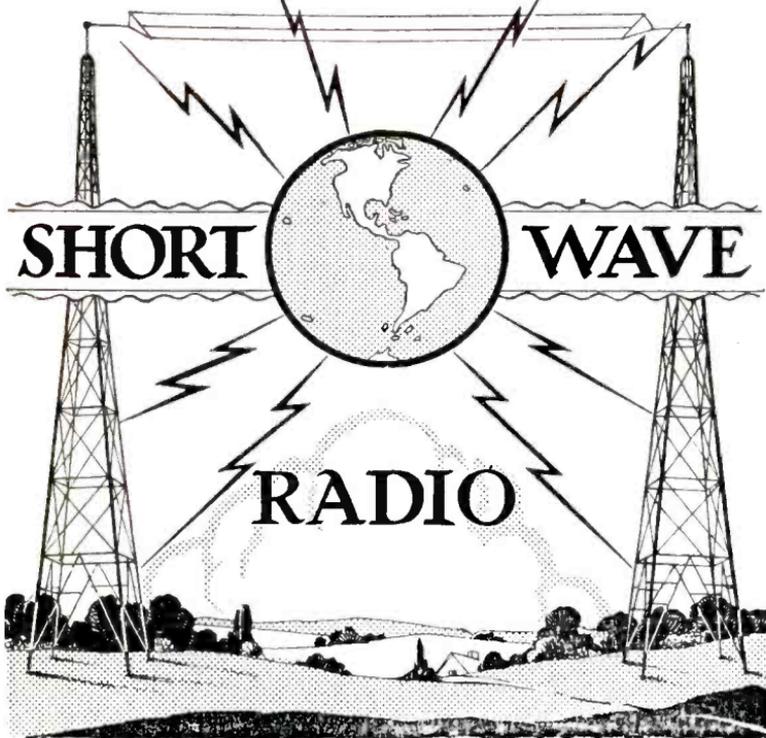


VOL VII

MAY, 1936

NO. 8

INTERNATIONAL



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

- Police Stations.
- Aircraft Stations.
- And Other Features.

THE VOICE OF THE
INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO, U. S. A.

PERLMAN'S PAGE of RADIO SPECIALTIES

"My Personal Approval + Guarantee with each item"

**FARM and FOREIGN RADIO LISTENERS, here's
How to GET FREE CURRENT from the AIR!**

FIRST USE WINCHARGER TO CHARGE YOUR BATTERIES—

THE WINCHARGER (Wind Generator) keeps *Your Storage Battery Always Charged* even when receiver is used 10 hours a day. Your **ONLY expense is a few cents a year** for distilled water. Works in the lightest breeze of wind, yet will not overcharge in strong gales. The WINCHARGER'S Aerofoil Propeller takes advantage of the lowest wind to charge your battery at a maximum rate of 8 amperes. An automatic cutout switch is provided to prevent overcharging. Easily mounted on roof, garage or barn.



UTILITY MODEL, for one storage battery.

List Price \$29.50. **YOUR NET PRICE..... \$18.95**
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DELUXE MODEL,
for charging up to 3
batteries (22 amperes),
complete with tower.
List Price \$44.50.
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can also be used for
supplying electric
light. I can furnish
you with the
necessary bulbs,
wires, and accessories.

SECOND Get D. C. HIGH VOLTAGE from STORAGE BATTERY with MULTI-TAP "B"

Multi-Tap "B" supplies your receiver with the necessary "B" voltage, which may be tapped at 90, 135, 180 or 250 volts at the various taps on the connecting block. It supplies you with a constant and reliable source of high voltage direct current. Multi-Tap "B" is free from annoying hum and R.F. disturbances. Output completely filtered to eliminate interferences and feedback.

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MY PRICE TO YOU.....
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WRITE ME ABOUT
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No. 886 Hi-Fi Duplex (doublet), illustrated, cage (41 ft.) with 50 feet Giant Killer cable lead-in. Complete with new Hi-Fi duplex antenna and receiver couplers and double

lightning arrester, screw eye, nail-it knobs and lead-in tube.

List Price. \$23.00.
Your net cost

\$13.75
Shipping wt. 8 lbs.

Others from \$4.05 Up.

THIRD Convert D.C. to A.C. with ATR INVERTER

For A.C. operated receivers, the ATR Inverter can convert from voltages of 6, 12, 32, 50, 90, 110, and 220 volts D.C. to 110 A.C. Important:—Give the rating of the receiver, voltage, current, cycles, and wattage—so that we may be able to recommend suitable model ATR Inverter for your installation.

All Models..... **\$13.50**
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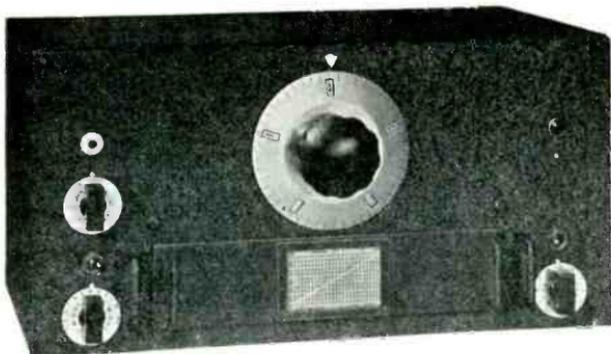
Cable Address: AMPLIVOX, N. Y.

SOL PERLMAN, E.E.

(W2)CU

TECHNICAL ADVISOR
OF N. Y. CHAPTER OF
I. S. W. C.

227 FULTON ST., New York—PHONE: CORTLANDT 7-7843



THE HRO JUNIOR

For those who have coveted the superlative performance of the communication-type HRO receiver, but who do not require its extreme versatility, a Junior model is offered. The circuit details of both receivers are identical in every respect, but the lower priced model has been greatly simplified by omitting the crystal filter and the S-meter, and by designing coils for "continuous handsread" only.

Although these omissions do not greatly restrict its usefulness, they make it possible to price the HRO Junior at a very attractive figure.

Whether your interest is in international broadcast or in amateur communications, we believe you will find these remarkable receivers ideally suited to your needs. The coupon below will bring an illustrated description of both.

National Company, Inc.,
Malden, Mass.

GENTLEMEN: Please send me your descriptive folder on the Standard HRO and the HRO Junior.

Name.....

Address..... ISW-5-36

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, 10 St. Mary's Place, Rotherhithe, London, S. E. 16, England.

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

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ARTHUR J. GREEN, Editor.

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A beautiful 12-inch globe showing the short wave stations of the world, with call-letters and location, for only \$2.75 F.O.B. Indianapolis. This globe is made by the world's greatest globe makers. It is modern in every detail, with all the latest changes in spellings and boundaries made.

The base is of walnut, highly finished. The globe itself can be cleaned by merely washing it with a damp cloth. Every short wave fan should have one of these globes for several good reasons. First of all, it marks the location of stations heard. Second, you can measure distances to the stations you hear. Third, it adds charm and beauty to any radio. Fourth, it creates interest in your short wave reception when people see this globe.

A free globe hand-book included in each sale.

PLEASE SEND POSTAGE

This new price does not include postage. Readers are requested to send the necessary postage when ordering. The shipping weight is eight pounds. In cases where more than enough postage is sent, we will return all not used.

Ask your postmaster for the postage rate on 8 pounds from Indianapolis, Indiana.

Address your letters to—

INTERNATIONAL SHORT WAVE CLUB, East Liverpool, Ohio



PERLMAN'S PAGE of RADIO SPECIALTIES

"My Personal Approval + Guarantee with each item"

"I wouldn't do without one of these PHONE RECEPTORS," writes J. Lorenz of Jersey City. "I enjoy myself with the headphones until the wee hours of the morning."

You, too, Will Enjoy Earphone Listening with my Perfected EARPHONE RECEPTOR!

6 Outstanding Advantages

Want privacy? Want to listen late at night? Want better reception? Use my Amplivox Headphone Receptor. Enables you to listen at any time, without disturbing anyone or being yourself disturbed.

NO TAMPERING with wiring to install. Installed in ONE MINUTE. No tools needed. Inserting phone jack AUTOMATICALLY silences speaker. FIVE FOOT CABLE makes it a phone jack at your fingertips. NEEDS BUT A FRACTION OF VOLUME used for loudspeaker. HELPS TO IDENTIFY STATIONS heard faintly on the speaker. Ideal for the "HARD-OF-HEARING." Shipping weight, 1 lb. List Price, \$6.75.

MY PRICE TO YOU..... **\$3.95**

Give make and model or receiver when ordering.

Also note the SPECIAL OFFER.



Important Note

About Amplification

AMPLIVOX PHONE RECEPTOR utilizes the full amplification of the receiver. Ordinary devices lack one stage of amplification because the signal is tapped from the grid of the tube instead of the plate. With the Amplivox Phone Receptor the signal is tapped from the plate.

SPECIAL—COMBINATION—OFFERS

(1)—Amplivox PHONE RECEPTOR, a pair of ACME phones and a special plug to take from 1 to 4 pairs of phones; shipping weight, 2 lbs.

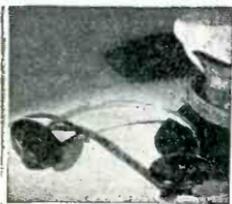
My Special Offer Price..... **\$4.49**

(Regular value, \$5.49)

(2)—Amplivox PHONE RECEPTOR, a pair of TRIMM FEATHERWEIGHT PHONES (4 oz.) and a special plug to take from 1 to 4 pairs of phones; shipping weight 2 pounds.

My Special Offer Price..... **\$9.23**

(Regular value, \$10.73)



EARPHONES That IMPROVE COMFORT AND RECEPTION

TRIMM (4 ounces) 24,000 Ohms. EXTREMELY SENSITIVE. The Lightest Wt. Phones Made.

Ultra-sensitive, weighs but four (4) oz. with head band, 24,000 ohm impedance. Can pick up signals so faint that they would not be heard on speaker. Shipping wt. 1 lb.

List Price, \$10.00. MY PRICE TO YOU..... **\$5.88**

ACME PHONES, 2000 ohm, sturdily made sensitive. My SPECIAL PRICE TO YOU..... **\$1.25**

PHONE PLUGS, will take from one to four pairs of phones. My Special Price..... **29c**

P.S.

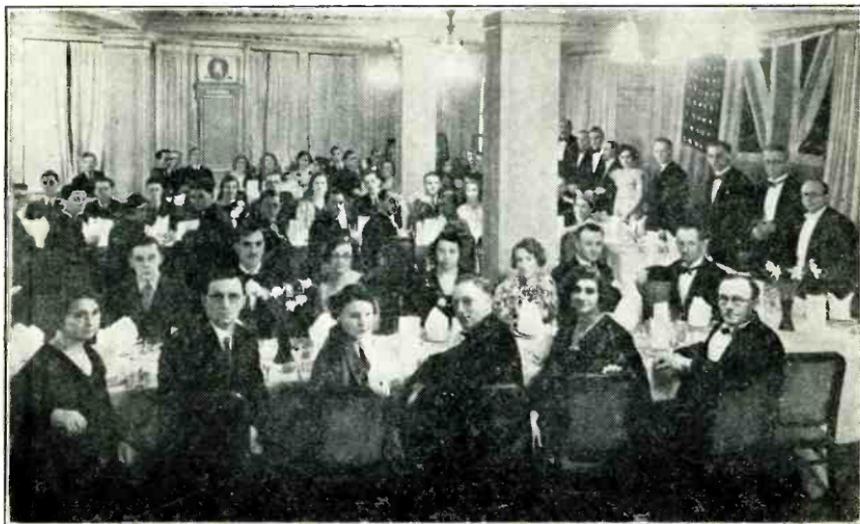
As Technical Advisor of the N. Y. Chapter of the I. S. W. C., I invite your inquiries on radio problems. I shall be glad to suggest solutions and recommend suitable materials or equipment.

Cable Address: AMPLIVOX, N. Y.

