to pay.

If your need is dependable Condensers, Chokes, I. F. Transformers, Coils, Coil Forms, Shields, Sockets, or a complete receiver or transmitter for which you will never have to apologize, we suggest that you consult the Hammarlund Catalog. And we are confident you will find the prices as low as for any similar products of equal quality.

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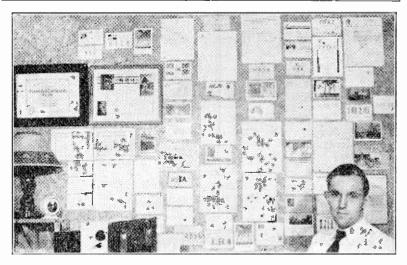
Recent development of the remarkable "XP-53" low-loss dielectric now makes it possible to offer highly efficient S-W Coils and Coil Forms at the lowest prices in Hammarlund history.

Several new types of compact Hammarlund Condensers are now available for trimming, balancing, padding and transformer-tuning.

Some mount inside of coil forms or shields (See illustration). They are accurately rated, constant and reliable under the most severe conditions.

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—Check here and attach 10c for 16-page Hammarlund 1935 Short-Wave Manual, illustrating and describing most popular S-W circuits of past year, with schematic and picture diagrams and parts lists.
—Check here for FREE information on XP-53 Coil Forms and Coils.
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DIXON RUSSELL

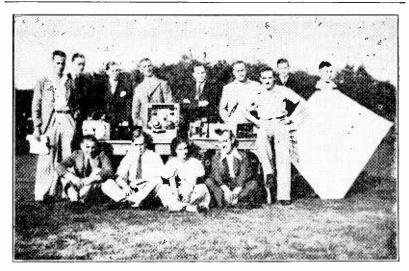
Introducing Dixon Russell of Baltimore, Maryland. Just about every member has read about him in past issues of this magazine. Mr. Russell is 22 years of age and started in short waves in 1932. He has made quite a record for himself since that time. Quoting from a recent letter: "First foreign station logged was 3ME. My only old-timers are HKA and G5SW. Have found the I.S.W.C. to be so far ahead of other short wave publications that there is simply no comparison. Would give my right leg to hear OXY."

Mr. Dixon has his Heard-All-Continents Certificate framed and it is shown in the left-hand side of the photograph. He is in Class A group. He also won 27th place in the Denton Contest.

IDENTIFYING STATIONS

The best way to identify a short wave station is to determine the wavelength or frequency used and check it with an up-to-date station list which gives the time of day each station is heard. For example, if you know where W2XAF comes in on the dials and you know where W1XAZ comes in, and you hear a station between these places between 5:15 and 8:15 P.M., you will find that station DJA, Germany fits right there.

However, many listeners would like some identification signal to help them out. So here is a list all prepared for you. Save this list, as others will be published in following issues, and you will soon have the entire group. First the station or stations is given, then the identification



LONDON CHAPTER FIELD DAY

The London Chapter, England, under the leadership of Arthur E. Baer, always has been able to keep interest at a high pitch. It is little wonder, for they always have some treat in store for members, such as trips to airports, DX tests on the tops of London's highest buildings, field days and such things. Above is shown a picture of a few of the members who attended a field day recently. Each member brought his own receiver and a test program was arranged with prizes for the winners. All kinds of antennas were used, including one attached to a kite, which can be seen in the photo.

The members standing are, left to right: J. H. Hunter, R. Butler, F. Postewaite, T. W. E. Pring, A. Fife, L. A. Kippen, F. Rand, G. Morgan and A. Brien. Seated are E. N. A. Johnson, Arthur E. Bear, P. Norton and A. F. Larkman.

signal and then an announcement, if the signal is not unusual.

National Broadcasting Company Stations (W3XAL, W8XK, W3XL, W9XF, etc.) use a three-note chime each quarter hour. These are G. E. C.

Daventry Station use Bow Bells on the hour. Big Ben is used at times PHI uses a Metronome with 80 beats (ticks) per minute.

HVJ uses a clock ticking. "Radio Citta Vaticana."

Germans use eight piano notes and "Achtung. Hier der Deutche Weltrundfunksender."

Rabat uses a motronome (60 ticks per minute) and "Ici Radio Maroc en Rabat."

W2XE announces in five languages.

RNE and RV59 says "This is Moscow Calling" and plays "Internationale" at the close.

Pontoise says "Ici Radio Coloniale, Paree."

2RO has a lady announce "Radio Roma Napoli."

Japanese use gongs and chimes irregularly.

LSX says, "Ellie-Essay Aixey, B-way-nos-eyeries."

ORK uses a carrillon and "Ici Bruxelles Post Colonial Belge."

EAQ uses English often and say "Eay-Aye-Coo."

CT1AA uses a Cuckoo call and says "Estacion CT1AA en Lisboa."

HBL-HBP say, "Wireless Stations of the League of Nations, Geneva, Switzerland."

VK2ME use the Laughing Jackass Bird or Kookaburra call and chimes at 6:00 A.M.

VUB says "This is Bombay calling."

LCL uses six piano notes.

VK3ME uses clock chimes at 6:00 A.M. and opening of programs.

PRF5 says "National Program of Brazil."

HJ4ABB uses bells and "Acqui radio difusora HJ4ABB en Manizales." HAS uses a musical box like a child's toy.

PRADO uses chimes and "Estacion el Prado en Rio-bama, Ecuador."

HJ1ABB says, "La Voz de Barranquilla, en Colombia, South America."

HI1A uses a gong and says "Aqui la voz del Yaque."

HJ3ABF uses bugle calls and says "Estacion de Radiofusora Ahie-Jaytrev-Bay-effie."

CJRO says "Stations CJRX and CJRO, Winnipeg, Manitoba." YV2RC uses bells every hour and "Acqui Cia Anomonia Venezuela."

YV3RC uses gongs and chimes. "Aqui Radiofusora Venezuela en Caracas."

VE9HX says, "Station CHNS, Halifax."

CP5 uses one stroke on a gong and then chimes.

OER2 uses a metronome (60 beats per minute) and "Hier Radio Wein."

YV5RMO uses a gong and says, "La Voz de Caribbe."

OXY uses a musical box like a child's toy.

VQ7LO says "This is VQ7LO, Nairobi, Calling."

XEBT uses a rooster crowing and cuckoo calls and an auto horn at times. HIX uses bells and says, "Atchee-eee-Aixey, en Santo Domingo."

We would like to hear from members regarding the stations they want identified and also from those who offer some identification signal for a station.

SHORT WAVE ECHOES

In an effort to discover the causes of "echoes" and of fading of short wave signals, the official British broadcasting journel "World Radio" has organized a group of short wave fans to check on certain signals. These signals are broadcast from GSB on 9.51 mc. each Sunday, Tuesday and Thursday and from HBQ on 6.67 mc. each Wednesday and Friday at the same time. The exact time of each test is not announced far enough in advance for publication here.

THE CHAPTERS

The New York Chapter meets now at Irving Plaza, Irving Place and East 15th Street, New York City at 8:00 P.M. on the second and fourth Fridays of each month. They also have a listening post at 10 Glenmore Avenue, Brooklyn, where members bring their own receivers. A number of antennas are up and members merely attach their receivers to these and tune. Visitors usually find many different kinds of receivers in use. This place is open Wednesdays, Fridays and Saturdays. The Chapter also broadcasts over station WVFW, WL/TH and WARD, all on 1400 kc. each Thursday from 11:00 to 11:15 P.M. Reports should be sent to WVFW. November 16, part of the meeting will be used as an auction sale of sets and parts owned by members.

The Cleveland, Ohio, Chapter met in the editorial rooms of the Cleveland Press on October 11 and new officers were elected. These were H. A. Yorchow, President, and F. J. Ferrell, Secretary and Treasurer. A new branch of the Cleveland Chapter is being formed and will meet at the Oliver Hazard High School. Dates and time are not yet fixed. For details get in touch with Herbert Steffen, 17914 Windward Road.

A new chapter is being formed in Jersey City, New Jersey. Details may be secured by writing 69 Montecello Ave., Jersey City.

The Manchester, England, Chapter meets at British Legion, Long St., Middleton, at 8:00 P.M. on November 6th and 20th, December 4th and 18th. They celebrate their first year in December with a Potatoe Pie Supper and Concert. This Potatoe Pie is an old Lancashire custom. The Exeter Chapter meets at the Y.M.C.A., on the second and fourth Fridays of the month. The Leicester Chapter meets Wednesdays at 4B Princess Road, Leicester. We have no details on the Stockholm, Madrid, Greater Cincinnati, or Market Harborough Chapters.

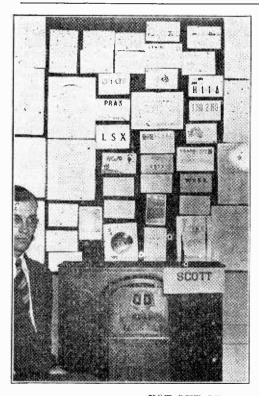
SHORT WAVE PROGRAMS

The programs broadcast by the stations at Daventry, England, may be secured by subscribing to the British Broadcasting Corporation's magazine, World Radio. Or, they may be secured by subscribing to the new Empire Programme Pamphlet, which will be issued for the first time in December. The cost of these pamphlets is five shillings per year. Subscriptions should be sent to the Publishing Dept., Broadcast House, London, W1, England. Mention the International Short Wave Club, please.

The programs of EAQ may be secured by subscribing to the magazine "EAQ," a monthly publication which sells for \$1.00 American, or ten Pesetas. Subscriptions may be addressed to Apartado de Correos 951, Madrid, Spain. Mention the ISWC, please.

A NICE CHRISTMAS GIFT

Members who are thinking about Christmas gifts for their friends may look at a membership in this organization as a very nice gift for some short wave friend. As each issue of the magazine arrives during the year, it will constantly remind them of your friendship.



BALPH BRADY

Mr. Brady lives in Brooklyn, New York, and has been interested in short wave for about four years. At the present time he uses a Scott twin-dial receiver attached to a Lynch antenna system. In the photograph are the verifications from the stratosphere balloon, RNE, XETE, RV59, LSX, CP5, PRA3, HIIA, 2RO, VK2ME, HC2RL, HCJB, VE9JR, YVQ, HJ1A-BB, and several others.

Mr. Brady was number 20 in the Denton Contest. He is 32 years of age and short wave radio is a hobby. He says his greatest pleasures in short waves are not in getting verifications, but in hearing the stations.



NOT OUT OF BUSINESS

We appreciate very much the many heart-felt but misdirected expressions of pity which we received during the past few weeks, but they were not needed. It was "Short Wave Radio," a magazine published in New York City and not "International Short Wave Radio" which closed up books and went out of business. There is no connection between these publishers and the International Short Wave Club. However, we accept these many comments at a true expression of what we might expect if we ever got into a tight place, and appreciate them as only we can. Several members, after expressing their sympathy, were very insistant that we re-organize and even went so far as to suggest the editor be given his old job back. That is really "keen" to think that such members could take their losses and still be with us. Doggone, it pretty near caused a lump in the throat. Thanks, all you fellows, but save your sympathy until it is needed.

MARIO CASSINA

Mr. Cassina lives in Corona, Long Island, New York. He has not been in short wave radio so very long, but has taken a very active part in International Short Wave affairs since he joined us. He understands and speaks four languages, or Italian, French, Spanish and English, and naturally has an advantage over most short wave fans when it comes to identifying stations heard. This means he always has a lot of news for the Club.

Mr. Cassino has used a Super-Wasp and a Hammarlund receivers. After reading about verifications in this magazine, he decided to start collecting verifications last February and now has a nice collection. Please note the neat array of them on the wall and pay attention to how each is put in a frame. That is the outstanding feature of this picture, the neatness in which he has arranged his verifications.



CLUB SEALS

After months of insistent demand, we have finally purchased some seals which members may paste on their letters and envelopes. As you know, many firms are offering special discounts to members and many radio stations are more prompt in replying to members of this club. So, these stickers, or seals, may be purchased by members and used to show they are members. They are rather large seals, measuring almost two inches square. The price is just 30 cents for 100, postpaid.

HEARING PHONE STATIONS

Fred B. Heller, Jr., of Philadelphia, passes on this tip. He says that members having an oscillator can tune in phone stations using garbled speech and make it understandable. He says to tune in the station and the oscillator and then vary the oscillator to a certain whistle, very slowly, and at a certain place the inverted speech will straighten out.

CUPID AND THE PEN-PAL SECTION

Newspapers and magazines all over the United States and Europe carried a story last month of how a short wave fan in England fell in love with a Michigan girl and they are going to be married soon, although they have never met. Well, here is the story.

Club-member Irwin Wendler of 175 Rathbone Avenue, Mt. Clemens, Michigan, was reading the magazine in September, 1932. In the pen-pal section he saw the name of club-member Cyril Wright of Leicester, Eng-So, he wrote to Mr. Wright and soon they were corresponding regularly. One day Mr. Wendler mentioned a girl that he had been "going with" for about six years. Mr. Wright sent Mr. Wendler the name of a girl-friend of his. And soon the four of them were writing to each other. Then one day Mr. Wendler received some rather startling news Mr. Wright had proposed marriage to his "girl-friend" in America, the girl Mr. Wendler had been "going with" all these years. Her name was Eleanor Fox and she was a neighbor to Mr. Wendler. So, Mr. Wendler asked Miss Fox if it was true and was told that she had accepted Mr. Wright.

Mr. Wright will soon be leaving Leicester and will come to America to get his bride. Mr. Wendler still writes to his girl-friend in England, but assures us he isn't thinking of marriage at this time. We guess he wants to see how Miss Fox gets along with another short wave fan. This short wave business is rather hard on a wife, especially when the husband decides to do some experimenting, using parts from just about everything in the home. Anyhow, the "pen-pal" section carries potential help to wife-hunters now that this story has come to light, and we expect a number of new applicants now.

SENDING IN REPORTS

Every month we are forced to write to a few members telling them their reports are of no value and every month we are criticized for not mentioning the names of certain members in connection with some news printed. We certainly would like to remedy this. But it is the members themselves who are to blame. We simply must close this magazine at a certain time in order to get it printed and mailed out on time, but every month, while the rolls of the press are running off the pages, we receive letters with news from members who expect to see that news in print. Don't put off, send what news you have just as soon as you get it. We close on the 24th of the month, but important news is published right up to the day the magazines are mailed out. Ordinary news is made up on the 25th and turned over to the printer.

In sending in news, it would be of great help if members would refrain from personal remarks until after he or she has stated all the news. It is a good idea to make a separate paragraph of each station, stating the call-sign, wavelength and such things on the margin of the letter. Pick out the important news only. For an illustration, two months ago we received a 34 page letter from a British member, giving a history of all his short wave work since 1929. It required seven days for him to write the letter and spread throughout his story were bits of news of what he

was hearing while he was writing. This news was given in British Summer Time. After reading five pages, checking back on each station mentioned (over 50) we failed to find anything which we could call news, so, we threw the letter aside and sent the writer our thanks. Later on he informed us that we over-looked three important notes in the letter. But, with thousands of members writing us, are we to blame for this over-sight?

A recent letter brought an idea for an editorial. The writer of the letter expressed himself by saying, "The more I go in for short waves, the more enjoyment I get out of it." He continues to tell of how he bought his first receiver and how he became discouraged when he discovered tuning for short wave stations was not exactly like tuning on the broadcast bands. He sums up his comments by saying that we should do more explaining to the short wave beginner about what may be done on short waves if the owner of the receiver just goes about things in the proper way.

It is quite true that the deeper you get into short waves, the more pleasure you get from them. Tuning in a few police stations may bring a little pleasure. Tuning in a few distant stations may also bring some. But, when you start searching for the distant stations that are hard to get, sending for and saving cards and letters from the stations proving your reception, learning to read code, and all these sort of things, your pleasures from short wave radio will increase. Some people can not see why others play golf, or why some like to fish. But once they get into it themselves, it makes them change. The same is true of short waves. Some people can see nothing in tuning for a distant station where you have to wait and almost hold your breath for an announcement that will tell you exactly where some distant station is located. But, once you get into the habit of reaching out for the hard-to-get stations, saving verifications, logging police and aircraft reports, following the ships at sea and such things, great pleasurer comes from owning a short wave receiver.

Our last edition, October, 1934, carried a list of addresses of most all the foreign stations, as well as regulations on how to get verifications from them. Get one of these copies and save it, as we have a number of spare copies printed for future requests. Always keep an up-to-date station list on hand also. If you are not a regular member of this organization, then join at once. Start tuning for those hard-to-get stations, start keeping a log of what you hear, start sending for verifications, and you will find your interest in short wave radio will be well repaid.

FOR SALE—A No. 1, 1933 Lincoln R9 receiver, complete with power-pack, speaker and tubes. Reason for selling, bad location. \$65.00, C.O.D. J. Bellggio. 414 Shawnee, Leavenworth, Kansas.

FOR SALE—Patterson PR10 including pre-selector complete with tubes, speaker, \$35.00. Also S. M. Skyrider latest 6V tubes. \$20.00. Al shape. Prices F.O.B. J. I. Mulford, 220 S, Commonwealth, Los Angeles, California.

SHORT WAVE NEWS

What many people call "skill" in tuning for short wave stations is nothing more or less than knowing WHEN and WHERE to tune for stations. Nearly all short wave stations are experimental and change their wave lengths or schedules almost without notice. To know when these changes take place is as important to successful reception as having a good receiver.

The average short wave station list contains hundreds of stations that have closed down, changed wavelengths or schedules, or have never really operated. The only reliable and helpful information comes direct from listeners, and even this must be published quickly in order to be of help. The information in this magazine is gathered by members of the club living in practically all parts of the world. Without this information, hundreds, or even thousands, of programs would be missed by readers. And without it, we would not be able to produce such a magazine. So, we say to all, "Thank You." This information is corrected up to within three days of the date of mailing. Other magazines usually make up copy from two to four months in advance of publishing.

