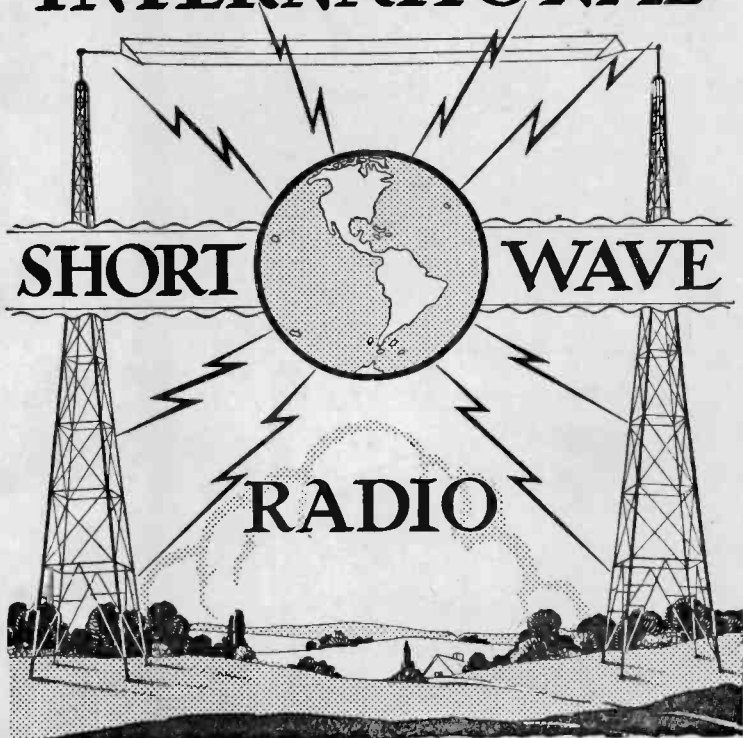


VOL. IX

OCTOBER, 1937

NO. 1

INTERNATIONAL



- Short Wave News.
- Accurate Station List.
- Hourly Tuning Guide.

- Ten Cents a Copy.
- One Dollar a Year.
- Published Monthly.

THE VOICE OF THE
INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO, U. S. A.



**THE FOLLOWING RADIOGRAM TELLS THE STORY
BETTER THAN WE CAN TELL IT**

Schooner Effie M. Morrissey,
W 10 XDA.

To: Radio Mfg. Engineers, Inc.,
306 First Ave.,
Peoria, Illinois.

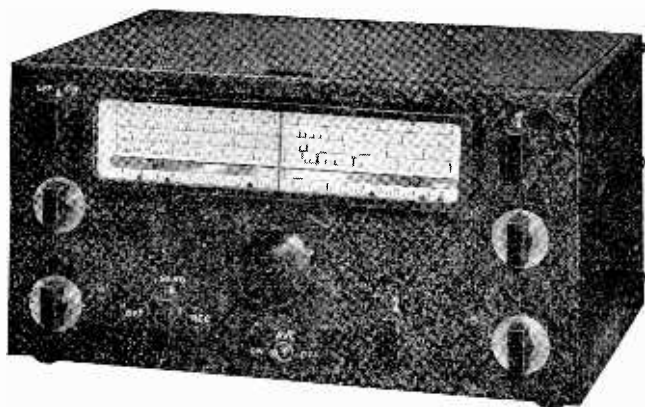
Words fail to express how well the RME-69 and DB-20
are performing under severe conditions. We could wish for
nothing better. Greetings from Northwest Greenland.

Located at
77 Degrées N. Lat.

CLIFF FOSS,
Radio Operator,
Schooner Morrissey,
Bartlett Expedition.

RADIO MFG. ENGINEERS, INC.

306 FIRST AVENUE, PEORIA, ILLINOIS



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BIG in every way that counts, the new NC-80X provides the utmost in economical performance. A new crystal circuit with continuously variable selectivity from 400 cycles (for CW) to 5 kilocycles (for broadcast reception), a new high-frequency IF amplifier for image rejection, and a new direct-reading precision dial are a few of the features that make its performance as remarkable as its low price of \$88.00 Net, complete. It is described in detail in the new National Catalogue.

USE COUPON BELOW

NATIONAL COMPANY, INC., Malden, Mass.

Gentlemen: Please send me your new catalogue No. 270.
I enclose six cents to cover mailing costs.

Name

Address.....(IC10)

International Short Wave Radio is published monthly by the International Short Wave Club of East Liverpool, Ohio, U. S. A. Subscription rate \$1.00 per year anywhere. Post Office or Express Company money orders, checks, cash or United States postage stamps accepted. The rate of exchange on \$1.00 may be learned at all postoffices or banks. Single copies, 10c each.

Note:—Readers who may find it more convenient may send 5 shillings to Arthur Bear, 100 Adams Gardens Estate, London, SE16, 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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SHORT WAVE LISTENER'S SUPPLIES

Writing Paper Many station owners are members of this organization and will verify your report faster if they know you are a member. Nearly all station owners are acquainted with this organization. Some firms offer special discounts to members. In order to let everyone know you are a member, write your reports on, and send your orders on, our special stationery. It has the club emblem printed in blue ink, on a good grade of paper, typewriter size. The price, only 50c per hundred, postpaid.

Club Seals Many members have their own private stationery and wish to use it and still let it be known that they are members of the club. For these members we have seals, or stickers as they are called, at 25c per hundred, postpaid.

Globes We do not sell a map. Distances can not be measured correctly on most maps. For accuracy, beauty, and distinction we suggest a world globe. We have two models for sale. One a beautiful twelve-inch globe which usually sells for \$12.00. It is modern and up to-date, has many short wave stations marked on it, is washable and is printed in eighteen different colors. It makes a wonderful addition to your radio and adds interest to short wave reception when visitors come. We have hundreds of unsolicited letters from people who bought these globes. Six different people have bought five or more of them after getting their first one. Many others have bought two or more. Seldom do we sell one without receiving a letter from the purchaser commenting on the beauty and the price. The price is \$2.75 F. O. B. Indianapolis, Indiana. You must send postage. Ask your postmaster for the postage rate on eight pounds from Indianapolis and add this to the \$2.75. The second globe is exactly the same as the first one except that it stands on the floor and uses a higher pedestal. The first one is sixteen inches high, the second forty inches high. The second one sells for \$3.75 plus postage on ten pounds.

Send all orders addressed to—

International Short Wave Club, East Liverpool, Ohio



Hear More
Short Wave Stations
with RCA
**SPIDER-WEB
ANTENNA!**

Typical RCA Spider-Web Antenna installation shown above. Note small space required. This antenna is the trans-oceanic communications type Stock Nr. 9685, list price \$8.95. Its frequency coverage can be increased to 70,000 kilocycles by adding RCA High Frequency "D" Band Kit —Stock No. 9689, list price \$1.50.

HERE'S an antenna that makes it easy for you to tune those "hard-to-get" stations! The RCA Spider-Web Antenna System gives excellent signal pickup over a frequency range from 140 to 25,000 kilocycles. If you wish, this coverage can easily be stepped up to 70,000 kilocycles.

A unique multiple doublet provides greater signal pickup in every receiving band—assuring you more short wave stations.

Noise reduction is another RCA Spider-Web Antenna feature. Pickup on short-wave band lead-in is eliminated, greatly reducing static caused by oil burners, fans and other similar electrical interference.

This antenna can be erected in a very small space—is easy to install. Its sturdy construction provides sufficient strength to withstand the most severe weather conditions. Completely assembled at the factory, it is yours at surprisingly low cost. Enjoy the additional short wave pleasure this antenna provides—today!



Parts

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

A Service of the Radio Corporation of America



ANNOUNCING *the* SCOTT SIXTEEN

HUNDREDS of people have been prevented from owning a custom built Scott because of the cost and because these fine instruments have been larger than could be conveniently installed in the smaller type of home. The announcement of the 30 tube Scott Philharmonic was followed by the most successful month in the history of the Scott Laboratories, but along with the great number of orders we received hundreds of letters urging us to design a receiver smaller in size, and lower in price, but with the famous Scott performance, quality, and tone.

The development of the new Scott Sixteen is the direct result and we believe it is one of the most beautiful pieces of radio design that has ever come out of our Research Laboratories. A few highlights of this remarkable instrument are below:

● Sensitivity better than 0.6 microvolt ● 50% Higher Fidelity than average radio receiver ● Wavelength Range covering every foreign and domestic station broadcasting radio entertainment on the short wave and broadcast bands ● Separate Bass and Treble Controls, both Continuously Variable ● Tone Balanced Volume Control which keeps constant the relationship between bass, middle, and treble registers at low volume—an important point for those living in small homes and for those who do not care to listen at the higher volume settings ● Undistorted Power Output approximately 300% greater than the average radio ● Selectivity which meets every present day requirement on both standard broadcast band and short waves. ● Two Separate Automatic Gain Control Systems replacing the conventional automatic volume control used in ordinary receivers ● Two Separate Chasses of 16 gauge steel, beautifully Chromium Plated ● Guaranteed 5 Years against defects—20 times longer than the standard 90 day guarantee adopted by RMA ● 16 Latest Type Tubes, all glass. Metal tubes are never used in these fine custom instruments ● Supershield Antenna Coupling System which effectively reduces a larger percentage of man-made static ● Quieter and More Noise-Free Reception for both short wave and broadcast band DX'ers ● Non-Directional Laboratory-Type Sound Projection System with exponential high frequency cone for correct sound diffusion ● Improved Reproduction of Voice. Speech is clear, crisp, and distinct at all volume levels ● Advanced European Type Dial with auxiliary tuning scale for DX logging of foreign stations ● Precision Calibration. Drifting or creeping of signals guaranteed to be less

than two-tenths of 1% ● Inverse Feedback System which smooths out dips and peaks in loudspeaker response (ordinarily the cause of raspy reproduction on ordinary receivers) and at the same time provides improved bass reproduction ● Strictly Custom Construction. A SCOTT in every sense of the word. Built with the same precision and of the same high quality parts that have gone into every Scott for the past 14 years ● Sensitivity Control ● 30 Day Home Trial ● Liberal Time Payments. As little as \$59.50 down puts the Scott Sixteen in your home ● Economical Operating Costs. Uses less than one-fourth the electricity that is consumed by your electric iron ● Priced Lower Than Many Ordinary Radios. Costs less than many 8 and 10 tube receivers because it is sold direct from laboratories. There are no dealers—you save the distributor's and dealer's profits ● 80 Other Amazing Features. These are only a few of the many developments incorporated in this remarkable instrument. Mail the coupon today for the COMPLETE data.

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SUPER SKY RIDER

FEATURES

5 to 550 Meters Coverage ● 6 Bands ● 11 Tubes
 ● Wide Range Variable Selectivity ● Better than One Microvolt Average Sensitivity on all Bands ● 1000° Electrical Band Spread ● "S" Meter ● 13 Watt Undistorted Output ● Air-Timed R.F. Circuit ● Improved Expanding I. F. Transformers ● Improved Crystal Filter Control.

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IMAGINE a receiver that gives you complete coverage from 5 to 550 meters, taking in everything from the 5 meter band to the top of the broadcast band—with wide range variable selectivity (single signal razor-sharpness to true high fidelity*)—with an ingenious, new, electrical band-spreading device** that provides 1000° of band spread—an "S" meter that works on weak signals—with improved image and signal-to-noise ratio, and a dozen other outstanding features. Now you can listen to two-way police communications on 7½ meters—to the interesting and active new 5 meter band—in fact to everything on short waves and the broadcast band as well.

Imagine all this on one receiver—there's not another feature the amateur or short wave listener could possibly desire. It's absolutely revolutionary in performance and scope. It's the New 1938 Super Sky Rider, now on display at your dealer's, at an amazingly low price for so much value. Available on Hallicrafters' liberal Time Payment Plan. See it today!

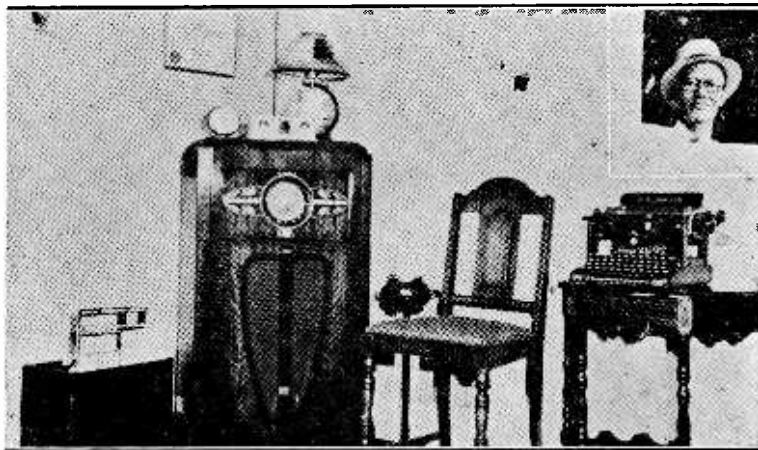
* R.M.A. has defined High Fidelity as 7000 cycles at 20 D.B. down.

** Patent applied for.

See the New 1938 Super Sky Rider at your dealer's or write for complete information.

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 America's Leading Manufacturers of Communications Receivers



ROY DE MENT, TEXAS

Movies and popular songs leads one to believe that Texas is the land where cowboys roam the range with "guns ablazing." Just to prove that this is of the past we show you Mr. Roy De Ment of Plainview, Texas, and his radio den. Instead of "roaming the Lone Star State in his Ford V-8" Mr. De Ment sits at home and roams the world on his short wave set.

NOTICE STATION OWNERS

All short wave station owners and operators interested in broadcasting the new Spatari Universal Radio Language please get in touch with us at once.

SPECIAL PROGRAM

A letter from F. Carville, of station GLZ, the Communist Party station called "Radio Liberte," will broadcast a special program October 18th from 7:00 P.M. to 10:15 P.M. using several different languages, but intended for listeners in America. The program will be composed of music, relays of long wave stations and a few talks. The letter says 18.23.27.28 meters and we believe this means they will be on 18 meters, 23 meters, 27 meters and 28 meters although it may be 18.23 meters and 27.28 meters. Try around 10.70 mc., 11.00 mc., 13.00 mc. and 17.00 mc. and "fish" until you hear a signal.

FOR SALE—One Scott 23 tube all-wave receiver 1½ years old, price \$175.00. Regent Cabinet, ant. amplifier, three speakers, chassis, perfect condition. Raymond Miller, 1512 Arrott Street, Philadelphia, Pa.



ACE REPORTER

It is a good thing we do not give degrees for short wave reporting or Robert Rossi, our Philadelphia, Pa., friend would be called something like Super-Ace, High-grade, deluxe, Honorable Doctor of Short Wave Degrees. Anyhow, he sends lots of reports and knows how to make them out, too. Many members have asked us when he finds time to sleep for his reports cover the entire twenty-four hours of the day.



LATE REPORTS

So many members wait too late in the month to send in reports. While others insist that their magazines be mailed on time. Please do not hold off reports until late in the month and send them all at one time. Send your news as you get it, on a postal card or by letter. Then you run no chances of missing out.

We acknowledge reports too late to be used from members Mildred and Harve Amers, Pomona, Calif.; O. E. Stark, Pierce City, Mo.; Ray Shaffar, Waterloo, Iowa; Morton Meehan, Elizabeth, New Jersey; Ed. Ullance, Wilmerding, Pa.; and N de Las Casa, Caracas, Venezuela.