SOL PERLMAN, E.E. (W2JCU)

TECHNICAL ADVISOR
OF N. Y. CHAPTER OF
I. S. W. C.

227 FULTON ST., New York—PHONE: CORTLANDT 7-7843



LONDON CHAPTER DINNER-DANCE

The third annual dinner-dance of the London Chapter was held March 7th at Maison Lyons Hall. Above is a picture of the members and guests. Standing at the table on the right, under the flags, are the following: G. Gambier Parry, Mr. Carleton L. Dyer (Vice-President), Mr. W. J. Nobbs Mons. M. F. Gallat (French Consul General), Miss P. Norton, Mr. J. E. Hunter (Chairman), Mr. A. E. Bear (European Representative), Mr. D. L. Gill and Mr. Ralph Stranger (well-known radio authority and writer of several books). The London Chapter is setting a fine example of co-operation and the members are to be complimented on their excellent work.

PEN-PALS

The following members would like to correspond with others:

- Robert Holland, Jr., Box 109, Murray, Kentucky, (Jamaica and Haiti).
- M. L. Grigsby, Granger, Iowa. (Japan and England).
- Edgar Murphy, 639 Lindsey Street, Greensboro, N. C.
- R. H. Maly, 347 East 72nd St., New York City.
- F. W. Henning, 50 Marlowe Road, Worthing, Sussex, England. (14 yrs. old.)
- Maurice Eckford, (W6NDF), P. O. Box 758, Escondido, Calif. (Foreign).
- Bill Vandecar, 574 Madison Ave., Grand Rapids, Mich.
- H. V. Gribble, Traffic Box 42, Minneapolis, Minn. (Midwest 16).
- E. Scala, Jr., 3310 Bainbridge Ave., Bronx, New York (Foreign).
- Wm. Kirpisk, Box 195, Wilber, Nebraska.



DR. PAUL Z. REIST

Pictured above is Dr. Paul Z. Reist, of Wausau, Wisconsin, and his radio den. Dr. Reist is an ardent short wave fan, listening for every program he can get and sending for verifications whenever he lands a new station. Dr. Reist is also a very active member of I. S. W. C. At the present time he is leading the contest for that beautiful Hallierafter receiver which we are giving to the person that sends in the most new members before August first. Dr. Reist hopes and expects to win this receiver and is working with that aim in view. In the above picture can be seen some of the verifications received by Dr. Reist and also his membership certificate in the I. S. W. C.

SAD NEWS

Members will be sorry to learn that a brother of Fred Karpen, that famous DXer from Johnstown, Pa., died on Easter Sunday. Mr. Karpen is known the world over for his short wave work.

BOOSTERS

We are very thankful to the following persons for securing members for us during the past month. It is such friendliness as this that has enabled this organization to carry on. Mrs. I. Heglund, Lake Worth, Fla.; James Crum, Durant, Miss.; Ben Friedman, Brooklyn, N. Y.; Charles Harrison, Port Arthur, Ontario; George Seale, Watetown, Mass.; D. Ogden, Manchester, England; F. G. Denham, London, England; H. Wild, Manchester, England; Mervyn Sound and Vision, London, England; Bernard Heckel, Struthers, Ohio; Richard Donovan, New Rochelle, N. Y.; Philo Radio of London, England; Herman Rappaport, Brooklyn, N. Y.; T. Russell Fairfax, Geneva, N. Y.; Andrew Shassetz, Monarch, Wyoming; Dr. H. L. Van Pelt, Ithaca, New York; Amateur Cine Service, Bromley, England; Scott Radio of London, England; M. Louw, Cape Town, South Africa; Capt. Leonard Nourse, St. George, Barbados; Constant Williams, Philipsburg, St. Martin, W. I.; Gerald Carr, Marysville, Ohio; E. A. Felix, Eldorado, Ill.; Elliot Bicknell, Newton Highland, Mass.; Eric Butcher, Cokeville, Wyo.; H. M. Macomber, Rutland, Vt.; Henry Ward, Jr., Sherbrooks, Quebec; A. J. Bubnick, Curry Alaska; Gilbert McLean, Madison, Wisc.; P. I. Ogilvie, Ponoka, Alberta, Canada.

WHY WE LEAD!

It is interesting to note that while many publications depend on one or two short wave listeners to supply their short wave news, this magazine used the reports of 113 members in Canada, India, England, Scotland, Czechoslovakia, New Zealand, Puerto Rico, Cuba, Ireland, Australia, Sweden, Venezuela, Colombia, Union of South Africa, Gibraltar, Japan, Portuguese China, and the United States, as well as many letters direct from stations in other countries, to make up the April issue. No one or two short wave fans could begin to supply the information used in bringing out this magazine. That is why we have no special "listeners." Every member is welcome to send in news at any time.

WHEN YOU BUY A NEW SET

Once again we urge members and readers to drop us a card or letter whenever you buy a new receiver or some new equipment and tell us how you like it. We want to know that you have bought it, and we want to know just how much success you have with it.

SENDING FOR VERIFICATIONS

A goodly number have written in and asked us to publish a list of stations that do not verify. It is not only impossible to do this, but it would be unfair and any publication that attempts to do such a thing would soon find themselves in hot water. For here are the facts. Every station has been accused by some person of not acknowledging reports, and every station, (or just about) has verified to some other person. One person who wrote last month said she could not get PCJ, W1XAL, 2RO, CT1AA, Pontoise, KKQ, PRF5, CRCX and Prado to answer. All but KKQ are among the very best stations to verify. And even KKQ has verified for some members.

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.

AUSTRALIA

VK2ME, Sydney, on 31.28 meters, or 9.59 mc., broadcasts Sundays 1:00 to 3:00 A.M., 5:00 to 9:00 A.M. and 10:30 A.M. to 12:30 P.M. in May.

VK3ME, Melbourne, on 31.55 meters, 9.51 mc., broadcasts week-days 4:00 to 7:00 A.M.

VK3LR, Melbourne, on 31.31 meters, 9.58 mc., broadcasts daily 3:15 to 7:30 A.M., but may be heard between 10:30 P.M. and 3:00 A.M. testing. They test with Geneva stations Mondays from 2:45 to 3:10 A.M.

VK2DL, Canterbury, Sydney, on 41.1 meters, or 7.30 mc., broadcasts from 7:00 to 9:00 P.M. Wednesdays and Sundays. Owned by W. Phelps of 14 Watkins Street.

VPD, Suva, Fiji Islands, on 22.95 meters, or 13.075 mc., still broadcasts between 12:30 and 1:30 A.M. It is heard by many now.

Radio Oceania, at Papeete, Tahiti, broadcasts on 29.79 meters, or 10.07 mc., Tuesdays and Fridays 11:10 P.M. to 1:00 A.M. according to H. S. Campbell, while W. Turpin says it is on 42.25 meters, 7.10 mc., Tuesdays and Fridays 11:00 P.M. to Midnight. Mr. Campbell also says a station at Numea, New Caledonia, is on 8.73 mc. testing.

VJZ, Rabaul, New Guiana, on 21.19 meters or 13.88 mc. is a new phone station announcing as "This is Radio Rabaul." They are testing around 5:00 A. M. and 5:00 P.M. on voice. (McDonough, New Zealand).

A new short wave broadcast station in Perth, Australia, will go on the air soon. It is owned by the Amalgamated Wireless, the owners of VK2ME and VK2ME. The call VK6ME will be used and they will operate somewhere between 20 and 50 meters. (Harry Jackson, Perth).

VK2MD, a portable station owned by A. W. A., on 8.83 mc. was logged between 5:46 and 5:57 A.M. once. (Williams, N. Y.)

AFRICA

VQG, Nairobi, Kenya, on 15.28 meters or 19.62 mc. is a new telephone station heard working London between 7:30 and 8:00 A.M. nearly every day. (Rossi, Penna.; Vandecar, Mich.; Palmer, Ohio; Miller, Ky.)

VQ7LO, Nairobi, Kenya, on 49.31 meters, 6.08 mc., broadcasts 5:45 to 6:45 A.M. weekdays. Also 8:30 to 9:30 A.M. on Tuesdays and Thursdays. Also daily 11:30 A.M. to 2:30 P.M.; Saturdays 11:00 A.M. to 3:00 P.M., and Sundays 11:00 A.M. to 2:00 P.M. This one is never heard good.

CR6AA, Lobito, Angola, on 41.80 meters, 7.177 mc., say they broadcast Wednesdays and Saturdays 2:45 to 4:45 P.M. instead of 2:30 to 4:30 P.M. as we list it. The address is Box 103 (Stuart Fuller). Even African members have a hard time landing this one.

CR7AA, Lourenco Marques, on 48.88 meters or 6.137 mc. This station has 300 watts power and broadcasts daily 12:45 to 3:00 P.M. and Sundays 8:00 to 10:30 A.M. The address is Box 594. This station is never heard well. (Channon, Cape Elizabeth, Africa, J. Miller, N. Y., Graham, Springs, Transvaal, Africa, and Schram, Wisconsin).

Bulawayo, South Rhodesia, on 48.80 meters, 6.147 mc., say they broadcast Tuesdays 1:15 to 3:15 P.M. and Fridays 10:00 A.M. to Noon. (W. Chambers). This one may just as well be in Mars or Jupiter.

FVA, Algeria, in 33.48 meters or 8.96 mc. phones Paris irregularly between 3:00 and 6:00 P.M. and around 1:00 A.M. (Solito, Pa.). The address is 137 Rue de Constantine, Alger, Algeria. Heard between 1:00 and 1:45 A.M. and 4:00 and 5:00 P.M. (Miller, Ky.).

ETB, Addis Ababa, Ethiopia, on 25.09 meters or 11.955 mc. is broadcasting a special program every Sunday between 4:30 and 4:50 P.M. As we go to press the Italian soldiers are close to the station, so we do not know what might take place now. ETB is sometimes used for phone work between 1:00 and 6:00 P.M. while a station ETA on 16.42 meters or 18.27 mc. is also used between 7:00 A. M. and 1:00 P.M. The address is Box 823. (Special broadcast reported by members Rogers, Child, Atherton, Strom, Kash, Legge, Jessen, Ward, Orchard, Olgivie, Stempel, Lawrence, Rossi, Swimmer, Rappaport, Brady, Miller and Miller).

Canary Islands, EA8AB, Santa Cruz, Tenerife, on 41.60 meters or 7.21 mc. broadcasts Mondays, Wednesdays and Fridays from 3:15 to 4:15 P.M. Amateur stations EA8AF, EA8AO, and EA8AJ, all in the Canary Islands, were reported using phone on 20 meters (14.03 mc. amateur band) between 3:00 P.M. and 10:30 P.M. (Ward, N. Y., Orchard, England; Rossi, Pa.; Bradley, N. Y.). Amateur EA8AL on 42 meters, 7 mc. was heard at 4:00 P.M. (Orchard, Eng.). EDR3, El Tablero, also called EHZ, telephones Spain (EHY) between 3:30 and 4:00 A.M. according to a letter received from Spain. (Chambers, Okla.)

African Phone Stations. SUX, Cairo, Egypt, on 38.06 meters, 7.86 mc., phones England around 4:00 to 6:00 P.M. SUV, Cairo, on 29.83 meters, 10.05 mc., phones around 1:00 to 5:00 P.M. SUZ, Cairo, on 21.70 meters, 13.83 mc., phones around 11:00 A.M. to 1:00 P.M. IDU, Asmara, Eritrea, on 22.40 meters, 13.38 mc., phones Rome between 7:00 and 11:00 A.M. to 1:00 P.M. OPL, Leopoldville, Belgian Congo, on 14.97 meters, 20.04 mc. phones Belgium 10:00 A. M. to 3:00 P. M. OPM, same city, on 29.58 meters, 10.14 mc., phones around 2:00 to 3:00 P.M., and reported between midnight and 2:30 A. M. by members W. Chambers and R. Leeder. ZSS, Capetown, South Africa, on 15.88 meters, 18.89 mc., phones England between 6:30 A.M. and 1:00 P.M. Reported once at 3:40 P.M. (R. Leeder). CNR, Rabat, Morocco, on 23.38 meters, 12.83 mc., phones Paris irregularly in daytime. Station SUV sent a special program from Jerusalem on April 5th, no time stated. (Centanino) and SUZ relayed a program from Addis Ababa at 3:00 A.M. one Sunday. (Olgivie, Canada).