The time is given in Eastern Standard. Add five hours for Greenwich Mean Time.

SOUTH AMERICANS

Argentina

Argentina was the center of a lot of short wave activity last month due to the Eucharistic Congress which met in Buenos Aires. Just about every short wave station in Argentina saw service last month. To put the details in a short space, stations IRM, IRW, IRK, Italy; HVJ, Vatican City; DHO, DJE, Germany; LSI, LSN, LSM, LSX, LSQ and LSL, Argentina; PPM, Brazil; HBK, Colombia, and many United States stations were connected in several special programs. The Congress was in session four days and during that time all of these stations were heard irregularly. Here is the Argentine report: LSN on 30.3 meters, 9.90 mc.; LSI on 30.61 meters, 9.80 mc., relayed the programs to the U.S.A. between 5:00 and 7:00 P.M. and reports came from Myron Reamy, Yonkers, N. Y.; Dominic Lorenzini, Minotela, N. J.; Harold Seaton, Sevierville, Tenn.; Edward Houlgate, London, Ontario; Charles Manson, Jersey City, N. J., and H. S. Bradley, Hamilton, N. Y.

LSX on 28.98 meters, 10.35 mc., was heard between 3:45 and 6:00 P.M. by Jack Watrous, San Mateo, California; F. L. Stitzinger, Erie, Pa.; Charles Miller, Covington, Ky.; Bob Everard, Standon, England; Nick Gaug, New York City; C. D. Hall, Chilicothe, Ohio; Louis Greenman, Conneaut, Ohio; Fred Karpen, Johnstown, Pa.; and F. A. Beane, Ridge well, England, as well as some of those mentioned above. This station was also used to relay the programs of Admiral Byrd from Little America each Wednesday between 9:00 and 10:30 P.M. Robert Zecher, Norfolk, Conn., reports this one at 5:00 P.M. Robert Rossi, Philadelphia, reports it one Sunday from 6:30 to 8:00 P.M.

LSQ on 29.10 meters, 10.30 mc., is reported testing with New York with music at 4:30 to 7:20 P.M. once by Carroll Foltz, North Baltimore, Ohio. J. R. Pickering, Hightstown, N. J., reports them on 29.25 meters working PSH, Brazil.

LSL on 37.97 meters, 7.90 mc., was reported between 7:15 and 8:15 P.M. relaying LR3, as was also LSX, by Robert Rossi, Philadelphia, Pa. LSM on 15.68 meters, 19:13 mc., broadcast the Eucharistic Congress meeting one Wednesday near 10:15 A.M. according to Harold Seaton. LSY on 16.55 meters, 18:12 mc., was heard at the same time according to Robert Rossi. LSY was also heard broadcasting from 3:00 to 3:30 P.M. one Monday by Fred Hafner, Buffalo, N. Y., and Myron Reamy, Yonkers, N. Y. Also at 3:30 A.M. by Fred Karpen, Johnstown, Pa., and H. J. Davison, Bayamon, P. R. James Pickering also reports LSF on 15.31 meters, 19:60 mc., one morning.

Ecuador

A new Ecuador station is on the air. John Shanks, Russellville, Tenn., says it is HC2OC at Quito and it is on 65 meters between 8:30 and 11:30 P.M. Dr. R. C. Kash of Sevierville, Tenn., says the same, Howard Eck, Lansing, Michigan, says it is at Guayaquill. Then Mario Cassina of Corona, New York, told us it was HC2B gave the wave as 65.20 meters, 4.60 mc., and says it is at Guayaquil and broadcasts Wednesdays and Saturdays from 10:30 to 11:30 P.M. H. S. Bradley, Hamilton, N. Y., comes along saying it is HC2EP. So there you are.

HC2RL at Guayaquil on 45 meters, 6.67 mc., broadcast a special program for the members of this club on October 16. The time was 9:15 to 11:15 P.M. This was their regular scheduled time on the air of course. Among other things, the owner wished the club success in securing 20,000 members (so do we) and offered to broadcast further programs if requested to do so. We received reports on this broadcast from Members Harold Seaton, Sevierville, Tenn.; Albert Emerson, Cleveland, Ohio; Frank Grey, Berwyn, Illinois; Louis A. Baer, San Francisco, California; E. L. Nocholson, Hamburg, N. Y.; Guy R. Bigbee, Fort Benning, Ga.; C. Pedicora, Brooklyn, N. Y., and Fred Henry Hafner, Buffalo, N. Y.

The programs of station El Prado at Rio Bamba, Ecuador, on 19.44 meters have been discontinued until next summer. This news comes from J. E. Brooks, Montgomery, Alabama, and Harris W. Dorr, Hartford, Conn. They remain on 45.31 meters, 6.62 mc., Thursdays 9:00-11:30 P.M.

A station believed to be HCK at Quito may be back on the air. This one is on 51.4 meters, 5.83 mc., (moves around some) between 8:00 and 10:30 P.M. daily, according to H. S. Bradley, Hamilton, N. Y., and on 50.61 meters from 8:00 to 9:30 P.M. according to Howard Eck, Lansing, Michigan.

Brazil

The station PRF5 at Rio de Janeiro on 31.56 meters, 9.50 mc., is still being heard most every night between 5:30 and 6:15 P.M. We believe this does not include Sundays however. Robert Rossi of Philadelphia tells us that reports should be sent to Impresna Nacional Gabinete do

Director Geral, Rio de Janeiro, Brazil. The station is owned by Compania Radio do Brazil.

PPQ on 25.73 meters, 11.66 mc., at 7:00 P.M. testing with voice is reported by Louis A. Baer, San Francisco, California, and Fred B. Heller, Jr., Philadelphia. PZS, the latest phone station on 38.50 meters, 7.78 mc., is reported at 12:20 Midnight by Mr. Baer and at 8:40 P.M. by Howard Eck, Lansing, Michigan. Station PSK on 36.65 meters, 8.19 mc., was heard sending a program to Argentina, one Thursday between 7:00 and 8:00 P.M. by J. B. Sessions, Bristol, Conn.. and relaying the programs of the Radio Club of Brazil between 6:00 and 8:00 P.M. by Fred Karpen, Johnstown, Pa., and Robert Woods, Sand Springs, Oklahoma. Many members report that verifications sent to PRF5 bring a verification card from PRA3, the Radio Club of Brazil. We can not explain this, unless they fail to read the reports.

Peru

OA4D, or some station like it, is back on the air on 51.90 meters, 5.78 mc., again. It is heard between 8:30 and 11:30 P.M. broadcasting and using some English. They give their address as Box 853, Lima, Peru. Now here is the argument: P. F. Loriot, Halifax, Nova Scotia, tells us he has a letter from a friend, R Grellaud, Avenida Abancay 915, Lima, Peru, saying he has a transmitter on 25.00 meters (12.00 mc.) week-days and on 50.00 meters. 6 mc., Sundays from 7 to 9 P.M. The call is OAX4B. That seemed in no way connected with OA4AD. Then along comes Sam Solito, Leedsdale, Pa., saying he was sure the call was not OA4AD but Then Ralph Williams, Garden City, comes along and says it is OAX4D. OA4XB. So, here we are, waiting for the right call-sign. Reports have come from members John Shanks, Robert Rossi, F. L. Stitzinger, Louis A. Baer, Mario Cassino, Esca Forgy (Shamrock, Texas), Marion Prazanowski (Chicago), C. O. Gallagher (San Francisco) and Myron D. Reamy. OA4AC on 38.36 meters, 7.82 mc., the same transmitter on a new wave length with another call, is reported one Saturday night at 11:00 P.M. by Fred Karpen, Johnstown, Pa.

Venezuela

There is little new on the Venezuelians this month, as they seem to be on the same schedule and wavelengths as previously announced. However, we have two items of note. Club-member Jorge Barbosa of Maracaibo, Venezuela, writes us that YV5RMO of that city will soon be on 51.28 meters, or 5.85 mc., instead of 49.39 meters, or 6.07 mc. Also, Marian Prazanowski of Chicago writes to tell us that Sears, Roebuck and Co., an American firm, is sponsoring a program over YV2RC and YV3RC, Caracas, each Thursday and Saturday night, called the "Silvertone Hour." The exact time is not given.

The Colombians

Boy, how these Colombians get us. We pray for the day when they will decide to use a different call-sign system, for it takes more than an expert to distinguish calls like Colombia uses. Anyhow, here's a new one for you. Charles W. Schiffer, Jr., of Cucuta, Colombia, wrote us saying that the Colombian Petroleum Corporation of Cucuta has a new station

under the call HJA-7 working on 55.56 meters, 5.40 mc, testing with station HJA2, Bogota, and a station at La Petrola which is on 2.70 mc., and with various camps around Cucuta. These tests, he says, take place mostly in daytime, but may be heard at nights some times. He says HJA2 belongs to the Central Telephone Company, Bogota. Well, HJA7 has been heard, but not on the wave mentioned. The four members who report it say it is around 65 meters. H. Hozey, Collingswood, New Jersey, reports it one Saturday from 11:15 P.M. to 12:50 A.M. O. L. Hay of Pittsburg, Pa.; L. F. Stephens, Redlands, California, and Fred Fahnauer, Leavenworth, Kansas, reports it between 11:00 and 11:40 P.M.

HJ1ABE, Cartagena, on 49.05 meters, 6.12 mc., writes that they broadcast Mondays 10:00 P.M. to Midnight and Wednesdays 8 to 10 P.M. But Louis A. Baer of San Francisco, tells us he hears them Sturdays, too. Arthur Lunn, Jr., tells us that a station HJ3ABH, Bogota, is on 49.92

meters, 6.01 mc, most every evening.

HJ1ABF, Barranquilla, is on 49.6 meters, 6.05 mc., from 8:30 to 11:30 P.M.. according to John Shanks, Russellville, Tenn., while Charles Miller, Covington, Ky., says it is on 48.47 meters, 6.19 mc. HJ1ABG, Barranquilla, is on 49.65 meters, 6.04 mc., and not 49.75 meters according to their announcements. They give their address as Box 4451 and not 451, according to Mr. Shanks. Frank Grey, Berwyn, Illinois, and C. D. Hall, Chilicothe, Ohio, also Itelp on this.

HJ2ABA at Tunja, announcing "Ecos de Boyaca" is on 48.78 meters, 6.15 mc, now instead of 51.49 meters, 5.88 mc. The schedule seems to be 7:00 to 9:00 P.M. now. This comes from Carl Forestieri, New York City and H. S. Bradley, Hamilton, N. Y. HJ1ABB, the best heard Colombian at present, is on 46.51 meters, 6.45 mc, and Charles Miller tells us it is now on a new schedule from 5:00 to 10:00 P.M. HJ4ABB, Manizales, on 42 meters, 7.14 mc., is reported at 9:15 P.M. once by Louis A. Baer, and by no others.

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The Colombian phone station, HJY is reported on 16.25 meters, 18.46 mc., working CEC, Chile, at 2:00 P.M. by Sam Solito, Leetsdale, Pa. It was also heard on 30.2 meters, 9.93 mc., where we list HKB, relaying station HJ1ABB from 4:00 to 5:00 P.M., this being reported by Frank Grey, Berwyn, Illinois, and John Shanks, Russellville, Tenn.

Station HJN, Bogota, is reported broadcasting most every night on 49.4 meters, 6.07 mc., (just under YV5RMO) between 8:00 and 11:00 P.M.

by Mr. Shanks and Mario Cassino, Corona, N. Y.

Bolivia

CP5, La Paz, Bolivia, is supposed to broadcast daily on 49.34 meters, 6.08 mc., from 8:00 to 9:00 P.M. However, Robert Rossi, Philadelphia, reports it once at 10:15 P.M. CP6 was also reported last month on 9.12 mc., around 9:00 P.M., by Mr. Baer of San Francisco.

CENTRAL AMERICANS

The Costa Ricans

TIX, the new station at San Jose is on 51.9 meters, 5.78 mc., (just about where OA4AD is heard) using four gongs and a siren as an identification signal and announcing as "La Reina del Aire." It was reported from 6:30 to 10:00 P.M. by F. L. Stitzinger, Erie, Pa.; 8:00 to 9:15 P.M. by John Shanks, Russellville, Tenn., and Mario Cassina, Corona, N. Y.; and at 11:00 P.M. by Howard Eck, Lansing, Michigan. The station signs

off with the recording of Ted Lewis' "Good Night Song."

TIEP on 44.71 meters, 6.71 mc., San Jose, is the best heard Costa Rican, but it certainly does keep an irregular schedule. It is a cross between an amateur station and a broadcaster. Most of the time you hear a lady calling other stations throughout Central and South America instead of broadcasting. The station is heard between 7:00 and 10:00 P.M. usually, but has been on the air up till 2:00 A.M. The owner is Edward Pinto Hernandez, Apartado 257, San Jose. On October 20th, this station sent a special program to members of this club, this program being arranged by H. S. Bradley, Hamilton, N. Y., and Sam Solito, Leetsdale, Pa. C. D. Hall, Chilicothe, Ohio, and C. H. Armstrong, Atlanta, Ga., heard the program.

Ralph Williams of Garden City, N. Y., reports TI4RNH, Heredia, back on 31.00 meters, 9.68 mc., but the owner says he is only on 20 meters amateur phone now, according to a letter to J. B. Sessions, Bristol, Conn. However, using the call TI4AC, it has been heard on 7:30 mc. from 7:00 to 10:00 P.M. calling Granada, Nicaragua, where the Daddy of the family

is now working. The daughter is heard doing the talking.

Nicaragua

Amando Cespedes Marin, the owner of old TI4NRH writes Arthur Lunn, Jr., of Maplewood, New Jersey, saying that there will soon be a high-powered, Crystal-controlled station in Nicaragua on 40 meters. He is working there at present. Mr. Lunn also tells us that a YNLF, Managua, is on 44 meters, 6.80 mc., with 1,000 watts power broadcasting

between 7:00 and 8:00 P.M. It is owned by Moises La France, Calle 15 de Sep No. 206, Managua, and announces "Radiofusora YNLF, La Voz de Nicaragua, en Managua, Republic de Nicaragua, American de Central." If they have 1,000 watts, it is strange that we do not hear more from this station. Stations like VE9GW have only half that amount of power.

Mixed News

TGX, Guatemala City, Guatemala, is reported on 50.50 meters, 5.95 mc., from 7:00 P.M. until Midnight Wednesdays and Saturdays by Louis A. Baer, San Francisco, and also reported heard by R. Lawton of Whitefield, England, who states no time. Bob Everard of Standon, England, reports a new phone using the call HRM at Tela, Honduras, on 20.69 meters, 14:50 mc., working WNC, Florida, from 4:30 to 4:45 P.M. once. Waldemar Hafemann of Cristobal, Canal Zone, sends us information that a new station owned by Servicio Publico de Radio S. A., Panama City, Panama, will start broadcasting soon on 33 meters, 9.09 mc., from 7:00 to 10:00 or 11:00 P.M. The signature will be "La Voz del Istmo." Manuel Diaz Doca is the manager and Robert Adams the constructor.

 $H\cdot$ S. Bradley, Hamilton, N. Y., has a letter from Army Headquarters, Quarry Heights, Canal Zone, saying they have a 5 kw. station on 15.71 meters, 19.09 mc., and test irregularly around 9:00 or 10:00 A.M. Station XEBT, the "Siren, Cuckoo and Crow" station in Mexico City remains on their irregular schedule still, and may be heard any time between 6:00

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P.M. and 3:00 A.M. the next day. XETE, Mexico City, is not on the air. O. L. Hay, Pittsburg, Pa., reports a Mexican station on 31.86 meters, 9.42 mc., testing near 8:00 P.M., counting in Spanish. John Shanks, Russellville, Tenn., reports a Mexican on 29.1 meters from 1:45 to 2:15 P.M. and then one on 49.9 meters from 2:15 to 2:45 P.M. testing like phone-Dr. R. C. Kash, Sevierville, Tenn., reports a Mexican on about 26:09 meters 11.50 mc., calling Bogota and Caracas at 6:30 P.M. This is probably XAM at Merida, Yucatan.

THE WEST INDIES

Cuban Stations

A new Cuban station is on the air. It was first heard on October 22. They announced their wavelength as 9.428 mc. or 31.8 meters, but reports indicate this was a bit wrong, and they are near 31.56, or 9.50 mc. The call is either COA or COH (we believe it is H) and the address is Number 2, B Street, Havana. It was heard from 8:00 P. M. to 10:24 P. M. Reports came from Albert Emerson, Cleveland, Ohio; Frank Grey, Berwyn, Ill.; Bruce T. O'Leary, Marshall, Mich.; Edmund Davenport, Pittsford, Vt.; W. A. Dean, Hartford, Conn.; Ralph Williams, Garden City, N. Y.; Robert Zecher, Norfolk, Conn.; H. Hozey, Philadelphia, Pa.; Fred Harry Hafner, Buffalo, N. Y.; E. L. Nicholson, Hamburg, N. Y., and Esca Forgy, Shamrock, Texas.