From these we can take the following: Amers report TGX2 giving schedule as Tuesdays and Fridays 10:00 P.M. to midnight instead of Mondays, Thursdays and Saturdays as before. Also CB1109, XEWB, HI2X, W2XBG, HS8PJ, OAX5C, (and says Ica, not Inca) Radio Martinique, Radio Nacional at Salamanac and HP5A. Mr. Shaffar reports CFA5, COBX, and Radio Nacional at Guadalaraja. Mr. Meehan reports CRCX announcing schedule as weekdays only 7:45 A.M. to 5:00 P.M. instead of noon to 7:00 P.M. Mr. Velasco reports CB1190 on 11.92 mc. at 5:50 P.M. Mr. Stark reports HI4V on 6.48 mc. instead of 6.44 and at San Francisco de Macoris instead of Trujillo, a verie from VP3BG saying daily on 6.13 mc., 11:30 A.M. to 12:30 P.M. and 4:15 to 9:00 P.M., address Crystals Broadcasting Company, Philharmonic Bldg., Georgetown, British Guiana. COBC moved from 9.31 to 9.33 mc.; HI1S, Santiago, on 6.48 instead of 6.42 mc. and YV4RB, Valencia, on 6.49 instead of 6.52 mc. Mr. La Casas reports OAX4C, Peru, on 19.7 meters and Santiago, Chile, on 25.5 meters.



MR. R. B. COMMANS

One of our first members in the Philippines was Mr. Commans of Manila. He is what we call a "Silent" booster. You do not see his name in the magazine often, but he certainly does boost the club and gets us members.

SPECIAL PROGRAMS

CN8AJ, Casablanca, French Morocco, on 7.045 mc. will send a special DX test program October 12th at 0700 GMT or 2:00 A.M., EST. Arranged by Joe Miller, S. W. Editor of S. W. & T., Address is Rene Crettieu, 29 Rue des Villas, Casablanc, Fr. Morocco.

Ray Shaffar of Waterloo, Iowa, has arranged with station COGF, Matanzas, Cuba, on 11.80 mc. to broadcast special programs dedicated to members of this club on October 16th from 11:30 P.M. to 12:30 A.M. and again Saturday October 30th from 11:30 P.M. to 12:30 A.M. next day.

FOR SALE—National HRO receiver rack mounting, new. One Model 12 Universal Microphone Recorder for aluminum disc, records inside to outside or outside to inside, perfect condition. One Supreme 30 watt high fidelity amplifier, double button Universal mike. 12 inch Utah orthovox speaker mounted all on six foot Western Electric Rack or will sell any part of equipment separately. First \$275.00 takes all. See February issue International Short Wave Club for photo of same. Robert O. Lane, 3238 Bishop Street, Cincinnati, Ohio, U.S.A.

STOP-PRESS NEWS

Here is some news received the day before this magazine was mailed out. A station in Bucaramanga, Colombia, is broadcasting on 9.63 mc., or 31.15 meters, from about 7:00 P.M. to 10:50 or 11:00 P.M. The call-sign is not certain, but it is something like HJ7ABB or HJ7ABD. It is quite a powerful station. One report says they relay the same programs as HJ2ABD while another says it is old HJ2ABD under a new call-sign. (Edwards, Pa.; Meehan, N. J.; Velasco, Mexico; Stark, Mo.)

OXY, Denmark, is off the air, according to announcements made, and OZF is a new station now on 9.52 mc., but capable of working on 11.80 mc. OZF is used from 2:00 to 6:45 P.M. (Stark, Mo.; Oxrieder, Pa.; Shaffar, Iowa.)

A station called "Radio Nacional" is on 7.09 mc. They announce "This is the short wave station of the National Revolutionary Party of Guadalajara, Mexico, broadcasting on 7.100 kc. with 200 watts power." Try from 7:00 P.M. until 12:30 A.M. next day. Address is Madero 216. (Stark, Mo.; Amers, Calif.)

EDITORIAL REVIEW

Greetings, members and friends. Another month has passed and we find ourselves starting another year in the history of the club. This month the club starts Volume Nine in the magazine, or in other words, the club has passed eight years of age. We will steal a line from Harry Richman and say "Thanks all you wonderful people." For we realize more than we can express in words, that we owe a debt of gratitude to you wonderful members who have helped us carry on throughout all these years.

Usually we celebrate our birthdays in October. This year we are making a slight change. The celebration this year will take place in December. We find many more people listening-in then and the stations are more willing to broadcast programs, too. So, in our November issue we hope to list a lot of special programs for December. We expect to give a prize to the person sending in the best report on each program instead of giving away a few large prizes for the best reports on all the programs as we have done in the past. Then in case someone has to work while one program is going on, he is not out of the race. A prize will be given for each program. Requests have been sent out to stations already and we hope to have a lot of nice programs and nice prizes lined up.

Now for general information. Members whose photos appear in these magazines may have the electro used to print the picture by sending us postage. This will amount to about ten or twenty cents, depending on how far away the member lives. Please, however, do not ask for them right away. Forms are not taken down until the next magazine is printed. Wait a month before sending the postage.

Quite a few comments were made on our change in style last month. Many liked it and many complained because it was hard to locate the new stations in the news section. This month we try to improve it by telling about the new stations heard in each band first thing. Your comments will still be welcomed. What we are trying to do is this: We want to make the magazine so easy to understand and stations so easy to find that all these short wave set owners who are not interested in DXing will become interested. There are ten thousand set owners to every DX fan. Many of these people would become DX fans if they could find a way to start DXing without taking a course in radio, or something almost as bad. When we say a station is heard on 6.69 mc. it may be understood by every member of the club, but perhaps one out of a thousand set owners would not know where to find the station on the dial of their set. We want to make our magazine so easy to understand and stations so easy to find that everyone will want to become a member. We also want to make it so complete that even the oldest short wave fan will not want to miss a single copy. Your help, your suggestions and your criticisms are most welcome, therefore.

MEMBERSHIP EXPIRATIONS

Members will find the date of the last magazine on their present subscription stamped alongside their name and address on each envelope. The date indicates the last magazine to be mailed on the subscription.

CHAPTER NEWS

It appears that many listeners are not aware of the tremendous help they can secure by joining a local chapter. For many members living in cities where there are chapters do not belong. We suppose that many believe the chapter meetings are made up of technical topics and a few notes on stations heard. But they are far wrong. In most chapters time is set aside for listeners to report new or unusual stations and some time is taken up with technical problems. But, there are many other things that chapters make possible.

One chapter shows movies of foreign lands heard on short waves, gives demonstrations of television and the "magic eye," demonstrates new short wave receivers, teaches amateur transmitting, answers questions presented by members and such things. They have been able to visit the radio rooms of one of the world's largest ships, have visited the International telephone exchanges of one of the largest telephone circuits in the world, and have taken members on tours through many familiar stations. Alone no member would be permitted to do this. They have also arranged for special discounts from many local radio stores.

Another chapter has had field days, when members gather together and drive out into the country and listen-in while enjoying themselves at other things. They have given tests from airplanes and trains. They have had dinner-dances with members and wives attending. There is a myriad of things a chapter can do that members can not do alone. The exchange of news is worth all the trouble of attending meetings. These other things are like gifts from heaven. It is not only your pleasure to attend meetings when you live in a district where one exists, it is also your duty to help maintain such a worthy enterprise.

For details of the New York Chapter write to Jacob Kleimans, 861 East 27th Street, Brooklyn. A postal card will do. This chapter meets on Fridays at Stuyvesant High School, New York City.

For details of the London Chapter write to Arthur E. Bear, 100 Adams Garden Estate, London, SE16. This chapter meets at 80 Theobalds Road, WC1, every Friday, and these are permanent rooms open every night for members.

Details of the Brighton Chapter may be had by writing John Bennett, 205 Braeside Avenue, Brighton 6, England. They meet at 100 Cromwell Road, Hove, on Wednesdays.

Details of the Guernsey Chapter may be had by writing F. S. La Pavoux, 8 Upper Canishers, St. Peters Port, Guernsey. They meet on Tuesdays at 5 Wells Road, St. Peters Port.

COMING FEATURES

We intended to start a new feature this issue for beginners, but it so happened that the day we were supposed to write the material for this edition, we decided to move. This edition was put out under very difficult circumstances. Our new address is 923 Vine Street, instead of 907 Vine Street. Mail may be addressed simply to the International Short Wave Club, East Liverpool, Ohio, with the street address left off. The phone number remains 1685-R. This information is for the host of friends who visit headquarters.

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

3.00 to 4.00 mc. (3 to 4 on Dial)

(General) Station YDL3, Djokjakarta, Java, on 3.45 mc. and station YDH4, Bandoeng, Java, are heard between 7:00 and 9:00 A.M. often. Address of YDH4 is Nillmy Building. (Walcott, Calif.)

4.00 to 5.00 Mc. (4 to 5 on Calibrated Dial)

(New) A letter from Antonio Fuentes L. of HJ1ABE, Apartado 31, Cartagena, Colombia, says they will go to 4.86 mc. or 61.73 meters soon and that all Colombians will move up near 4.85 mc. HJ1ABE has a new verie card and they send a special English program Mondays at 11:00 P.M. However, HJ1ABE is still on 9.50 as we go to press. (Oxrieder, Pa.)

YDE2, Java, on 4.81 mc. is heard broadcasting mornings around 7:00 A.M. (Sparks, Calif.)

HJ3ABD, Bogota, on 4.85 mc. heard until 11:30 P.M. and said back at 10:00 A.M. (Stark, Mo.)

5.00 to 6.00 Mc. (5 to 6 on Dial)

(New) ZNB, Mafaking, Africa, on 5.90 mc. broadcasts daily 1:00 to 2:30 P.M. (Hansen, Africa.) XTW is a new phone at Canton, China, on 5.91 mc. around 9:00 A.M. (Walcott, Calif.)

(Frequency Changes) YV3RC, Caracas, Venezuela, moved back to 5.90 after trying 5.87. (Oxrieder, Pa.) Philco Radio at Saigon, Indo-China, roams between 5.90 and 5.98 mc. Verie says they start Sundays 5:30 A.M. and other days at 6:00 A.M. and broadcast until 9:30 A.M. Not heard lately. (Walcott, Calif.)

(General) Card from Catholic station says 200 watts power on 5.977 mc. daily 3:30 to 5:30 P.M. and also Sundays and Thursdays 7:00 to 8:00 A.M. (mornings) Is known as "Radio Renascenca" and address is Rua Capelo, Lisbon. (Studholme, England.)

PMY, Bandoeng, Java, on 5.14 mc. heard broadcasting daily at 7:00 A.M. now. (Sparks, Calif.) HRN, Tegucigalpa, Honduras, on 5.87 mc. heard one Sunday until 1:00 A.M. (Pegge, England) Heard until 11:00 P.M. often now schedule shows 10:00 P.M. only. (Worcester, Hawaii)

6.00 to 7.00 Mc. (6 to 7 on Calibrated Dial)

(New) Radio Tananarive, Madagascar, says in a letter that they are on 49.9 meters (6.01 mc.) and 31.5 meters (9.53 mc.) daily 12:30 to 12:45 A.M., 3:30 to 4:30 A.M., 10:00 to 11:00 A.M. Address is Le Directeur

des PTT, Radio Tananarive, Administration PTT, Tananarive, Madagascar. (Miller, N.Y.) Try 3:30 to 4:30 A.M. (Editor)

(New) HP5il, Panama City, is on the air again on 6.122 mc. between 6:00 and 11:00 P.M. (Oxrieder, Pa.) CP12, Radio Tunari, Cochamba, Bolivia, is on 6.16 mc. irregularly. (Rossi, Pa.) CP1, Radio Chuquisaca, at Sucre, Bolivia, is on 6.23 mc. at times and on 9.895 mc. at times around 9:00 to 10:00 P.M. (Rossi, Pa.)

(New) A santiago de los Caballeros, Dominican Republic, station H11L is heard on 6.49 mc. between 7:25 and 9:00 P.M. (Oxrieder, Pa.)

(New) W4XAD, University of Florida station, heard on 6.43 mc. calling K4XAO at 7:20 P.M. (Atherton, Vt.)

(New) YNLG, Managua, Nicaragua, on 6.67 mc. hear until 10:30 P.M. (Stark, Mo.) YNLG moved from 8.50 mc. to about 6.348 mc. but moves around. (Oxrieder, Pa.)

(New) XECU, Guadalajara, Jalisco, Mexico, is on 6.08 mc. around 10:55 P.M. (Velasco, Mexico.) XEBS, Jalapa, Vera Cruz, was on 6.09 mc. at 10:17 P.M. once. (Velasco)

(General) HJ1ABJ, Santa Marta, Colombia, verie says 11:30 A.M. to 2:00 P.M. and 5:30 to 10:30 P.M. (Quayle, Canal Zone.) 9MI on the ship "Kanimbla" verie says they broadcast on 6.01 mc., have 50 watts power and are on every Sunday 6:00 to 7:30 A.M. (Myers, Calif.) XEBT, Mexico City, on 6.00 mc. is heard regularly 10:00 A.M. until 12:15 A.M. next day. (Velasco, Mexico.) XEUW on 6.02 mc. is at Vera Cruz, not Mexico City. (Velasco)

Verie from CFCX, Montreal, Canada, says CFCX relays CFCF from 8:00 A.M. until 11:15 P.M. except Sundays which is 9:00 A.M. until 11:15 P.M. (Fortune, Pa.) Our list shows 7:00 A.M. until midnight because it was heard, regardless of printed schedule—Editor. Rangoon, Burma, on 6.007 mc. sends letter saying schedule is 9:20 to 9:40 P.M. and 9:00 to 9:30 A.M. (Walcott.) Heard in Java. (Hardemann.)

HP5B, Panama, verie says daily 11:30 A.M. to 1:00 P.M. and 5:00 to 11:00 P.M. Is on 6.03 mc. (Quayle, Canal Zone.) XETW, Tampico, Mexico, heard at 9:52 P.M. on 6.04 mc. (Velasco, Mexico.)

Letter from OAX4Z now says 6.082 mc. 7:00 to 11:30 P.M. (Stark, Mo.) Heard on 6.077 mc. (Oxrieder, Pa.) Heard 11:00 A.M. until midnight now. (Cancio, Cuba.) Heard 8:00 A.M. until 11:30 P.M. (Velasco, Mexico.) Mysore, India, station heard on 6.08 mc., 6:30 to 10:00 A.M. (Hardeman, Java.) W9XAA, Chicago, on 6.08 mc. will leave the air for good October First. (Riggle, Ohio.)

HJ5ABD, Cali, Colombia, verie says 11:00 A.M. to 2:00 P.M. and 6:00 P.M. to 11:00 P.M. (Quayle, Canal Zone.) VPB, Colombo, Ceylon, verie says 6.16 mc. but heard about 6.097 mc. or 6.115 mc. moving around. (Walcott, Calif.) W9XF, Chicago, Illinois, on 6.10 mc., heard signing off at 8:00 P.M. saying back at 12:05 A.M. (Herzog, N.Y.) Schedule sent out shows W3XAL and W9XF on the air 5:00 to 8:00 P.M. and 12:05 to 1:00 A.M. (Editor) HJ3ABX, Bogota, Colombia, on 6.12 mc. uses organ number "Indian Love Call" at sign-off. (Fortune, Pa.) XEPW, Mexico City, now owned and operated by different people. New call is XEGW same address and same schedule. (Velasco, Mexico.)

Letter from ZEB, Bulawyo, Rhodesia, Africa, says 6.147 mc., operating simultaneously with ZEA, Salisbury, on 5.88 mc. relaying long wave station ZEC. Has 325 watts power now and broadcast Sundays 3:30 to 5:00 A.M., Mondays, Wednesdays and Fridays 1:15 to 3:15 P.M.; Tuesdays 11:00 A.M. to noon; Thursdays 10:00 A.M. to noon. Address is P. O. Box 792, Salisbury, South Rhodesia, Africa. (Miller, N. Y.)