ASIA

From the chief engineer of the Kokusai Denwa Kaisha, Ltd., Osaka Bldg., Kojimachiku, Tokyo, Japan, comes the following list of telephone stations now in use in Nazaki, Japan. They verify, letters are to be sent to the above address.

JVA—15.86 m. (18.91)	JVB—15.63 m. (18.19)	JVC—16.05 m. (18.69)
JVD—18.91 m. (15.86)	JVE—19.15 m. (15.66)	JVF—19.20 m. (15.62)
JVG—20.12 m. (14.91)	JVH—20.55 m. (14.60)	JVI—22.12 m. (13.56)
JVJ—24.44 m. (12.27)	JVK—24.96 m. (12.02)	JVL—25.73 m. (11.66)
JVM—27.93 m. (10.74)	JVN—28.14 m. (10.66)	JVO—28.93 m. (10.37)
JVP—39.95 m. (7.51)	JVQ—40.16 m. (7.47)	JVR—40.60 m. (7.39)
JVS—42.92 m. (6.99)	JVT—44.44 m. (6.75)	JVU—51.81 m. (5.79)
JVV—52.56 m. (5.73)	JZD—17.74 m. (16.91)	JZE—23.04 m. (13.02)
JZF—35.29 m. (8.50)	JZG—47.39 m. (6.33)	JYT—19.03 m. (15.76)
JYK—22.06 m. (13.60)	JYS—30.49 m. (9.84)	JYR—38.07 m. (7.88)

Stations JVN and JVP broadcast a program for European listeners each Tuesday and Friday from 2:00 to 3:00 P.M. Sometimes JVM is also heard. JVP and JVN also broadcasts a program to America on Mondays and Thursdays from 4:00 to 5:00 P.M. These last programs are heard all over the United States, by the way. In addition to the above, many of these stations may be heard broadcasting a program while waiting for a telephone call to be put through. A station JYS on 30.40 meters, 9.87 mc. has been heard broadcasting 11:00 P.M. (Walcott, Calif.), 1:00 A.M. (Gallagher, Calif.), and 2:50 A.M. (Chamers, Okla.). And here are the stations heard telephoning: JVN at 6:00 A.M., 7:00 A.M., 2:00 A.M., 5:40 A.M. JVM at 7:00 A.M., 2:00 A.M., 10:00 P.M., 11:15 P.M.; 1:00 A.M. and 4:40 A.M. JVE at 8:30 P.M. JVT at 6:30 A.M. JVH at 11:30 P.M. to 1:00 A.M. JVL at midnight. JVD at 6:30, 10:15 P.M. and from 5:00 P.M. to midnight. JVN is also reported broadcasting a program from midnight to 1:00 A.M. every night. A Japanese station on 9.34 mc. has been heard from 11:00 P.M. to 5:00 A.M. calling station JJD. Another one on 9:69 answers and calls Shinjio (Walcott, Calif.).

A letter from the Chureki Transmitting Station, International Telephone Company of Japan, Chureki Gai, Shinchiku State, Taiwan, Japan, says they have JIA on 15.74 mc.; JIB on 28.49 meters, or 10.53 mc., and JIC on 50.93 meters, 5.89 mc. JIB is used all day, and JIC on winter nights. On the second Sunday of each month they relay a program from station JEAK around 5:00 to 6:00 P.M., Japan Time, or 3:00 to 4:00 A.M., E.S.T. (Sparks, Calif.). JIB was heard phoning at 9:00 A.M. (Howe, Arizona), at 2:00 A.M. and 10:00 A.M., and sending music once at midnight (Sparks).

Kanjoshi Station, Manshu Denshin Denwa Kaisha, Ltd. of Shinkio, (Hsinking), Manchuko, has stations TDE (also called JZB) on 29.80 meters or 10.065 mc. and TDD (also called JZC) on 5.83 mc. that may be heard telephoning Japan quite often between 10:00 P.M. and 6:00 A.M.

CQN, Macao, Portuguese China, on 31.00 meters or 9.665 mc. broadcasts Mondays and Fridays from 7:00 to 8:30 A.M. Reports should be sent to the Postoffice Department, Macao. Reported heard by Butcher, Wyo.; Miller, N.Y.; Rossi, Pa. A letter verifies this schedule (Miller, N.Y.)

ZBW, Hong Kong, on 34.29 meters, 8.75 mc., broadcasts daily. It is heard in the U.S.A. between 3:00 and 7:00 A.M., and on the west coast until 10:30 A.M. Many heard it last month.

XOJ, Shanghai, China, on 18.99 meters, 15.80 mc. is a new phone station working JVD Japan, between 5:00 P.M. and midnight nearly every day (Walcott, Calif., and Sparks, California.)

XGOA, Nanking, China, has a new short wave broadcast station on 31.45 meters, 9.54 mc. and it is heard between 3:30 and 5:30 A.M. nearly every day. They give an English program daily at 5:10 A.M. (Walcott, Calif.; Sparks, Calif.)

XGN, Shanghai, on 17.00 meters, 17.64 mc., phones London around 7:00 A.M. daily. XGW, Shanghai on 28.79 meters or 10.42 mc. phones Japan between midnight and 3:00 A.M.

A letter from A. Kayoum, Ministere des PTT, Kaboul, Afghanistan, to A. Scala, Jr., Bronx, N. Y., says they have station AFK at Kaboul on 71.50 meters, 4.193 mc. in daytime and on 30.90 meters or 6.607 mc. at night and AFH at Herat on 71.50 meters or 4.193 mc. in daytime and 50.80 meters, 5.135 mc. at night. Mr. Scala says they telephone. R. Williams, New York, says AFH on 50.80 was broadcasting a program in English one Sunday 5:12 to 6:05 A.M.

VUB, Bombay, India, on 31.36 meters, 9.57 mc., broadcasts Sundays 12:30 to 1:30 P.M. and Thursdays and Saturdays 11:30 A.M. to 12:00 P.M. VWY, Poona, India, telephones England on 17.10 meters on 17.54 mc. between 7:00 and 8:30 A.M. nearly every day, starting at 7:00 A.M. sharp.

HSE, Bangkok, Siam, on 10.055 mc. and HSH on 10.25 broadcast nearly every Monday, Wednesday and Thursday between 9:00 and 10:00 A.M. These tests started recently (Gallagher and Sparks, Calif.). Bangkok was heard on 22.80 meters sending music to KTO and KAY, Philippines, from 12:55 to 2:30 P.M. (Orchard, Eng.). HS8PJ on an announced frequency of 27.40 meters, 10.955 mc. was heard between 7:00 and 7:30 A.M. one Monday (Walcott, Calif.). HSP, Bangkok, on 16.92 meters, 17.75 mc. was heard giving news at 1:00 A.M. (Olgivie, Canada) and phoning at 10:25 A.M. (Howe, Ariz.).

RV15, Khabarovsk, Siberia, on 70.65 meters, 4.25 mc. broadcasts from 1:00 to 9:00 A.M., but are fading out in North America now. A letter signed by Rowena Meyer to Walter Kurtz of Kansas City says they broadcast an English program at 1:00 P.M. local time every odd day in the month and they welcome reports. This is the first reply reported direct from the station in four years.

Java. A letter from N.I.R.O.M. at Embong, Malang 65, Soerabaja, Java, to Ernest Orchard, Weymouth, England, says they broadcast as follows: On 31.20 meters, 9.61 mc., on Mondays and Wednesdays from 4:30 to 9:30 A.M.; Saturdays 4:30 to 11:00 A.M. and other days 4:30 to 10:00 A.M. Also on 25.30 meters, 11.86 mc., on Sundays 7:00 P.M. to 1:30 A.M. next day and all other days 10:30 P.M. to 1:30 next day. Members all report this one station on about 31.10 meters, 9.65 mc., between 6:00 and 8:30 A.M. (Grey, Wooten, Miller, Gavin, Sparks, Gallagher, Walcott). Also heard between 1:30 and 2:00 A.M. (Walcott, Calif.)

PLP, Bandoeng, Java, on 26.26 meters, 11.00 mc. is broadcasting nearly every day between 2:00 and 7:00 A.M. now. PMN on 29.25 meters or 10.26 mc. broadcasts between 6:00 and 11:30 A.M. three or four days a week. PLQ on 10.67 mc. and a station on about 11.51 mc. is heard irregularly around 10:00 A.M. These programs have been mentioned by members J. Edwards, R. Williams, R. Legge, J. Ward, A. Walcott, R. Rossi, C. Miller, J. Miller, G. Feldrik, H. Rappaport, J. Studholme and Mr. Olgivie).

Java Phones. Station PMA on 15.50 meters, 19.35 mc. works Holland between 7:00 and 10:30 A.M. PLE on 15.93 meters, 18.83 mc. phones between 6:50 and 7:50 P.M. and 7:00 and 11:00 A.M. PLV on 31.86 meters or 9.42 mc. is heard around 6:45 and 11:00 P.M. PNI, Makassar on 34.19 meters, 8.77 mc. phones Bandoeng between 3:00 and 5:00 A.M. nearly every day. YBG, Medan, Sumatra, on 28.80 meters or 10.40 mc. phones Bandoeng between 3:00 and 11:00 A.M. J. Miller, Brooklyn, reports a letter from Bandoeng, saying that YBG is on 28.76 meters and PLV is on 31.90 meters. For some unknown reason, letters from these stations always seem to state a new wave. So, these stations must move around a bit.

The Philippines. The Long Distance Telephone Company of Manila, has stations KZGB on 8.71 mc., KZGM on 7.885 mc. and KZGF on 5.81 mc. and they have been testing with some ship nearly all day, each being heard for about fifteen minutes (Walcott, Calif.). KZRM, Manila, now is on short waves, testing on 48.86 meters or 6.13 mc. (same wave as W8XK) around 4:00 A.M. (Walcott, Calif.). KAY, a phone on 14.98 mc. phones around 6:00 to 10:00 A.M. KTP on 8.12 mc., KTR on 10.91 mc. and KAX on 19.98 mc. all work phone nearly every day. KBB was broadcasting at 9:20 A.M. once (Howe, Ariz.) and KTP works phone with KAX, California, from 10:30 to 11:00 A.M. daily (Channon, Africa).

THE EUROPEANS

The British Broadcasting Corporation paper for May gives the following schedule:

GSB on 31.55 meters, 9.51 mc., from 12:15 to 2:15 A.M.; 12:15 to 5:45 P.M.
 GSC on 31.32 meters, 9.58 mc., 6:00 to 8:00 P.M.; 9:00 to 11:00 P.M.
 GSD on 25.53 meters, 11.75 mc., 11:30 A.M. to 12:00; 12:15 to 5:45; 6:00 to 8:00 P.M. and 9:00 to 11:00 P.M.
 GSF on 19.82 meters, 15.14 mc., 9:00 A.M. to Noon.
 GSG on 16.86 meters, 17.79 mc., 6:00 to 8:45 A.M.; 9:00 A.M. to Noon.
 GSH on 13.97 meters, 21.47 mc., 6:00 to 8:45 A.M.
 GSI on 19.66 meters, 15.26 mc., 12:15 to 4:00 P.M.
 GSO on 19.76 meters, 15.18 mc., 4:00 to 5:45 P.M.
 GSP on 19.60 meters, 15.31 mc., 6:00 to 8:00 P.M.
 GSN on 25.38 meters, 11.82 mc., 12:15 to 2:15 A.M.