We made a bad mistake last month. We said COC was on the air 9:30 to 11:00 P. M., when it should have said A. M. (mornings). The schedule really is daily 9:30 to 11:00 A. M. and 4:00 to 6:00 P. M. And each Saturday night from 11:00 P. M. till about 1:00 A. M. they broadcast a special program. It was this Saturday night program that got us mixed up. So, pardon us please, for we will be more careful in the future. At the present time COC is on about 50.1 meters, or 5.99 mc. according to reports. They have been on 49.96 meters, or 6.01 mc. and they may return there or stay on this other wave. We have several dozen reports on this station, too many to mention in print

Republic of Dominicana

Boy, how these Dominicans are coming out. Station HIH, "La Voz del Higuamo" at San Pedro de Macoris is on the air. It was heard around 44.00 meters, 6.61 mc. broadcasting between 8:00 and 10:00 P. M. and coming in very good. The owner is Domingo Dominguez, San Pedro de Macoris. Reports indicate he broadcasts Thursdays and Sundays. These reports came from H. S. Bradley, Hamilton, N. Y.; John Shanks, Russellville, Tenn.; Carl Forestieri, New York City; Robert Rossi, Philadelphia, Pa.; Charles Nabours, Cameron, Texas; Stuart Fuller, Providence, R. I.; James Pickering, Highstown, N. J.; H. Wagner, Erie, Pa.; Dr. R. C. Kash, Sevierville, Tenn.; Harry Miner, Wallston, Mass.; H. J. Davidson, Bayamon, P. R., and Roy Waite, Ballston Spa, N. Y.

HI4D (not B) sends a letter saying the call is HI4D and says they are at Santo Domingo and not Quisquilla. They use the signature "La Voz de

Quisqueya" the meaning of which we do not know. They send a nice card, printed in blue, red and black. It gives the schedule as Lunes and Sabados 12:15 to 2:00 P. M. and 5:00 P. M. their time, which, if we are not wrong, equals Wednesdays and Saturdays 11:55 A. M. to 1:40 P. M. and 4:40 P. M. to 7:40 P. M., E.S.T. Such cards have been received by Harris Dorr, Hartford, Conn.; Howard Eck, Lansing, Michigan; Fred Heller, Jr., Philadelphia, Pa.; John Shanks. Russellville, Tenn., H. S. Bradley tells us this station comes in between HJ1ABB and HJ5ABD on the dials, if that is any help. The owner says they are on 46.25 meters or 6.48 mc.

HI1A, San Pedro de Macoris, announces a new wavelength saying they are on 48.00 meters, or 6.25 mc., for a short period. They gave their address as Box 423. They were near 48 meters around 11:00 P.M. to 12:10 A.M. Saturday night to Sunday morning by Nick Gaug, New York City and Frank Grey, Berwyn, Illinois, and 6:45 P.M. by John Shanks and at 9:30 to 10:30 P.M. one Thursday by O. L. Hay, Pittsburg, Pa.

John Shanks and Frank Grey both tell us that HIX, Santo Domingo, has moved and can now be heard around 50.2 meters, 5.98 mc., instead of 49.50 meters, 6.06 mc. Fred Karpen, Johnstown, Pa., reports a station on 45.75 meters from 6:00 to 7:30 P.M. believed to be in Santo Domingo. H. S. Bradley of Hamilton, N. Y., has a letter from station HIL, Santo Domingo, saying they are on 46.5 meters, 6.45 mc. (same as HJ1ABB), from 8:00 to 10:00 P.M. daily.

J. Martinez Bernacet of Santurce, Puerto Rico, tells us that we may expect to hear a new station under the call W4XP relaying WNEL, San Juan, Puerto Rico, very scon. This station will have 500 watts power. It is owned by Piza and Martinez, radio dealers in San Juan whose address is 59 Brau Street, San Juan Piza and Martinez are old-time members of the I.S.W.C., and no doubt they will send us schedules and such things just as soon as they get on the air.

THE EXPERIMENTAL STATIONS

KNRA, on the "Seth Parker" has been heard on two frequencies this past month, called number 6 on 31.51 meters, 9.52 mc., and number 3 on 33.94 meters, 8.84 mc. This ship is now somewhere in the Pacific Ocean and they send a program to an American chain each Monday from 8:45 to 9:00 P.M. but may be heard before and after that time testing with stations at Rocky Point, N. Y. Helpful reports have come from Ralph Williams, Garden City, N. Y.; Max Horlick, Youngstown, Ohio; Albert Emerson, Cleveland, Ohio; George Van Honk, Erie, Pa.; F. L. Stitzinger, Erie, Pa.; James Pickering, Hightown, N. J.; W. D. Martin, Honolulu, Hawaii; Robert Woods, Sand Springs, Oklahoma; Wm. Neal, Southington, Conn.; H. J. Davison, Bayamon, P. R.; Robert Rossi, Philadelphia, Pa.; WQOon 44.67 meters is usually used to work NKRA.

W10XDA on the Effie Morrisey is back in New York, and it is doubtful if this station will ever be heard again. W10XDA was heard on 34.68

meters, 8.65 mc., working W2XX, Wayne, New Jersey, which was on 46.75 meters, or 6.425 mc., as they neared the end of their journey. They were also heard on 21 meters working amateur stations. Reports came from James Pickering, Heightstown, N. J.; Howard Eck, Lansing, Mich.; O. L. Hay, Pittsburg, Pa.; Fred Karpen, Johnstown, Pa.; Max Horlick, Youngstown, Ohio; and Wm. Fiedler, Milwaukee, Wisconsin.

KFZ, Admiral Byrds station down in Little America can be heard in America direct, although most of the programs which are broadcast each Wednesday night come through station LSX, Argentina. KFZ has been using one of three waves lately. These are 44.98 meters, 6.67 mc; 33.94 meters, 8.84 mc.; and 31.57 meters, 9.52 mc. Helpful reports have come from Ralph Williams, Garden City, N. Y; Max Horlick, Youngstown, Ohio; Frank Krisne, Berwyn, Illinois; F. L. Stitzinger, Erie, Pa.; Grant Wheeler, Carbondale, Pa.; Robert Stuart, Bernardsville, N. J., and Robert Zecher, Norfolk, Conn.

KFZ works on the following waves and frequencies: The first number designates the channel, the second is meters and the third is megacycles. 1—45.11 (6.65); 2—45.05 (6.60); 3—44.98 (6.67); 4—34.01 (8.82); 5—33.94 (8.84); 6—31.57 (9.52); 7—25.36 (11.83); 8—22.76 (13.18); 9—22.73 (13.20); 10—22.68 (13.2'); 11—22.60 (13.24); 12—22.62 (13.26); 13—16.65 (15.27); 14—17.04 (17.60); 15—17.03 (17.62); 16—13.94 (21.52); 17—13.89 (21.60); 18—13.87 (21.63).

H. S. Bradley, Hamilton, N. Y., has a reply to his letter reporting station DHDL on the Cap Arcona. The reply came from Deutsche Betriebsgefellfachft, Hardenbergstrasse 43, Berlin-Charlottenburg 2, Germany.

THE EUROPEANS

Vatican Station

Station HVJ, Vatican City, was heard quite a lot last month, as it was used to relay a speech by the Pope to the Eucharistic Congress which was meeting in Buenos Aires, Argentina. On 19.84 meters, 15.11 mc., it was heard many days between 8:00 A.M. and 12:00 Noon testing with stations in Argentina, Spain and Germany Members F. L. Stitzinger, Erie, Pa.; Jack Watrous, San Mateo, California; Myron Reamy, Yonkers, N. Y.; Robert Rossi, Philadelphia, Pa.; Carroll Foltz, North Baltimore, Ohio; Shokichi Yoshimura, Moji, Japan; Nick Gaug, New York City, Mario Cassina, Corona, N. Y.; Wm. C. Vestal, Redlands, Calif.; Francis Worrell, Ann Arbor, Michigan; C. Pedicora, Brooklyn, N. Y.; Robert Short, Waddington, N. Y.; Frank Grey, Berwyn, Illinois; and Lawrence Gagnon, Quebec, Canada On 50.26 meters, 5.97 mc., it was heard testing with Buenos Aires from 3:20 to 3:30 P.M. All this in addition to their regular schedule.

The British Stations

The British Broadcasting Company sends us the schedules for the Daventry stations for November. Here they are: 3:00 A.M. to 5:00 A.M.—GSD on 25.53 (11.75) and GSB on 31.55 (9.51).

6:00 A.M. to 7:30 A.M.—GSG on 16:86 (17.79) and GSF on 19.82 (15.14). 7:30 A.M. to 9:00 A.M.—GSF on 19.82 (15:14) and GSB on 31.55 (9.51). 9:15 A.M. to 10:45 A.M.—GSF on 19.82 (15:14) and GSE on 25.29 (11.86). 10:45 A.M. to 12:45 P.M.—GSE on 25:29 (11.86) and GSB on 31.55 (9.51). 1:00 P.M. to 5:45 P.M.—GSD on 25:53 (11.75) and GSB on 31.55 (9.51). 6:00 P.M. to 8:00 P.M.—GSC on 31.30 (9.58) and GSA on 49:59 (6.05).

A new phone is reported. Francis Worrel of Ann Arbor, Michigan, reports a GCI, Rugby, on 34.60 meters, 8.73 mc, working VWY, Poona, India, at 3:20 P.M. one Sunday while Fred Henry Hafner of Buffalo reports it at 3:00 P.M. and he thought it was GCR.

ORK Changes Schedule

Station ORK at Brussells, Belgium, is one hour later on the air now. They are on 29.04 meters, or 10.33 mc., broadcasting from 2:45 until 4:15 P.M. Their cards still say 18.45 to 20.15 P.M. which equals 1:45 to 3:15 P.M., but this is wrong, as they have changed their schedule. For this information we thank Carl Forestieri, New York City; Dr. R. C. Kash, Sevierville, Tenn.; John Shanks, Russellville, Tenn.; Edward Houlgate, London, Ontario; Al Leonhardt, Brooklyn, N. Y.; Lewis R. Greenman, Conneaut, Ohio; Fred Karpen, Johnstown, Pa.; Robert Rossi, Philadelphia, Pa.; and Lawrence Gagnon, Quebec, Canada.

Norway

At last we are vindicated. The short wave station at Jeloy, Norway, is LCL and not LKJ1, as many wrote. A letter to Robert Rossi, Philadelphia, says the call is LCL and not LKJ1. This station has been assigned many waves, but it is usually heard on 31.41 meters, 9.55 mc., every morning around 5:00 A.M. according to Bob Everard, Standon, England, although the schedule says it is 11:00 A.M. to 6:30 P.M. Shokichi Yoshimura of Moji, Japan, even reports this station from 12:30 Noon to 3:00 P.M.

Portugal

Station CT1AA, Lisbon, Portugal, has moved. They say they are now on 31.07 meters, or 9.66 mc., having moved to avoid intedference. This station broadcasts Tuesdays and Fridays from 4:00 to 6:00 P.M. Reports have come from Bob Everard, Standon, England, and Charles Miller, Covington, Ky. This station uses cuckoo calls as an identification signal. Station CT1CT is not reported by anyone this month. R. Lawton of Whitefield, England, reports a strange station in Portugal using the call CUG2 on 25.18 meters, but gives us no time.

Switzerland

HBL on 31.3 meters, 9.60 mc., and HBP on 38.47 meters, 7.80 mc., continue to broadcast Saturdays from 5:30 to 6:15 P.M. Robert Zecher, Norfolk, Conn., and Bob. Everard, Standon, England, reports them working PSZ, Brazil, once until 6:45 P.M. J. B. L. Hinds, Yonkers, N. Y., reports a Geneva Station on 44.5 meters one Saturday. HBO, a station we asked about last month, is on 24.93 meters, not 25.04, and is used irregularly for special purposes. It is the same transmitter as HBL, and has no schedule. Thanks to Dixon Russell, H. S. Bradley, L. F. Stephens, W. E. Weppler, and H. J. Davison.

GREATER THAN EVER

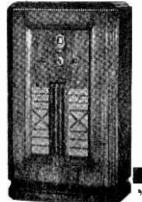
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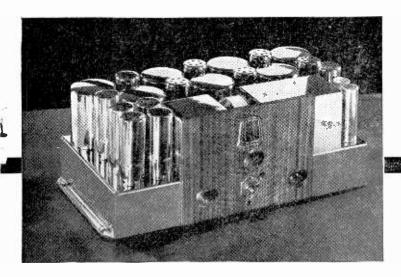
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E. H. SCOTT RADIO LAB 4450 Ravenswood Ave. Send me particulars FIFTEEN, and PROOF of it	Dept. ISW-114 Chicago,	III. ·WAVE	MAIL THE COUPON NOW!

France

The programs from Paris continue as before, no changes having been made. James Pickering, Hightstown, N. J., tells us that he heard FYA on 24.56 meters, 12.21 mc., at 6:25 A.M. Some people call these stations as Pontoise FYA. H. S. Bradley tells us he heard a TYA, Pontoise, on 12.21 mc. phoning Algeria over a year ago and now has a verification. It was heard between 9:00 and 10:00 A.M.

Germany

The November schedule for the Zeesen stations are as follows: DJB on 19.73 meters (15.20) 8:00 to 11:30 A.M. daily; 4 to 5:30 A.M. Sun. DJD on 25.53 meters (11.76) from Noon to 4:30 P.M. DJA on 31.38 meters (9.57) 8-11:30 A.M.; 5:15-8:15 P.M. (Sun. 4-5:30 A.M.)

DJC on 49.83 meters (6.02) Noon to 4:30 and 5:30 to 10:45 P.M.

This schedule is supplied by Notary G. C. Chappelle, Floriana, Malta. We repeat the news given last issue. The Germans now have been assigned these new waves, DJR on 19.56 meters (15.34 mc.); DJQ on 19.63 meters (15.28); DJP on 25.31 meters (11.85); DJO on 25.43 meters (11.79); DJN on 31.45 meters (9.54). Watch for these new stations.

The German phones reported last month were a DGG on 13.18 mc., irregularly mornings by H. S. Bradley, Hamilton, N. Y.; a DJE on 16.89 meters, 17.76 mc., at 8:30 A.M. talking to Argentina by Harold Seaton, Seiverville, Tenn.; a DFT near 38 meters, 7.90 mc., relaying the programs of DJD from 1:50 to 2:30 A.M. by Bob Everard, Standon, England; a DGH near 28 meters, 10.75 mc., phoning Manila mornings around 5:00 A.M. by A. D. Taylor, Heswell, England; a DAF on 24.20 meters, 12.40 mc., in contact with GFWV on the S. S. Majestic and KUW, Manila, in a three-way test by Mario Cassino, Corona, N. Y., who fails to mention the time, and a DIQ on 29.15 meters, or 10.29 mc., relaying the programs of DJD at 3:15 P.M. by F. A. Beane, Ridgewell, England.

Italy

When the Eucharistic Congress met in Argentina last month, and when Premier Mussolini gave a talk for world-wide broadcasting, it meant a lot of activity for the Italian Stations. Programs were sent for rebroadcasting in all parts of the world. Here are some reports. IAC, Coltana Radio, Piza, on 23.45 meters, 12.80 mc., relayed Mussolini Saturday, Oct. 6th to the U.S.A. This comes from members, Nick Gaug, New York City. It was also reported on that wave by Bob Everad, Standon, England, working the S. S. Rex at 6:00 A.M. On 17.76 mc., it was reported at 4:00 P.M. by L. A. Baer, San Francisco, California. IRJ on about 22.90 meters 13.10 mc., was broadcasting from 10 to 11 A.M. once according to H. S. Bradley, Hamilton, N. Y. IRK on 14.97 meters, 20.04 mc., relayed a talk by the Pope between 7:00 and 9:00 A.M. according to Robert Rossi, Philadelphia.. IRW on 15.37 meters, 19.52 mc., was heard testing with Brazil between 8:30 and 9:00 A.M. by Bob Everad, Standon, England, relayed the talk by Mussolini from 10:00 to 10:30 P.M. on October 6th according to Fred Karpen, Johnstown, Pa.; Louis A. Baer, San Francisco, California, and James Pickering, Hightstown, New Jersey, and was heard

near 4:00 P.M. testing with Rocky Point by Carroll Foltz, North Baltimore. Ohio. IRM on 30.5 meters, 9.83 mc., tested with LSX at 4:00 P.M. reports F. A. Beane, Ridgewell, England, and at 5:30 P.M. says H. J. Davison, Bayamon, P. R. Also at 7:15 P.M. according to H. S. Campbell, Upland, California.

2RO, the Italian broadcaster, will be back on the air soon now, according to their own announcement made by letter. They will test on 25.40 meters, 11.81 mc., first of all. Later on in December they expect to have three transmitters on the air using directional antennas and broadcasting special programs dedicated to different parts of the world. These waves will be 54.01 meters (5.55 mc.), 53.48 meters (5.61), 52.40 meters (5.72), 49.46 meters (6.06), 49.30 meters (6.09), 48.70 meters (6.16), 42.98 meters (6.98), 31.25 meters (9.60), 31.13 meters (9.63), 30.67 meters (9.78), and 25.4 meters (11.81). This information comes through the kindness of members Rossi, Lawton, Beane, Karpen, and Pedicora.

The Russians

The programs broadcast to Rocky Point each Sunday morning by stations RNE on 25 meters (12 mc.) and RKI on 19.94 meters (15.04 mc., are being heard well now. These programs take place every Sunday somewhere between 8:00 and 11:00 A.M. (Mornings) and they also test Saturday mornings irregularly. They come in best between 9:30 and Looking over the reports we find over 50 members have reported this, so we better not take the space to mention them all. RNE, in addition to the above, broadcasts Saturdays from 10 to 11 P.M. and Sundays from 6 to 7 A.M. They use English at these times. Bob Everard, Standon, England, says it was heard at 11:45 A.M. several week-days. A. B. McDonough, Wellington, New Zealand, tells us that it is heard Wednesdays at 9:30 A.M. as does F. A. Beane, Ridgewell, England. Mario Cassino, Corona, N. Y., Bob Everard, Standon, England, and F. A. Beane all report RNE and RKI, Moscow, RIM, Tashkent, on 19.68 meters (15.25 mc.) are testing and phoning every morning between 3:00 and 8:00.