TG2, Guatemala City, heard on 6.17 mc. instead of 6.31 at 11:45 P.M. Close to XEXA. (Velasco, Mexico.) H11X, Trujillo, Dominican Republic, heard on 6.31 mc., not 6.34 from 8:15 until 10:06 P.M. instead of 4:45 to 6:00 P.M. as schedule shows. (Fortune, Pa.) Signed off at 8:30 P.M. once. (Unsigned Philadelphia.) COCW, "La Voz de la Antillas," Havana, Cuba, on 6.324 mc. heard 4:45 P.M. and as late as 11:00 P.M. when schedule shows 8:00 to 10:00 P.M. (Rossi, Legge, Stark, Heglund.)

Japanese airports are heard on 6.48 mc. quite often around 2:00 to 5:45 A.M. Some are J2AA, J2IK, J3A1 and J2FA. HCVT, La voz de Tanghuria, at Ambato, Ecuador, is on 6.55 mc. evenings. (Rossi, Pa.) TI2M, San Jose, Costa Rica, is on 6.79 mc. irregularly. (Rossi, Pa.) XGOX, Nanking, China, is off the air now. (Walcott, Calif.) XBA, Mexico, actually on 6.96 not 6.93 mc., from 10:50 to 11:00 P.M., when schedule says 7:00 to 8:45 P.M. (Stark, Mo.) At 11:10 P.M. (Seymour, Mo.) VK8SC, Port Hedlund, West Australia, is on 6.96 mc. with 200 watts power. Is owned by Australian Medical Service to broadcast medical services to flying doctors. Heard Sundays 4:30 to 5:15 A.M. and once worked postmaster at Melbourne at 8:30 A.M. (Walcott.)

7.00 to 8.00 Mc. (7 to 8 on Calibrated Dial)

(New) Station operated by Communist Party at Becon Courbevoise, France. broadcasts now on 7.31 mc. from 4:15 to 4:45 P.M. in Portuguese, on 7.39 mc. beginning at 3:10 P.M. in French and on 7.41 mc. beginning at 6:45 A.M. mornings in French. (F. Carville, Operator.)

(New) station using slogan "Radiodifusora del Pueblo," heard on 7:08 mc. until 11:14 P.M. gave address as Comite Estacion Guadalajara, Jalisco, Mexico. (Velasco, Mexico.) Is XEDQ, Apartado 197, heard on 7.12 mc. around 11:00 P.M. until midnight. (Seymour, Md.) Some station heard near 7.10 mc. from 10:30 until 11:30 P.M. but it is not XEDQ. (Oxrieder, Pa.) Heard daily on 7.10 mc. 9:00 to 10:00 P.M. (Grey, Ill.) XEDQ generally operates on 9.48 mc.—Editor.

(New) A station in Lima, Peru, using slogan "Radio Comerciales" is on 7.56 mc. broadcasting until 11:00 P.M. and then works amateurs. (Worcester, Hawaii.)

(New) RK1, Moscow, on 7.53 mc. is relaying RAN programs now 7:15 until 9:30 P.M. (Oxrieder, Pa.) On 7.70 but claims 7.62. (Ehbecke, Pa.) Is 7.54 mc. (Stockbridge, Mass.) Is supposed to be on 7.51 mc.—Editor. Heard phoning on 7.545 mc. 8:00 to 10:00 P.M. now. (Flagg, Mass.)

(New) Chinese phone heard on 7.22 mc. 7:00 to 9:00 A.M. (Walcott, Calif.)

(New) YSD, San Salvador, El Salvador, on 7.894 mc. broadcasts, relaying YSS, from 9:00 until 10:30 P.M. or 11:00 P.M. Is 500 watt transmitter, government owned and in charge of Julio Enrique Avila. (Mayes, San Salvador.) Reports show it was heard from 8:00 P.M. until 10:15 or 10:30 P.M.

Address announced as Director General of Communications. (Shaffer, Lopez Diaz, Worcester, Waite, Oxrieder, Stark, Grey, Legge, Velasco; Ebbecke.)

(New) A station at Hanoi, Indo-China, is on 7.44 mc. mornings. (Hardeman, Java.) Is on 7.32 mc. (Cooke, India.)

General) EA8AB, Santa Cruz, Canary Islands, is off the air now. Was on 7.01. (Miller, N. Y.) FO8AA, Tahiti, on 7.10 mc. broadcasts Tuesdays and Fridays, 11:00 P.M. until midnight and stays on until 12:45 A.M. at times. Has new President now, name is H. C. P. Juventin. (Worcester, Hawaii.)

8.00 to 9.00 Mc. (8 to 9 on Dial)

(New) HCJB, Quito, Ecuador, is now on 8.85 mc. between 8:45 and 10:25 P.M. HC1JB, amateur station on 20 meters said they were on 8.945 mc. 9:00 to 11:00 P.M. daily. (Stark, Mo.)

(New) The African Broadcasting Corporation is testing a new station on 8.90 mc. every Sunday between 5:00 A.M. and 3:00 P.M. relaying programs from Capetown. (Hansen, Africa.) JRZB on the ship "Yasukuni Maru" is on 8.90 mc. phoning JZG, Japan, (6.33 mc.) around 6:00 A.M. (Myers, Calif.) HC1EC at Quito, Ecuador, was on 8.60 once. (Rossi.) XEAW, Vera Cruz, Mexico, is a new station reported on 8.63 mc. between 8:00 and 10:00 P.M. (Erwin, Ill.) Heard 9:00 P.M. to 12:50 A.M. using slogan "Auditorio del Continent." (Rossi, Pa.) ZUD, Pretoria, South Africa, is testing on 8.73 mc. between 7:00 and 8:00 A.M. Reports should be sent to the Radio Engineer care of Postmaster Pretoria. (Hansen, Africa.) YNPR, "Radio Pilot," verie says YN1PR is call and frequency is 8.65 mc. (Eder, Minn.) Heard on 5.85 mc. now. (Oxrieder, Pa.)

9.00 to 10.00 Mc. (9 to 10 on Dial)

(New) COBX, San Miquel, 194, Havana, Cuba, is on 9.17 mc. relaying CMBX. Heard between 6:00 and 10:15 P.M. Says 9.135 mc. Slogan is "Radio Alvarez." (Stark, Mo.) On 9.17 evenings. (Velasco, Mexico.) Is on 9.20 mc. from 6:00 to 9:30 P.M. (Oxrieder, Pa.)

(New) HBL, Geneva, Switzerland, is broadcasting almost nightly between 7:00 and 8:00 P.M. (Flagg, Mass.; Oxrieder, Pa.)

(New) Letter from Copenhagen, Denmark, says station OZF would be used on 9.52 mc. after September 6th from 2:00 to 6:45 P. M. Heard around 6:45 P.M. (Oxrieder, Pa.)

(New) YSH, San Salvador on 9.52 mc heard around 9:00 to 9:40 P.M. (Lopez Diaz, Cuba, and Oxrieder, Pa.) A station XTA, Hanhow, China, on 9.55 mc. heard several times. (Gallagher, California) KZRM, Manila, P. I., on 9.57 mc. supposed to broadcast between 9:00 P.M. and 9:00 A.M. is heard in America between 4:00 and 9:00 A.M. Also reported 4:30 to 5:00 P.M., afternoons. (Studholme, England.)

(New) JFAK, Taihoku, Japan, is on 9.625 mc. broadcasting 4:00 to 10:30 A.M. weekdays and 10:15 A.M. Sundays. (Walcott, Calif.; Cooke, India; Hardeman, Java.) Relays same program as JIB on 10.535 mc. around 10:00 A.M. (Gallagher, Calif.)

(New) JDY, Dairen, Kwangtung, on 9.925 mc. is broadcasting daily 7:00 to 8:00 A.M. Reads news in English 7:45 to 8:00 A.M. (Walcott, Calif.; Grey, Ill.; Hardeman, Java; Cooke, India.) Gave address as 7 Oyanmagori, Dairen. (Chavez, Calif.)

(New) CFA5, Drummondville, Canada, is a new phone on 9.63 mc. heard 2:30 A.M. (Shaffar, Iowa.) At 12:30 noon. (Gallagher, Calif.) At noon with call CGA5. (Wooten, Ala.) At 8:35 A.M. with call CFHI. (Edwards, Pa.)

(New) A station announcing LR3-CXA8, Buenos Aires, Argentina, on 9.65 mc. heard until midnight broadcasting. (Worcester, Hawaii.) On 9.62 mc., 11:55 P.M. to 12:05 A.M. gave address as Radio Belgrano, Buenos Aires, (Velasco, Mexico.) Says "LR3, Radio Belgrano, Buenos Aires. CXA8 Montevideo, Uruguay, onda corte," so must be CXA8 on short waves. Heard on 9.637 mc. (Oxrieder, Pa.) Please listen for LRX on 9.66 mc. at same time as it may be LRX.—Editor.

(New) Radio Martinique at Fort de France, Martinique, is back again, this time on 9.68 mc. They broadcast from 6:36 to 7:36 P.M. daily, have a lady announcing, sign off with "Marseillaise" and give address as P. O. Box 136, Fort de France. Members disagree on the wavelength some, but this is close to the place they are on now. (Edwards, Kash, Oxrieder, Stark, Grey, Fortune, Legge, Wooten, Eder and Ebbecke.)

(New) A station with call like XGOA heard on 9.80 mc. 6:45 to 10:00 A.M. broadcasting several times. Woman reads news in English 7:30 to 7:45 A.M. (Walcott, Calif.)

(General News) Veries from COBZ, "Radio Sales," Havana, Cuba, say they have 1500 watts, on 33.32 meters or 9.03 mc., address Box 866 and they relay CMBZ. (Heglund, Quayle, Nash, Stuholme.) Heard on 9.00 mc. (Oxreider, Pa.) Heard 8:00 A.M. until 11:00 P.M. or midnight. COBC, Havana, on 9.31 mc. uses the slogan "Radio Progreso Cubano." Veries say address is Box 132, Havana. (Pegge and Legge.) Says relay CMBC daily 6:55 A.M. until 12:30 A.M. next day. (Erwin, Ill.) Heard starting up at 2:00 P.M. (Nash, N.Y.)

OAX4T verie says 31.37 meters or 9.562 mc. 11:30 A.M. to 1:30 P.M. (Stark, Mo.) EAR, Madrid, on 9.48 mc. is used now only from 6:30 to 8:30 P.M. (Ebbecke, Pa.) XEWW, Mexico City, on 9.50 mc., using the slogan "La Voz de le American Latina dese Mexico," broadcasts from 6:00 P.M. until midnight usually but sometimes stays on 15.16 mc. until midnight instead. The new schedule for W2XAF on 9.53 mc. is shown in our list. Member Fortune says W2XAF was heard 1:30 to 2:00 P.M. one Friday when not scheduled.

HS8PJ, Bangkok, Siam, is now on 9.51 mc. Thursdays 8:00 to 10:00 P.M. (Walcott, Cooke, Amers.) FIQA, Madagascar, may be heard by some roaming between 9.50 and 9.58 mc. around 7:30 to 10:30 A.M.

OAX5C, Peru, is on about 9.64 mc. relaying OAX5A until 11:00 P.M., signing off between 11:00 P.M. and midnight. Uses slogan "Radio Libertad" instead of "Radio Universal" now. (Worcester, Hawaii.) This must be a mistake, for they use "Radio Universal" and the Communist Party station in France used "Radio Libertad." Is at Ica. (Oxrieder) Is spelled Inca. (Rossi, Pa.)

YDA, Batavia, Java, was on 9.67 mc. for a while but went back to 3.04 mc. (Hardeman, Java.) YDB, Java, verie says 9.61 mc. now but heard on 9.57. (Eder, Minn.) COCM, Havana, Cuba, roamed all around

last month between 9.68 mc. and 9.84 mc., using as many as three frequencies in one night. They said 9.775 all the time. Uses slogan "Transradio Columbia" and relays CMCM, Apartado 33. Also used slogan "Ondas Corta Commercial." (Oxrieder, Pa.) Heard at noon until 1:30 P.M. and 6:00 P.M. until 11:00 P.M. by the following: Nash, Velasco, Pegge, Worcester, Seymour, Oxrieder, Stark, Erwin, Gallagher; Eder and Studholme.

CSW, Lisbon, Portugal, discontinued 11.04 mc. wave and used 9.94 mc. only for a while between 3:00 and 8:00 P.M. Now on 11.04 from 2:00 to 4:00 P.M. and on 9.94 from 4:00 until 8:00 P.M. (Ebbecke, Pa.) On 11.04 at 2:00 P.M. (Stockbridge, Mass.)

10.00 to 11.00 Mc. (10 to 11 on Dial)

(New) A Communist Party station at Becon Cournevois, France, broadcasts now on 10.07 mc. from 5:00 to 5:45 P.M. in German and on 10.70 mc. from 5:45 until 6:30 P.M. in Italian. Address is Radio Home, 10 Avenue de la Liberte, Becon Courbevoie, France. (Carville, operator.)

(New) A station saying "Radio Nacional de Espano" at Salamanaca, Spain, with a lady announcing and saying "Viva Franco" and "Viva Espano" has been reported on 10.37 mc. between 7:00 P.M. and 8:48 P.M. Uses some English. This would be the wavelength of EAJ43, Canary Islands, but one member (Stark, Mo.) says EAJ43 is on 10.43 mc. and another (Oxrieder, Pa.) say EAJ43 is still on 10.37. This new station is reported on 10.34 mc. (Erwin, Ill.) On 10.98 mc. (Fortune, Pa.) On 28.92 meters. (Eder, Minn.) Announcer says "Back at 2:00 A.M. Spanish Time" when signing off which is the same as saying back at 9:00 P.M., but no one reports it at that time. (Wilbur, New Jersey.)

(New) JIB, Taihoku, Taiwan, Japan, on 10.535 mc. is broadcasting now from 9:05 to 10:25 A.M. weekdays and 9:50 until 10:15 A.M. Sundays. Gives 15 minutes news in English before signing off. Relays JFAK. (Walcott, Calif.; Gallagher, Calif.; Chavez, Calif.)

(General News) JVN, Tokio, Japan, on 10.66 mc. broadcasts irregularly 1:30 to 2:15 A.M. (Gallagher, Calif.) Phone XGR, China, heard on 10.95 mc. calling XGJ at 6:18 A.M. (Waite, N. Y.) This is new frequency.

11.00 to 12.00 Mc. (11 to 12 on Dial)

(New) WMI, Lorain, Ohio is new station heard giving weather reports on 11.05 mc. at 11:10 A.M. (Atherton, Vt.) Heard on 11.37 mc. nightly 10:00 to 10:10 P.M. with weather reports. (Stark, Mo.)

(New) A station XEWB was heard on 11.33 and 11.41 mc. between 9:00 P.M. and 11:40 P.M. in July. A verie from station says 11.71 mc., Apartado 3808, Hospicio 50, Guadalaajara, Jalisco, Mexico. (Walmsley, Cal.)

(New) XETM, Apartado 74, Villa Hermosa, Tabasco, Mexico, heard near 11.52 mc. between 7:00 and 11:00 P.M. (Oxreider and Rossi, Pa.)

(New) WXA, Juneau, Alaska, heard on 11.55 phoning WVD, Seattle, at 11:00 P.M. May also use 5.32 mc. and 9.92 mc. WVD heard on 11.93 mc. 11:00 P.M. until 2:00 A.M., both WXA and WVD using scrambled speech. (Walcott, Calif.) WXA at 7.33 P.M. on 11.00 mc. (Herzog, N.Y.)

(New) Phone JVL, Nazaki, Japan, on 11.66 mc. heard 6:00 to 8:00 A.M. (Karpen, Pa.)

(New) HP5A. Apartado 954, Panama City, verie says 500 watts power, 11.70 mc. Slogan is "Radio Teatro Estrella de Panama." No schedule is given. (Vantassel, Erwin, Pegge, Atherton and Herzog.) Verie says daily 11:45 A.M. to 1:00 P.M. and 6:00 to 10:00 P.M. (Quayle, Canal Zone.) Heard coming on at 6:00 P.M. playing "Anvil Chorus" from opera "Travatore." (Studholme, Nash and Kash.)