Many members report this so we will not mention names. The new ship "Queen Mary" uses the call GBTT on 4.43 mc. (Orchard, Eng.) and was heard on 8.80 mc. and 8.68 mc. once at 8:30 A.M. (Studholme, Eng.) A new phone GCI is on 8.73 mc. phoning India between 1:00 and 4:00

A.M. (Williams, N. Y., and Miller, Ky.) Many other Rugby phones are heard every day of course.

LKJ1, Jeloy, Norway, on 31.48 meters, 9.53 mc., broadcasts from 5:00 to 8:00 A.M. and from 11:00 A.M. to 6:00 P.M. A letter says they are building a new transmitter that will have 25,000 watts power to work on different waves. (Hart, Minn.)

OXY, Skamlebaek, Denmark, broadcasts on 49.50 meters, 6.06 mc., from 1:00 to 6:00 P.M. weekdays and 11:00 A.M. to 6:00 P.M. Sundays.

OER2, Vienna, Austria, on 49.42 meters, 6.072 mc., broadcasts 9:00 A.M. to 5:00 P.M. weekdays and until 6:00 P.M. Saturdays.

CT1AA, Lisbon, Portugal, say they are on 31.09 meters or 9.65 mc. now. They moved the schedule up last year when fast time came in, so they must be on the air now from 3:30 to 6:00 P.M. on Tuesdays, Thursdays and Saturdays.

CSW, Lisbon, Portugal, on 31.91 meters, 9.40 mc., send a card giving the address as Administracao Geral de Correios e Telegrafos, Lisbon, but the station was heard on 31.98 meters, 9.38 mc., between 5:00 and 7:00 P.M. (Hersowitz, Md.)

EAQ, Madrid, Spain, on 30.43 meters, 9.86 mc., broadcasts daily from 5:15 to 9:30 P.M. and recently changed to broadcast Saturdays from 1:00 to 3:00 P.M. On Good Friday, from 1:30 to 2:00 P.M. they sent a special program to America (Gaug, N. Y.). And it was heard on Saturday once on 19.72 meters (a new wavelength) sending a special to the U.S.A. from 1:30 to 2:30 P.M. (Hersowitz, Md.; Childs, Pa.; and Rappaport, N. Y.)

SPW, Warsaw, Poland, on 22.00 meters, 13.63 mc., is broadcasting Mondays, Wednesdays and Fridays from 11:30 A.M. to 12:30 P.M. The address is Polskie Radjo Spolka Okcyjna, Warazawa U. L., Mozowieka 5.

SM5SD, Lumafabriken, Stockholm, Sweden, is broadcasting on 42.00 meters, 7.21 mc. with 30 watts power on Saturdays from 7:00 to 8:00 A.M. and will move to 31 meters and have 300 watts power soon (I. Gullberg, Sweden).

PHI, Huizen, Holland, as we predicted last month, has moved to 16.88 meters or 17.77 mc. and broadcasts daily excepting Tuesdays and Wednesdays 8:00 to 10:30 A.M. (Centanino, Pa.; XDX, Pa.; Legge, N. Y.; Hersowitz, Md.; Ogilvie, Alta.; Gavin, Ohio. This station sent a special program to African listeners one Sunday from 1:00 to 2:00 P.M. (Kash, Tenn.; Davison, P.R.; Childs, Pa.)

PCJ, Eindhoven, Holland, on 31.28 meters, 9.50 mc., broadcasts Sundays 7:30 to 8:30 A.M. for Asia; 1:00 to 2:00 P.M. for Africa and 7:00 to 8:00 P.M. for America. This station always announces as the Catholic Broadcasting Corporation, Amsterdam, but the station is at Eindhoven. They are also on 19.71 meters, 15.22 mc., Tuesdays 3:00 to 6:00 P.M.; Wednesdays 7:00 to 11:00 A.M. and sometimes Sundays 6:00 to 8:00 A.M.

TPA2, Pontoise, France, on 19.68 meters, 15.15 mc., now broadcasts from 6:00 to 11:00 A.M. TPA3 on 25.23 meters, 11.90 mc., broadcasts 2:00 to 5:00 A.M., and 11:15 A.M. to 6:00 P.M. TPA4 on 25.63 meters or 11.71 mc., broadcasts from 6:15 to 8:00 P.M. and 10:00 P.M. to Midnight. TPA3 between 2:00 and 3:00 A.M. is reported by members, Houlgate, Reese, Chambers, Stempel and Sparks, all in North America. A station

TYA on 24.56 meters or 12.21 mc., has been broadcasting between 10:40 P.M. and Midnight (Walcott, Calif.) and phoning day and night (many).

From Germany comes the May schedule. It is as follows:

DJA on 31.38 meters, 9.56 mc., 12:30 to 3; 8 to 11 A.M.; 4:50 to 10:45 P.M.
 DJB on 19.74 meters, 15.20 mc., 3:50 A.M. to 11:00 A.M.
 DJC on 49.83 meters, 6.02 mc., 11:35 A.M. to 4:20 P.M.
 DJD on 25.49 meters, 11.77 mc., 11:35 to 4:20 P.M.; 4:50 to 10:45 P.M.
 DJE on 16.89 meters, 11.76 mc., 8:05 to 11:00 A.M.
 DJL on 19.85 meters, 15.11 mc., 5:45 to 7:30 A.M.
 DJM on 49.34 meters, 6.08 mc., 7:30 to 9:30 P.M.
 DJN on 31.45 meters, 9.54 mc., 12:30-3:50; 8:05-11 A.M.; 4:50-10:45 P.M.
 DJO on 25.43 meters, 11.79 mc., 3:00 to 4:20 P.M.
 DJP on 25.31 meters, 11.85 mc., Noon to 2:00 P.M.
 DJQ on 19.63 meters, 15.28 mc., 12:30 to 7:00 A.M.
 DJR on 19.56 meters, 15.34 mc., 1:30 to 3:30 A.M.

We wish to compliment the officers of the German broadcast system for arranging their programs so carefully and sticking to the program throughout the month. In addition to the above they have been experimenting with the following:

DZA on 31.00 meters, 9.675 mc., from 5:00 to 7:00 P.M.
 DZB on 29.88 meters, 10.04 mc., from 7:00 to 9:00 P.M.
 DZC on 29.15 meters, 10.29 mc., from 3:00 to 10:45 P.M.
 DZE on 24.73 meters, 12.13 mc., from 7:00 to 9:00 A.M.; 5:00 to 7:00 P.M.
 DZH on 20.75 meters, 14.46 mc., from Noon to 2:00 P.M.

None of these stations can be considered regular, of course. The Zep Hindenburg was reported on the 8.00 mc. ship band at 4:00 P.M. (Studholme, England) and the phones DJR and DJL worked them (Flagg, Mass.) and DFL and a phone on 10.85 mc. phoned them (Flagg). Other reports on phones came from members Wooten, Miller, Smith, Oxrieder, Davison, Palmer, Studholme, Stempel, Kash, Walcott, Fugere, and Legge. Walcott reports a DZD on 15.36 mc., from 11:00 P.M. to 1:00 A.M.

2RO, Rome, Italy, broadcasts on 25.40 meters, 11.81 mc., from 8:15 to 9:00 A.M. and 9:15 to 11:15 A.M. and 11:30 to 12:15 P.M. Then on 31.13 meters, 9.64 mc., daily from 1:30 to 5:15 P.M.; Mondays, Wednesdays and Fridays from 6:00 to 7:30 P.M.; Tuesdays, Thursdays and Saturdays from 6:00 to 7:45 P.M.

Italian phones. IRW on 15.37 meters, 19.526 mc.; IRY on 18.20 meters, 16.117 mc.; IRA on 20.73 meters, 14.73 mc., IRM on 30.52 meters, 9.83 mc., and IRT on 44.90 meters, 6.68 mc., are all owned by Italo Radio, via Calabria 46-48, Rome, Italy. IAC, Piza, Italy, works ships on several different waves. These are shown in our list. IQA on 20.37 meters was heard phoning New York at 2:00 P.M. once for a special program. (Edwards, England, and Houlgate, Ontario)

HAS3, Budapest, Hungary, on 19.52 meters, 15.37 mc., broadcasts on Sundays from 9:00 to 10:00 A.M. and HAT4 on 32.58 meters, 9.12 mc., is heard 6:00 to 7:00 P.M. Reported until 7:15 P.M. (Scala, N. Y.)

TFJ, Reykjavik, Iceland, on 24.52 meters, 12.24 mc., does not broadcast now. They phoned England between 5:00 and 7:00 A.M. and 10:00

to 11:00 A.M. and Denmark between 7 and 10 A.M. (I. Morgan, Quebec).

ORK, Brussels, Belgium, on 29.04 meters, 10.33 mc., broadcasts daily 1:30 to 3:00 P.M. now. Once from 6:00 to 10:00 P.M. (Reese, N. Y. City).

LZA, Sofia, Bulgaria, on 20.04 meters, 14.97 mc., seems to be broadcasting Sundays from 3:30 to 11:30 A.M. and 2:00 to 4:30 P.M. On 20.10 meters one Sunday 10:30 A.M. and again from 3:30 to 4:30 P.M. sending this last program in English for American listeners (Ogilvie, Ponoka, Canada) and from 2:00 to 3:30 P.M. (Gullberg, Sweden).

Belgrade, Jugoslavia, on 49.18 meters, 6.10 mc., has been reported as follows: From 4:00 to 4:30 P.M., signing off with National Anthem (Sutton, England); On 49.26 at 4:15 P.M. (Greenland, England) and closing at 4:00 P.M. (Barron, Scot.); On 49.18 from 4:15 to 4:37 P.M. (Orchard, England). We do not know if they are on every day or every Sunday.

Switzerland. HBH on 16.22 meters, 18.48 mc.; HBJ on 20.64 meters, 14.54 mc.; HBO on 26.35 meters, 11.385 mc.; HBL on 31.27 meters, 9.595 mc., and HBP on 38.47 meters, 7.797 mc., are all in Switzerland. HBL and HBP broadcast every Saturday from 5:30 to 6:15 P.M. HBL and HBP were reported one Monday 6:00 to 7:00 P.M. (Holland, Ky., and XDX, Pa.) HBO once at 4:57 A.M. (Reese, N. Y.); At 2:00 A.M. (Chambers, Okla.) 4:00 P.M. one Sunday (Kash, Tenn.); HBH heard at 1:00 A.M.; HBJ and HBO were heard from 1:30 to 2:00 P.M. (Childs, Pa.); HBH was heard at 3:00 P.M. (Summer, Ohio). The new address of these stations is Radio Suisse, S. A., 12 Quai de la Poste, Geneva. On Sunday, April 5th, a special program was arranged for rebroadcast over an American chain. This program came from stations EAQ, DFC, DJD, HBO, HBJ and LSY. American stations KKR, WQV and WQD were used. This was around 2:00 P.M. (Wooten, Ala.)

Russia broadcasts now on 25.00 meters, or 12.00 mc., from 2:00 to 5:00 P.M., Saturdays until 6:00 P.M., Wednesdays 6:00 to 7:00 A.M. (Morning) and Sundays 6:00 to 7:00 A.M. and 10:00 to 11:00 A.M. They changed from 50.00 meters, or 6.00 mc., last month (Swimmer, Ohio; Flag, Mass.)