RV59, Moscow, on 50.00 meters, 6 mc., is again reaching the United States with their programs. They are heard usually between 4:00 and 6:00 P.M. sometimes signing off at 5:00 P.M. They use English Sundays, Mondays, Wednesdays and Fridays. Help has come from John Shanks, Russellville, Tenn.; Edward C. Houlgate, London, Ontario; and Mario Cassino, Corona, N. Y.

Holland

Well that Dutch station on 19.71 meters, 15.22 mc, has been identified. It is old PCJ, which is now being used with PHI. It is operated by the N. V. Phillips Radio. They broadcast daily except Tuesdays and Wednesdays from 7:30 to 10:00 A.M., the same as PHI, which is now on 25.57 meters, 11.73 mc. On Sundays both of these stations remain on the air later that 10:00 A.M., by the way. Send reports on the new station to the N. V. Phillips Radio, Huizen, Holland. Carroll C. Foltz, North Baltimore, Ohio reports PHI on 25.57 meters one Sunday from 4:00 to 5:15 P.M. Others who report PHI and PCJ are H. S. Bradley; J. B. L. Hinds; A. M. Plyte, Yarmouth, Maine; Marston Hadley, Northfield, Minn.; George Van Honk, Erie, Pa.; F. L. Stitzinger; Carroll C. Foltz; John Shanks; Howard Eck; Edward Houlgate; A. J. Leonhardt, Brooklyn; Dr. R. C. Kash, Sevierville, Tenn.; Fred Karpen; Mario Cassina; John Kovatch, Escorse, Michigan; Robert Rossi; C. Pedicora, Brooklyn; Lawrence Gagnon, Quebec City; H. J. Davison and C. H. Armstrong.

PDV on 24.88 meters, 12.06 mc, is reported at 12:30 Noon by Louis A. Baer, San Francisco, California. This station, along with PCJ and PH1 relays a speech by Queen Wilhelmina, on October 9 at 8:00 A.M., according to F. Karpen, Johnstown, Pa. J. Leesburg, Kelowna, B.C. Can, reports a Dutch station on 49.58 meters, 6.05 mc, broadcasting to the Dutch East Indies at 10 to 11 A.M. and saying they would be back on the air at 6:35 P.M., E.S.T. This may be a station in the Dutch East Indies, known as YDB.

Mixed News

A letter from OER2, Vienna, Austria, says they have only 250 watts power and the schedule is 9:00 A.M. to 5:30 P.M. daily. The wavelength is 49.42 meters, 6.07 mc., but they come in above OXY, by the way. This news comes from members Bob Everard and F. A. Beane, both of England.

Mr. Beane tells us that a station will soon be heard in Iceland but no schedule or wave is given out as yet. R. Lawton, Whitefield, England,

also helps.

W. G. Richards of the Radio Intelligence, Ltd., writes us about EAQ, but doesn't clear up matters any. Members recall that there was some doubt if EAQ was on the air Saturdays from Noon to 2:00 P.M. or 1:00 to 3:00 P.M. Mr. Richards says in winter it is 12 Noon to 2 P.M. and in Summer from 1 to 3 P.M. However, this should be just the opposite, or our reporters are all wrong. It is heard in summer from Noon to 2:00 P.M. and in winter from 1 to 3 P.M. Their daily schedule is 5:15 to 7:00 P.M., with special programs until 7:30 P.M. on Tuesdays, Thursdays, Saturdays and Sundays.

THE ASIATICS The Japanese

Ed Lips, Pittsburg, sends us a list of the Japanese Stations he received from Japan. First, however, we wish to say that Wm. Vestal, Redlands, California, writes us that he has a letter from the owners and their address is Kokusai Denwa Kaisha, Ltd., No. 31 Chome, Uchisaiwaicho Kojimachiku, Tokyo. Japan. The letter says they want reports on these stations. Members have been wanting this address for a long time.

JVA—15.86 m. (18.91)	JVB-15.63 m. (18·19)	JVC—16.05 m. (18.69)
JVD—18.91 m. (15.86)	JVE19-15 m. (15.66)	JVF—19.20 m. (15,62)
JVG-20.12 m. (14.91)	JVH—20.55 m. (14.60)	JVI—22·12 m. (13.56)
JVJ-24.44 m. (12.27)	JVK-24.96 m. (12.02)	JVL-25.73 m. (11.66)
JVM-27.93 m. (10.74)	JVN-28.14 m. (10.66)	JVO—28.93 m. (10.37)
JVP-39.95 m. (7.51)	JVQ40·16 m. (7.47)	JVR-40.60 m. (7.39)
JVS-42.92 m. (6.99)	JVT44.44 m. (6.75)	JVU-51.81 m. (5.79)
JVV-52.56 m. (5.73)	JZD17.74 m. (16.91)	JZE—23.04 m. (13.02)
JZF-35,29 m. (8.50)	JZG-47.39 m. (6.33)	JYT—19.03 m. (15.76)
JYK-22.06 m. (13.60)	JYS-30·49 m. (9.84)	JYR-38.07 m. (7.88)

All the JV and JZ stations are at Nazaki, the JZ stations are used for working ships. The JY stations are at Kemikawa-Cho, Chiba-Ken, Japan, and are owned by a different firm. Mr. Vestal tells us that JVM, JVN, JVP, and JVT relay station JOAK, a broadcast station, while the others are used for phone work exclusively. Following are the stations heard this month:

JVH from 4:25 to 5:40 A.M. phoning London reported by Bob Everard, Staindon, England. JVF between 5 and 8 P.M. working California. Ralph Williams, Garden City, N. Y.; Sam Solito, Leetsdale, Pa.; L. F. Stephens, Redlands, Calif.; Charles Nabours, Cameron, Texas; H. S. Campbell, Upland, California, report. JVT on 44.44 meters, 6.75 mc, was broadcasting nearly every day last month from about 11:00 P.M. until 7:40 A.M. the following day, and over seventy American members report this station. This is the one to try for. JVM is reported from 12:00 Midnight to 2:00 A.M. by L. A. Baer, and C. O. Gallagher, San Francisco. JVN is reported from around 11:00 P.M. on up till around 7:00 A.M. irregularly. Mario Cassina, Corona, N. Y.; Paul Tyree, Oakland, California: Fred B. Heller, Jr., Philadelphia: and James Alexandre, Auckland, New Zealand, reports this one. C. O. Gallagher, San Francisco, reports JVL on 25.73 meters, 11.66 mc., at 6:00 P.M. JVQ is reported from Midnight to 2:20 A.M. by Louis A. Baer, San Francisco, while Robert Rossi, Philadelphia, reports them working KAY, Manila, one Friday from 6:35 to 7:00 P.M. H. S. Campbell reports JVP at 1:50 A.M. once. Robert Woods reports a JIC at Taihoku, Japan, at 4:30 A.M. on 5.89., but we know nothing about this one. JYS at Kemikawa on 30.49 meters, 9.84 mc., was on the air again last month. It was reported one Thursday at 1:45 A.M. by P. E. Donnally, Los Angeles, and at 6:00 A.M. by James Pickering, Hightstown, New Jersey and at 1:20 A.M. by H. S. Campbell, Upland, California.

Tavanese

W. H. Pepin, Maylands, West Australia, has a letter from Niron Broadcasting Company. Batavia, Java, with important news. They have ten transmitters operating between 49 and 200 meters, two of which should be heard at considerable distance and one of which we are certain is being heard by quite a few listeners in America. One station is YDA at Bandoeng and it is on 49.02 meters, 6.12 mc., and according to the letter they broadcast daily from 8:30 to 11:30 A·M., but we believe this is an error, for the station is heard quite often between 6:00 and 7:00 A.M. The power is 1500 watts. YDB at Soerabaia on 49.66 meters, 6.04 mc., has 1000 watts and it is on the air at the same time each day. They also own YDB2 at Semerang on 68.65 meters, and seven others above 100 meters, all low powered stations. The address is N. V. Nederlandsch-Indissche Radio Omreop Maatschappii, Batavia, D. E. I. Robert Rossi of Philadelphia, says they use English and are heard between 6:00 and 8:00 A.M. About fifty members ask about this station, reporting hearing it.

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Paul Tyree, Oakland, California, reports PNI, Makasser, on 34.2 meters phoning after 5:00 A.M. John Clark, Berkeley, California, reports PLV, Bandoeng, on 31.86 meters, or 9.42 mc., working KWU and signing off in English at 7:00 A.M. Shokichi, Yoshimura, Moji, Japan, reports PMC on

16.35 meters, 18.35 mc., from 5:30 to 5:45 A·M. Many others report on the Java phones also.

The Philippines

KZRM is reported back on the air after three years. W. H. Pepin, Maylands, West Australia, tells us they were on 31.3 meters, 9.57 mc., announcing their schedule from 5:30 to 7:30 A.M. This is on the same wave and time as VK3LR, Australia, by the way. William Long, Los Angeles: tells us they were supposed to test near 49 meters according to a friend of his in Manila.

A. B. McDonough, Wellington, New Zealand, reports a new phone, a KTJ, Manila, between 35 and 40 meters relaying KVRA, and then working Tokyo, Japan, near 6:00 A.M. KAY on 20.03 meters, 14.98 mc., worked Tokyo from 5:20 to 5:25 A.M. and Berlin from 5:25 to 5:45 A.M. according to Bob Everard, Standon, England. Fred Karpen, Johnstown, Pa., tells us they use a new call, either KPF or KVS and it is heard from 5:00 to 7:00 P.M. (evenings)

Mixed Asiatic News

RV15 on 70.65 meters, 4.25 mc., can now be heard in America. They usually may be heard from about 6:00 to 7:30 A·M., although they broadcast from 1:00 to 9:00 A.M. Howard Eck, Lansing, Michigan; John Shanks, Russellville, Tenn., and Dr. R. C. Kash, Sevierville, Tenn., report this. On the West coast, Paul Tyree of Oakland, and Louis A· Baer of San Francisco, report it from 1:00 A.M. up until 9:00 A.M. Reports should not be sent to Moscow on this station, but to the Far East Radio Station RV15, Khabarovsk, U. S. S. R·

VUB, Bombay, India, on 31.36 meters, 9.57 mc., remains on the air from 11:30 A.M. to 12:30 Noon. This is on the same wave as W1XAZ and W1XAZ, of course, prevents reception here in America. We have asked VUB for a special test, when we will ask W1XAZ to remain off the air. Incidently our hat comes off to W1XAZ, for they remain off the air Sunday mornings until 10:00 A.M. to permit listeners to hear VK2ME.

Louis A. Baer reports ZGE, Kuala Lumpur, Malay States, on 6·13 mc., one Wednesday morning from 2:00 to 2:25 A.M. although their schedule calls for broadcasts Sundays, Tuesdays and Fridays, 6:40 to 8:40 A.M.

R. Lawton, Whitefield, England, has a letter from Radio Service Co., of Malay, Broadcast House, 2 Orchard Rroad, Singapore, Straits Settlement, owners of ZHI. They give their present schedule as Mondays, Wednesdays and Thursdays from 6:00 to 8:30 P.M. and Sundays from 11:00 A.M. to 1:30 P.M. their time or 5:40 to 8:10 A.M. those three days and Saturdays from 10:40 P.M. to 1:10 A.M. on Sunday mornings. Seems like this station should reach America Saturday nights. Also, each second and fourth Sunday, they broadcast from 5:10 to 6:40 A.M., a special program.

HSP, Bangkok, Siam, on 16.92 meters, 17.75 mc, worked DAF, Nauen, Germany, at 10:00 A.M. and also at 8:00 A.M. several times last month according to Louis A. Baer, San Francisco, California. HSJ on 37.60 meters, 7.98 mc., at 3:00 A.M. one Saturday is reported by Fred Heller,

Jr., Philadelphia. XGN, Shanghai, China, on 16.38 mc., at 11:00 A.M. is reported by Max Horlick, Youngstown, Ohio. Some one, whose name we missed, reports ZLT, Wellington, New Zealand, is on 40.60 meters, 7.39 mc., working Australia mornings.

AUSTRALIA

W. H. Pepin, Maylands, Australia, sends us a newspaper clipping saying that VK3LR may soon close down, owing to the lack of reports. This station broadcasts on 31.31 meters, 9.58 mc., daily except Sundays 3:00 to 8:00 A.M. Under the call VK3XX they also test irregularly. These tests usually took place between 11:00 P·M. and 3:00 A.M. The station was reported using this call by Louis A. Baer, E. F. Gernard, P. E. Donnelly, Bob Everard, Fred B. Heller, Jr., and A. B. McDonough.

VK2ME continues to send programs dedicated to different sections of the world. These take place on their regular Sunday programs, on 31.28 meters, 9.59 mc. November 25 will be the District of Colombia program. December 2 will be to the British Islands. December 9 will be for Canada, according to John J. Lawson, Toronto, who received a letter about this. From 2:15 to 3:00 A.M. it will be Alaska, Yukon, British Colombia, Alberta, Saskatchewan program. From 6:30 to 7:00 A.M. it will be Manitoba and Ontario and from 7:00 to 7:30 A.M., Quebec New Brunswick and Nova Scotia.

Both VK2ME and VK3ME tested with W2XAF, New York, many times last month, usually between 6:00 and 7:30 A.M., in regards to the great London to Melbourne air race. VK2ME was once on 28.51 meters, 10.52 mc., for these tests. At other times they were on their regular wave. VK3ME was on 31:55 meters, 9.51 mc. A great many members reported on these tests.

VK3ME at Melbourne on 31.55 meters, 9.51 mc., announced on October 20 that they would be on the air daily for at least two weeks from 5 to 7 A.M. They tested with W2XAF many times during the past month, too. We thank E. L. Nicholson, Hamburg, N. Y.; Albert Emerson, Cleveland, Ohio. and J. B. Sessions, Bristol, Conn., for reporting this news. F. A. Beane, Ridgewell, England, tells us that VLJ, Australia, on 37.3 meters works ZLT, New Zealand, on 27.3 meters almost daily at 2:00 A.M. Ed. A. Burlson of Urbana, Illinois, reports VIY, Sydney, on 12.02 mc., or 24.96 meters, testing with W2XAF, New York, once when WK2ME could not be heard well. Hal Thompson of San Francisco, reports VK3LR broadcasting one night from 9:00 P.M. to 12:15 A.M., the arrival of the planes in the London-to-Melbourne Race.

THE NORTH AMERICANS

W2XAF and W2XAD have altered their schedule. W2XAD on 19.56 meters, 15.34 mc., broadcasts daily from 2:30 to 3:30 P.M. W2XAF on 31.48 meters, 9.53 mc., broadcasts daily from 6:30 to 11:00 P.M. This comes from Robert Hughes, Trowbridge, England; C. D. Wagoner of W2XAF-W2XAD; Thomas Grey, Lyons, Illinois; and H. J. Davison of

Bayamon, P. R. W2XAF tested with the Australian stations, WK2ME, WK3ME and VIY during the London-to-Melbourne Plane Race, usually

around 6:00 to 8:00 A.M. Over fifty members reported this,

W1XAL, Boston, stays off the air Sundays until 10:00 A.M. now in order that Americans can tune in VK2ME, Australia. Wm. Neal, Southington, Conn., reports. W1XAL of Boston wrote to J. B. L. Hinds, Yonkers, N. Y., that they do not know whether they will be on 25.42 meters or 49.67 meters and does not know exactly when they will be on.

W3XAL, Boundbrook, New Jersey, is on a new schedule. On 16.88 meters, 17.78 mc., they broadcast daily from 10:00 A.M. to 4:00 P.M., and on Mondays, Wednesdays and Saturdays they broadcast on 49.18 meters, 6.10 mc., from 4:30 P.M. to 1:00 A.M. the following day. Last month on 16.88 it was heard until 5:00 P.M. several times on account of the baseball games and other special programs. H. J. Davison, Bayamon, P. R.: Robert Zecher. Norfolk, Conn.; Harold Seaton, Sevierville, Tenn.; and Edward Houlgate, London, Ontario, helped on this.

W9XAA, Chicago, on 49.34 meters, 6.08 mc, was reported on the air one Friday at 11:30 P.M. by Francis Worrel, Ann Arbor, Michigan. This

is the first report on this station in many months.

W9XF, also in Chicago, on 49.18 meters, 6.10 mc., was reported at 2:00 P.M. by Charles Miller, Covington, Ky., although their schedule calls for 3:30 P.M.

VE9GW, Bowmanville, Ontario, Canada, on 49.22 meters, 6.07 mc., is now on a winter schedule on Mondays, Tuesdays and Wednesdays from 3:00 P.M. to Midnight; on Thursdays, Fridays and Saturdays from 7:00 A.M. to Midnight; and on Sundays from 1:00 P.M. to 9:00 P.M. This comes from J. B. L. Hinds. A station believed to be VE9BJ, St. John's New Brunswick, Canada, on 49.29 meters, 6.09 mc., at 2:45 P.M. is reported by John Shanks, Russellville. Tenn.

CJRX on 25.60 meters, 11.72 mc., and CJRO on 48.85 meters, 6.15 mc., are broadcasting daily from 8:00 to 11:00 P.M. and 11:30 to Midnight. During the World Series baseball games they were heard in the afternoons from 1:00 to 4:00 or 5:00 P.M. Charles Miller, Covington, Ky.; Edward Houlgate, London, Ontario; Fred Karpen, Johnstown, Pa.; and

C. O. Gallagher, San Francisco, California, report on this.

The United States Naval Ships—New Mexico (NAVM). California (NAFT), and Saratoga (call not known) all tested last month with WOO, the telephone station at Ocean Gare, N. J., and W2XBJ at Rocky Point, N. Y. The ships were on about 96.8 meters, 3.09 mc., and 53.57 meters, 5.60 mc., at 9:30 P.M. according to Howard Eck, Lansing, Michigan, From 9:00 to 9:15 P.M. they were on 45.45 meters, 6.60 mc. WOO was heard on 63 13 meters, 4.75 mc. W2XBJ was on 33.52 meters, 8.95 mc., old WEL using that call. We thank the following friends for their help: F. L. Stitzinger, Erie, Pa.; Albert Leonhardt, Brooklyn, N. Y.; James Pickering, Hightstown, New Jersey; H. J. Davison, Bayamon, P. R.; E. L. Nicholson, Hamburg, N. Y.; R. G. Summers, Buffalo, N. Y.