(New) YSM, San Salvador, El Salvador, on 11.71 mc. has 500 watts power, is government owned and under direction of Julio Enrique Avila and broadcasts daily 1:30 to 2:30 P.M. (Mayes, San Salvador.) Relays YSS and send reports to Director of Communications Electrica, San Salvador.—Editor. Heard at 8:55 P.M. (Groves, Mass.) At 9:20 P.M. (Lopez Diaz, Cuba.) At 9:03 P.M. (Velasco, Mexico.) At 9:51 P.M. (Stark, Mo.)

(New) A station using slogan "Las Broadcasting Populares para toda la America," and "Otter Becker" is on about 11.76 mc. between DJD and GSD broadcasting between 11:00 A.M. and midnight. Gives address as Casilla de Correos 706 or Campos Sport de Nunoa. Is CB1170 and relays CB89 and has 1 kw. power. (Neve, Mexico.) Heard 6:00 to 11:00 P.M., is CB1180 and relays CB89, Santiago, Chile. (Oxrieder, Pa.) Heard 8:00 P.M. until midnight. (Gallagher, Calif.) Is CB1170. (Velasco, Mexico.)

(General News) OER3 is the call of the station at Vienna on 11.80 mc. and OER2 is on 6.072 although all veries say OER2. (Ebbecke and Rossi.) JZJ, Japan, schedule says 8:00 to 9:00 A.M.; 3:00 to 4:00 P.M. and 4:30 to 5:00 P.M. Heard once last month at 5:25 A.M. with JVN. (Herzog, N.Y.) OAX5A on 11.796 mc. is at Ica, not Inca, Peru. (Oxrieder and Stark.) Is spelled Inca. (Rossi.)

COGF, Havana, Cuba, on 11.80 mc. sends veries saying different things on them. Late one says 1:00 to 4:00 P.M. and 6:00 to 10:00 P.M. weekdays and 9:00 to 10:00 A.M. Sundays. (Atherton, Vt.) Another says 6:00 to 10:00 P.M. every day. (Boothroyd, England.) Heard at 5:00 P.M. and verie says slogan is "Ecos del Valle Yumuri." (Studholme, England) Heard at 5:00 P.M. (Herzog, N.Y.) On 11.804 now. (Oxrieder.)

SBG, Motala, Sweden, on 11.71 mc. broadcasts now 1:20 to 2:05 A.M., 8:00 to 9:00 A.M. and 11:00 A.M. to 1:30 P.M. Philco Radio, Saigon, Indo-China, is roaming between 11.71 and 11.73 mc. broadcasting until 9:30 A.M. and starting between 4:30 and 6:30 A.M. TPA4, Pontoise, France, on 11.72 mc. heard at 4:30 and 6:00 P.M. when schedule shows 6:00 to 8:00 P.M. and 10:00 P.M. to midnight. (Nash, N.Y.)

CR7BH, Lourenco Marques, Portuguese East Africa, on 11.718 mc. is now on the air from 12:15 to 1:00 A.M., 9:30 to 11:00 A.M. and 12:45 to 3:45 P.M. weekdays and 5:30 to 7:00 A.M. and 10:00 to 12:30 P.M. and 1:30 to 3:30 P.M. Sundays. (Hansen, Africa.) Is heard 3:15 to 4:15 P.M. (Seymour, Md.) Heard at 6:30 A.M. daily. (Sparks, Calif.) Apparently station is not keeping schedule.—Editor.

OAX5B verie says 11.796 mc. daily noon to 4:00 P.M. and 7:00 to 11:30 P.M. Address is Avenida San Luis, Inca, Peru. Denmark is still testing on 11.804 mc. between 5:00 and 9:00 P.M., but COGF, Cuba, is on top of them. (Oxrieder, Pa.) OLR5A, Czechoslovakia, on 11.84 mc. broadcasts

daily 2:30 to 4:30 P.M. and Mondays and Thursdays 7:00 to 9:00 P.M. Heard once at 4:00 A.M. (Kash, Tenn.) Heard until 10:07 P.M. when sign-off is supposed to be 9:00 P.M. (Fortune, Pa.) Tests 4:35 to 4:50 P.M. on 11.76 mc. or 15.23 mc. every day except Sunday. (Ebbecke, Pa.)

WVD, Seattle, Washington, on 11.93 mc. may be heard phoning Alaska 11:00 P.M. to 2:00 A.M. (Walcott, Calif.) H12X, Trujillo, D. R., on 11.97 mc. heard Sundays and Wednesdays when schedule says Tuesdays and Fridays 7:40 to 9:10 P.M. (Amers, Calif.) Heard until 10:10 P.M. Tuesdays. (Stark, Mo.)

12.00 to 13.00 Mc.

(New) A station CB1109 is on about 12.02 mc. Says 25 meters and 11.19 mc. Uses slogan "La voz de Arica at Arica, Peru," and signs off in English. (Worcester, Hawaii.) Says "Radio Suss at Valdivia, Chile., Signs off at 11:00 P.M. saying they would be back at 11:00 A.M. next day. (Stark, Mo.) Heard 8:00 to 11:00 P.M., sounds like CB1109, Valdivia, Chile. (Gallagher, Calif.) This station must not be confused with the station called "Radio Service" on 12.30 mc. Member Stark says "Radio Service" moved to 11.76, but it may be another station, and "Radio Service" may still be on 12.30 mc.

(General) RNE, Moscow, seems to be roaming between 12.00 and 12.10 mc., and broadcasting irregularly. Heard on 12.07 nightly at 10:00 P.M. (Oxrieder, Pa.) Sends German programs daily 3:00 to 4:00 P.M., Wednesdays and Sundays 5:00 to 6:00 P.M. and 7:00 A.M. to 11:00 A.M. (Herzog, N.Y.) Broadcasts daily 2:00 to 5:00 P.M.—Editor.

TPZ, Alger, Algeria, on 12.12 mc. broadcasts some afternoons 3:30 to 4:30 P.M. VVS, Mingaladon, Burma, 12.88 mc. and VVN, Fort St. George, Madras, India, phone each other 10:00 P.M. to 7:00 A.M. according to verie. Has 750 watts power. VVN is on 13.26 mc. (Walcott, Calif.) The MacGregor Expedition to Ellesmere Island, may broadcast on 17.31 mc., 12.8625 mc., 8.65 mc. or 6.24 mc.

13.00 to 14.00 Mc.

(New) HC2FA, "Radio Paris," at Guayaquil, Ecuador, owned by Dr. Francisco Andronde, is on 13.10 mc. Mondays 8:00 to 10:00 P.M. broadcasting. Has 15 watts power. (Rossi, Pa.) SPW, Warsaw, Poland, on 13.63 mc. broadcasts Mondays, Wednesdays and Fridays 12:30 to 1:30 P.M. and Sundays 11:30 to 12:30 P.M. (Nichols, Ebbecke, Boothroyd and Stark.)

(New) The Communist Party Station at Becon, Caourbevoie, France, broadcasts on 13.87 mc. from 11:00 P.M. on in French and Spanish. (F. Carville, Director.)

(General) Call of the phone on 13.00 mc. is TYC, Paris, according to verie. (Seymour, Md.) ZBG, Kuala Lumpur, Selanger, on 13.642 mc. was heard calling Java, 7:30 to 8:15 A.M., but letter says they will not verify. Address was Posts and Telegraphs. (Walcott, Calif.)

14.00 to 15.00 Mc.

(New) A station XW6A on 14.15 mc. was heard calling K4SA and saying they were sailing away from California westward. (Stark, Mo.)

Heard at 6:05 A.M. saying they were 300 miles from California. (Waite, N.Y.)

(New) A phone KQH, Hawaii, heard on 14.90 mc. relaying programs of KGMB at 11:30 P.M. once. (Gallagher, Calif.)

(General News) EA9AH, Tetuan, Spanish Morocco, on about 14.03 mc. seems to broadcast the same music over and over and shout "Viva Franco." Also works amateurs at times. Veries say they broadcast war news at 10:45 P.M. and 1:00 A.M., but they do not say if this is G.M.T. or not. If it is then listen at 5:45 P.M. and 8:00 P.M., E.S.T. (Many)

UPOL, the Soviet station at the North Pole, is now on about 14.10 mc. and talks to amateurs between 2:00 and 4:30 P.M. (Rossi, Pa.) Letter says call is REAM and they are on 7 and 14 bands. Connections with Moscow are not made direct but through a transmitter at Rudolph Island, (Smith, England).

VE1IN, of the Bowdoin-Kent Expedition has been assigned 14.285 mc. and 3.885 mc. and will visit polar regions. Address Bowdoin College, Brunswick, Maine.

A Japanese station on 14.65 mc. is broadcasting baseball games around 11:15 P.M. (Shaffar, Iowa.) This must be JVH—Editor. Program from Italy heard 3:50 to 4:15 P.M. on about 20 meters. (Edwards, Pa.) This might be IBS on 14.48 mc. or IRJ on 13.22 mc.—Editor.

15.00 to 16.00 Mc.

(New) Communist Party station at Becon Caourbevoie, France, broadcasts on 15.19 mc. starting at 7:15 P.M. irregularly. (F. Carville, Director)

(New) PRF5, Rio de Janeiro, Brazil, was heard on 15.00 mc. at 5:30 P.M. once, apparently moving to avoid XEWW on 9.50 mc. (Studholme, England)

(New) A station VE9HS on the ship "Nascopie" heard twice, once at 6:30 P.M. at Craig Harbor and once at Bellots Straits. Operated by the National Research Council. Ship is supply ship for Hudson Bay Trading Company of Canada. Works VE9AV and may use 15.19 mc. or 11.705 mc. as well as 9.82 mc. (Shaffar, Iowa.)

(New) OAX4Z, Lima, Peru, heard on 15.17 mc. from 5:30 to 5:50 P.M. Left the air at 5:50 P.M. (Atherton, Vt.)

(General News) XEWW, Mexico City, on 15.16 mc. broadcasts from 9:00 A.M. to 6:00 P.M. and not noon to 6:00 P.M. (Erwin, Ill.) TPA2, France, on 15.24 mc. heard at 5:30 A.M. when schedule shows 6:00 to 11:00 A.M. (Herzog, N.Y.) OLR5A, Prague, on 15.23 mc. heard at 2:00 A.M. once. (Boothroyd, England.) He must mean 2:00 P.M.—Editor. LSL3 a Buenos Aires phone on 15.81 mc. is heard nightly at 8:00 P.M. calling PPU. (Kash, Tenn.)

RCH, a Siberian phone on 15.01 mc. phones another new station on 16.39 mc. daily 5:00 to 9:00 A.M. (Karpen, Pa.) RKI, Moscow, U. S. S. R., is on 15.08 mc., not 15.04 mc. and relay RAN programs between 7:00 and 9:30 P.M. nightly. Verie says 15.00 mc. (Atherton, Vt.) Heard Sundays 1:00 to 3:00 P.M. (Ebbecke, Pa.) JZK, Nazaki, Japan, on 15.16 mc. sends schedule showing them on the air 12:30 A.M. to 1:30 A.M., 8:00 to 9:00 A.M. and 3:00 to 4:00 P.M. as well as the American program 4:30 to 5:30

P.M. Member Worcester of Hawaii says JZK and JZL broadcast Mondays, Wednesdays and Fridays 2:30 to 3:30 A.M. for Hawaii.

16.00 to 21.00 Mc.

(General News) FZE8, Djibouti, French Somaliland, verie says they have 5 kw. power and phone Paris on 17.28 mc., and the first Thursday of each month from 7:45 to 8:15 A.M. they broadcast. (Seymour, Md.) Heard 7:30 to 8:15 P.M. evening. (Rossi, Pa.)

A phone, IBT at Sao Paulo, Italy, on 16.25 mc. works IUG, Ethiopia, 8:00 A.M. to 11:00 A.M. now. (Studholme, England)

W2XGB, Press Wireless, Hicksville, L. I., New York, on 17.31 mc. says schedule is daily except Saturday and Sunday 10:00 A.M. to 1:00 P.M. (Boothem, England) Says 10:00 A.M. to noon. (Bell, Scotland) Verie says 5 kw. power, want reports from Europe, Box 296, Hicksville, New York. (Rastall, England)

A ship "Yashukuni Maru" is on about 17.65 mc. phoning Japan and Germany. (Cooke, India) HSP, Bangkok, Siam, on 17.74 mc. is heard at 6:30 A.M. Saturdays, Sundays and Mondays phoning Germany. (Grey, Ill.) At 10:00 A.M. several times. (Gallagher, Calif.) LSY, Buenos Aires, phone on 18.12 mc. heard broadcasting music until 4:00 P.M. and then reads news. (Bells, Scotland)

JZL, Nazaki, Japan, on 17.78 mc. is testing at times. Heard 3:00 to 3:30 A.M. once. (Walcott, Calif.) At 2:30 A.M. once. (Legge, Pa.) A new Russian station on 18.02 mc. was heard sending music 6:00 to 8:00 A.M. once. (Karpen, Pa.) TYE2, Paris, France, a phone on 18.09 mc. is sending special programs from the World's Fair between 9:00 A.M. and 4:00 P.M. irregularly. (Karpen, Pa.) CGA, Canada, is on 18.18 mc. almost daily phoning 7:00 A.M. to 3:00 P.M. (Karpen, Pa.) A new Japanese phone, JVB on 18.19 mc. was heard calling Java 6 to 9 A.M. (Karpen, Pa.)

HS8PJ, Bangkok, Siam, has returned to their old schedule. They are on 19.02 mc. Mondays 8:00 to 10:00 A.M. and on 9.51 mc. Thursdays 8:00 to 10:00 A.M. (Walcott, Calif.; King, England; Bell, Scotland; Treece, England.) Phoned DFB, Germany, 9:30 to 10:00 A.M. once. (Walcott.)

GENERAL NEWS

The Chines phones like XOJ, XTB. etc., at Shanghai, are all destroyed apparently. A small transmitter using the call XOB-1 sent program to Manila. (KAX, 19.98 mc.) and thence to the U.S.A. Wave of XOB-1 is not known. (Walcott, Calif.)

England will use these this month:

9.51 mc.—GSB, 2:00 to 4:15 A.M., 12:20 to 6:00 and 9:00 to 11:00 P.M.
 11.75 mc.—GSD, 2 to 4:15 A.M. 12:20 to 3:45, 6:20 to 7:30 and 9 to 11 P.M.
 15.14 mc.—GSF, 10:30 A.M. to noon, 4:00 to 8:00 and 6:20 to 7:30 P.M.
 15.18 mc.—GSO, 2:00 to 4:15 A.M., 4:00 to 6:00 and 6:20 to 7:30 P.M.
 15.26 mc.—GSI, 12:20 to 2:45 P.M. and 9:00 to 11:00 P.M.
 15.31 mc.—GSP, 6:20 to 7:30 P.M.
 17.79 mc.—GSG, 2:00 to 4:15 A.M., 5:45 to 9:00 A.M., 9:15 A.M. to noon,
 12:20 to 6:00 P.M. and 9:00 to 11:00 P.M.
 21.47 mc.—GSH, 5:45 to 9:00 A.M. and 9:15 A.M. to noon.

21.53 mc.—GSJ, 5:45 to 9:00 A.M. and 9:15 A.M. to noon.