Russian phones. RKI, Moscow, is on 19.94 meters, 15.04 mc., and 39.97 meters, 7.50 mc. RNE, Moscow, is on 25.00 meters, 12.00 mc. RIM, Tashkent, is on 19.68 meters, 15.25 mc. RIO, Bakou, is on 29.50 meters, 10.17 mc. RIR, Tiflis, is on 29.76 meters, 10.08 mc. RRR, Khabarovsk, Siberia, is on 18.01 meters, 15.95 mc. ROU, Omsk, is on 20.28 meters, 14.79 mc. RSZ, Irkutsk, Siberia, is on 34.02 meters, 8.82 mc. RKI usually broadcasts Sunday mornings at 10:00 A.M. and phones daily around 5:00 to 10:00 A.M. RIM is heard around 5:00 to 8:00 A.M. and 11:00 P.M. to 4:00 A.M. RIO is heard around 11:00 P.M. to 4:00 A.M. RIR is heard around 5:50 A.M. (Gavin, Ohio) and 6:30 to 8:00 A.M. (Sparks, Calif.) RRR is on 15.97, not 15.97 mc. (Rossi, Pa.) RSZ was heard at 4:00 A.M. (Miller, N. Y.) RKI on 7.50 sent music at 2:30 to 3:00 P.M. once and 5:30 to 6:00 P.M. once (Studholme, England.)

CENTRAL AMERICANS

HRD, La Ceiba, Honduras, broadcasts on 48.11 meters, 6.235 mc. Their signature is "La Voz de Atlantida" and they say "H for Happiness, R for

Radio and D for delight." Dr. Tulio Casteneda is the owner. They have 250 watts power. Cards say they broadcast 7:00 to 10:00 P.M. daily and until 12 Sundays, which is 8:00 to 11:00 P.M. daily and Sundays until 1:00 A.M. (Hofmaster, Ohio). W. D. Flagg insists they say "V for Victoria" and the call is HRV, but cards show HRD, so there is no argument.

HRN, Tegucigalpa, Honduras, on 51.11 meters, 5.875 mc., broadcasts weekdays 1:15 to 2:15 P.M. and 8:30 to 10:00 P.M. W. Siddle also adds 7:00 to 7:45 P.M. They acknowledge reports on Sundays at 9:30 P.M. HRY, Tegucigalpa, on 47.24 meters, 6.35 mc., has been testing between 6:45 and 9:30 P.M. irregularly. F. Atherton reports it one Tuesday 11 P.M.

YSJ, San Salvador, Salvador, on 20.71 meters, 14.485 mc., is a new telephone station heard working WNC afternoons around 4:00 P.M. (Legge, N. Y.; Wooten, Ala.; and Rossi, Pa.)

YNLF, Managua, Nicaragua. "La voz del Nicaragua," sent letters to Wm. Palmer, Cleveland, and R. Rossi, Philadelphia, saying they were on 46.50 meters, or 6.451 mc. Later on they sent cards to H. Bradley, N. Y., and W. Siddle, Alabama, saying they were on 50.42 meters, or 5.95 mc. And to top it off, they are reported now on 9.65 mc., 31.09 meters, by R. Rossi. So, it looks like they are moving around, for they were on all three waves. Jacoba G. Maria is station manager, and the address is Empresa le France, Calle 15 de Sept., No. 206, Managua. The letters also had different schedules, the latest one being 8:00 to 9:00 A.M.; 12:30 to 2:30 P.M. and 6:30 to 10:00 P.M.

YNVA, Managua, on 34.72 meters, 8.64 mc., broadcasts between 7:00 and 9:30 P.M. irregularly. A station YNLAT, Granada, on 40.00 meters, 7.50 mc., is supposed to broadcast daily 9:00 to 10:00 P.M. They have 15 watts power and the address is Box 17 (H. S. Bradley).

TGW, TGWA, TG1X and TG2X. A program originating in the studios of station TGW, Guatemala City, and heard on long waves, has also been heard on 31.75 meters, 9.45 mc., and 50.51 meters, 5.94 mc., between 10:00 P.M. Saturday nights and 6:00 A.M. Sunday mornings. Letters from TGW say they have 200 watts power and the schedule is Noon to 3:00 P.M.; 8:00 to 9:00 P.M. and 10:00 to Midnight Eastern Time, with a special program Saturdays 10:00 P.M. to 6:00 A.M. (Mas, Mich.: Kash, Tenn.; Siddle, Ala). A letter requesting exact call-sign brought a reply from TG2X (Tydall, Vt.) and another report brought varies from both TGW and TG2X, so TG2X must be relaying TGW (Atherton, Vt.) TG2X is operated by the National Police on 50.51 meters, 5.94 mc., most every night. TGWA was heard on 24.82 meters, 12.08 mc., from 6:00 to 8:30 P.M. one Sunday (Reese, N. Y.) Reports on the Sunday morning programs on 9.45 mc. came from members Aiken, Miller, Legge, Jessen, Chambers, and Walcott.

TGS, Guatemala City, on 52.26 meters, 5.74 mc., broadcasts Wednesdays, Thursdays and Sundays from 6:00 to 9:00 P.M.

HP5K, Colon, Panama, on 49.96 meters, 6.005 mc., relays station HP5O from Noon to 1:00 P.M. and 6:00 to 9:00 P.M. They are known as "La Voz del Victor" and the address is Box 33 (Bradley, N. Y.) Schedule is 10:00 A.M. to Noon Sundays, too (Siddle, Ala.). Heard broadcasting a

special program for the ISWC, Wednesday, March 11th from 11:20 to 12:04 A.M. (Reese, N. Y. C.)

HP5B, Panama City, on 49.75 meters, 6.03 mc., say they broadcast Noon to 1:00 P.M. and 7:00 to 10:30 P.M. HP5F, Colon, Panama, on 49.34 meters, 6.08 mc., broadcasts weekdays 11:45 A.M. to 1:15 P.M. and 7:45 to 10:00 P.M. and Sundays 10:45 to 11:30 A.M. and 4:00 to 6:00 P.M. HP5J, Panama City, on 31.28 meters, 9.59 mc., broadcasts 7:30 to 10:00 P.M. weekdays and 2:00 to 3:00 P.M. Sundays. It is heard now until 11:00 P.M. and at 7:00 P.M. (Flagg, Mass.)

TIRCC, San Jose, Costa Rica, on 45.81 meters, 6.55 mc., broadcasts daily 6:00 to 7:00 P.M.; Thursdays and Sundays 6:00 to about 11:00 P.M. TIEP, San Jose, on 44.71 meters, 7.61 mc., broadcasts 5:00 to 10:00 P.M. irregularly. TIGP, San Jose, on 46.86 meters, 6.41 mc., "La Voz del Victor," broadcasts Noon to 2:00 P.M. and 6:00 to 11:30 P.M.

A letter from Luis Cordero Castro of station TIGPH says they are on 51.50 meters, 5.83 mc., with 1000 watts power from Noon to 2:00 P.M. and 7:00 to 11:00 P.M., E.S.T. TIGPH is known as "Alma Tica" and it is also on long waves (650 kc.) They also own a station TIX, "La Reina del Aire," on long waves (800 kc.) and a TIVCA on long waves (1225 kc.) and they relay TIX over TIGPH daily from 10:00 to 11:00 P.M. Their address is Apartado 800.

TI5HH, San Roman, 54.74 meters, 5.48 mc., "La Voz del San Roman," broadcasts between 3:30 to 4:00 P.M. and 8:00 to 11:30 P.M. TI8WS, Puntarenas, "Ecos del Pacifico," on 39.47 meters, 7.60 mc., broadcasts between 6:00 and 11:00 P.M. Cards from the station say they are on 7.55 mc. and the address is Apartado 75 (W. Siddle). TI2M, or N, San Jose, on 44.90 meters, 6.70 mc., is heard between 9:40 and 11:30 P.M. It is known as "La Voz Nicaraguense," They say they are on 6.90 mc. but are heard on 6.70.

W. D. Flagg says TI8WS is really on 7.50 mc. A station TIRW, Port Limon, Costa Rica, on 43.73 meters, 6.86 mc., was heard at Midnight broadcasting in Spanish and English using the slogan "Ondas del Caribe" and asked for reports to be sent to Apartado 45. (Siddle, Ala.) A station TIAW, San Roman, on 6.82 mc., was heard at 10:45 P.M. (Atherton, Vt.) A station TI6OW, Port Limon, on 6.86 mc., was heard between 9:00 and 10:00 P.M. (Bradley, N. Y.) and 9:00 and 9:30 P.M. (Kash, Tenn.) We wonder if these are not all the same station? A TIEF, San Jose, was heard on 6.50 mc. at 8:00 P.M. (Davison, P. R.). This may be TIRCC relaying some station.

XEFT, Veracruz, on 49.02 meters, 6.12 mc., "La Voz de Veracruz," sends out a card giving the address as Avenida Independencia 28 and giving the schedule as daily 11:00 A.M. to 4:00 P.M.; Sundays 9:00 P.M. to 12:30 A.M.; Saturdays 6:30 P.M. to 12:30 A.M. and other days 7:30 P.M. to 12:30 A.M. (Carlos Lopez Ona).

XEUW, Veracruz, on 49.83 meters, 6.02 mc., sends out a card giving their address as Avenida Independencia 98 and the schedule as 8:00 P.M. to 12:30 A.M.

XECR, Mexico City, on 40.65 meters, or 7.38 mc., broadcasts from 7:00 to 8:00 P.M. Sundays and sometimes starts at 6:00 P.M. Cards say 6:00

to 7:00 P.M. (F. Gavin). XEXA, Mexico City, on 48.55 meters, 6.18 mc., sends out a card saying they broadcast 3:00 to 5:00 and 7:00 to 11:00 P.M. Another says 8:45 to 9:30 A.M. and 8:00 to 10:00 P.M. (M. Gavin). Letters come from the Secretary of Public Education. XBJQ, Mexico City, is not broadcasting now. They test irregularly on 27.26 meters, 11.00 mc.

XEME, Merida, Yucatan, Mexico, on 36.65 meters, 8.19 mc., sent word to W. Siddle that they broadcast 9:00 A.M. to Noon and 5:00 to 11:00 P.M., but sent another to Charles Miller saying 10:00 A.M. to 3:30 P.M. and 5:30 to 11:00 P.M.

XFA2, Vera Cruz, Mexico, on 45.52 meters, 6.60 mc., now uses the call XDC and they can be heard between 7:30 and 8:15 P.M. (W. Siddle). It is XBC. (Bradley, N. Y.)

XEVI has changed their call to XEWI and they are moving around to find a clear channel and broadcast Sundays 1:00 to 2:15 P.M.; Mondays 3:00 to 4:00 P.M.; Tuesdays 7:30 to 8:45 P.M.; Wednesdays 3:00 to 4:00 P.M.; Thursdays 7:30 to 8:45 P.M.; Fridays 3:00 to 4:00 and 9:00 P.M. to Midnight; Saturdays 9:00 to 10:00 P.M.; with special programs Tuesdays 10:30 P.M. to Midnight and Thursdays 10:00 P.M. to Midnight. This comes from Bruce Hart, Minnesota. This station has either a strong harmonic or is on a new wave of about 25.08 meters, 11.96 mc. This was heard at 8:00 P.M. (Kash, Tenn.); 5:30 P.M. (Walcott, Calif.); 7:00 P.M. to Midnight (Howe, Ariz.) and on 12.005 mc. from 8:00 to 10:30 P.M. (Herzog, N. Y.) The station is supposed to be on 50.17 meters, 5.98 mc., and the first harmonic would fall on 11.96 mc.

Mexican Phones. Station XDR, Mexico City, on about 9.40 mc. phones around 6:00 to 8:00 P.M. XAM, Merida, Yucatan, on 26.09 meters, 11.50 mc., phones around 6:00 to 7:00 P.M. XDC, Vera Cruz, on 45.80 meters, 6.548 mc., works XDA from 7:00 to 8:00 P.M. and then broadcasts at 8:00 P.M. XDA, Mexico City, on 43.00 meters, 6.97 mc., phones around 7:00 to 8:00 P.M. XAP, Villa Hermosa, on 34.52 meters, 8.69 mc., phones XDR around 7:00 P.M. XAP is a new station. This comes from W. Siddle, Birmingham, Alabama.

SOUTH AMERICANS

CB960. Santiago. Chile. on 31.25 meters. 9.60 mc.. known as El Praco has been broadcasting between 8:30 P.M. and Midnight, but has not been reported by very many this month. Supposed to broadcast regularly on Saturdays from 9:00 to 11:30 P.M. Moved to 31.22 meters (Orchard. Eng.)