Some reports on the American phones and commercial stations follow: KKZ on 21.90 meters, 13.70 mc., at Bolinas, California, was heard at Noon broadcasting, reports Albert Emerson, Cleveland, and Fred Hafner,

Buffalo. KEE, Bolinas, on 38.89 meters, 7.71 mc., was sending music from 10:00 to 11:30 P.M. reports Mr. Emerson; O. L. Hay, Pittsburg, Pa; C. Lidstron, Salt Lake City, Utah; and L. F. Stephens, Redlands, Calif. KEB on 43.45 meters, 6.90 mc., is relaying musical programs from 11:00 P.M. to 1:00 A.M. to Hawaii reports Mr. Hay. A KEN, Bolinas. on 43.86 meters, 6.84 mc., relaying the Ed Wynn program from 9:30 to 10:00 P.M. is reported by Wm. C. Vestal, Redlands, California. KEL, Bolinas, on 43.71 meters broadcasting one Tuesday from 9:00 P.M. to Midnight is reported by Fred Karpen, Johnstown, Pa. KIO, Kauhuku, Hawaii, on 25.63 meters, 11.71 mc., at 1:00 A.M. sent a special program to America last month, according to C. O. Gallagher, San Francisco, and H. S. Campbell, Upland, California. KKH, same place, on 38.98 meters, 7.52 mc. tested with LSX, Argentina, from 6:30 to 7:00 P.M. once last month, according to Fred Karpen, Johnstown, Pa. WQV, Rocky Point, N. Y., and WEA, the same place, on near 20 and 28 meters, were reported by Bob Everard, Standon, England, last month between 12:00 Noon and 12:45 P.M. and 5:15 to 6:30 P.M.

The Army airports have changed calls again. A WO9 at Mitchell Field, New York, on 6:39 mc. called and worked stations JJ6 and IF3 last month. This was near 4:00 P.M. Robert Short, Waddington, N. Y., tells us it was 6:25 mc. O. L. Hay, Pittsburg, Pa., and LeRoy J. Scherb, Lebanon, Pa., also helped us. Cyrus Will, Glencoe, Illinois, reports a station WYBF at Napolean, Missouri, near 115 meters at 9:00 P.M. We believe this is some sort of special station. L. M. Basehart, Zanesville, Ohio, tells us that a WPW at Zanesville will be on 2430 kc. soon. The Ohio and Pennsylvania police stations did yoemans duty last month when a notorious gangster known as "Pretty Boy" Floyd was killed by local police a short distance from club headquarters.

THE AFRICANS

We are not at all sure that the station at Rabat, Morocco, is still on the air as none report it recently. This sort of wipes out African broadcasting so far as America is concerned, as stations VQ7LO and ZTJ are not heard consistently, if at all, in this country now. Robert Rossi has a letter from station ZTJ, sometimes called JB, which gives their wavelength as 49 meters, 6.12 mc., and the power as 5,000 watts. They give their schedule as daily from 10:45 to 11:00 and 15:30 to 20:00 but do not say if this is local time, G.M.T., or E.S.T. Local time is seven and one-half hours ahead of E.S.T., or two and one-half hours ahead of G.M.T. Two members, Louis A. Baer and J. G. Gallagher, both of San Francisco, report a station announcing as Johannesburg on 6.12 mc. at 6:00 A.M., Eastern Standard Time.

R. Lawton, Manchester, England, reports a station CR6AA, Estacao Radio Difusora. Caixa Postal 118, Lobito, Anglo, Portugese West Africa, on 41.8 meters on Wednesdays and Saturdays from 2:30 to 4:30 P.M. We have had quite a few letters about this same station, all giving different wavelengths and times on the air. First is on 84 meters then 50 meters, then 66 meters and then 150 meters. We do not know where all this news comes from, but we pass it on for what it may be worth.

The Amateurs

The amateurs on the 21 meters, 14 mc., band continue to come in from a great many places. Here are the stations reported last month, all supposed to be on voice: England-G5BY, G6LI, G5BB, G2NN, G6SR, G6AG, G5BJ, G5ML, G5VB, G2BK. Dominican Republic-H18X, H16X, HI6F, HI7G. Belgium—ON4ABC, ON4BZ. Peru—OA4B. Colombia-Costa Rica-TI3AZ, TI2GZ, TI3AV, TI4AC, TI2EP, TI2AV. Argentina - LU8DR, LU1PB, LU8AD. Ecuador -Portugal — CT1BY. HC1FG, HC1JW. Norway-LA1G, LA3G, Spain-EA4AV. Puerto Rico-K4AA Tunis—FM4AA Brazil—PAOLL. Cuba—CM2LL, CM2RA, CM2WZ, Many Mexican and Canadians, as well as U.S.A. stations are reported. Thanks to members Robert Zecher, Frank Grey, Albert Lee, Robert Rogers, Sam Solito, F. A. Beane, Robert Rossi and Hyman Cohen. On the 40 meter band we find many stations in Colombia, Costa Rica, Cuba, Mexico, Dominican Republic and Argentina mentioned. Most of these stations are heard between 4:00 and 10:00 P.M., E.S.T.

Last Minute Flashes

A Peru station is on 48 meters, 6.23 mc., at 7:30 P.M. heard announcing as OA4B according to Robert Rossi, Philadelphia, and OAX4B according to H. S. Bradley, Hamilton, N. Y. T. Russell Fairfax, Geneva, N. Y., has a card from HJ5ABD, Cali, Colombia, saying they are on 47 meters, 6.49 mc., with 1000 watts and identify themselves with "La Voz del Valle." He also has a letter from YV3RC, same schedule and wave as shown on list.

Station 2RC returned to the air October 26 on 25.40 meters, 11.81 mc., at 6:30 P.M. and an attempt to rebroadcast them in America was a failure. This station will broadcast a special program for American listeners now each Monday, Wednesday and Friday night from 6:30 to 8:00 P.M. They may be on 25.40 meters, 11.81 mc.; 30.67 meters, 9.78 mc; 42.98 meters, 6.98 mc; or 48.70 meters, 6.16 mc., but we expect it will be 25.40 meters most of the time.

At the same time that John Wilbur of Long Island City wrote us that two stations in Shanghai, China, XEBA on 42.92 meters and XEBD on 31.32 meters, were said to be broadcasting by a short wave "expert," a letter was being written by Charles Guadagnino of Grosse Point, Michigan, saying that he has a letter from a Mr. Sequeira of Shanghai, saying there are no short wave broadcasting stations there and only government-owned telegraph stations are in operation there.

A letter from the chief operator of the government station TGW, Guatemala City, Guatemala, asks us to announce that they will soon broadcast programs on 50.51 meters, 5.94 mc., from 2.00 to 3:30 P.M., 8:30 to 9:30 P.M., and 11:00 P.M. to 1:00 A.M. the next day, each week-day.

Charles Miller, Covington, Ky., writes that he has arranged a special program from station W8XAL, Cincinnati, Ohio, for December, the date probably being Sunday morning, December 16 from 2:00-3:00 A.M., E.S.T.

H. S. Bradley says a station HRM, Tela, Honduras, is on 15.40 mc. and 13.80 mc. around 3:00 P.M. working tests with a station HPD, Panama.

Fred Heller of Philadelphia, and John Kovatch of Escorse, Michigan, tell us they are hearing a station CMCY, Havana, Cuba, on 6.01 mc.,

where COC should be heard. They give the address as 215 G Street, Hayana, Cuba. No doubt this is COC relaying some station called CMCY.

Time is from 6:00 to 11:00 P. M., however.

YV5RMO, Maracaibo, Venezuela, announced at 10:30 P.M. on 49.39 meters, 6.07 mc. that they would be on 51.5 meters, 5.88 mc., according to John Kovatch, Escore, Michigan, while Sam Solito, Leetsdale, Pa., tells us they were on 6.42 mc, working amateurs one night. must be jumping around.

Mr. Solito also tells us the station called by us TIX is really TIXF3

and their address is Apartado Postal 775, San Jose, Costa Rica.

O. Leesburg of Kelowana, B. C., writes us that a Holland station on 49.75 meters, 6.05 mc., was heard broadcasting the Melbourne-London Air Race from 7:45 to 11:00 A.M. once for the benefit of Dutch East Indies listeners. He said he would be back at 7:45 P.M., E-S.T. It was also heard at 9:45 A.M. the next day.

Arthur Bear of London tells us that station GSA on 49.59 meters, or 6.05 mc., may be used from 10:45 A.M. to 12:45 Noon instead of GSE on

25.29 meters.

MEMBERSHIP CONTEST

The membership contest is fast coming to a close. A beautiful Postal International Receiver will be given to the member who gets the most new members for the club before January First, if they happen to live in North America, or January 15, if they live outside of North America. Members know how much a set like this one sells for, still the results of the contest have been very poor, and most anyone could step in right now and win the set easily. In addition to the Postal Receiver, there are four other awards, including a dynamic speaker, headphones, and globes of the world.

This is written on the 29th day of October, early morning, and here is the line-up of the leaders. This does not include memberships received after October 28: Thomas Malone, New York City, (18 memberships); Hal Thompson, San Francisco, and E. F. Youngblood, Cleveland, Ohio, (17 each); Z. Hinojoza, Jr., Maracaibo, Venezuela, (15 memberships); J. B. L. Hinds, Yonkers, N. Y.; Fred Heller, Jr., Philadelphia, Pa., and W. Haffeman, Cristobal, Canal Zone, (12 members each); W. Peterson, Brooklyn, N. Y. (11), and A. F. Gernandt, Berkeley, California (9). A little bit of hustling these next two months and most anyone can win that wonderful radio set.

PEN-PALS

The following members would like to correspond with others: Don Haupt, 6178 Bellefontaine, Indianapolis, Indiana. (foreign) Alfred G. King, 7417 87th Avenue, Woodhaven, New York. Emmett G. Riggle, 223 Edwin Avenue, S. E., Massillon, Ohio. Charles Miller, 309 View Place, Covington, Kentucky. (foreign) Wm. C. Vestal, Box 430, Redlands, California. James Alexandre, 8 Ashton Road, Mt. Eden, Auckland, S1, New Zealand.

H. W. Wainwright, 34-21 150th St., Flushing, New York.

G. M. Basehart, Box 305 Hamlin Ave., Zanesville, Ohio.

APPRECIATION

Just look at this bunch of members who secured new members for the club last month. Boy, are we lucky to have so many friends? And do we appreciate the fact? You bet we do. To all these members we say a hearty "Thank you." We also thank those others who have sent in news, those who have spoken a good word for us and also those who sent in names of prospective members. It is all so nice.

Here is the list of members who actually brought us new members Charles Fulton, Rolla, Mo.; R. L. King, Mobile, Alabama; last month: E. L. Wilson, Rumford, R. I.: George R. Laroche, Cape Haitian, Haiti; A. W. Bellings, Carbondale, Pa.: H. J. Tozeland, Winnipeg, Manitoba; Charles Comier, St. Pierre Island. Richard Isaacs, Chicago, Illinois; A. E. Gaston, Yakima, Washington; Sgt. George Crouse, York, Pa.; Benoit C. Poux, Port de Paix, Haiti; Crawfords, Beverly Hills, California; Hal Thompson, San Francisco, California; E. F. Gernandt, Berkeley, Calif.; Donald I Gross, Asheville, North Carolina; W. A. Hinckley, Oakland, California; G. A. Gill, Bridgetown, Barbados; Ralph B. Williams, Garden City, N. Y.; George Tidmarsh, Tucson, Arizona; J. J. Lawlor, Hollywood, California; Fred Clubine, Toronto, Ontario; Rudolph Bossert, Rochester N. Y.; R. E. Stuart, Indianapolis, Indiana; George Bank, Brooklyn, N. Y.; Wm. Warren, Exeter, England; Neil Campbell, West Lothian, Scotland; F. W. Adams, London, England; Louis A. Baer, San Francisco, California; E. D. Godfrey, Tarrytown, N. Y.; J. M. Vela, Bayamon, Puerto Rico; O. D. McAdams, Pomeroy, Pa.; C. J. Post, Jr., New York City; Maxwell Dettman, Brooklyn, N. Y.; Thomas Malone, New York City; J. A. Mullen, Brooklyn, N. Y.; Leo A. J. de Roo, Honolulu. Hawaii; John J. Carr, Bronx, N. Y.; Fred Hafner, Buffalo, N. Y.; J. G. Goldstein, Newark, New Jersey; Dr. W. H. Wolfram, Cincinnati, Ohio; Nelson S. Bell, Wellesley, Mass.; C. H. Armstrong, Atlanta, Ga.; Harold F. Rowley, Greenfield, Mass.; Tilgham McCabe, Ocean City, Md.; E. D. Purkey, Hollywood, California; George Bellusch, Oolitic, Indiana; Harry Wengner, Grand Rapids, Michigan; Wm. Sterrett, Jamestown, N. Y.: Ed. Ullrich, Utica, N. Y.; A. Hiram Shafer, Powellton, W. Va.: PX Radio Sales, Beverly Hills, California; Albert Leonhardt, Brooklyn, N. Y.; Porter Noe, Hartford, Conn.; E. E. Heine, Hannibal, Mo.; Elmo C. Rankin, Hinton, Okla.; Fred B. Heller, Jr., Philadelphia, Pa.; J. B. L. Hinds, Yonkers, N. Y.; W. G. Bearman, New Brunswick, N. J.; Charles B. Hinds, Portland, Maine; Albert Emerson, Cleveland, Ohio; Capt. C. M. Rowley, S. S. Calgarolite; Fred Ray, Cleveland, Ohio; D. J. McIlveen, Springfield Gardens, N. Y.; B. A. Van Maaren, Detroit. Michigan; C. H. Armstrong, Atlanta, Ga.; Bictor A. Durand, East Orange, N. J.; John Kovatch, Escouse, Michigan; Marcus Anderson, Stockholm, Sweden,

FOR SALE — McMurdo Silver Masterpiece, II, all-wave receiver complete except cabinet. Excellent condition. A real value at \$95.00. Grover S. Mumford, 2121 Wright Avenue, Greensboro, North Carolina.

This is the largest edition we have ever printed. We certainly congratulate the members for their loyal support.

nproved WHEN THE BABY IS PUT TO BED, 7 Is Your Receiver Put to Sleeep, Too

OUR NEW TYPE

KEEPS YOUR RECEIVER AWAKE WHILE THE FAMILY AND NEIGH BORS SLEEP, without disturbing them,

JUST BECAUSE YOUR RECEIVER HAS NO HEADPHONE JACK



there is no reason why your listening hours should be restricted, depriving you of hearing the stations that come in early morning or late at night.

With our PHONE RECEPTOR (Missing Link) installed in two minutes without using tools and without even touching wiring of receiver or breaking seals, you CAN LISTEN AT ANY TIME YOU PLEASE. Absolutely safe, cannot injure or unbalance receiver, fully guaranteed. Five-foot

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THE STATIONS YOU NEVER HEAR because you miss or skip them when tuning your receiver. A Beat Note Oscillator is described by the manufacturers of the latest custom built receivers as 'the easiest way to find stations, particularly the weak and distant ones." It will locate for you ALL STATIONS THAT YOUR RECEIVER IS CAPABLE OF BRINGING IN, on ALL WAVE LENGTHS, including broadcast. The most sensitive and reliable station indicator there is for the superheterodyne receiver. Electron coupled, same type as used in latest ALL-wave and most expensive wiring of receiver or breaking receiver's seals. To operate, you merely throw a toggle switch ON, rotate the dial of receiver. When the receiver is tuned to



a station, you will hear a whistle. You then snap toggle switch OFF, the whistle disappears and station is heard at the peak. Uses one 24A tube, powered direct from your receiver. Mention make and model of receiver when ordering. Ideal for CW.\$8.95 Reception. No. 756 BEAT-NOTE OSCILLATOR, List \$15.00; Net.....\$8.95 GENUINE RCA 24-A TUBE......\$1.10

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CONSULTING ENGINEER ON NTENNA PROBLEMS TO LYNCH ORK CHAPTER OF THE CLUB -

BEST STATIONS AND HOURLY GUIDE

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GSG Baland Daily -W3XAL U. S. A. Daily -W2XAD. U. S. A. Daily -W2XE U. S. A. Daily -W3XK U. S. A. Daily -W4 b. Germany Daily -GSF England Irreg -HVJ Vatican Daily -CNR Africa. Sunday
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their program on the half-hour. "See List" means to look in our station list, as the station does not operate regularly at the time stated. Please note—Time given is Eastern Standard. Write in local Stations marked 1/2 means that they start or end time in space provided underneath Eastern Standard Time. (s) means that the station signs off at that hour. operate regularly at the time stated.

"ON-THE-AIR"

Because of the world-wide membership of this organization and the speed in which this magazine is edited and published, this list is considered by most short wave fans, and manufacturers of short wave receivers, as the most complete, up-to-date and authentic in the world. No other publication has the world-wide circulation of this organization, and none are able to bring out such an accurate up-to-date list in such a short time.