Germany will use these:

- 6.02 mc.—DJC, 11:35 A.M. to 4:30 P.M.
- 9.56 mc.—DJA, 12:05 to 11:00 A.M. and 4:45 to 10:45 P.M.
- 9.51 mc.—DJN, 12:05 to 11:00 A.M. and 4:50 to 10:45 P.M.
- 11.77 mc.—DJD, 11:35 to 4:30 P.M. and 4:50 to 10:45 P.M.
- 15.11 mc.—DJL, 12:00 to 2:00 A.M., 8:00 to 9:00 A.M., 11:35 to 4:30 P.M.,
Sundays 6:00 to 8:00 A.M.
- 15.20 mc.—DJB, 12:05 to 11:00 A.M., 4:50 to 10:45 P.M., Sundays 11:10 to
12:20 P.M.
- 15.28 mc.—DJQ, 12 to 8 A.M., 4:50 to 10:45, Sundays 11:10 to 12:20 P.M.
- 15.34 mc.—DJR, 8:00 to 9:00 A.M. and 4:50 to 10:45 P.M.
- 17.76 mc.—DJE, 12:05 to 5:45 A.M., Sundays 11:10 to 12:25 P.M.

Germany also has experimental stations, DZA on 9.675 mc., DZB on 10.04 mc., DZC on 10.29 mc., DZE on 12.13 mc., DZG on 15.36 mc. and DZH on 14.46 mc. which may be used at times. DJO on 11.85 mc. is heard most every afternoon starting around 11:35 A.M. and lasting till 4:30 P.M. DZC, DZE, DZG and DZH broadcast every Wednesday for the Penambuco Radio Club (PRA8), Brazil, between 2:00 and 3:00 P.M. (Mascarenhas, Brazil. Heard 5:00 to 5:30 P.M. with these programs, (Hansen, Africa). Heard at 2:00 P.M. (Studholme, England). On the 14th and first days of each month, stations DZC on 10.29 mc. and a station on 11.855 mc., either DJO or DJP relays a program from YUA, Belgrade,

Newspaper clipping says programs from the ship Normandie take place the 2nd, 6th and 7th of October and 3rd of November from 11:00 to 11:30 A.M., on 4th and 18th of October from 6:00 to 6:30 A.M. Will be on about 4.42 mc., 8.84 mc. or 13.34 mc. A station at Pontoise will relay them. Pontoise will be on one of the following meters: 23.08, 24.56, 33.19, 38.96 or 71.00. (Fawcett, France) Call is FNSK and they use 13.21 mc. and 13.194 mc. verie says. (Seymour, Md.)

ULTRA-SHORT WAVES

A few members have written to us regarding stations heard on the ultra-high frequencies. Below we list what information we have on these stations. The figures given are megacycles.

- 25.95—W6XKG, Los Angeles, Calif. Broadcasts 24 hours daily.
- 26.40—W9XAZ, Milwaukee, Wisconsin. Relays WTMJ 1 P.M. to midnite.
- 30.57—KBCH, Pasadena, Calif. U. S. Forestry Service.
- 30.61—W2XEN, Roselle Park, New Jersey, Police.
- 31.60—W8XKA, Pittsburgh, Pa. Relays KDKA 3:00 to 11:00 P.M.
- 31.60—W3XKA, Philadelphia, Pa. Relays KYW noon to 10:00 P.M.
- 31.60—W1XKA, Millis, Mass. Relays W1XX 9:00 A.M. to noon.
- 31.60—W4XCA, Memphis Tenn. Relays WMC, 7:30 A.M. to 11:00 P.M.
- 31.60—W3XEY, Baltimore, Md. Relays NBC 6 P.M. to midnite.
- 31.60—W8XAI, Rochester, N. Y. Relays WHAM.
- 31.60—W8XWJ, Detroit, Mich. 6:15-12:30 P.M., 2-5 P.M., 7-10 P.M.
- 31.60—W2XDV, Wayne, New Jersey. Relays WABC.
- 31.60—W9XHW, Minneapolis, Minn. 9:00 A.M. to 5:00 P.M.

- 31.60—W9XPD, St. Louis, Md. Relays KSD 9:00 A.M. to midnite.
 31.60—W9XJL, Superior, Wisc. Relays WEBC around 11:00 A.M.
 31.60—W1XAQ, New Bedford, Mass. Relays WNBH 2:00 to 6:00 P.M.
 33.10—W6XM, Stockton, California. Police
 33.10—W6XEH, Long Beach, California. Police.
 33.33—W2XEM, Newark, N. J., Police. City Hall.
 33.33—W2XFA, Jersey City, N. J. City Hall.
 35.60—W1XAO, Boston, Mass., Police. City Hall.
 35.60—W2XMS, Police station, location not known.
 35.60—W3XFK, Police station, location unknown.
 35.60—W3XES, Baltimore, Md. Relays WCAO, 9:00 A.M. to 5:00 P.M.
 35.60—W2XDV, Wayne, N. J. Owned by CBS, 9-11 A. M.
 37.10—W2XHP, Kingston, N. Y. Police. City Hall.
 37.50—W3XES, Baltimore, Md. Broadcasts 5 to 11 P. M.
 38.60—W2XDV, Wayne, N. J. Relays WABC.
 41.00—W2XDV, Wayne, N. J. Relays WABC.
 41.00—W2XGH, Schenectady, N. Y., daily 8:00 A.M. to 11:00 P.M.
 55.50—W8XK, Pittsburgh, Pa., daily 1:00 to 9:00 P.M.
 55.50—W1XKA, Boston, Mass., daily 6:00 A.M. to midnight, Sundays starts at 8:00 A. M.

Information on W6XM and W6XEH from veries. (Grey, Ill.) H. A. Buffum, California, says W9XJL is on 26.1 not 31.60 mc.

AMATEUR NEWS

Members reporting amateur stations are requested to follow these rules: Reports should be written on a separate sheet of paper from the broadcast stations. Confine reports to distant stations or unusual ones. Stations in North America, Central America, the West Indies and certain parts of South America can be eliminated. Unusual stations may be reported in these places, however. Give the station call-sign, city and country, if possible, approximate frequency and time of day. You do not need to give the exact date. Only stations heard during the month should be reported. The call-sign, time of day heard and location are important.

The 20 meter band offer great DX possibilities. Amateurs do not send music as a rule, but due to the low-power used and number of stations on the air, it is a great place to "fish." The amateur band runs from 14.00 to 14.40 mc. with most foreign stations between 14.00 and 14.15 mc. Do not ask us for station addresses. All such requests will be completely ignored. If you are interested in addresses, send \$1.25 for a call-book listing over 60,000 amateurs.

Member Seymour of Maryland reports UPOL, North Pole, on 20.82 meters 5:00 to 9:00 P.M. YL2BC, Latavia, on 14.20 mc. at 5:40 P.M. VQ5KLA, Uganda, Africa, 14.38 mc. at 6:55 P.M. OQ5AA, Africa, 14.25 mc. at 6:50 P.M. and CT1GU, Portugal, 14.33 mc. at 7:00 P.M. Harry Noe of Brooklyn reports HH5PA, Haiti; LY2AE, Lithuania; CT1AY, Portugal; VP4TH, Spain, and F35D, France. Roy Waite, New York, reports CN8AF on 14.09 at 5:57 P.M.; CN8AM, Morocco, on 14.09 at 6:07 P.M.; CN8AG, Morocco, on 14.11 mc. at 4:53 P.M.; FA3HC, Algeria, on

14.35 mc. at 5:05 P.M.; FT4AN, Tunis, on 14.25 mc. at 3:19 P.M. and HA8N, Hungary, on 14.13 mc. at 5:50 P.M. All but HA8N is in Africa.

O. E. Stark, Missouri, reports ZU6P, Africa, on 14.14 mc. midnight; KA1HS, Manila, on 14.21 mc. at 8:00 A.M.; VE5JC, Kent Town, Australia, at 7:25 A.M.; KA1ME, Manila, 14.12 mc. at 7:00 A.M.; EI2L, Ireland, 14.05 mc. at 5:30 P.M.; CE3DG, Santiago, Chile, at 12:20 A.M.; CN8AJ, Morocco, 14.12 mc. at 6:15 P.M.; CT1AY, Oporto, Portugal, 14.13 mc. at 6:50 P.M.; EA8AE, Canary Island, 14.07 mc.; PY2ET, Taubate, Brazil, 14.08 mc.

Elmer Caldwell of Pa. reports OQ5AA, Tondo, Belgian Congo; CN8AJ, Morocco, from 1:30 to 2:00 A.M.; VK2AZ, Australia, 1:30 to 2:00 A.M.; ON4VK, Belgian, 14.076 mc. and F3HM, Paris, France, afternoons. George Ebbecke, Pa., reports VS7GJ, Malay States, and VK3KK, Australia, at 6:30 A.M.

Ashley Walcott, California, reports all these: South Africans heard from 9:00 to 11:00 A.M. are ZS1B, 14.065 mc.; ZU1T, 14.07 mc.; ZS2J, 14.285 mc.; ZS2N, 14.03 mc.; ZS2X, 14.04 mc.; ZT2B, 14.025 mc.; ZT2G, 14.255 mc.; ZS4U, of unstable frequency near 14.29 and 14.32 mc.; ZS5AB, 14.06, 14.09 and 14.14 mc.; ZT5P, 14.06 mc., whose card gives power as 50 watts input; ZS6AJ, 14.13, 14.25, 14.34 mc.; ZS6S, 14.252 mc.; ZS6T, 14.31 mc.; ZT6AK, 14.03 mc.; ZT6J, 14.27 mc.; ZT6T, 14.09 mc.; ZT6Y, 14.05 mc.; ZU6AF, 14.25 mc.; ZU6K, 14.06 mc.; ZU6N, 14.11 mc.; ZU6P, 14.13 mc.; ZE1JR, 14.044 mc.; ZE1JN, 14.354 mc.; FB8AH, 14.27 mc. Asians heard are VS2AE, Non-Federated Malay States, operated by Sultan of Johore on 14.35 and 14.37 mc.; XZ2DY, Burma, on 14.34 mc.; VS6AB, Hong Kong, on 14.04 mc.; PK3AA, Java, on 14.11 and 14.36 mc.; PK2WL, 14.18, and XU8MC, Shanghai, on 14.04 mc. all heard around 8 to 10 A.M.

G. C. Gallagher, California, reports these from 1:00 to 3:00 A.M.: VK2AZ, 2HF, 2AC, 2MJ, 2RJ, 2AQ, 2IQ, 2HS, 2AC, 2AZ, 2AL, 2ABE, 2BU, VK3AL, VK4JU, VK4WU, VK4JX, VK4AW, all in Australia, and ZT6AK, Asia.

Roger Legge of New York, reports these: Asia—PK1GL, Java, 14.26 mc. at 8:00 A.M. Africa—FT4AN, Tunis, 14.1 mc. at 7:00 P.M.; CN8AM, Morocco, 14.1 mc. at 6:00 P.M. and SU1GP, Egypt, 14.07 mc. at 7:00 P.M. Australian all heard 5:00 to 8:00 A.M.—2ABG, 2ADE, 2ACO, 2AFG, 2NO, 2NY, 2OQ, 2RJ, 2VV, 2VB, 2XU, 2XS, 3GQ, 3KR, 3MX, 3ZZ, 3XJ, 3TL, 3ZB, 3WA, 3IO, 4BB, 4JX, 4JU, 4MU, 4TY, 4VD, 5HD, 5AW, 5TR, 5FL, 5GM, 5KD, 6MW, 7YL, 7JB. Ireland—EI9J, 14.04 mc.; EI3J, 14.1 mc.; EI2L, 14.04 near 5:00 P.M. Wales—GW2UL, 14.10 mc. and GW5KJ, 14.09. Switzerland—HB9BL, 14.00 mc. at 10:30 P.M. Hungary—HA8N, 14.13 at 10:00 P.M. Italy—I1IT, 14.32 mc., and I1KS, 14.37 mc.

R. H. Greenland, Yorks, England, reports these without location given: ZU6P, 12:40 P.M.; ZS6AJ, 12:55 A.M.; ZS6Q, 5:12 P.M.; W10XDA, and W2OJ at 3:00 P.M.; HC1FG, 5:12 P.M.; VE4OK, 3:20 P.M.; VE5EF, 1:09 P.M.; K6NZQ, 1:30 P.M.; YL2CC, 2:40 P.M.; CE3CO, 12:54 A.M.; VK2RJ, 1:57 A.M.; VK3KX, 2:00 A.M.; VK2VB, 1:30 A.M.; VK3XJ, 2:14 A.M.; VK2ABD, 2:40 A.M.; KA1ME, 12:37 P.M.; VU2BG, 3:07 P.M.; PK1ZZ, 2:35 P.M.; PY1FR, 4:05 P.M.; CE1AH, 1:30 A.M.; YI2BA, 3:57 A.M. and VE5QT, 3:05 A.M.

WITH THE REPORTERS

The following people have sent us reports this month and we thank them, for without their reports there would be no magazine.

J. S. Bell, Falkirk, Scotland; Manuel Lopez Diaz, Caibarien, Cuba; Felix Quayle, France Field, Canal Zone; Douglas Worcester, Honolulu, Hawaii, R. E. Cooke, Kolar Goldfields, India; Alfonso Velasco, Mexico City; Dr. Antonio Cancio, Sancti-Spiritus, Cuba; E. G. Neve, Torreon, Coah, Mexico; James H. Mayes, San Salvador, El Salvador.

S. Boothroyd, Uppermill, England; J. Hardeman, Tjimali, Java; Oscar Fawcett, Havre, France; J. M. R. Studholme, London, England; P. Rastall, Manchester, England; J. R. Garrett Pegge, Chesham, Bucks, England.

George Nash, Brooklyn, N.Y.; Roy Waite, Balston Spa, N.Y.; W. F. Herzog, Center Moriches, N. Y.; Joe Miller, Brooklyn, N.Y.; Mrs. Alice Wilbur, Newark, New Jersey; L. L. Groves, Somerville, Mass.; Frank Stockbridge, Westboro, Mass.; Fred Atherton, Rutland, Vermont; W. D. Flagg, Holyoke, Mass.

H. C. Vantassell, Swissvale, Pa.; Ford Edwards, Wilmerding, Pa.; Captain Oxrieder, State College, Pa.; Jack Morgan, Philadelphia, Pa.; Miss E. L. Fortune, York, Pa.; Elmer Caldwell, Altoona, Pa.; Robert Rossi, Philadelphia, Pa.; George Ebbecke, Philadelphia, Pa.

Mrs. Irving Heglund, Lake Worth, Florida; W. A. Weiss, Louisville, Ky.; Ray Shaffar, Waterloo, Iowa; O. E. Stark, Pierce City, Mo.; Dr. R. C. Kash, Lebanon, Tenn.; James B. Wooten, Mobile, Ala.; Carl and Anne Eder, Willmar, Minn.; A. Spuhler, Cleveland, Ohio; Neville Seymour, Baltimore, Md.; Wm. J. Wood, Oak Park, Ill.; Tom Erwin, Herrin, Ill.

G. C. Gallagher, San Francisco; Ashley Walcott, San Francisco; William Sparks, San Francisco; Mildred and Harve Amers, Pomona, Calif.

LATE MAGAZINES

Some few members have written to us regarding the late delivery of their magazine. Please understand that we do not pre-date our magazine, therefore, it may appear as though our magazines are late when the truth is they are far ahead of others. Our present issue is dated October, 1937, and will be mailed out the first Monday in October and will contain information received up to Saturday, October 2nd. You may get some other magazine dated November before you receive this one, but do not judge by the date on it. Read the news in both and see if we are not months ahead of others. For example, we see one magazine giving JULY news in their November issue. We printed July news in our August issue and even if you did get it late in July, it is better than getting it in October and marked November.

Our news is gathered and printed up to almost the day it is mailed out. No other magazine could arrange to get out the news faster than we. Just pay no attention to the date, compare the lateness of the news and you will know.

FOR SALE—Scott 23 tube all-wave receiver in Roslyn Grande Console, complete with three speakers. Sell for \$125.00 Henry C. Wehrenberg, 786 Washington Blvd., Baltimore, Md.