CEC. Santiago. Chile. on 28.12 meters, 10.67 mc., broadcasts most every day from 7:00 to 7:15 P.M., and is supposed to broadcast Thursdays and Sundays 8:30 to 9:00 P.M. Heard on 29.33 meters, 10.23 mc., from 6:15 to 7:15 P.M. (Flagg, Mass.)

HJU, Buenaventura, Colombia, on 31.55 meters, 9.51 mc., broadcasts Mondays, Wednesdays and Fridays from Noon to 2:00 P.M. and 8:00 to 11:00 P.M. Cards received say this. (Aria, Calif.; Gavin, Ohio; Hofmaster, Ohio; Siddle, Ala.)

HJ1ABE, Cartagena, Colombia, on 49.05 meters, 6.11 mc., broadcasts daily 7:30 to 9:00 P.M. and Mondays 10:30 to 11:30 P.M., but on April 5th

they moved to about 31.42 meters, 9.55 mc., and sent a 24-hour program. This program and station must not be confused with the new station HJ1ABP in Cartagena, which is on a nearby wave. We do not know why HJ1ABE moved to this wave. Members do not agree on the exact wavelength used, but it was near this. It was reported by W. Mas, Mich.; Adler, N. Y.; Nickels, Ind.; Eggenweiler, Calif.; Chambers, Okla.; Hersowitz, Md.; Antognini, Calif.; Davison, P. R.; Stempel, Conn., and Gallagher, California.

HJ1ABP, Cartagena, on 31.25 meters, 9.60 mc., is broadcasting now from 11:00 A.M. to 1:00 P.M. and 5:00 to 11:00 P.M. weekdays and 10:00 A.M. to 1:00 P.M. and 3:00 to 6:00 P.M. Sundays. The address is Box 37, while the address of HJ1ABE is Box 31, so do not confuse them. This all comes direct from the station, while no less than a hundred members report reception or verifications.

HJ1ABG, Barranquilla, on 49.65 meters, 6.0425 mc., say they broadcast weekdays from 11:00 A.M. to 11:00 P.M. and Sundays 11:00 A.M. to 8:00 P.M. (Heglund, Fla., and Hart, Minn.)

HJ1ABJ, Santa Marta, has moved from 6.01 mc. to 6.02 mc., and broadcasts 6:30 to 10:30 P.M. (Oxrieder, Pa., and Siddle, Ala.)

HJN, Bogota, on 50.26 meters, 5.97 mc., broadcasts from 6:00 to 11:00 P.M. HKV, the army station at Bogota tests between 11:00 P.M. and 1:00 A.M. irregularly on 34.10 meters, 8.79 mc. HJA2, Barranquilla, on 7.52 mc. was phoning HJA3, Bogota, between 9:00 and 10:00 P.M. once (Rappoport, N. Y.) and was on a new wavelength of 46.75 meters at 11:00 P.M. once (Siddle, Ala.) HJA3, Bogota, on 6.41 mc. was phoning a ship at 11:45 P.M. once (Child, Pa.)

HJ2ABD, Bucaramanga, Colombia, on 50.10 meters, 5.99 mc., broadcasts 11:30 A.M. to 12:30 P.M.; 5:30 to 6:30 P.M.; 7:30 to 10:30 P.M. The station gives this news. Heard once at 11:30 P.M. (Legge, N. Y.) and on 50.21 meters (Kash, Tenn.)

HJ3ABD, Bogota, on 49.55 meters, 6.05 mc., broadcasts most every night, but does not give a schedule. The address is Box 509 (Siddle, Ala.) and their identification is a train puffing. (Kash, Tenn.)

HJ3ABX, Bogota, on 49.00 meters, 6.122 mc., is a new station broadcasting between 7:00 and 11:30 P.M. They use the signature "La Voz de Colombia." They use a nine-note chime and give the address as Calle 14, No. 738. (Reported by members Bradley, Siddle, Kash, Verbrugghe, Flagg, Hersowitz, Piedra, Solito and Schmeichel.) Signed off at 11:10 P.M. with Indian Love Song, an organ selection. (Rappoport, N. Y.)

HJ4ABA, Medellin, on 25.40 meters, 11.81 mc., is supposed to broadcast 11:30 A.M. to 1:00 P.M. and 6:30 to 10:30 P.M., but has not been reported for sometime.

HJ4ABB, Medellin, was on 48.78 meters, 6.15 mc., once at 7:00 P.M. (Morgan, Quebec.) It is supposed to broadcast on 49.15 meters, 6.10 mc., between 8:30 and 11:00 P.M., but has no regular schedule.

HJ4ABC, ibague, on 46.44 meters, 6.48 mc., broadcasts from 11:00 A.M. to Noon and 8:00 to 11:00 P.M. The power is 200 watts, and they say on cards they are on 6.45 mc. The address is apartado 39.

HJ4ABC, Periera, on 49.67 meters, 6.04 mc., still uses the same call. They broadcast from 9:00 to 11:00 A.M. and 7:00 to 8:00 P.M. Some say they are on 6.08 mc.

HJ4ABD, Medellin, broadcasts on 52.17 meters, 5.75 mc., from 8:00 to 11:30 P.M. On 5.78 (Kash, Tenn.)

HJ4ABE, Medellin, on 50.60 meters, 5.93 mc., broadcasts 11:00 A.M. to Noon and 6:00 to 10:30 P.M. they say (Erwin, Ill.) Moved to 49.10 meter, 6.097 mc. (Oxrieder, Pa.)

HJ4ABP, Medellin, on 48.86 meters, 6.135 mc., relays HJ4ABQ between 8:00 and 11:00 P.M. Heard until W8XK, Pittsburg, comes on at 7:00 P.M. (Siddle, Ala.)

HJ5ABC, Cali, on 48.78 meters, 6.15 mc., uses the signature "La Voz de Colombia." They broadcast Monday to Friday inclusive 7:00 to 10:00 P.M. and Sundays Noon to 2:00 P.M. The address is Calle 12, No. 235.

VP3MR, Georgetown, British Guiana, on 42.37 meters, 7.08 mc., broadcasts between 4:45 to 8:45 P.M. weekdays and 7:45 to 10:15 A.M. Sundays. They announced they would move to about 64 meters or near that. (Childs, Pa.) VP3BG, Georgetown, is now operating as an amateur station on 14.05 mc. (Orchard, Hersowitz)

PZ1AA, Paramaribo, Dutch Guiana, on 13.98 mc., was working phone calling Brazil and U.S.A. between 6:00 and 8:00 P.M., and at times sent music (Rossi, Pa.) On 14.10 mc. at 10:00 P.M. (Wooten, Ala.)

LRU, Buenos Aires, Argentina, on 19.62 meters, 15.29 mc., has been heard broadcasting between 8:00 and 8:30 A.M. and 4:00 and 8:00 P.M. They announced they were on the air 8:00 to 8:30 A.M. and 4:00 to 4:30 P.M., local time, which would be 9:00 to 9:30 A.M. and 5:00 to 5:30 P.M., E.S.T. (Wooten, Ala.) But was heard between 5:00 and 8:00 P.M. (Shasetz, Wyo.; Edwards, Eng.; Legge, N. Y.; Gavin, Ohio; Erwin, Ill.; Howe, Ariz.; Miller, Ky.)

LRX, Buenos Aires, 31.25 meters, 9.59 mc., has been heard between 6:00 and 10:00 P.M. lately. They relay Radio El Mundo, and the address of both LRX and LRU is Calle Maipu 555. (Chippindale, Paraguay, and Orchard, England.)

LSX, Buenos Aires, on 28.98 meters, 10.35 mc., has been heard between 6:30 and 11:30 P.M. irregularly. They have no regular schedule. LSQ on 29.13 meters was heard sending a program from 2:20 to 3:30 A.M. in English. (Reese, N. Y.) LSY3 on 18.11 mc. sent a special to the U.S.A. April 19th at 1:55 P.M. (Howe, Arizona).

OAX4G, Lima, Peru, on 48.00 meters, 6.25 mc., broadcasts daily 7:00 to 10:00 P.M. OAX4D, Lima, on 51.90 meters, 5.78 mc., broadcasts Wednesdays and Saturdays 8:00 to 11:30 P.M.

PRF5, Rio de Janeiro, Brazil, on 31.56 meters, 9.50 mc., broadcasts daily 4:45 to 5:45 P.M. PRA8, Pernambuco, Brazil, on about 49.90 meters or 6.025 mc., broadcasts from 2:30 to 8:30 P.M. Heard 6:00 to 8:00 P.M. (Butcher, Wyo., and Kash, Tenn.)

ECUADOR. HCJB, Quito, on 34.12 meters, or 8.77 mc., broadcasts daily except Mondays 7:30 to 9:30 P.M. R. Rossi says they are on 9.64 mc. now, right where 2RO, Rome, comes in. HC2JSB, Guayaquil, on 38.19 11:00 P.M. Prado, Riobamba, on 45.31 meters, 6.62 mc., broadcasts on

Thursdays 9:00 to 11:30 P.M. HCK, Quito, on 50.93 meters, or 5.89 mc., say they broadcast Mondays and Fridays 8:30 to 10:30 P.M., local time. Their address is Direccion General de Telegraphos y Inalamericoa. HC2ET of Guayaquil, broadcasts on 65.22 meters, 6.40 mc., Wednesdays and Saturdays from 9:00 to 11:00 P.M. HC1PM, on 52.40 meters, 5.725 mc., owned by J. Leonardo Ponce, Box 664, Quito, sends word they broadcast Tuesdays 9:00 to 11:00 P.M. They are known as "El Palomar." (H. S. Bradley, N.Y.) HCJB has moved to 8.95 mc. now (Miller, Ky.) They must move every day or so. HCK was heard at 11:30 P.M. one Sunday testing with HP5B. (Legge, N. Y.)

VENEZUELA. YV2RC, Caracas, Venezuela, on 51.72 meters, 5.80 mc., broadcasts from 10:30 A.M. to 1:00 P.M. and 5:15 to 10:00 P.M. YV4RC, Caracas, on 47.10 meters, 6.37 mc., "Ecos del Avila," sends a card saying they broadcast weekdays 5:30 to 9:30 P.M., E.S.T., or 6:00 to 10:00 P.M. their time. The address is Box 983 (R. Piedras). YV5RMO, Maracaibo, Venezuela, on 51.28 meters, or 5.85 mc., sends a card saying they are on 5.65 mc., but they are heard on 5.85 mc. The schedule is 11:00 A.M. to 12:30 P.M. and 5:00 to 9:30 P.M. YV6RV, Valencia, Venezuela, on 46.01 meters, 6.52 mc., broadcasts from 11:00 A.M. to 2:00 P.M. and 5:00 to 10:00 P.M. (Heglund, Fla.) YV6RV was heard until 10:40 P.M. one Sunday. (Erwin, Illinois)

YV8RB, Barquisimeto, "La Voz de Lara," sends a card saying they broadcast from Noon to 1:00 P.M. and 6:00 to 10:00 P.M. They were on 5.88 mc., but recently moved to 5.90 mc. to avoid interference with HRN. YV9RC, Caracas, Venezuela, "Ondas Populares," on 38.31 meters, 7.83 mc., broadcasts 7:00 to 11:00 P.M. irregularly. We would like to have more details of this station. YV10RSC, San Cristobal, on 52.45 meters, 5.72 mc., broadcasts from 7:00 to 11:30 P.M. YV12RM, Maracay, Venezuela, on 47.51 meters, 6.30 mc., "Emisora 24 de Julio," sends a card saying they are on 6.30 mc. It is heard between 8:00 and 10:30 P.M.

YVQ, Maracay, on 44.96 meters, 6.67 mc., broadcasts Saturdays 8:00 to 8:30 P.M. Ed. Schmeichel says he had them on 44.8 meters from 7:00 to 7:30 P.M.