The time given is in Eastern Standard. Add five hours for G. M. T. Mark down the dial readings of the stations heard on the margin of the paper and it will guide you to the location of other stations on your dials

B—Stands for Broadcast stations. These stations broadcast programs, usually relaying

some long wave station.

T—Stands for Telephone Stations. These stations are used to relay telephone conversations across oceans and a carrier wave, or "whistle," may be heard for several hours without any voice being heard. Some stations use a "chopper" which distorts the voice and makes it imposssible to understand.

E—Stands for Experimental Stations. These stations are never on the air regularly. They are usually telegraph stations which are rented by some chain to relay a broadcast to

some foreign country. You never can tell when you will hear them.

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Meter Meg.
                                                                                                                                                                                                                                                    STATION
        Meter Meg. STATION

B-13.92-21.54-W8XK, Pittsburgh, Pa. Relays KDKA, 7:00 A.M. to 2:00 P.M. daily.

T-14.01-21.41-W8XK, Pittsburgh, Pa. Relays KDKA, 7:00 A.M. to 4:00 P.M.

T-14.17-21.16-LSL, Buenos Aires, Arg. 8:00 A.M. to 1:00 P.M. GAA and PSF.

T-14.23-21.08-PSA, Rio de Janerio, Brazil. Phones WKK, WLK daytime.

T-14.27-21.03-LSN, Buenos Aires, Arg. 8:00 A.M. to 4:00 P.M. WKK and WLK.

T-14.38-20.86-EHY-EDM, Madrid, Spain. Phones South America, mornings.
T-14.27—21.03—LSN, Buenos Aires, Arg. 8:00 A.M. to 4:00 P.M. WKK and WLK. T-14.38—20.85—EHY-EDM, Madrid, Spain. Phones South America, mornings. T-14.72—20.38—GAA, Rugby, England. Phones LSL and PPU near 8:00 A.M. T-14.97—20.04—OPL. Leopoldsville, Belgian Congo. Phones ORG mornings. T-14.99—20.02—DHO, Nauen, Germany. Phones PPU and LSM mornings. T-15.14—19.81—WKN, Lawrenceville, N. J. Phones GAU. daytime. T-15.24—19.69—CEC, Santiago, Chile. Phones LSR, HJY near 11 A.M. and 4 P.M. T-15.31—19.60—LSF, Buenos Aires, Argentina. Testing 7 to 9 A.M. irregularly. T-15.37—19.52—IRW, Rome, Italy. Phones Argentina mornings. T-15.39—19.50—LSQ, Buenos Aires, Argentina. Heard testing near 2:00 P.M. T-15.50—19.35—FTM, St. Assise, France. 10:00 A.M. to 2:00 P.M. LSG. T-15.50—19.35—PMA, Bandoeng, Java. Phones Holland mornings. T-15.58—19.25—DFA, Nauen, Germany. Phones FTM, 10:30 A.M. to 3:00 P.M. T-15.68—19.13—LSM, Buenos Aires, Argentina. Phones FTM, 10:30 A.M. to 3:00 P.M. T-15.68—19.13—LSM, Buenos Aires, Argentina. Phones FAQ. DHO, GAA mornings. T-15.88—18.89—ZSS, Klipkeuval, S. Africa. Phones GAS, 6:30 to 7; 10 to 10:45 A.M. T-15.93—18.83—PLE, Bandoeng, Java. Phones Holland 6 to 11 A.M. KWX irregularly. T-16.06—18.68—OCI, Lima, Peru. Testing with HJY near 2:00 P.M. T-16.11—18.62—GAU, Rugby, England. Phones New York mornings. T-16.25—18.46—HJY, Bogoto, Columbia. Phones CEC, LSR, 11 A.M. and 4:00 P.M. T-16.35—18.35—FZS, Saigon, Indo-China. Phones Paris 5:09 A.M. to 4:00 P.M. T-16.35—18.35—FZS, Saigon, Indo-China. Phones Paris 5:09 A.M. to 4:00 P.M. T-16.35—18.35—FZS, Saigon, Indo-China. Phones Rew York mornings. T-16.63—18.13—CAS, Rugby, England. Phones New York mornings. T-16.63—18.35—FZS, Saigon, Indo-China. Phones Bengland 8:00 A.M. to 4:00 P.M. T-16.635—18.25—FTE, St. Assise, France. Phones LSM, PPU, mornings. T-16.63—18.18—CGA, Drummondville, Canada. Phones Germany 10:00 A.M. T-16.635—18.25—FTE, St. Assise, France. Phones LSM, PPU, mornings. T-16.65—18.18—CGA, Drummondville, Canada. Phones Degland daytine. T-16.65—18.97—G
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TIME
                      Meter Meg.
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  B-16.86-17.79-GSG, Daventry, England. 6:00 to 7:40 A.M.
  B-16.87-17.78-W3XAL, Bound Brook, New Jersey. 10:00 A.M. to 4:00 P.M. daily.
B-16.87—17.78—W3XAL, Bound Brook, New Jersey. 10:00 A.M. to 4:00 P.M. daily.

T-16.89—17.76—IAC, Piza, Italy. Phones ships early mornings.

E-16.89—17.76—DJE, Nauen, Germany. Heard irregularly in the mornings.

T-16.85 to 18.27—17.80 to 16.42—ships. Heard in daytime.

T-16.92—17.75—HSP, Bangkok, Siam. Works Germany, 4:30 to 6:30 A.M.

T-17.10—17.54—VWY, Poona, India. Phones GBU, 2:00 to 8:00 A.M.

T-17.12—17.52—DFB, Nauen, Germany. Phones LSM and YVQ near 9:00 A.M.

T-17.34—17.30—Italian ships. Phone WOO and IAC, daytime.

T-17.34—17.30—Italian ships. Phone WOO and IAC, daytime.

T-17.52—17.12—WOO, Ocean Gate, New Jersey. Phones ships irregularly.

T-17.52—17.12—WOO, Ocean Gate, New Jersey. Phones ships irregularly.

T-18.44—16.30—WLK, Lawrenceville, N. J. Phones England.

T-18.71—16.04—KKP, Kauhuku, Hawaii. Phones KWU 1:00 to 7:00 P.M.

T-18.91—15.86—CEC, Santiago, Chile. Phones OCJ 11 A.M., 1 and 4:40 P.M., irreg.

T-19.02—15.81—LSL, Buenos Aires, Arg. Phones GAA 8 A.M. to 1 and FTM 1-2 P.M.

T-19.15—15.6—JVE, Nazaki, Japan. Phones Java 3:00 to 5:00 A.M.

T-19.15—15.6—JVE, Nazaki, Japan. Phones CEC daytime.

T-19.20—15.61—JVF, Nasaki, Japan. Phones U.S.A. near 5:00 A.M. and 8:00 P.M.

T-19.47—15.41—KWO, Dixon, California. Phones Hawaii in place of KWU.

T-19.56—15.34—W2XAD. Schenectady. New York. 2:30 to 3:30 P.M. daily.
  B-19.56—15.34—W;2XAD, Schenectady, New York. 2:30 to 3:30 P.M. daily.
B-19.64—15.27—W2XE, Wayne, N. J. Relays WABC 11:00 A.M. to 1:00 P.M.
T-19.68—15.25—RIM, Tashkent, U.S.S.R. Phones RKI near 7:00 A.M.
B-19.68—15.25—Pontoise, France. 8:00 to 11:00 A.M.
B-19.71—15.22—PCJ, Eindoven, Holland. Daily except Tues., Wed., 8:30 to 11:00 A.M.
B-19.72—15.21—W8XK, Pittsburgh, Pa. Relays KDKA 10:00 A.M. to 4:00 P.M.
B-19.73—15.20—DJB, Zeesen, Germany. Daily 8:00 to 11:30 A.M.; Sun. 4:00-5:00 A.M.
B-19.82—15.13—GSF. Daventry. England. 6:00 to 10:45 A.M.
   B-19.82-15.13-GSF, Daventry, England. 6:00 to 10:45 A.M.
B-19.84-15.11-HVJ, Vatican City. Daily 5:00 to 5:15 A.M., Sat., 10:00 to 10:30 A.M.
 B—19.8—15.11—HV), Vatican City. Daily 5:00 to 5:15 A.M., Sat., 10:00 to 10:30 A.M.

T—19.91—15.07—WNC, Hialeah, Florida. Phones HJB, RXC and YVQ, daytime.

T—20.03—14.98—KAY, Manila, P. I. Phones DFS 5 to 7 A.M.; U.S.A., 7 to 8 P.M.

T—20.06—14.96—HJB, Bogota, Colombia. Phones Hialeah daytime.

T—20.42—14.69—PSF, Rio de Janerio, Brazil. 7 A.M. to 6 P.M. LSL, WLK, WOK.

T—20.55—14.60—JVH, Nazaki, Japan. Phones Europe 4:00 to 8:00 A.M.

T—20.56—14.59—WMN, Lawrenceville, N. J. Phones England daylight.

E—20.60—14.56—HBJ, Geneva, Switzerland. Experimenting.

T—20.65—14.53—LSN, Buenos Aires, Argentina. Phones New York daytime.

T—20.69—14.50—TIR and TIU, Cartago, Costa Rica. Phones many stations daytime.

T—20.69—14.50—HPF, Panama City. Phones Florida daytime.

T—20.73—14.48—TGF, Guatemala City. Phones Florida daytime irregularly.

T—20.73—14.47—WMF, Lawrenceville, N. J. Phones England daylight.

T—20.75—14.46—GBW, Rugby, England. Phones WNC 6:00 A.M. to 6:00 P.M.

E—20.97 to 21.26—14.30 to 14.11—Amateur phones heard in daytime.
   T—20.75—14.46—GBW, Rugby, England. Phones WNC 6:00 A.M. to 6:00 P.M. E—20.97 to 21.26—14.30 to 14.11—Amateur phones heard in daytime. E—21.58—13.90—WQP, Rocky Point, N. Y. Testing with RNE irregularly mornings. T—21.70—13.83—SUZ, Cairo, Egypt. Phones GAA 7:00 A.M. to 3:30 P.M. T—21.98—13.65—HJY, Bogota, Colombia. Phones irregularly. T—22.06—13.60—JYK, Kemikawa-Cho, Japan. Irregular. T—22.09—13.58—GBB, Rugby, England. Phones Canada and Egypt daytime. E—22.22—13.50—WKU, Rocky Point, N. Y. Irregular. T—22.35—13.42—GCJ, Rugby, England. Phones JVH 3:00 to 8:00 A.M. T—22.40—13.39—WMA, Lawrenceville, N. J. Phones England daytime. T—22.48—13.35—YVQ. Maracay, Venezuela. Phones Florida daytime. T—22.50 to 24.3—13.34 to 12.35—Ships. Heard in daytime. T—22.58—13.28—CGA3, Drummondville, Canada. Phones ships and England daytime. E—22.65—13.24—KILS, Alaska. Irregular. Used in Byrd broadcast.
      E-22.65-13.24-KILS, Alaska. Irregular. Used in Byrd broadcast.
E-22.68-13.23-KFZ, Little America and KNRA, "Seth Parker."
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Meter Meg. STATION

E-22.76—13.18—DGG, Nauen, Germany. Phones Asia mornings irregularly.
T-23.00—13.04—German ships. 11:15 A.M. and 1:30 P.M.
T-23.36—12.84—WOO, Ocean Gate, N. J. Phones ships irregularly.
T-23.38—12.83—HJA3, Barranquilla, Colombia. Phones U.S.A. daytime.
T-23.38—12.83—CNR, Rabat, Morocco. Phones St. Assise 5:00 to 8:00 to 8:00 A.M.
B-23.38—12.83—RABAT, Morocco. Broadcasts Sunday 7:30 to 9:00 A.M.
T-23.45—12.80—IAC, Piza, Italy. Works ships mornings.
T-23.47—12.78—GBC, Rugby, England. Phones ships irregularly.
T-23.70—13.22—KPJ, Manila, P. I. Heard 3:00 to 8:00 A.M. with Java.
T-24.20—12.40—DAF, Norden, Germany. Phones ships irregularly mornings.
                     Meter Meg.
                                                                                                   STATION
                                                                                                                                                                                                                                                                      TIME
  T-24.40-12.30—PLM, Bandoeng, Java. Phones vK2ME near 6:30 A.M.
T-24.41—12.29—GBU, Rugby, England. Phones vK2ME near 6:30 A.M.
T-24.41—12.29—GBU, Rugby, England. Phones America evenings.
B-24.53—12.23—CT1CT, Lisbon, Portugal. Sun., 7 to 9 A.M.; Thurs., 4 to 6 P.M.
T-24.69—12.15—GBS, Rugby, England. Phones New York.
T-24.88—12.06—PDV, Kootwijk, Holland. Tests near 7:30 A.M.
B-25.00—12.00—RNE, Moscow, U.S.S.R. Sat. 10-11 P.M., Sun. 6-7 and 10-11 A.M.
T-25.02—11.99—FZS, Saigon, Indo-China. Phones Paris mornings.
E-25.11—11.97—KKQ, Bolinas, California. Heard irregularly evenings.
T-25.12—11.95—FTA, St. Assise, France. Phones CNR 4 to 7 A.M.; LSM 10 to 12 P.M.
  B-25.20—11.90—Pontoise, France. 10:15 A.M. to 1:15 P.M. and 2:00 to 5:00 P.M. B-25.27—11.87—W8XK, Pittsburgh, Pa. Relays KDKA 4:30 to 10:00 P.M. daily. B-25.28—11.86—GSE, Daventry, England. 9:15 A.M. to 12:45 Noon. E-25.36—11.83—KFZ, Little America. Used irregularly. B-25.36—11.83—W2XE, Wayne, N. J. Relays WABC 3:00 to 5:00 P.M. B-25.40—11.81—2RO, Rome, Italy. Schedule not known just now. B-25.51—11.76—DJD, Zeesen, Germany. Noon to 4:30 P.M. B-25.53—11.75—GSD, Daventry, England. 3:00 to 5:00 A.M. and 1:00 to 5:45 P.M. B-25.57—11.73—PHI, Huizen, Holland. Daily except Tues. and Wed., 7:30 to 10 A.M.
   B-25.57-11.73-PHI, Huizen, Holland. Daily except Tues. and Wed., 7:30 to 10 A.M.
    B-25.60-11.72-CJRX, Winnipeg, Canada. 8:00 to 11:00 P.M., 11:30 to Midnight,
   E-25.63-11.71-KIO, Kauhuku, Hawaii. Heard in the evenings testing. B-25.63-11.71-Pontoise, France. 2:00 to 11:00 P.M.
  E-25.73-11.66-PPQ, Rio de Janeiro, Brazil. Used irregularly in evenings.
E-25.73—11.00—FFQ, RIO de Janeiro, Brazii. Osed irregularly in evenings.