LETTER WRITING CONTEST

The winner of the Sky-Buddy Receiver for writing the best letter on how to improve short wave radio is Elmer Caldwell, 209 Maple Avenue, Altoona, Pa. His letter offered a plan to eliminate interference between stations by an organization composed of listeners, station owners, government officials and disinterested persons, meeting at regular times and places, and using monitoring stations to check stations. He also covered a system of identifications, of distributing short wave station frequencies and several other things. His letter was almost duplicated by J. H. A. Hardeman of Tjimahi, Java, who deserves a real hearty thanks for his worthy contribution. Other very valuable letters came from Philip Malvern on Cheltenham, England, and Willis Werner of San Diego, Calif.

Letters on the contest were received from all but two states in the United States, also Canada, England, Curacao, Chile, Paraguay, Holland, Java, Burma and Czechoslovakia. Excellent letters were received from the following: N. F. Kriebel, Ambler, Pa.; Stuart Walmsley, Los Angeles, Calif.; W. Chippendale, Concepcion, Paraguay; Luis Schleede N., Valparaiso, Chile; John Tinnon, Larchmont, N. Y.; S. Boothroyd, Uppermill, England; H. Putnam, Claremont, N. H.; W. J. Ray, Oakland, Calif.; James Hunter, Barkingside, Essex, England; Johann P. Curiel, Curacao; George Ebbecke, Philadelphia, Pa.; Herve Bouvier, Central Falls, R. I.; and R. B. Law, Toronto, Canada. Space does not permit us to mention all persons sending in letters.

The letters were judged by the editor and disinterested persons. To arrive at a fair decision, the names and identifying marks were clipped from the letters. They were then judged and classified, after which the clippings were replaced and the writer identified. The receiver could not go to better hands, for, Mr. Caldwell is a bed-fast cripple and his enjoyment will be greatly increased with this new receiver.

Practically every letter received brought out two things definitely: One was that a new arrangement of wavelengths is necessary. The elimination of telegraph station interference is the greatest need of the moment. Second only to this is the elimination of local interference, caused by man-made noise-producing machinery. Third, is the better distribution of stations over the dial, which really can be classified under the first mentioned heading. Our only regret in closing this contest is that we had only one prize to offer. For many deserved more than just thanks for their efforts. Most of the letters will be turned over to the Radio Manufacturers Association for their attention.

PEN-PALS

There is no charge for having your name printed under pen-pals, but every pen-pal must agree to answer letters sent to them. And, boys, please do not ask us to find you a girl-friend. We will not print such requests.

Clive Peterson, P.O. Box 21, Philipsburg, St. Martin, N.W.I. (Java, Holland)
Adolph Dick, Jr., 263 Lincoln Avenue, Brooklyn, N.Y. (Japan and S.A.)
Mrs. D. Aung Gyi, Maubin, Burma. (Lady members only.)
Harry Honda, 429 North Fremont Avenue, Los Angeles, Calif. (Stamps)
A. S. Whitehouse, 153 Malvern, Worcester, England.

REPLACE

WORN-OUT DOWN-LEADS WITH

LYNCH GIANT KILLER CABLE

L. S. BRACH MFG. CORP.
World's Largest Makers of Antenna Systems
NEWARK, N. J.

HOW TO USE OUR STATION LIST

Our broadcast station list is shown in an hourly guide form. A station shown on 6:00 mc. comes in at 6 on a calibrated dial and one marked 7.00 comes in at 7 on the dial and stations shown between 6.00 and 7.00 come in between 6 and 7 on the dial. Time given is Eastern Standard. Add five hours for G.M.T. A station shown under 7:00 A.M. in list is on at 1200 G. M. T., etc.

Whenever a station shows $\frac{1}{2}$ under a certain hour, it means that the station either starts or ends their program on the half-hour, depending on whether the $\frac{1}{2}$ is shown at the beginning or ending of a group. Let us try a real hard one. CR7BH on 11.72 mc. for Sunday shows the station with $\frac{1}{2}$ under 10:00 A.M., $\frac{1}{2}$ under N (noon), $\frac{1}{2}$ under 1:00 P.M. and $\frac{1}{2}$ under 2:00 P.M. Well, the first one means they start 10:30 A.M., broadcast on till 12:30 when they sign off; the third one shows they start up again at 1:30 P.M. and the last one shows they sign off at 3:30 P.M. Whenever a full number is shown, the station is on the full hour shown. Whenever the letter S appears, it means station signs off at that hour exactly.

ON THE AIR

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Meg.	Meters	Station	City	Day	A. M.											P. M.												
					1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
4.25.	70.65	RV15	Khbarovsk	SMTWTFS	1	2	3	4	5	6	7	8	9	s														
4.60.	65.22	HC2ET	Guayaquil	W S																								
4.78.	62.76	HJ1ABB	Barranquilla	SMTWTFS																								
4.79.	62.63	HJ2ABC	Cucuta, Col.	SMTWTFS											11	N												
4.85.	61.86	HJ3ABD	Bogota	Irreg.																								
5.15.	58.30	PMY	Bandoeng	SMTWTFS																								
5.73.	52.36	HC1PM	Quito	S																								
5.74.	52.26	TGS	Guatemala City	WT S																								
5.76.	52.08	YNOP	Managua	Irreg.																								
5.77.	51.95	YV2RA	San Cristobal	Irreg.																								
5.78.	51.90	OAX4D	Lima	W S																								
5.80.	51.72	YV5RC	Caracas	SMTWTFS																								
5.81.	51.64	TI2H	San Jose	Irreg.																								
5.82.	51.50	TI6PH	San Jose	SMTWTFS																								
5.85.	51.28	YV1RB	Maracaibo	SMTWTFS																								
5.86.	51.15	HI1J	San Pedro de M	SMTWTFS																								
5.87.	51.11	HRN	Tegucigalpa	MTWTFS																								
				S																								
5.88.	51.02	HI9B	Santiago City	Irreg.																								
5.90.	50.90	YV3RA	Baraquismeto	SMTWTFS																								
5.90.	50.90	TI1S	San Jose	Irreg.																								
5.90.	50.68	YV4RH	Valencia	Irreg.																								
5.92.	50.68	HH2S	Pt.-Au-Prince	SMTWTFS											1	s												
5.93.	50.59	YV1RL	Maracaibo	Irreg.																								
5.94.	50.51	TG2X	Guatemala	M T S																								
5.95.	50.42	PJCI	Curacao	SMTWTFS																								
5.97.	50.25	HJ4ABD	Medellin	SMTWTFS																								
5.97.	50.26	HVJ	Vatican	SMTWTFS																								
5.98.	50.17	OAX4P	Huancayo, Peru	Irreg.																								
5.98.	50.17		Lisbon	SMTWTFS																								
5.99.	50.10	HJ2ABD	Bucaramanga	SMTWTFS																								
6.00.	50.00	XEBT	Mexico City	SMTWTFS																								

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Meg.	Meters	Station	City	Day	A. M.											P. M.												
					1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
6.29.	47.65	OAX4G	Lima, Peru	SMTWTFS.	7 8 9 10 11
6.30.	47.62	YV4RD	Maracay	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.31.	47.50	HIZ	Trujillo	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.32.	47.47	COCW	Havana	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.34.	47.32	OAX1A	Chiclayo	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.34.	47.32	HI1X	Trujillo	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
				T F	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.35.	47.24	HRY	Tegucigalpa.	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.36.	47.17	HRP1	San Pedro Sula	MTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.36.	47.17	YV1RH	Maracabo	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.38.	47.02	YV5RF	Caracas	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.40.	46.88	YV5RH	Caracas	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.41.	46.80	TIPG	San Jose.	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.42.	46.73	YV6RC	Bolivar	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.42.	46.73	HI1S	Santiago	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.48.	46.30	HI4V	Trujillo	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.48.	46.30	HI8A	San Francisco.	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.48.	46.30	Guardia Civil.	Tetuan	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.50.	46.13	TIOW	Port Limon	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.50.	46.13	HIL	Trujillo	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.52.	46.01	YV4RB	Valencia	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.54.	45.94	YN1GG	Managua	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.54.	45.85	YV6RB	Bolivar	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.55.	45.81	HI4D	Trujillo	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.55.	45.81	TIRCC	San Jose.	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
				S T	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.55.	45.80	XBC	Vera Cruz	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.62.	45.31	Prado	Rio Bamba.	T	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.63.	45.25	HIT	Trujillo	MTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.64.	45.18	HC2RL	Guayaquil	S	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
				T	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.69.	44.84	TIEP	San Jose.	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.72.	44.60	PMH	Bandoeng	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11
6.73.	44.58	HI3C	La Romana	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7 8 9 10 11

(See Note E)

Meg.	Meters	Station	City	Day	A. M.												P. M.											
					1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
6.78.	44.25—	HIH	"San Pedro, D.M.	Irreg.
6.78.	44.25—	HIHP	Trujillo	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.79.	44.18—	PZH	Paramaribo	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.88.	43.60—	T1RS	San Jose, C.R.	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.89.	43.51—	HCETC	Quito	T	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.90.	43.48—	HI2D	Trujillo	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.98.	43.00—	XEA	Tecubaya	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6.99.	42.89—	CLX	Havana	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.00.	42.86—	EA9AH	Tetuan	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.08.	42.35—	PI1J	Nordricht	S.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.10.	42.25—	FO8AA	Papeete	T F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.17.	41.78—	CR6AA	Lobito, Angola	W S.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.20.	41.67—	YNAM	Managua	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.38.	40.65—	XECR	Mexico City	S	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.56.	39.74—	YNLF	Managua	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.80.	38.47—	HBP	Geneva	S.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.85.	38.08—	HC2JSB	Guayaquil	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7.89.	38.00—	YSD	San Salvador	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.19.	36.63—	XEME	Merida	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.25.	36.36—	HC2CW	Guayaquil	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.50.	35.29—	YNLG	Managua	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.59.	34.92—	YNPR	Managua	MTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.66.	34.64—	COJK	Camaguey	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8.85.	33.00—	HCJB	Quito	S TWTFs.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.03.	33.33—	COBZ	Havana	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.12.	32.88—	HAT-4	Budapest	S W S.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.20.	32.60—	COBX	Havana	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.30.	32.26—	YNGU	Managua	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.31.	32.20—	COBC	Havana	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.34.	32.15—	OAX4J	Lima	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.42.	31.86—	PLV	Bandoeng	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.43.	31.82—	COCH	Havana	SMTWTFS.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9.44.	31.76—	HCODA	Guayaquil	Irreg.	
9.45.	31.75—	TGWA	Guatemala	SMTWTFS.	
9.46.	31.67—	PJC1	Curacao	S	

(See Note D)

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Meg.	Meters	Station	City	Day	A. M.														P. M.										
					1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M	
15.20.	19.73	DJB	Berlin	SMTWTFS	1	2	3	4	5	6	7	8	9	10	s	3	5	6	7	8	9	10	s	M	
15.21.	19.72	W8XK	Pittsburgh	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.22.	19.71	PCJ	Hilversum	.....	See Note B.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.23.	19.70	OLR5A	Praha	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.24.	19.68	TPA2	Pontoise	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.25.	19.68	W1XAL	Boston	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.26.	19.66	GSI	Daventry	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.27.	19.64	W2XE	New York	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.27.	19.68	H13X	Trujillo	.....	S	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.28.	19.63	DJQ	Berlin	.....	SMTWTFS	1	2	3	4	5	6	7	8	9	10	s	..	..	..	..	..	..	..	..	..	..	..
15.29.	19.62	LRU	Buenos Aires	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.31.	19.60	GSP	Daventry	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.33.	19.56	W2XAD	Schenectady	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.34.	19.56	DJR	Berlin	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.37.	19.52	HAS-3	Budapest	.....	S	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15.44.	19.43	XEBM	Mazatlan	.....	Irreg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17.76.	16.89	DJE	Berlin	.....	SMTWTFS	1	2	3	4	5	s	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17.77.	16.88	PHI	Huizen	.....	SMT TFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17.78.	16.87	W3XAL	New York	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17.79.	16.86	GSG	Daventry	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19.02.	15.77	H88PJ	Bangkok	.....	M	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21.47.	13.97	GSH	Daventry	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21.52.	13.94	W2XE	New York	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21.53.	13.93	GSJ	Daventry	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21.54.	13.92	W8XK	Pittsburgh	.....	SMTWTFS	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

NOTES: A—Also broadcasts Sundays 11:10 to 12:20 P.M. B—Sundays 7:00 to 8:00 A.M., Tuesdays 4:30 to 6:00 A.M. and Wednesdays 8:00 to 10:00 A.M. C—Mondays, Wednesdays, Fridays 3:00 to 4:00 P.M. and 9:00 to midnight, Tuesdays and Thursdays 7:30 P.M. to midnight, Saturdays 9:00 P.M. to midnight and Sundays 12:30 to 2:00 P.M. D—Some Saturdays 8:00 P.M. to 6:00 A.M. Sunday mornings. E—Saturdays 9:40 to 10:40 P.M. F—Also Sundays 7:45 to 10:45 A.M. G—Daily 2:00 to 2:15 P.M. and Sundays 5:00 to 5:30 A.M. H—Also Sundays 1:00 to 2:00 P.M. I—Both ZEC and ZEA broadcast Sundays 3:30 to 5:00 A.M., Tues. 11:00 A.M. to noon, Mon., Wed. and Fri. 1:15 to 3:15 P.M. and Thurs. 10:00 to 10:15 A.M. and 11:00 A.M. to noon. I—Saturdays 10:00 to 11:00 P.M., Sundays 10:00 A.M. to 7:00 P.M.

TELEPHONE STATIONS

The time given is Eastern Standard. Add five hours for G. M. T

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 impossible 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.