YV8RV, Valencia, a new station on 45.89 meters, 6.545 mc., (announced) was heard from 9:30 to 9:55 P.M. (Oxrieder, Pa.) YV9RC, Caracas, has moved from 7.83 mc. to 6.40 mc. (Oxrieder, Pa.) We believe the first was YV6RV and the second was just a temporary move, but we give the facts and call for help.)

WEST INDIES

HIT, Trujillo, Dominican Republic, on 45.25 meters, 6.63 mc., broadcasts weekdays 12:30 to 2:00 P.M. and 6:30 to 9:00 P.M. with a special DX program Saturdays from 11:00 P.M. to 1:00 A.M. We believe this is local time, which is just twenty minutes ahead of E.S.T. (D. Gross, I. Heglund, W. Herzog, F. Karpen, B. Hart, Dr. Kash and M. Gavin).

HIZ, Trujillo, on 47.50 meters, 6.31 mc. A letter from Frank Hatton, Station Director, says they broadcast from 11:30 A.M. to 2:45 P.M. and from 5:30 to 9:00 P.M. each day, Saturdays until 10:00 P.M. and some

Saturdays with a special DX program from 10:30 to 11:30 P.M. Mr. Hatton says they verify reports only when a dime or a reply coupon is sent. Postage stamps are no good. Postage to HIZ is just 3c, he says, and many put 5c on their reports.

HIG, Trujillo, on 47.77 meters, 6.28 mc., say they broadcast on this wave with 50 watts power from 7:10 to 8:40 A.M., 12:40 to 2:10 P.M. and 8:10 to 9:40 P.M. Letters as signed by A. Cordero Puella. (F. Karpen, R. Rossi, Dr. Kash, R. Brady, W. Siddle). Heard until 10:25 P.M. (Palmer)

HIX, Trujillo, on 50.17 meters, 5.98 mc., broadcasts Sundays 7:40 to 10:40 A.M., Tuesdays and Fridays 12:10 to 1:10 P.M., 4:40 to 5:40 P.M., 8:10 to 10:10 P.M., and the rest of the week 12:10 to 1:10 P.M. and 4:40 to 5:40 P.M. (Hart, Minn.)

HIL, Trujillo, on 46.13 meters, 6.50 mc., broadcasts from 12:10 to 1:40 P.M. and 5:40 to 7:40 P.M. with 50 watts power. The address is Box 623. (Hafner, N. Y.)

HI4V, Trujillo, on 46.51 meters, 6.45 mc., say they broadcast from 11:40 to 1:40 P.M. and 5:10 to 6:40 P.M., but they have been heard signing off at 7:40 and 9:40 P.M. with the "Stein Song." They usually sign off at 7:40 P.M. This is "La Voz de la Marina." Two members say the address is Apartado 824. H. S. Bradley says 771. On 6.48 mc., now says Oxrieder, Pa., and Legge, N. Y.

HI4D, Trujillo, say they are on 46.25 meters, 6.49 mc., and they broadcast from 11:55 to 1:40 P.M. and 4:40 to 7:40 P.M., but they are on 6.553 mc. according to Capt. Oxrieder, and on 6.55 and signing off at 11:30 P.M. once, according to Roger Legge. Their signature is "La Voz de Quisqueya."

HI5M or N, Trujillo, "La Voz del Alemacen," on 48.92 meters, or 6.13 mc., broadcasts irregularly between 5:00 and 9:00 P.M. using an eight note chime as an identification. Was also heard between 6:00 and 7:00 A.M. a few times.

HI7P, Trujillo, on 44.12 meters, 6.80 mc., is a new station that has been heard between 7:00 and 9:00 P.M. (Kash, Tenn.; Davison, P. R., and Siddle, Ala.) HI8A, Trujillo, say they are on 6.45 mc. Their address is La Fabrica Dominicana de Calzado. Heard on 6.40 mc. (Bradley, N. Y.) Heard on 6.425. (Rossi, Pa.)

HIH, San Pedro de Macoris, D. R., is supposed to be on 44.12 meters, 6.81 mc., daily from 7:30 to 9:00 P.M., and Sundays 3:00 to 4:00 A.M. and 4:15 to 6:00 P.M. On 6.78 mc. (Oxrieder, Pa.) On 6.77 mc. (Kash, Tenn.)

HI1A, Santiago de los Caballeros on 48.50 meters, 6.19 mc., say they broadcast 11:40 A.M. to 1:40 P.M. and 7:40 to 9:40 P.M. The address is Box 423.

HI1J, San Pedro de Macoris, on 51.15 meters, 5.86 mc., sends a card saying they broadcast daily 12:00 to 2:00 P.M. and 6:30 to 9:00 P.M. The address is Box 204 (M. Gavin).

HI1S, Puerto Plata, "La Voz de Hispanola," on 46.73 meters, 6.42 mc., sends a card saying they broadcast daily 11:40 A.M. to 1:40 P.M.; 5:40 to 7:40 P.M. and 9:40 to 11:40 P.M. They have English programs Tuesdays and Fridays from 7:10 to 7:40 P.M. (W. D. Flagg).

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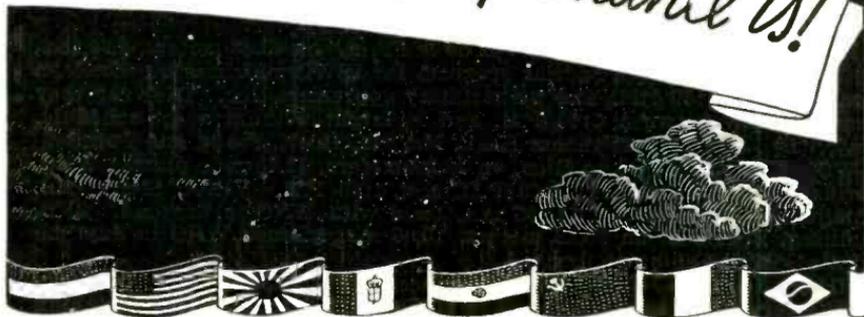
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HI3U, Santiago, D. R., "Estacion Perifonica," and "La Voz del Comercio," say they are on 47.02 meters, 6.383 mc., from 10:40 A.M. to 1:40 P.M. and 4:40 to 9:40 P.M. (H. S. Bradley). Usually signs off between 8:20 and 8:40 P.M. (R. B. Oxrieder).

HI9B, Santiago City, D. R., on 49.60 meters, 6.045 mc., on the Mercedes Hotel is reported broadcasting irregularly at 10:40 A.M.; 6:00 to 9:00 P.M.; Midnight to 1:30 A.M.; 5:00 to 6:00 P.M.

HI3C, La Romano, D. R., "La Voz de la Feria," on 43.48 meters, 6.90 mc., has been broadcasting a special program for ISWC members on Mondays from 10:30 to 11:30 P.M., and we certainly appreciate this. They say they broadcast now between 6:00 P.M. and Midnight without a set schedule. (May, Pa.) Heard by members Kash, Morgan, Rossi, Flagg and Palmer.

WCT, San Juan, Puerto Rico, on 22.39 meters, 13.40 mc., phones WNC, Florida, around 9:00 A.M., 2:00 P.M. and 4:00 P.M. VRR4, Stony Hill, Jamaica, on 25.87 meters, 11.595 mc., tests with WNC in daytime. ZFB, Hamilton, Bermuda, on 29.83 meters, 10.05 mc., phones WNC in daytime and also phones ships at times.

HH2S, Port-Au-Prince, Haiti, broadcasts on 50.85 meters, 5.91 mc. nearly every night between 7:30 and 10:30 P.M. Has been heard signing off at 9:55 P.M. (E. Butcher) and at 10:45 P.M. with the Swan Song (A. Fowler) and heard at 4:00 P.M. (H. J. Davison). The address is Box A 103. Verifications say they have 100 watts. HH2T, owned by the same people was heard on 25.93 meters, 11.57 mc., at 10:15 P.M. (Kash, Tenn.)

HH3W, Port-Au-Prince, Haiti, broadcasts on 31.27 meters, 9.595 mc., with 30 watts power daily from 1:00 to 2:00 P.M. and 7:00 to 8:30 P.M. C. Ricardo Widamair is the owner and the address is Box A 117. H. S. Bradley says their cards say 30 watts power. Mrs. Heglund sends the schedule, too, Capt. Oxrieder says they are on 9.612 mc., not 9.59.

A station VP5MK, Kingston, Jamaica, on 42.00 meters, 7.02 mc., was broadcasting one Saturday from 5:00 to 5:30 P.M. (Palmer, Ohio.) and a station in Curacao on that wave was sending a special program one Sunday at 12:30 P.M. and a station in Martinique talked to the operator. (Constant Williams, St. Martin Island.)

COKG, Santiago, Cuba, on 48.79 meters, 6.15 mc. broadcast nearly every day from 8:00 A.M. until 11:00 P.M., with a few minutes out now and then. This station is heard in Europe now with excellent quality.

COCO, Havana, on 49.90 meters, 6.01 mc., broadcasts 9:30 A.M. to 12:30 P.M.; 4:00 to 7:00 P.M. and 8:00 to 10:00 P.M. with a special English program Saturdays 11:30 P.M. to 2:00 A.M. COCD, Havana, on 48.92 meters, or 6.13 mc., is heard between 5:00 P.M. and 1:00 A.M. CO9JQ, Camaguey, Cuba, on 34.62 meters, 8.66 mc., broadcasts 5:30 to 6:30 P.M. and 8:00 to 9:00 P.M.

COCH, Havana, on 31.80 meters, 9.42 mc., broadcasts 8:00 A.M. to 7:00 P.M. and 8:00 to 10:00 P.M. weekdays and also 3:00 to 5:00 A.M. Sundays now. Heard between 7:00 and 8:00 P.M. also and on up until 11:30 P.M. (Erwin, Ill.)

CO9WR, Sancti Spiritus, Cuba, on 47.77 meters, 6.28 mc., say they broadcast, relaying CMHB, from 9:00 to 10:00 A.M.; Noon to 1:00 P.M.; 4:00 to 6:00 P.M., and 9:00 to 11:00 P.M. daily. Mrs. Heglund of Florida

has a letter saying this. Dr. Kash says they announce Havana, not Sancti Spiritus. They are at the later, however.

CMA3, a phone station owned by the Cuban Trans-Atlantic Telephone Corporation on 19.49 meters, 15.39 mc., was testing from 10:30 to 11:30 A.M. once. (Reese, N. Y. C.) A station using the call CO9PC was heard on about 24.39 meters, 13.30 mc. This is a harmonic of station CO9GC that is now called COKG. This has been mentioned many times. H. Rappaport says it was on 12.27 mc. and they asked for reports to be sent to Box 177 and the call was CO9DT.

NORTH AMERICAN

W8KK, Pittsburg, Pa. A letter tells us they will not change their schedule after Daylight Saving Time goes into effect. The schedule is shown in our list, the one they say they will use.

W2XAD on 19.56 meters, 15.33 mc., will broadcast daily 10:00 A.M. to 2:00 P.M. and W2XAF on 31.48 meters, 9.53 mc., will broadcast daily 4:00 P.M. to Midnight, E.S.T.

W9XAA, Chicago, Illinois, told us they were on 25.36 meters, 11.83 mc., from 6:30 to 5:00 P.M. and 10:00 P.M. to Midnight daily, but it seems that they have changed this, as they have not been heard on this wave regularly this past month. William Sparks of California says they are back on 49.34 meters, 6.08 mc., from 6:30 A.M. up to Midnight now.

W2XBG, Press Wireless, Hicksville, L. I., New York, on 46.70 meters, 6.425 mc., has been testing from 8:00 to 10:00 P.M. nearly every night for the past two weeks. Heard until 10:40 P.M. at times. (Ward, N. Y.; Irwin, Illinois; Doty, N. Y.; Graham, Pa.)