E-26.09—11.50—XAM, Merida, Yucatan. Irregularly 1:00, 6:00 and 7:00 P.M. T-27.26—11.00PLP, Bandoeng, Java. Phones PNI from 5:00 to 7:00 A.M. T-27.33—10.99—ZLT, Wellington, New Zealand. 5 to 7 A.M. irregularly. VLJ. E-27.65—10.85—DFL, Nauen, Germany. Irregular. T-27.65—10.85—DFL, Nauen, Germany. Irregular. T-27.67—10.84—KWV, Dixon, California. Phones Hawaii daytime. T-27.67—10.84—KWV, Dixon, California. Phones Hawaii daytime. T-27.69—10.74—JVM, Nazaki, Japan. Heard 1:30 to 7:00 A.M. and 7 to 11 P.M. T-28.09—10.68—WNB, Lawrenceville, N. J. Phones Bermuda daytime. T-28.09—10.68—WNB, Lawrenceville, N. J. Phones Bermuda daytime. T-28.14—10.66—JVN. Nazaki, Japan. Phones Europe 3:00 to 8:00 A.M. E-28.28=10.61—WEA, Rocky Point, N. Y. Tests irregularly with Europe. T-28.51—10.52—VK2ME-VLK, Sydney, Australia. 1:00 to 8:00 A.M. GBP.
 1—28.44—10.53—WOK, Lawrenceville, N. J. Friories Drazil and Argentine Irregularly.
1—28.51—10.52—VK2ME-VLK, Sydney, Australia. 1:00 to 8:00 A.M. GBP.
E—28.79—10.42—XGW, Shanghai, China. Testing near 6:00 A.M.
1—28.80—10.42—PDK, Kootwijk, Holland. Phones Java, 7:30 to 9:40 A.M.
1—28.80—10.40—YBG, Medan, Sumatra. 5:30-6:30, 12:30-1:30 A.M., 7:30-8:30 P.M.
1—28.80—10.40—YBG, Medan, Sumatra. 5:30-6:30, 12:30-1:30 A.M., 7:30-8:30 P.M. E—28.85—10.40—KEZ, Bolinas, California. Used irregularly. E—28.91—10.38—WCG, Rocky Point, N. Y. Tests irregularly. B—28.98—10.35—LSX, Buenos Aires, Argentina. 6:15 to 7:15 P.M. daily. Wed., 10 P.M. E—29.03—10.33—ZFD, St. Georges. Bermuda. Heard afternoons irregularly. B—29.04—10.33—ORK, Brussells, Belgium. 2:45 to 4:15 P.M. daily. E—29.06—10.32—PPM, Rio de Janeiro, Brazil. Testing 6:00 to 11:00 P.M. irregularly. E—29.15—10.29—DIQ, Nauen, Germany. Used irregularly. T—29.25—10.26—PMN, Bandoeng, Java. Near 5:30 A.M. daily. VLK. T—29.45—10.22—PSH, Rio de Janeiro, Brazil. Sending music evenings. T—29.50—10.17—RIO. Bakou, U.S.S.R. Phones Moscow 8:00 to 10:00 A.M. T—29.58—10.14—OPM, Leopoldville. Belgian Congo. Phones ORK 9-11 A.M., 3-6 P.M. T—29.79—10.07—EHY, Madrid, Spain. Phones YVR near 4:00 P.M. irregularly.
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Meter Meg. STATION
T1ME
T-29.83—10.05—ZFB, Hamilton, Bermuda. Phones U.S.A. and ships daytime.
T-29.83—10.05—SUV, Cairo, Egypt. Phones GAA after 3:30 P.M.
T-30.09—9.97—KAZ, Manila, P. I. Phones PLV near 2:00 A.M.
T-30.15—9.95—GCU, Rugby, England. Phones New York evenings.
T-30.21—9.93—HKB, Bogota, Colombia. Phones PSK irregularly evenings.
T-30.30—9.90—LSN, Buenos Aires, Argentina. 6:00 P.M. to 6:00 A.M. WLO.
T-30.40—9.87—WON, Lawrenceville, N. J. Phones England evenings.
B-30.40—9.87—EAQ. Madrid, Spain. Daily 5:15 to 7:00 P.M. Sat. 1 to 3 P.M.
F-30.49—9.84—USS IIAA Chiba-Ken. Janan Near 4:00 to 8:00 A.M. irregular
                     Meter Meg.
                                                                                                         STATION
   E-30.49- 9.84-JYS, JIAA, Chiba-Ken, Japan. Near 4:00 to 8:00 A.M. irregularly.
 T-30.52—9.83—JRM, Rome, Italy. Phones Egypt afternoons.
T-30.60—9.80—GCW, Rugby, England. Phones America evenings.
E-30.61—9.80—LSI, Buenos Aires, Argentina. Used irregularly evenings.
T-30.75—9.76—VK2ME-VLK, Sydney, Australia. Phones Java 4:00 to 8:00 A.M.
T-30.77—9.75—WOF, Lawrenceville, N. J. Phones England evenings.
T-30.90—9.71—GCA, Rugby, England. Phones Argentina around 6:00 P.M.
B-31.07—9.66—CT1AA, Lisbon. Portugal. Tues. and Fri., 3:30 to 6:00 P.M.
T-31.08—9.67—DGU, Nauen, Germany. Phones Egypt 11:00 A.M. to 5:00 P.M. irreg.
B—31.27—9.59—HBL, Geneva, Switzerland. 5:30 to 6:15 P.M.
B—31.28—9.59—WBLE, Sydney, Australia. Sun., 12-2; 4:30-8:30; 9:30-11:30 A.M.
B—31.28—9.59—W3XAU, Philadelphia, Pa. Noon to 7:50 P.M.
B—31.30—9.58—GSC, Daventry, England. 6:00 to 8:00 P.M.
B—31.31—9.58—VK3LR, Melbourne, Australia. 3:00 to 8:00 A.M. except Sundays.
B—31.36—9.57—W1XAZ, Boston, Mass. 7:00 A.M. to 1:00 A.M.
B—31.36—9.57—VUY-VUB, Bombay, India. Wed. and Sat., 11:00 A.M. to 12:30 Noon.
B—31.38—9.57—DJA, Zeesen, Germany. 8:00 to 11:30 A.M. and 5:30 to 10:45 P.M.
B—31.44—9.55—LCL, Jeloy, Norway. Relays Oslo 11:00 A.M. to 6:30 P.M. irregularly.
E—31.45—9.54—DJO. Zeeser., Germany. Experimental and irregular. Relays DJA.
B—31.55—9.51—VK3ME, Melbourne, Australia. Wed. 5:00 to 6:30; Sat. 5 to 7 A.M.
B—31.55—9.51—CSB, Daventry, England. 3:00-5:00; 7:30-9:00; 10:45 A.M.-5:45 P.M.
B—31.56—9.50—PRF5, Rio og Janeiro, Brazil. Daily 5:30 to 6:15 P.M.
 T-31.63—9.48—PLW, Bandoeng, Java. Phones Australia 3:00 to 8:00 A.M. irregularly. E-31.67—9.47—WET, Rocky Point, N. Y. Irregular. B-31.80—9.43—COH, Havama, Cuba. Heard 8:00 to 10:00 P.M. irregularly. T-31.86—9.42—PLV, Bandoeng, Java. Phones 7:40 to 9:40 A.M. T-32.15—9.33—CGA4, Drummondville, Canada. Phones Ships and England irregularly. T-32.33—9.28—GCB, Rugby, England. Phones CGA and SUV afternoons. T-32.72—9.17—WNA, Lawrenceville, N. J. Phones England evenings. T-32.83—9.14—YVR, Maracay, Venezuela. Phones Europe afternoons.
 T—33.26—9.02—GCS, Rugby, England. Phones New York evenings.
E—33.29—9.01—KEJ, Bolinas. California. Tests irregularly.
E—33.52—8.95—WEL-W2XBJ, Rocky Point, N. Y. Testing irregularly evenings.
T—33.41—8.98—VWY, Poona, India. Phones England near 8:30 A.M.
T—33.93 to 36.58—8.84 to 8.20—Ships. Heard irregularly.
E—33.94—8.84—KFZ, Little America and KNRA, "Seth Parker."
T—34.19—8.77—PNI, Makasser, D. E. I. Phones Java near 4:00 to 5:00 A.M.
 T—34.56— 8.68—6BC, Rugby, England. Phones ships irregularly.

T—35.02— 8.57—WOO, Ocean Gate, N. J. Phones ships irregularly.

T—35.42— 8.47—DAF, Norden, Germany. Phones ships irregularly.

T—35.60— 8.38—IAC, Piza, Italy. Works ships irregularly.

T—36.65— 8.19—PSK, Rio de Janeiro, Brazil. Sending music 6:00 to 7:30 P.M.

B—37.33— 8.05—CNR, Rabat, Morocco, Africa. Sunday 2:30 to 5:00 P.M.

T—37.60— 7.98—HSJ, Bangkok, Siam. Phones Germany 4:30 to 6:00 A.M. irregularly.

E—37.97— 7. —LSL, Buenos Aires, Argentina. Heard afternoons and Evenings.
 E-38.02—7.89—DFT, Nauen, Germany. Heard near 2:00 P.M. irregularly. T-38.06—7.86—SUX, Cairo, Egypt. Phones Rome and London afternoons. B-38.07—7.88—JYR, J1AA, Chiben-Ken, Japan. Heard 4:50-7:50 A.M. relaying JOAK. B-38.36—7.82—OA4AC. Lima, Peru. Heard 9:00 to 11:30 P.M. B-38.47—7.80—HBP, Geneva, Switzerland. 5:30 to 6:15 P.M. Saturdays. E-38.50—7.78—PSZ, Rio de Janeiro, Brazil. Heard between 6:00 and 11:00 P.M. irreg.
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STATION
            Meter Meg.
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Meter Meg. S1ATION
T—39.44—7.63—RIM, Russia. Phones RKI 6:00 to 8:15 A.M.
T—39.42—7.61—KWX, Dixon, California. Phones Hawaii nights.
T—39.89—7.52—KKH, Kauhuku, Hawaii. Phones KWO evenings.
T—39.97—7.50—RKI, Russia. Phones RIM 6:00 to 8:15 A.M.
B—40.55—7.40—HJ3ABD, Bogota, Colombia. 7:30 to 11:00 P.M.
T—40.71—7.37—KEQ, Kauhuku, Hawaii. Phones Dixon nights.
B—41.55—7.22—HKE, Bogota, Colombia. Mon. 6 to 7 P.M.; Tues., Fri. 8 to 9 P.M.
  B-42.00- 7.14-HJ4ABB, Manizales, Colombia. Daily 4-6; Tues., Fri. 7:30-10:00 P.M.
 B-42.00 — 7.14—HJ4ABB, Manizaics, Colombia. Daily 4-0, 1ucs., Fri. 7.50-10.00 1.22
E-42.86 — 7.00—HJ5ABB, Cali, Colombia. Irregularly evenings.
T-43.45—6.90—GDS, Rugby, England. Phones New York nights.
E-43.86—6.84—HAS, Budapest, Hungary. 3:00 to 5:30 P.M. irregularly.
B-44.05—6.81—HIH, San Pedro de Macoris, R. D. Around 8:00 to 9:00 P.M. irreg.
T-44.41—6.75—WOA, Lawrenceville, N. J. Phones England nights.
T-44.44—6.75—JVT, Nazaki, Japan. 1:30 to 8:00 A. M.. oftimes with music.
E-44.54 6.74—WEJ-W2XBJ, Rocky Point, N. Y. Testing irregularly evnings.
E-44.67—6.73—WQO, Rocky Point, N. Y. Used irregularly.
B-44.71—6.71—TIEP, San Jose, Costa Rica. 5:00 to 10:00 P.M. irregularly.
T-44.96—6.67—YVQ, Maracay, Venezuela. Testing near 10:00 P.M. irregularly.
B-45.00—6.67—HC2RL, Guayaquil, Ecuador. Sun., 5:45-8:00; Tues., 9:15-11:45 P.M.
T-45.10—6.65—IAC, Piza, Italy. Phones ships evenings.
E-45.11—6.65—KFZ, Little America and KNRA, "Seth Parker."
 B-45.31-6:62-PRADO, Riobamba, Ecuador. Thursdays 9:00 to 11:30 P.M.
B-45.38-6.61-REN,Moscow, U.S.S.R. 1:00 to 6:00 P.M.
B-46.25-6.48-HI4D, Santo Domingo, R.D. Wed. and Sat., 11:55-1:40 & 4:40-7:40 PM
B-46.30-6.48-HJ5ABD, Cali, Colombia. 7:00 to 10:00 P.M.
  B-46.51-6.45HJ1ABB, Barranquilla, Colombia. 11:45-12:45 Noon; 7:00-9:30 P.M. B-46.69-6.43-W3XL, Boundbrook, N. J.
 B-47.50- 6.32-HIZ, Santo Domingo, R. D. Daily 4:40-5:40; Sat. 11:00-12:40 P.M. B-47.80- 6.23-HIIA, Dominican Republic. 12:10 to 1:40 and 7:40 to 9:40 P.M. daily,
                                                                      1:40 to 4:40 and 7:40 to 9:40 P.M. Sundays.
  E-48.00- 6.25-Army aircraft heard in daytime.
 B-48.00- 6.25-HJ3ABF, Bogota, Colombia. 7:00 to 11:00 P.M. daily.
B-48.78- 6.15-YV3RC, Caracas, Venezuela. 10:30 to 1:30 and 4:30 to 9:30 P.M.
B-48.85  6.15—CJRO, Winnipeg, Canada. 8:00 to 11:00 P.M.; 11:30 to Midnight. B-48.86  6.14—W8XK, Pittsburgh, Pa. Relays KDKA 4:30 P.M. to about 2:00 A.M. B-48.92  6.13—ZGE, Kuala Lumpur, Malaya States. Sun., Tues., Fri., 6:40-8:40 A.M. B-48.94  6.13—LCL, Jeloy, Norway. Relays Oslo 11:00 A.M. to 6:00 P.M. B-49.00  6.12—Johannesburg, Africa. 4 to 6; 8:00 to 10:30; 11 A.M. to 3:40 P.M.
B—49.02— 6.12—YDA, Bandoeng, Arica.

Heard between 6:00 and 11:00 A.M.

B—49.05— 6.12—W2XE, Wayne, N. J. Relays WABC 6:00 to 11:00 P.M.

B—49.08— 6.12—H21ABE, Cartagena, Colombia. Mon., 10-12; Wed, 8-11 P.M.

B—49.08— 6.11—YV2RC, Caracas, Venezuela. 10:30 to 1:00:5:15 to 10:00 P.M.

B—49.10— 6.11—VE9HX, Halifax, N. S. 8:30 to 11:30 A.M. and 5:00 to 10:00 P.M.

B—49.10— 6.11—VUC, Calcutta, India. 9:30 A.M. to Noon, Sat., 11:45 P.M. to 3 A.M.

B—49.18— 6.10—W3XAL, Bound Brook, N. J. Mon., Wed., Sat. 5 P.M. to 1 A.M.

B—49.18— 6.10—W9XF, Chicago, Illinois. 3:30 to 7:00, 8:30 P.M. to 1:00 A.M.
B-49.29-6.07-VE9GW, Bowmanville, Canada. Mon., Tues., Wed., 3 to 12 P.M.; Thurs., Fri., Sat., 7 to 12 P.M.; Sun., 1 to 9 P.M. B-49.29-6.09-VE9BJ, St. John's, N. B., Canada. Near 5:00 and 11:00 P.M.
B-49.34- 6.08-CP5, La Paz, Bolivia. 8:00 to 9:00 P.M. daily.
B-49.39- 6.07-YV5RMO, Maracaibo, Venezuela. 5:15 to 9:00 P.M.
B-49.40- 6.07-OXY, Skamleback, Denmark. 2:00 to 6:30 P.M. irregularly.
B-49.42- 60.7-OER2, Vienna, Austria. 9:00 A.M. to 5:30 P.M.
B—49.45—6.07—HJN, Bogota, Colombia. 8:00 to 11:00 P.M. irregularly.
B—49.50—6.06—HIX, Santo Domingo, R. D. Tuesday and Friday 8:10 to 10:10 P.M.;
Sunday 8:40 to 10:40 A.M. and 2:40 to 4:40 P.M.
B—49.50—6.06—W3XAU, Philadelphia, Pa. Relays WCAU 8:00 to 11:00 P.M.
B—49.50—6.06—W8XAL, Cincinnati, Ohio. 6:30 A.M. to 7:00 P.M.; 10 P.M. to 2 A.M.
B—49.50—6.05—GSA, Daventry, England. 6:00 to 8:00 P.M. daily.
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TIME Meter Meg. STATION B-49.60- 6.05-HJ3ABI, Bogota, Colombia. 8:00 to 10:00 P.M. irregularly. B-49.65- 6.04-HJ1ABG, Barranquilla, Colombia. 6:00 to 10:00 P.M. B-4r.67- 6.04-YDB, Soerbaia, Java. Around 6:00 to 11:30 A.M. irregularly. B-49.83- 6.02-DJC, Zeesen, Germany. 8:00 to 11:30 A.M.; 5:30 to 10:45 P.M. B-49.83 — 6.02—CQN, Macao, China. Monday and Friday, 7:00 to 9:00 A.M. B-49.83 — 6.02—XEBT, Mexico City. Relays XEB, 6:00 P.M. to 2:00 A.M. irregularly. B-49.92 — 6.01—ZHI, Singapore. Mon., Wed., Thurs., 5:40-8:10; Sat., 10:40-1:10 A.M. B-50.00 — 6.00—RV59, Moscow, U.S.S.R. Daily, 2:00 to 6:00 P.M. B-50.00— 6.00—COC, Havana, Cuba. 9:30-11:00 A.M.; 4-6 P.M. daily. Sat 11 P.M. E-50.08 — 5.99—WVD, Seattle, Washington. Calls Alaska evenings irregularly. B-50.08 — 5.99—YV4RC, Caracas, Venezuela. 4:30 to 10:30 P.M. B-50.25 — 5.97—HJ2ABC, Cucutta, Colombia. 11:00 A.M. to Noon; 6:00 to 9:00 P.M. B—50.25— 5.97—HJZABC, Cucutta, Colombia. 11:00 A.M. to Noon; 6:00 to 9:00 P.M. B—50.26— 5.97—HVJ, Vatican City. Daily, 2:00 to 2:15 P.M., Sun. 5:00 to 5:30 A.M. B—50.42— 5.95—HJ4ABE, Medellin, Colombia. Mon. 7:00 to 11:00 P.M.; Tues., Thurs., Sat. 6:15 to 8:00 P.M.; Wed., Fri. 7:30 to 10:30 P.M. B—50.50— 5.95—TGX, Guatemala City. Sundays 2 to 5 A.M. and also near Midnight. T—51.26— 5.85—WOB, Lawrenceville, N. J. Phones Bermuda nights. B—51.40— 5.83—HCK, Quito, Ecuador. 8:00 to 11:30 P.M. irregularly. B—51.49— 5.88—HJZABA, Tunja, Colombia. 1:00 to 2:00 and 7:30 to 10:00 P.M. T—51.50— 5.82—HJA2, Bogota, Colombia. Phones HJA3 afternoons and evenings. T—51.72— 5.80—KZGF, Manila, P. I. Phones from 5:00 to 8:00 A.M. B—51.90— 5.78—OA4AD, Lima, Peru. Heard 9:00 to 1:100 P.M., irregularly. B—51.90— 5.78—TIX, San Jose, Costa Rica. 8:00 to 9:15 P.M. irregularly. E—52.97— 5.66—CFU, Rossland, Canada. Works CFO and CFN near 10 P.M. irreg. B=33.37 = 5.60—HJ5ABC, Cali, Colombia. 8:00 to 10:00 P.M.
E=55.56— 5.40—HJA-7, Cucuta, Colombia. Testing irregularly.
T=58.30— 5.15—PMY, Bandoeng, Java. Phones Australia near 11:00 A.M.
T=59.08— 5.08—WCN, Lawrenceville, N. J. Phones England evenings.
T=59.76— 5.02—ZFA, Hamilton, Bermuda. Phones U.S.A. and Ships at night.
T=60.26— 4.98—GBC, Rugby. Phones to ships irregularly.
T=61.15— 4.90—CGA5, Drummondville, Canada. Phones ships and England evenings.
T=62.24— 4.82—GDW, Rugby, England. Phones New York evenings. T-63.13—4.75—WOO, Ocean Gate, N. J. Phones ships irregularly.
B-65.85—4.55—WDN, Rocky Point, N. Y. Phones KSRA evenings.
T-66.50—4.51—VPN, ZFS, Nassau, Bahamas. Phones WND and GYD 2 to 10 P.M.
T-67.87 to 73.17—4.42 to 4.10—Ships. Heard irregularly. 1—07.07 to 75.17—4.2 to 4.10—Sinps. Heatu irregularly.