Meg.	Meters	STATIONS	TIME
E—4.00	3.96—75	to 75.8—Amateurs on voice.	
T—4.10	73.21	WN1D, Hialeah, Florida. Phones irregularly with VPN.	
T—4.42	4.10—67.87	to 73.17—Ships. Heard irregularly.	
T—4.51	66.50	ZFS, Nassau, Bahamas. Works WND evenings.	
T—4.75	63.13	WOO, Ocean Gate, N. J. Phones ships irregularly.	
T—4.84	61.98	GDW, Rugby, England. Phones U. S. A. nights.	
T—4.90	61.15	CGA8, Drummondville, Canada. Phones ships irregularly.	
T—4.98	60.26	GBC, Rugby, England. Phones to ships, irregularly.	
T—5.02	59.76	ZFA, Hamilton, Bermuda. Phones U.S.A. and ships at night.	
T—5.08	59.08	WCN, Lawrenceville, N. J. Phones England, evenings.	
E—5.40	55.56	HJA7, Cucuta, Colombia. Mondays 4:30 to 7:30 P.M., irregularly.	
T—5.48	54.74	XTL, Hankow, China. Heard around 5:00 to 7:00 A.M., phoning.	
T—5.48	54.74	XTZ, Hankow, China. Phones Shanghai 4:00 A.M. to noon.	
E—5.66	52.66	CFU, Rossland, Canada. Works CFO and CFN nar 10 P.M., irreg.	
T—5.74	52.26	XTD, Shanghai, China. Phones Hankow 4:00 A.M. to noon.	
T—5.80	51.50	HJA2, Bogota, Colombia. Phones HJA3 afternoons and evenings.	
T—5.83	51.46	TDD, Shingio, Manchukuo. Phones Japan 10:00 P.M. to 6:00 A.M.	
T—5.85	51.26	WOB, Lawrenceville, N. J. Phones Bermuda, nights.	
T—5.89	50.93	JIC, Taiwan, Japan. Phones Nazaki 5:00 to 10:00 A.M., winter.	
6.00	5.00 mc.	50.00 to 60.00 meters—Aircraft stations.	
E—6.31	47.54	TG2, Guatemala City. Relays TGI around 5:00 to 9:00 P.M., irreg.	
E—6.35	47.49	JZG, heard relaying JVT, JOAK from 5:00 to 7:30 A.M., irregularly.	
E—6.41	46.77	HJA3, Barranquilla, Colombia. Phones HJA2, irregularly.	
E—6.42	46.73	W9XBS, Chicago, Illinois. Heard irregularly broadcasting.	
T—6.55	45.80	XEM1, Mexico. Tests around 9:30 to midnight.	
T—6.65	45.11	JFZC, Ship "Chichibu Maru." Phones irregularly.	
T—6.65	45.10	IAC, Piza, Italy. Phones ships, evenings.	
T—6.67	44.96	YVQ, Maracay, Venezuela. Phones irreg.	
T—6.67	44.94	HBQ, Geneva, Switzerland. Used for special broadcasts.	
T—6.72	44.64	XEM2, Guanacebi, Dur, Mexico. Tests around 9:30 P.M., irreg.	
T—6.75	44.44	JVT, Nazaki, Japan. 1:30 to 8:00 A.M. oftentimes with music.	
T—6.75	44.41	WOA, Lawrenceville, N. J. Phones England nights.	
T—6.90	43.45	GDS, Rugby, England. Phones New York nights.	
E—6.98	43.00	XBA, Tacubaya, Mexico. 9:30 A.M. to 1:00; 7:00 to 8:30 P.M.	
T—6.98	42.98	KZGG, Cebu, P. I. 1:00 to 4:45 A.M. and 6:30 to noon.	
T—7.37	40.71	KEQ, Kauhuku, Hawaii. Phones Dixon, nights.	
T—7.51	39.95	RKI, Moscow, U.S.S.R. Heard 5:00 to 11:00 A.M. in winter.	
T—7.52	39.89	KKH, Kauhuku, Hawaii. Phones KWO evenings.	
T—7.56	39.68	FZE9, Djihouti, French Somaliland. Phones Paris.	
T—7.56	39.68	KWY, Dixon, Calif. Phones week-days 9:30 P.M. to midnight.	
T—7.39	40.60	ZLT2, Wellington, New Zealand. Phones Sydney 3:00 to 7:00 A.M., irr.	
T—7.61	39.42	KWX, Dixon, California. Phones Hawaii nights.	
T—7.63	39.32	RIM, Tashkent, U.S.S.R. Heard 5:00 to 1:00 A.M. in winter.	
T—7.68	39.06	YBZ, Manado, Celebes, D. E. I. Phones PNI 5:00-7:00 A.M.	
E—7.78	38.50	PSZ, Rio de Janeiro, Brazil. Heard between 6:00 and 11:00 P.M., irreg.	
T—7.86	38.06	SUX, Cairo, Egypt. Phones Rome and London afternoons.	
T—8.12	36.95	KTP, Manila, P. I. Phones KWX 10:30 to 11:00 A.M.	
T—8.19	36.65	PSK, Rio de Janeiro, Brazil. Sending music 6:00 to 7:30 P.M.	
T—8.38	35.80	IAC, Piza, Italy. Works ships irregularly.	
T—8.47	35.42	DAF, Norden, Germany. Phones ships irregularly.	
T—8.57	35.02	WOO, Ocean Gate, N. J. Phones ships irregularly.	

Meg. Meters	STATION	TIME
T-8.65-34.68	VOWQ, North West River, Laborador.	Phones irreg.
E-8.65-34.68	WVD, Seattle, Wash.	Testing irregularly.
T-8.68-34.56	GBC, Rugby, England.	Phones ships irregularly.
T-8.71-34.44	KBB, Manila, P. I.	Phones ships 5:00-9:00 A.M., irregularly.
T-8.77-34.19	PNI, Makassar, D. E. I.	Phones Java near 4:00 to 5:00 A.M.
E-8.79-34.10	KNV, Bogota, Colombia.	Testing, 5:30 to 11:00 P.M., irregular.
T-8.90 to 8.84	36.58 to 33.93	Ships. Heard irregularly.
E-8.95-33.52	WEL-W2XBJ, Rocky Point, N. Y.	Testing irregularly, evenings.
T-8.96-33.48	TPZ2, Alger, Algeria, Africa.	Phones Paris, daytime.
T-8.98-33.41	VWY, Poona, India.	Phones England 6:00-10:00 A.M., irreg.
E-9.01-33.29	KEJ, Bolinas, California.	Tests irregularly.
T-9.02-33.26	GCS, Rugby, England.	Phones New York evenings.
T-9.03-33.19	TYA2, Paris, France.	Phones Algeria, 6 P.M. to midnight, irreg.
T-9.08-33.04	XTK, Hankow, China.	Phones around 4:00 to 9:30 A.M.
T-9.12-32.89	YCP, Bilikpapan, Borneo.	5:00-7:00 A.M., phones East Indies.
T-9.14-32.84	YVR, Maracay, Venezuela.	Phones Europe afternoons.
T-9.17-32.72	WNA, Lawrenceville, N. J.	Phones England evenings.
T-9.18-32.68	ZSR, Klipkeval, So. Africa.	Phones England 1:00-7:00 P.M., irreg.
T-9.28-32.33	GCB, Rugby, England.	Phones OGA and SUV, afternoons.
T-9.28-32.32	XTC, Shanghai, China.	Phones 2:00 to 11:00 A.M., irreg.
T-9.33-32.15	OGA4, Drummondville, Canada.	Phones ships and England, irregularly.
T-9.36-32.05	XTR, Swatow, China.	Phones around 4:00 to 9:30 A.M.
T-9.37-32.02	PLC, Kootwijk, Holland.	Phones 3:00 to 10:00 A.M., irregularly.
T-9.42-31.86	PV, Bandoeng, Java.	9:00-11:00 A.M., 6:00-11:00 P.M., irreg.
T-9.46-31.71	TIpoli, Africa.	Phones IAC, Italy, 6:00 A.M. to 1:00 P.M., irreg.
T-9.49-31.61	KEI, Bolinas, Calif.	Used irregularly.
T-9.50-31.58	XTV, Canton, China.	Phones 2:00 to 11:00 A.M., irreg.
T-9.65-31.08	DGU, Nauen, Germany.	Phones Egypt in daytime.
E-9.67-31.00	DZA, Zeesen, Germany.	Broadcasts irregularly.
T-9.75-30.77	WOF, Lawrence, N. J.	Phones England, evenings.
T-9.76-30.75	VK2ME-VLK, Sydney, Australia.	Phones Java 4:00 to 8:00 A.M.
E-9.80-30.61	LSI, Buenos Aires, Argentina.	Used irregularly, evenings.
T-9.80-30.60	GCW, Rugby, England.	Phones America, evenings.
T-9.83-30.52	IRM, Rome, Italy.	Phones Egypt afternoons.
E-9.87-30.40	JYS, Kemikawa-Cho, Japan.	Relays JOAK, irregularly, mornings.
T-9.87-30.40	WON, Lawrenceville, N. J.	Phones England evenings.
T-9.90-30.30	LSN, Buenos Aires, Argentina.	6:00 P.M. to 6:00 A.M. WLO.
T-9.92-30.23	JDY, Dairen, Manchucuo.	Phones Japan 2-4 A.M., 8-10 P.M., irreg.
T-9.93-30.21	IKB, Bogota, Colombia.	Phones PSK irregularly, evenings.
T-9.95-30.15	GCU, Rugby, England.	Phones New York evenings.
T-9.97-30.09	KAZ, Manila, P. I.	Phones PLV near 2:00 A.M.
E-10.04-29.88	DZB, Zeesen, Germany.	Irregularly.
T-10.05-29.83	SUV, Cairo, Egypt.	Phones England around 1:00 to 5:00 P.M.
T-10.05-29.85	ZFB, Hamilton, Bermuda.	Phones U. S. A. and ships, daytime.
T-10.06-29.80	TDE, Shinkio, Manchukuo.	Phones Japan 1:00 to 9:00 A.M., irregularly.
T-10.07-29.79	EHY, Madrid, Spain.	Phones YVR near 4:00 P.M., irregularly.
T-10.08-29.76	RIR, Tiflis, U.S.S.R.	Phones 10:00 P.M. to 10:00 A.M., irregularly.
T-10.14-29.58	OPM, Leopoldsville, Belgian Congo.	12-2 A.M., noon-3:00 P.M., irreg.
T-10.17-29.50	RIO, U.S.S.R.	Phones 10:00 P.M. to 10:00 A.M., irregularly.
T-10.22-29.45	PSH, Rio de Janeiro, Brazil.	Sending music, evenings.
E-10.23-29.33	CED, Antofagastan, Chile, heard 7:00 to 9:30 P.M., irregularly.	
E-10.25-29.27	LSL, Buenos Aires, Argentina.	Testing 5:30 to 7:00 P.M.
E-10.29-29.15	DZC, Zeesen, Germany.	4:00 to 9:00 P.M., Irregularly.
T-10.30-29.13	PPM, Rio de Janeiro, Brazil.	Phones irregularly.
E-10.30-29.13	LSQ, Buenos Aires, Argentina.	Used for special tests.
E-10.33-29.04	ORK, Brussels, Belgium.	1:30 to 3:00 P.M., daily.
T-10.33-29.04	RVV, Vladivostok, U.S.S.R.	Phones around midnight.
T-10.37-28.93	JVO, Nazaki, Japan.	Phones 6:00 P.M. to 11:00 A.M., irregularly.
E-10.38-28.91	WOG, Rocky Point, N. Y.	Tests irregularly.
E-10.40-28.85	KEZ, Bolinas, California.	Used irregularly.
T-10.42-28.80	PKD, Kootwijk, Holland.	Phones Java, 7:30 to 9:40 A.M.
T-10.42-28.79	XGW, Shanghai, China.	Phones almost any time.
T-10.42-28.79	TYE3, St. Assise, France.	Phones U. S. A. 3:30 to 7:00 P.M.

Meg.	Meters	STATION	TIME
T-10.43	-28.76	YBG, Medan, Sumatra, Phones Java 5:00 to 8:30 A.M.	
T-10.52	-28.51	VK2ME-VLK, Sydney, Australia. 1:00 to 8:00 A.M. GBP.	
T-10.54	-28.49	JIB, Taiwan, Japan. Phones Japan 10:00 P.M. to 10:00 A.M.	
T-10.55	-28.44	WOK, Lawrenceville, N. J. Phones Brazil and Argentine, irregularly.	
E-10.61	-28.28	WEA, Rocky Point, N. J. Tests irregularly with Europe.	
T-10.66	-28.14	JVN, Nazaki, Japan. Phones 6:00 P.M. to 11:00 A.M., irregularly.	
T-10.68	-28.09	WNB, Lawrenceville, N. J. Phones Bermuda, daytime.	
T-10.86	-28.09	PLQ, Bandoeng, Java. PNT 8:00 to 10:00 A.M.	
T-10.74	-27.93	JVM, Nazaki, Japan. Phones 6:00 P.M. to 11:00 A.M., irregularly.	
T-10.77	-27.86	GBP, Rugby, England. Phones VLK 11:00 P.M. to 8:00 A.M.	
E-10.85	-27.65	DFL, Nauen, Germany. Irregular.	
T-10.84	-27.67	KWV, Dixon, California. Phones Hawaii, daytime.	
T-10.86	-27.62	RQT, Irkutsk, U.S.S.R. Phones around 3:00 to 5:00 A.M.	
T-10.91	-27.50	KTR, Manila, P. I. Phones ships around 7:00 to 10:00 A.M.	
T-10.96	-27.37	ZLT2, Wellington, New Zealand, 11:00 P.M. to 7:00 A.M., Australia	
T-10.97	-27.35	OCI, Lima, Peru. Phones HJY, evenings.	
E-11.40	-26.31	HBO, Geneva, Switzerland. Used for special broadcasts.	
T-11.41	-26.29	XTB, Shanghai, China. Phones around 3:00 to 9:30 A.M.	
T-11.47	-26.16	XTS, Swatow, China. Phones around 2:45 to 9:00 A.M.	
E-11.50	-26.09	XAM, Merida, Yucatan. Irregularly 1:00, 6:00 and 7:00 P.M.	
E-11.59	-25.87	VRR4, Stony Hill, Jamaica. Testing with WNC in daytime.	
T-11.66	-25.73	PPQ, Rio de Janeiro, Brazil. Phones often and broadcasts, irreg.	
T-11.66	-25.73	JVL, Nazaki, Japan. Phones 6:00 P.M. to 11:00 A.M., irregularly.	
E-11.71	-25.63	KIO, Kauhuku, Hawaii. Heard in the evenings testing.	
T-11.82	-25.38	RFM, Khabarovsk, U.S.S.R. Phones around 7:00 to 11:00 A.M.	
T-11.95	-25.12	FTA, St. Assise, France. Phones CNR 4 to 7 A.M., LSM 10 to 12 P.M.	
E-11.97	-25.11	KKQ, Bolinas, California. Heard irregularly, evenings.	
T-11.95	-25.09	IUC, Addis Ababa, Ethiopia. Phones Rome around noon and midnight.	
T-11.99	-25.02	FZS, Saigno, Indo-China. Phones Paris, mornings.	
T-12.00	-25.00	RNE, Moscow, U.S.S.R. Almost any time. Try 11 P.M. to 10 A.M.	
T-12.02	-24.96	JVK, Nazaki, Japan. Phones 4:00 to 8:00 A.M., irregularly.	
T-12.07	-24.86	XTU, Canton, China. Phones China 2:00 to 9:30 A.M.	
		4:30 P.M., irregularly.	
T-12.12	-24.75	TPZ, Aler, Algeria. Phones Paris midnight to noon, broadcasts 3:30 to	
E-12.13	-24.73	DZE, Zeesen, Germany. 7:00-9:00 A.M., 5:00-9:00 P.M., irregularly.	
T-12.15	-24.96	GSB, Rugby, England. Phones New York.	
T-12.18	-24.63	RWJ, Alma-Ata, U.S.S.R. Phones 1:00 to 8:00 A.M., irregularly.	
T-12.22	-24.56	TYA, Pontoise, France. Phones the Normandie, irregularly.	
T-12.24	-24.52	TFF, Reykjavik, Iceland. Phones GCB and OXT 5:00 to 10:00 A.M.	
T-12.25	-24.49	TYB, Pontoise, France. Teard late afternoons, irregularly.	
T-12.29	-24.41	GBU, Rugby, England. Phones America, evenings.	
T-12.30	-24.40	PLM, Bandoeng, Java. Phones VK2ME near 6:30 A.M.	
T-12.40	-24.20	DAF, Norden, Germany. Phones ships, irregularly, mornings.	
T-12.78	-23.47	GBC, Rugby, England. Phones ships, irregularly.	
T-12.83	-23.38	CNR, Rabat, Morocco. 5:00-7:00 A.M., 2:00-4:00 P.M., irregularly.	
T-12.84	-23.36	WOO, Ocean Gate, N. J. Phones ships, irregularly.	
T-12.86	-23.33	IAC, Piza, Italy. Phones Africa 8:00 A.M. to 1:00 P.M.	
T-12.87	-23.31	VVS, Mingaladon, India. Phones 5:00-7:00 A.M., irregularly.	
T-12.88	-23.29	RTZ, Irkutsk, U.S.S.R. 10:00 P.M. to 10:00 A.M., irregularly.	
T-13.00	-23.08	FYC, Paris, France. Phones Ships, irregularly.	
T-13.19	-22.74	RFL, Khabavorsk, U.S.S.R. Around 4:00 to 10:00 A.M.	
T-13.22	-22.70	IRJ, Rome, Italy. Phones Japan irregularly 5:00 to 8:00 A.M.	
T-13.28	-22.58	CGA3, Drummondville, Canada. Phones ships and England, daytime.	
T-13.34	-22.36	-22.50 to 24.3—Ships. Heard in daytime.	
T-13.35	-22.48	YVJ, Maracay, Venezuela. Phones Florida, daytime.	
T-13.37	-22.44	JVU, Nazaki, Japan. Around 6:00 to 10:00 A.M.	
T-13.39	-22.40	WMA, Lawrenceville, N. J. Phones England, daytime.	
T-14.38	-22.40	IDU, Asmara, Eritrea. Phones Italy 8:00 A.M. to 3:00 P.M., irregularly.	
T-13.41	-22.37	YSJ, San Salvador. Phones WNC, daytime.	
T-13.58	-22.09	GBB, Rugby, England. Phones Canada and Egypt, daytime.	
T-13.79	-21.73	RVU, Vladvostok, U.S.S.R. 4:00 to 10:00 A.A., irregular.	
T-13.65	-21.98	HJY, Bogota, Colombia. Phones irregularly.	
E-13.69	-21.91	KKZ, Bolinas, California. Used irregularly.	