T—69.44—4.32—GDB-G6RX, Ruby, England. Testing 7:00 to 10:00 P.M.

E—69.60—4.31—WTDV, WTDW, Virgin Islands. 2:00 to 3:00 P.M.; weather reports.

B—73.00—4.00—HCJB, Quito, Ecuador. 7:30 to 9:45 P.M. daily except Monday.

B—70.65—4.25—RV15, Khabarovsk, U.S.S.R. 1:00 to 9:00 A.M.

T—73.21—4.10—WND, Hialeah, Florida. Phones irrregularly with VPN. E-75 to 75.8-4.00 to 3.96-Amateurs on voice.

SHIP STATIONS

These stations are telephone stations but are sometimes rented to broadcast a special program from a ship. They operate on four band: 16.85 to 18.27 meters, 22.50 to 24.3 meters, 33.93 to 36.58 meters and 67.87 to 73.17 meters. In megacycles this is 17.80 to 16.42, 13.34 to 12.35, 8.84 to 8.20 and 4.42 to 4.10.

VQJM. Monarch of Bermuda; GLSQ, Olympic; GFJY, Caledonia; GMJQ, Belganland; GFWV, Majestic; GDLJ, Homeric; GMBJ, Empress of Britain; DOAH, Bremen; DOAI, Europa; DHEY, Deutchland; DHJZ, Hamburg; DOBX, Columbus; DHAO, Albert Ballin; DHRL, New York; ICEJ, Rex; IBLI, Conte de Savoia; GBZW, Berengaria; FNSM, Ile de France; GLRZ, Aquitania; VQJP, Queen of Bermuda; DHTY, Resolute. DHDL, Cap Arcona; WNBN, Leviathan.

SPECIAL STATIONS

KFZ, Little America (South Pole) near 45, 34, 31.57, 25.36, 23, 19.64, 17 and 14 meters. KNRA, The Schooner "Seth Parker." 48.70, 24.30, 31.22 meters and same as KFZ. KILS, Alaska. Same as W10XDA in meg., 4.40, 8.81, 8.83, 13.21, 13.24, 17.62, 17.66. W10XDA, "The Morrissey." 74.90, 46.70, 34.68, 23.30, 17.03, 16.99.

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WHICH IS YOUR ANTENNA?

If You Want to BUILD YOUR OWN ANTENNA

For greatest amount of noise reduction and signal pick-up we recommend NNA SUPPLIES

	LYNCH	ANTE
List Price	Ne	t Price
	Cage Spreaders	
	ransposition Blocks	
\$2.00 Kit 8 N	avy Type Insulators	. 1.20
\$1.25 Double :	Lightning Arrester	75
\$1.50 New Ur	iversal Coupler	90
\$1.00 Light H	li-Mho Wire, 100 feet.	60

AN DOLLHIED	
	Price
\$1.50 Heavy Hi-Mho Wire, 100 feet	.90
\$3.00 Giant Killer Cable, 50 ft	1.80
\$12.50 DeLuxe Kit, of 10 spreaders,	20
transposition blocks, 8 navy type insu	
tors, 300 ft. Hi-Mo wire, double light	
ning arresters and Universal Coupler.	\$7.50

NEW LYNCH HI-FI COUPLERS AND KITS

\$3,50 HI-FI DUPLEX Antenna Coupler (for doublets using Giant Killer cable lead-in) ... \$2.10 \$2.50 HI-FI RECEIVER COUPLER (for ALL systems using Giant Killer cable lead-in) \$1.50 \$6.75 HI-FI DUPLEX ANTENNA COUPLING KIT, of antenna coupler, receiver coupler and 50 feet of Giant Killer cable \$7.00 HI-FI SIMPLEX ANTENNA KIT, of receiver coupler, 125 ft. heavy Hi-Mho wire, 35 ft. Giant Killer cable, 3 type insulators, 2 nail-it knobs, 1 stand-off insulator\$4.20

HOW TO SELECT THE ANTENNA FOR YOUR LOCATION

Cage antenna (for greater volume) is used where space available for the flat top (horizontal part of Antenna is less than 80 feet. Use No. 862 or No. 886 if you can take the lead-in off the center; where the lead-in must be taken off at one end, use No. 863 or 887. A Giant Killer

cable lead-in for entire length (No. 886 and 887) is used where lead-in must run at an angle.

Single wire flat top may be used where space available is more than 80 feet. Use No. 872 or 896 if lead-in can be taken off in center, or No. 873 or 897 where lead-in must be taken off one end. Complete Giant Killer cable lead-in (No. 896 or 897) is used where the lead-in is taken off at an angle or run around corners. When used with HI-FI Couplers, the Giant Killer cable lead-in gives the same results as a transposed lead-in.

Giant Kilter cable is also used to bring transposed lead-in from window to receiver.

NOTE-The transposed lead-in or Giant Killer cable lead-in (the part of system which provides for noise reduction) may be of ANY LENGTH, without loss of volume.

HI-FI COMPLETE SYSTEMS, READY-TO-HANG

HI-FI DUPLEX SYSTEMS

HI-FI SIMPLEX SYSTEMS

No. 886 - Doublet cage (41 ft.) with 35 ft. Giant Killer cable lead-in. Complete with new Hi-Fi Duplex Antenna and receiver couplers and Double Light-

ning Arrester. List Price....\$23.00, Your net cost \$13.75 Kit Lynch materials to build 886. List price \$16.75. Your net cost.,\$9.95

No. 887—Inverted L 41 ft. cage with 35 ft. Giant Killer cable lead-in Complete with new Hi-Fi Receiver Coup-

ler and Double Light-

ning Arrester. List Price....\$19.50 Your net cost \$11.75 Kit Lynch materials to build 887. Price \$13.25. Your net cost..\$7.85

No. 896 - Doublet single wire (78 ft, flat top) with 35 ft. Giant Killer cable lead-in Complete with new Hi-Fi Duplex Antenna and receiver couplers and Double Light-

ning Arrester. price \$12.50. Your net cost..\$7.50 ning Arrester.

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No. 897-Inverted L List Price...\$15.50, (78 ft. flat top) with Your net cost. \$9.25 35 ft. Giant Killer Your net cost. \$9.25 cable lead-in. Complete with new to build 896. List Hi-Fi Receiver Coupler and Double Light-

List Price.....\$12.00 Your net cost., \$7.20 Kit Lynch materials to build 897. List price \$9.00. Your net cost.,\$5.40

Each additional 5 feet of Giant Killer Cable Lead-in, attached, List Price, 40c. Net cost, 25c FOR TRANSPOSED LEAD-IN SYSTEMS SEE OPPOSITE PAGE

CONSULTING ENGINEER ON AHTENNA PROBLEMS TO LYNCHO HNICAL ADVISOR OF NEW YORK CHAPTER OF THE CLUB -

THIS THIS? OR

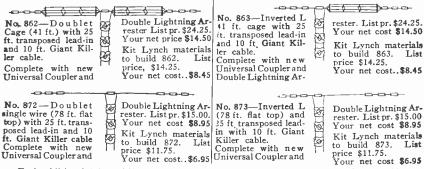


A PICTURE IS WORTH A THOUSAND WORDS

The above drawing explains graphically how our Systems reduce noises and boost signals. A transposed lead-in or Giant Killer Cable DOES NOT pick up any signal but merely "pipes" the signals from flat top to receiver. When the flat top is erected high above the ground, you remove it from the field or man-made interference. Man-made noises lose intensity much faster when traveling upward than when traveling in a horizontal direction. A four wire cage increases signal strength because the four wires act as four paths (instead of one as in a single wire) for the signals to enter your receiver.

TRANSPOSED LEAD-IN ANTENNA SYSTEMS, READY-TO-HANG-UP

Just attach to your masts. LYNCH materials used exclusively.



Each additional 5 feet of Transposed Lead-in, attached, List Price, \$1.50. Net cost, 90c.

Other sizes of Antenna Systems, including 78 ft. cages, Doublet or Inverted L, transposed or Giant Killer cable lead-in built to order. For estimate, send sketch of location, showing space available, heights and sources of interference. Mention make of receiver.

SEE OPPOSITE PAGE FOR HI-FI DUPLEX AND SIMPLEX SYSTEMS PRICES QUOTED in this Advertisement DO NOT INCLUDE TRANSPORTATION

ANTENNA PROBLEMS TO LYNCH YORK CHAPTER OF THE CLUB

POLICE STATIONS

(These stations are used by Police departments to relay messages to police cars that patrol the cities. They come on the air, send their message and go right off again. Since there are several stations on each wavelength, when one is tuned-in just keep your dial set and others will be heard. The first figure given is the wavelength in meters and the second is the wavelength in megacycles. Write dial numbers in space provided.)

WPFP, Clarksburg, W. Va. WPDZ, Fort Wayne, Ind. WPFJ, Hammond, Ind. WPFJ, Hammond, Ind.
WPGO, Huntington, N.Y.
WPDT, Kokomo, Ind.
KGZU, Lincoln, Nebr.
KGHJ, Long Beach, Calif.
WPGS, Mineola, N.Y.
KCHX, Santa Anna, Calif.
KGZD, San Diego, Calif.
KGHD, Seattle, Wash.
KGHE, Snoqualmie, Wash.
WPGN, South Bend, Ind. 2,474 (121.26 2,474 (
WPFW, Bridgeport, Conn.
WPGX, Worcester, Mass.
WPFO, Knoxville, Tenn.
KGHG, Las Vegas, Nev.
WPDP, Philadelphia, Pa.
KGHM, Reno, Nev.
WPFQ, Swerthmore, Pa.
WRDQ, Toledo, Ohio WRDQ, Toledo, Ohio
121.65 2,466)
WPGA, Bay City, Mich.
KGOZ, Cedar Rapids, Iowa
WPGK, Cranston, R.I.
KGPN, Davenport, Iowa
KGZG, Des Doines, Iowa
WPDF, Flint, Mich.
WPEC, Memphis, Tenn.
KGPI, Omaha, Nebr.
WPFV, Pawtucket, R.I.
WPGB, Port Huron, Mich.
KGPK, Sioux City, Iowa
WPEM, Woonsocket, R.I. 2,458 WPDO, Akron, Ohio WPDV, Charlotte, N.C.
WRBH, Cleveland, Ohio
KGZW, Lubbock, Texas
WPGD, Rockford, Ill.
WPDG, Youngstown, Ohio
KGZI, Wichita Falls, Texas 122.40 2,450 ()
WPEF, Bronx, N.Y.
WPEE, Bronx, N.Y.
WPEE, Brooklyn, N.Y.
KGZF, Chanute, Kans.
KGZP, Coffeyville, Kans.
KGPQ, Honolulu, Hawaii
WPDK, Milwaukse, Wis.
WPEG, New York, N.Y.
KGPH, Oklahoma City, Okla.
KGPO, Tulsa, Okla.
KGPZ, Wichita, Kans.

2,490 (

s. Write dial numbers in space 122.85 2,442 () WPGL, Binghamton, N.Y. KGPX, Denver, Col. WPEB, Grand Rapids, Mich. WMDZ, Indianapolis, Ind. WPFG, Jacksonville, Fla. WPFT, Lakeland, Fla. WPFT, Lakeland, Fla. WPDE, Louisville, Ky. WPFZ, Miami, Fla. WPDE, Miami, Fla. WPFZ, Miami, Fla. WPFC, Muskegon, Mich. WPFX, Palm Beach, Fla. KGPP, Portland, Ore. WPFE, Reading, Pa. WPDH, Richmond, Ind. WPES, Saginaw, Mich. KGZR, Salem, Ore.

123.45 2,430 ()
WPDI, Columbus, Ohio
WPDM, Dayton, Ohio
WPFK, Hasensack, N.J.
KGPB, Minneapolis, Minn.
WPEK, New Orleans, La.
KGZJ, Phoenix, Ariz.
WPGI, Portsmouth, Ohio
WPDS, St. Paul, Minn.
WPGE, Shreveport, La.

123.80 2,422 ()
WMJ, Buffalo, N.Y.
KGPE, Kansas City, Mo.
WPFU, Portland, Maine
KGZC, Topeka, Kans.
KGPG, Vallejo, Calif.
WPDW, Washington, D.C.

124.37 2,414 ()
KGZV, Aberdeen, Wash.
WPGH, Albany, N.Y.
KGZX, Albuquerque, N.M.
WPDY, Atlanta, Ga.
KGPS, Bakersfield, Calif.
WPFH, Baltimore, Md.
WPFI, Columbus, Ga.
WCK-WPDX, Detroit, Mich.
KGZM, El Paso, Texas
KGZA, Fresno, Calif.
WRDR, Grosse Point, Mich.
WMO, Highland Park, Mich.
WPGM, Lagrange, Ga.
KGZO, Santa Barbara, Calif.
KGPA, Seattle, Wash.

KGHS, Spokane, Wash. KGZN, Tacoma, Wash. WPDA, Tulare, Calif. WPGJ, Utica, N.Y.

124.69 2,406 () KGBZ, Little Rock, Ark. KGPW, Salt Lake City, Utah

175.23 1,712 ()
WPED, Arlington, Mass.
KGPJ, Beaumont, Texas
WPDB-C-D, Chicago, Ill.
KVP, Dallas, Texas
WPEI, E. Providence, R.I.
KGPL, Los Angeles, Calif.
WPFN, New Bedford, Mass.
WPFA, Newton, Mass.
KGJX, Pasadena, Calif.
WPDU, Pittsburg, Pa.
WPGF, Providence, R.I.
KGZY, San Bernardino, Calif.
WPEH, Sommerville, Mass.
KGZQ, Waco, Texas

175.85 1,706 (WKDU, Cincinnati, Ohio WPET, Lexington, Ky. KGPC, St. Louis, Mo.

178.36 1,682 () KGHO, Des Moines, Iowa WPGG, Findlay, Ohio

179.21 1,674 ()
KGHK, Palo Alto, Calif.
KGPD, San Francisco, Calif.
KGPM, San Jose, Calif.
KGZT, Santa Curz, Calif.

180.07 1,666 () WRDS, East Lansing, Mich. WMP, Framingham, Mass. WPEW, Northampton, Mass. WPEL, Bridgewater, Mass.

180.88 1,658 ()
KSW, Berkeley, Calif.
WPGC, S. Scheneetady, N.Y.
KGZE, San Antonio, Texas

184.05 1,630 () Fire WEY, Boston, Mass. WKDT, Detroit, Mich. KGPD, San Francisco, Call. KIDA, Seattle, Wash.

NEW BAND SPREAD SUPERHET WITH DUAL 3-GANG CONDENSER

A 5-Tube Receiver with 7-Tube Efficiency. Tunes 14.9 to 74.9 and 191.0 to 555.2 meters. Has latest airplane dial, A. V. C. and uses 1-6A7, 1-6D6, 1-75, 1-42 and 1-80 tubes. Conveniently calibrated and marked for the principal European Short Wave reception ranges. Band-spread action is remarkable for its effective tuning of distant signals. Only one of the many fine S.W sets offered by ALLIED. Others include All-Wave Supers tuning 13 to 2500 meters, Professional Short Wave Sets, "Skip-Band" Models, etc. Also a full line of S.W. Converters, Beat Note Oscillators, Preselectors, etc. All featured in the New 1935 ALLIED Catalog—yours for the asking.



ALTAR FREE CIRCUIT DIAGRAM AND PARTS LIST

Here's today's sensation in Short Wave Build-Your-Own Kits. Thousands of Short Wave fans are talking about, and building this remarkable set. Designed by 8 of America's leading radio parts manufacturers. Amazing for DX results! Offers continuous band-spread tuning; optional beat-note oscillator; 10-550 meter tuning range; 7-tube superhet. circuit, A. C. operated; latest tubes; pre-adjusted coils, etc. Easy to build—detailed instructions show where each wire goes. Write today for FREE Parts List and circuit diagram. Only \$2.50 will start you building this great set. For this sum you get the All-Star Foundation Kit consisting of drilled chassis base and front panel, instructions, diagrams, etc. Then you buy the remaining parts as you need them. Write for complete information.

FREE! ALLIED'S NEW 1935 FREE!

Send for our great new 1935 Catalog. Over 100 pages filled with top-notch radio equipment. We specialize in Short Wave merchandise. Amateurs, experimenters, and servicemen will find all their needs fully answered at consistently lower prices. We handle all the leading SW. lines, including National and Hammarlund; the latest S.W. and All-Wave sets and Kits; transmitting gear; new Antenna Systems; test instruments; Sound Equipment; parts, accessories, etc. Write for your Free copy today!



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- [] FREE ALL-STAR PARTS LIST.

Name

Address

FREE Lafourette Lafourette

The BIGGEST Latest, Most Complete 1935 RADIO CATALOG

THIS amazing new 1935 Radio Catalog is the last word ... the greatest Bargain Book of Radio even published by us or any other company. There are more pages, more items listed, more nationally known lines, more Specialized Departments. Over 50,000 items have been assembled in this great 192-page catalog to make it the outstanding book of the Radio Industry.

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SHORT WAVE HEADQUARTERS

Then there is our matchless SPECIALIZED SHORT WAVE DEPARTMENT which in itself is a complete catalog llsting everything the Ham, Brasspounder and Experimenter will ever need. Sets, Kits, Transcievers, Preselectors, Converters, as well as other Short Wave parts and accessories. Practically every nationally known manufacturer is listed here.

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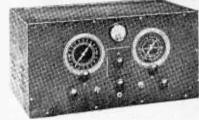
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