Meg. Meters	STATION	TIME
T-13.76-21.77	TYE2, St. Assis, France.	Phones Africa, daytime.
T-13.83-21.70	SUZ, Cairo, Egypt.	Phones GAA 7:00 A.M. to 3:30 P.M.
E-13.90-21.58	WQP, Rocky Point, N. Y.	Testing with RNE irregularly, mornings.
E-13.98-21.46	PZIAA, Paramaribo, Dutch Guiana.	in the evenings.
E-14.30-21.11-20.97	to 21.26	Amateur phones, heard in daytime.
E-14.46-20.75	DZH, Zeesen, Germany.	Irregular.
T-14.46-20.75	GBW, Rugby, England.	Phones WNC 6:00 A.M. to 6:00 P.M.
T-14.47-20.73	WMF, Lawrenceville, N. J.	Phones England, daytime.
T-14.48-20.72	IBS, Rome, Italy.	Phones Africa, mornings.
T-14.48-20.71	TGF, Guatemala City.	Phones WNC, daytime.
T-14.48-20.71	HRF, Tegucigalpa, Honduras.	Phones WNC, daytime.
T-14.48-20.71	HPF, Panama.	Phones WNC, daytime.
T-14.48-20.71	YNA, Managua, Nicaragua.	Phones WNC daytime.
T-14.48-20.71	TIU, Cartago, Costa Rica.	Phones WNC daytime.
T-14.48-20.71	HRL5, Nacaome, Honduras.	Testing with WNC, daytime.
T-14.48-20.71	YSJ, San Salvador.	Phones MNC, afternoons.
T-14.53-20.65	LSN, Buenos Aires, Argentina.	Phones New York, daytime.
T-14.54-20.64	HBJ, Geneva, Switzerland.	Used irregularly.
T-14.58-20.58	RTV, Moscow, U.S.S.R.	Phones around 7:00 A.M.
T-14.59-20.56	WMN, Lawrenceville, N. J.	Phones England, daytime.
T-14.60-20.55	JVH, Nazaki, Japan.	Phones and also broadcasts at times.
T-14.67-20.45	GBL, Rugby, England.	Phones JVH 1:00 to 7:00 A.M.
T-14.73-20.37	IQA, Rome, Italy.	Phones 8:00 to 11:00 A.M., irregularly.
T-14.79-20.29	ROU, Omsk, Siberia.	Phones Moscow 7:00 to 9:00 A.M. irregularly.
E-14.80-20.27	WQV, Rocky Point, N. Y.	heard irregularly
T-14.95-20.08	HJA3, Barranquilla, Colombia.	Phones WNC, Florida.
T-14.94-20.08	HII, Trujillo, Dominican Republic.	Phones WNC, daytime.
T-14.94-20.08	HJB, Bogota, Colombia.	Phones WNC, daytime.
T-14.98-20.03	KAY, Manila, P. I.	Phones DFS 5 to 7 A.M.; U.S.A., 7 to 8 P.M.
T-15.01-19.99	RCH, Kerbi, Siberia.	Phones midnight to 9:00 A.M.
T-15.04-19.95	RKI, Moscow, U.S.S.R.	Phones almost any time.
T-15.06-19.92	WNC, Hialeah, Florida.	Phones many stations in daytime.
T-15.25-19.68	RIM, Tashkent, U.S.S.R.	Phones RKT near 7:00 A.M.
T-15.35-19.54	KWU, Dixon, California.	Phones Hawaii, 2:00 to 7:00 P.M.
E-15.36-19.53	DZG, Zeesen, Germany.	Broadcasts irregularly.
T-15.41-19.47	KWO, Dixon, California.	Phones Hawaii in place of KWU.
T-15.45-19.42	IUG, Addis Ababa, Ethiopia.	Phones Italy 7:00 to 10:00 A.M.
E-15.50-19.35	CO9XX, Tuinucu, Cuba.	Testing irregularly 5:00 to 9:00 P.M.
T-15.53-19.31	HSG2, Bangkok, Siam.	Tests Sunday 11 P.M., Fri. 4:00 A.M.
T-15.61-19.20	JVF, Nazaki, Japan.	Phones U.S.A. near 5:00 A.M. and 8:00 P.M.
T-15.66-19.15	JVE, Nazaki, Japan.	Phones almost any time.
T-15.81-19.02	LSL, Buenos Aires, Arg.	Phones GAA 8 A.M. to 1 and FTM 1-2 P.M.
T-15.86-18.91	CEC, Santiago, Chile.	Phones OCI 11 A.M., 1 and 4:40 P.M., irreg.
T-15.86-18.91	JVD, Nazaki, Japan.	Phones almost all day and night.
T-15.80-18.90	XQJ, Shanghai, China.	Phones Japan 5:00 P.M. to midnight.
T-15.88-18.89	FTK, St. Assise, France.	Phones Saigon 8:30 to 11:00 A.M.
T-15.95-18.81	RRR, Khabarovsk, U.S.S.R.	Phones 11:00 P.M. to 9:00 A.M., irreg.
T-16.04-18.71	KKP, Kauhuku, Hawaii.	Phones KWU 1:00 to 7:00 P.M.
E-16.11-18.62	IRY, Rome, Italy.	Used irregularly for special broadcasts.
T-16.14-18.59	GBA, Rugby, England.	Phones China-Japan, 3:00 to 10:00 A.M.
T-16.20-18.51	FZK, Saigon, Indo-China.	Phones Paris, mornings.
T-16.24-18.47	KTO, Manila, P. I.	Phones Japan 5:00 to 9:00 P.M., irregularly.
T-16.30-18.44	WLK, Lawrenceville, N. J.	Phones England.
T-16.35-18.34	RTW, Moscow, U.S.S.R.	Phones midnight to 9:00 A.M.
T-16.38-18.31	ITK, Mogadiscio, Italian Somaliland.	Phones Italy, daytime.
T-17.12-17.52	WOO, Ocean City, New Jersey.	Phones ships, irregularly.
T-17.28-17.36	FZE8, Djibouti, Fr. Somaliland.	Phones Paris 5 A.M.-2 P.M., Irreg.
T-17.47-17.16	VWY2, Poona, India.	Phones England 7:00 to 10:00 A.M.
T-17.52-17.12	DFB, Nauen, Germany.	Phones LSM and YVO near 9:00 A.M.
T-17.31-17.33	W2XGB, Hicksville, N. Y.	Tests Irreg., relaying WOR.
T-17.64-17.00	XGN, Shanghai, China.	Phones London 7 to 9 A.M., Mon., Wed., Sat.
T-17.70-16.94	IAC, Piza, Italy.	Phones Africa, 5:00 A.M. to noon.
T-17.74-16.91	HSP, Bangkok, Siam.	Phones Japan, Germany and England.

Meg.	Meters	STATION	TIME
T-17.80	to 16.42-16.85	to 18.27-Ships.	Heard in daytime.
T-18.05	-16.82	-PCV, Kootwijk, Holland.	6:00 to 9:00 A.M. Java.
T-18.04	-16.63	-GAB, Rugby, England.	Phones Canada 10:00 A.M. to noon.
T-18.09	-16.58	-TYEZ, Pontoise, France.	Phones U. S. A. 8:00 A.M. to 3:00 P.M.
E-18.12	-16.55	-LSY, Buenos Aires, Argentina.	Irregular.
T-18.18	-16.50	-PMC, Bandoeng, Java.	Phones PCV, 3:10 to 9:20 A.M.
T-18.20	-16.48	-GAW, Rugby, England.	Phones New York, mornings.
T-18.25	-15.44	-FTT, St. Assise, France.	Phones LSM, PPU, mornings.
T-18.30	-16.39	-YVR, Maracay, Venezuela.	Phones Germany, 10:00 A.M.
T-18.31	-16.38	-GAS, Rugby, England.	Phones New York, mornings.
T-18.35	-16.35	-WLA, Lawrenceville, S. J.	Phones England 8:00 A.M. to 4:00 P.M.
T-18.40	-16.30	-PCK, Kootwik, Holland.	Phones Java near 7:00 A.M.
E-18.45	-16.26	-HBF, Geneva, Switzerland.	Used for special purposes.
E-18.48	-16.22	-HBH, Geneva, Switzerland.	Used for special programs.
T-18.62	-16.11	-CAU, Rugby, England.	Phones New York, mornings.
T-18.68	-16.06	-OCI, Lima, Peru.	Testing with HJY near 2:00 P.M.
T-18.69	-16.05	-XGS, Changhai, China.	Heard 7:00 to 8:00 A.M., irregular.
T-18.83	-15.93	-PLE, Bandoeng, Java.	Phones Holland 6 to 11 A.M. KWX, irregular.
T-18.89	-15.88	-ZSS, Klipheval, S. Africa.	Phones 6 A.M. to 2:30 P.M., irregular.
T-19.13	-15.68	-LSM, Buenos Aires, Argentine.	Phones EAQ, DHO, GAA, mornings.
T-19.21	-15.62	-ORG, Brussels, Belgium.	Phones OPL, mornings.
T-19.25	-15.58	-DFA, Nauen, Germany.	Phones 10:00 A.M. to 2:00 P.M., irregularly.
T-19.27	-15.57	-PPU, Rio de Janeiro, Brazil.	Phones FTM, 10:30 A.M. to 3:00 P.M.
T-19.35	-15.50	-PMA, Bandoeng, Java.	Phones Holland, mornings.
T-19.35	-15.50	-FTM, Assise, France.	10:00 A.M. to 2:00 P.M. LSG.
T-19.50	-15.39	-LSQ, Buenos Aires, Argentina.	Heard testing near 2:00 P.M.
T-19.62	-15.28	-VOG, Nairobi, Kenya, Africa.	7:30 to 9:30 A.M., England.
T-19.69	-15.24	-CEC, Santiago, Chile.	Phones LSR, HJY near 11 A.M. and 4 P.M.
T-19.98	-14.01	-KAN, Manila, P. I.	Phones daytime.
T-19.78	-15.14	-WKN, Lawrenceville, N. J.	Phones GAU, daytime.
T-20.04	-14.97	-OPL, Leopoldsville, Belgian Congo.	Phones ORG, mornings
T-20.38	-14.72	-GAA, Rugby, England.	Phones LSL and PPU near 8:00 A.M.
T-21.03	-14.27	-LSN, Buenos Aires, Arg.	8:00 A.M. to 4:00 P.M. WKK and WLK.
T-21.06	-14.24	-KWN, Dixon, Calif.	Phones irregularly.
T-21.08	-14.23	-PSA, Rio de Janeiro, Brazil.	Phones WKK, WLK, daytime.
T-21.16	-14.17	-LSL, Buenos Aires, Arg.	8:00 A.M. to 1:00 P.M. GAA and PSF.
T-21.41	-14.01	-WKK, Lawrenceville, N. J.	Phones LSN, 8:00 A.M. to 4:00 P.M.

SHIP STATIONS

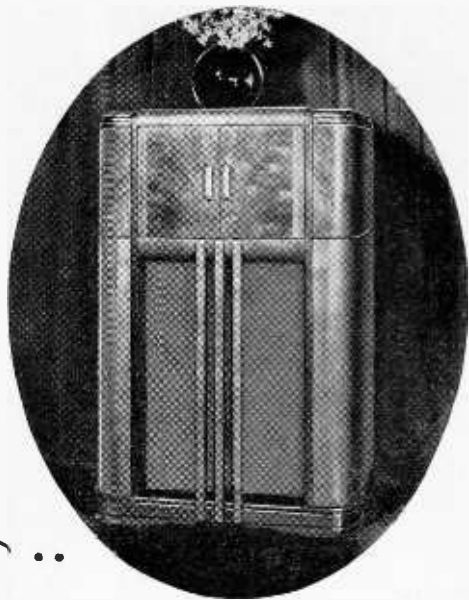
These stations are telephone stations but are sometimes rented to broadcast a special program from a ship. They operate on four bands: 16.85 to 18.27 meters, 22.50 to 24.3 meters, 33.93 to 36.58 meters and 67.87 to 73.17 meters. In megacycles this is 17.80 to 16.42, 13.34 to 12.35, 8.84 to 8.20 and 4.42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

VQIM, Monarch of Bermuda; GFJY, Caledonia; GBTT, Queen Mary; FMNS, Normandie; GMBJ, Empress of Britain; DOAH, Bremen; DOAI, Europa; DHEY, Deutschland; DHIZ, Hamburg; DOAX, Columbus; DHAO, Hansa; DHRL, New York; ICEJ, Rex, IBLI, Conte de Savonia; GBZW, Berengaria; DHDL, Cap Arcona; JFZC, Chichibu Maru.

BOOSTERS

To the following goes our most sincere thanks for securing new members for us last month: Mrs. Alice Wilbur, Baltimore, Md. (4 new members); Neville Seymour, Baltimore, Md.; Roy Saunders, Worcester, Mass.; Carl Eder, Willmar, Minn.; Douglas Worcester, Honolulu, Hawaii; Henry Ward, Jr., Sherbrooke, Quebec; Alejandro Trinks, Maracaibo, Venezuela. (3 members.)

F. C. Patton, Los Angeles, Calif.; Dick Cooper, Norwood, Ohio; Walter Buttes, Worthington, Ohio; "The Daily Sketch," London, England; "Television and Short Wave World," London; "World Radio," London.



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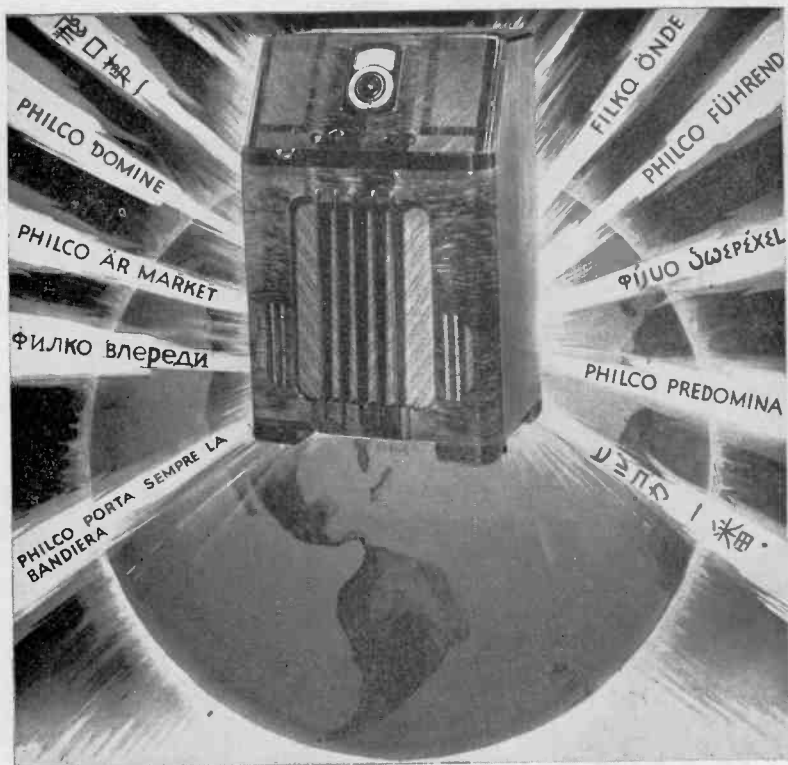
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