VE9CA, Calgary, Canada, "The Voice of the Prairies," on 49.75 meters, 6.03 mc., is heard now relaying CFCN from 9:00 A.M. to 3:00 P.M. and 7:00 P.M. to 2:00 A.M. week days and Sundays 3:00 to 5:00 P.M. and 8:00 to 2:00 A.M. (Jessen, Oregon).

CJRO, Winnipeg, Canada, on 48.83 meters, 6.15 mc. and CJRX on 25.60 meters, 11.72 mc. should be heard now from 4:00 P.M. to 10:00 P.M., now that fast time has come into effect.

VE9DR, Drummondville, Quebec, Canada, on 49.96 meters or 6.005 mc. has been heard relaying programs from CFCF and some NBC programs. The station has been heard from 11:30 A.M. up till 11:30 P.M., but they do not seem to be broadcasting regularly. Of course, this station is the same as VE9DN that has been heard broadcasting programs to the Far North on Saturdays starting at 11:30 P.M. VE9DR has been heard on just about every day of the week. We have reports from members Carter, N. Y.; Flass, Mass.; Reese, N. Y.; Kash, Tenn.; Reese, N. Y. C.; Hersowitz, Fd.; Stempel, Conn.; Rappaport, N. Y., and Herzog, N. Y.

CFU, Rossland, B. C., Canada, on 52.57 meters or 5.705 mc. is reading news dispatches at 8:30 P.M. every night (A. Fowler, R. Leeder, W. Chambers, G. Gallagher and W. Siddle). A card gives the above wavelength and says they have 500 watts power. Other cards and letters have said **52.97 meters or 5.66 mc.**

VE9HX, Halifax, N. S., Canada, is now on 48.92 meters, 6:13 mc., and they broadcast Mondays to Fridays inclusive from 10:30 A.M. to 2:30 P.M. and 6:00 P.M. to midnight, Saturdays and Sundays 3:00 P.M. to midnight (Flagg, Mass.) We believe they will move their schedule up one full hour on April 26th. On 6.13 mc. (Vance, Eng.; Reese, N. Y.)

Hawaii. Station KIO on about 25.63 meters, 11.71 mc. is heard testing around 6:00 P.M. and as late as midnight. KKH on 39.89 meters, 7.52 mc. is heard just about every night around midnight relaying some program. KKP on 16.04 mc. was sending music at 6:30 P.M. once. (Kash, Tenn.)

Alaska. Station WVD, Seattle, Washington, on 34.68 meters, 8.65 mc., has been testing with some Alaskan phones. WXE, Anchorage, Alaska, sends a letter to W. Siddle, Birmingham, Alabama, saying they have 500 watts on 5.96 mc. and 2.98 mc. and in summer use 8.868 mc. The address is Washington-Alaska Military Cable and Telegraph System, Anchorage. Others reported are WZA, Kodiak, on 4.13 mc.; WXH, Ketichan, on 5.99 and 2.604 mc.; WXA, Juneau, on 8.05 mc.; KMYB, a ship on 4.61 mc.; KYMA, Juneau, on 4.61 and KBAI, Juneau, on 4.61 mc. Most of these are heard between 10:00 P.M. and 1:00 A.M. usually around Midnight. (Sparks, California, and Jessen, Oregon)

Amateurs. There are several hundred foreign amateur stations heard between 20 and 21 meters, 14.00 and 14.40 mc., now. It is next to impossible to list them, as there is a great confusion over the calls and locations. Letters like C, D, E, G and B all sound so much alike over the air that a station like C2BGD might be sent in to us in sixteen different ways, because listeners would be unable to distinguish the call letters. For about twenty hours out of every day, there are stations to be heard in this band now. About the only time you can not find them is between 1:00 A.M. and 5:00 A.M. So, we suggest that members tune down on 20 meters any time of the day for some DX thrills. And if you are after verifications from amateurs, send for the Radio Amateur Call-book, which lists over 60,000 amateurs of the world, with the address of the owner and other information. It sells for \$1.25 a copy. We accept orders.

Ultra-short waves. A few members say they have sets that tune down to nine meters. Well, there are a few stations on or near 9.488 meters, 31.60 mc., that can be heard. These are W9XPD, St. Louis; W8XAI, Rochester, N. Y.; W9XAZ, Milwaukee, Wisconsin; W6XKG, Los Angeles, and W8XWJ, Detroit. (Sam Arias and R. Verbrughe.)

FOR SALE—Sargent Model 10 Special Receiver. Eight bands covering 14 to 22000 meters. \$50 complete. T. Porcher, 7708 Navajo Street, Philadelphia, Penn.

FOR SALE—Jewell Radio Set Analyzer, Pattern No. 4444. Completely overhauled by Jewell-Weston Instrument Co. Analyzer is in perfect condition, will test all glass tubes. Will accept best offer. G. C. Gallagher, 18 Delano Avenue, San Francisco, Calif.

SACRIFICE—McMurdo Silver Masterpiece, custom built super-heterodyne, laboratory seals intact. Special short wave antenna peak pre-selector. Glenn Watt, Chanute, Kansas.

WITH THE REPORTERS

This section of the magazine is always the first to be made up each month. For this reason members should send us reports so they will reach us early as possible in the month. And for this same reason it is almost impossible for us to put the reports from each section of the world by themselves, as some are made up early in the month while others are not received till late in the month. We try, however, to bunch the reports from each section. We would also like to call one thing to the attention of some members. We are not interested in reports on stations received long ago, but only in reports on stations heard recently and particularly of stations that have made some changes. This is not a section of "stations heard" but a review of reports from members that have been helpful in getting out the latest news on these stations. We are not interested in stations heard long ago or in stations that are heard on schedule and on their proper wavelengths.

F. W. Henning, Worthing, England, reports VQ7LO and HJ4ABA. L. Smith, London, England, sends useful information on SPW and German stations. John Edwards, Sales, England, reports LZA, LRU, PMN, IQA and VP3MR. C. E. Sutton, Coventry, England, reports the new Yugoslavakia station. R. Greenland, Barnsley, England, helps with reports on HJ1ABE, HJ1ABP, CNR, LZA and Radio Belgrade. E. Orchard, Weymouth, England, reports EA8AL, EA8AF, ETB, GBTT, CE960, LRX, HJ1-ABP, VP3BG, Yugoslovakia, and a new siamese station. Dr. E. S. G. K. Vance, of Huthwaite, England, reports SPW, OER2, VP3MR, VE9HX, and several others on schedule.

D. S. Channon, Port Elizabeth, South Africa, reports CR7AA and KTP. Shokichi Yoshimura, Moji, Japan, reports GBL, YDB, OMN, YDA, PLP, SPW, ZHI, ZBW, TPA2, RV15, VQ7LO, LKJ1, KPT and TPA4. W. H. Chippindale, Concepcion, Paraguay, reports LRU, LRX, PSH, ZBW, LSX, OAX4B and ZP3AC. A. B. McDonough, Wellington, New Zealand, reports a new Siamese station and CQN. John Barron, Aberdeen, Scotland, reports Radio Belgrade and SPW. I. Gulberg, Stockholm, Sweden, reports SM5SD, Sweden. L. J. Neederle, Praha, Czechoslovakia, reports Belgrade, Jugoslavakia.

From Canada we have Edward Houlgate, of London, Ontario, with TPA3, TYA, KK1, KEI, IQA. Ian C. Morgan, Montreal, shows JVP, JVN, HI3C, YDB, VRR4 and HJ4ABB. Robert Rogers, Arundel, reports ETB. W. Kuzmin, Agencourt, reports CT1AA, ORK, JVM and W1XAL.

From New York State we have H. S. Bradley with news of HRD, HIG, HC1PM, HP5K, XDIB, HI8A, and YNLF. W. F. Herzog, of Center Moriches, shows XBWI, COKG, DJM, and HIT. Fred Hafner, Buffalo, helps with HIG, HIT, HIL and CT1AA. R. Brewster Williams, of Garden City, reports VK2MD, PMN, PLP, VWY and GCI. E. Scala, Jr. of Bronx, reports AFK, AFH, HAT4, VE9DR and HJ1ABP. Nick Gaug, New York City reports EAQ special. J. W. Brauner, Williamsville, N. Y., reports PLP, PMN and JVN. Milton Carter, Jamaica, reports ZFA, W2XAF, VE9DR and VE9DN. Rober Legge, Binghamton, reports YSJ, ETB, PLP, LRU, JVN, JVM, HJ2ABD, HJ3ABF, PCJ, TG2X, H14V, H14D, GSO, GSP, DZB,

PHI, HC2CW and HCK. Raymond Aiken, Lockport, reports TGW, VPD, HJ1ABP and JVM. Charles Ward, Jr., Brooklyn, reports ETB, SU8FA, EA8AF, CNR, PLP, JVM, JVN, GSP, GSO and many amateurs. Jimmie Reese, New York City, reports CO9PC, HP5K, HI9B, JVN, W9XBS, ORK, HBO, CMA3, SPW, VPD, TGW, TPA3, LSQ, ROU, ETB, HH2T, PCJ, LZA VE9DN, DZE, RW59 and HH3W.

W. H. Howe, Tucson, Arizona, reports PLP, JVL, JVE, PLV, JVH, JVN, JVM, ZBW, KBB, GSP, GSO, PHI, HJ1ABP and many others on schedule. Andrew Shassetz, Monarch, Wyoming, reports SPW, LRU and RKI. Eric Butcher, Cokeville, Wyoming, reports HCJB, GSN, GSO, GSJ, HC1TQ, HI3C, HRD, CO9WR, HC2ET, HJU, HJ1ABP, PRA8, YNVA, VPD, YNLAT, CQN and PCJ. Wade Chambers, Tulsa, Oklahoma, reports HBO, TPA2, DJR, RIO, OPL, JVN, JVM, JYS, ZLT, ZFB, TGW, HJ1ABE and LRU.

Mrs. I. Hegler, Lake Worth, Florida, reports HH3W, HJ1ABG, HIT, YV5RMO, WWD and CO9WR. J. B. Wooten, Mobile, Alabama, reports WQD, DFC, HBO, HBJ, LSY, KKR, PLP, YDB, LRU, HH3W, HJ1ABP, PZ1AA, DZA, VK3ME, HBH, VPD, YSJ, HH2S, JVH and amateurs. Don Gross, Asheville, North Carolina, reports HJU and HIT.

Tom Erwin, Herrin, Illinois, reports RKI, RNE, EAQ, HJ1ABP, GSO, HJ4ABE, COCH, XEFA, CO9JQ, JVD, JVM, DZB, XDC, HJ3ABX, HIT, HJU and HSP. C. E. Johnstone, Taylor Ridge, Illinois, sends Daventry schedule. Frank Grey, Berwyn, Illinois, reports RNE, GSP, PLP, YDB, WCT and PCJ. J. N. Nickels, Indianapolis, Indiana, reports HJ1ABE and HJ1ABP. Allan Teague, Millington, Michigan, reports KKQ, KKL and England. Richard Verbreghe, Detroit, Mich., reports W8WJ, HJU, HJ3ABX, GSP, CO9JQ and HJ1ABP. W. Vandecar, Grand Rapids, Mich., reports VQG, HP5K, TIEP, and VPD. Walter Mas, Hamtramck, Mich., reports HAT4 and HIZ.

Dr. R. C. Kash, Sevierville, Tenn., sends helpful news on all of the following: TGWA, HJ4ABD, HI3C, KKP, PCJ, GSP, XDR, HI3U, DFL, HJ3ABX, HJ2ABD, CO9WR, VP3MR, HJ3ABH, RKI, HJ3ABH, HI7P, HIT, HH2T, ETB, HIH, TI6OW, VE9DR, DZE, EA8AB, DZE, EA8AB, DZB, PLE, HJ1AP, HIG, XSWI, KKG and PRA8. Robert Holland, Jr., Murray, Ky., reports HBL and HBP. J. R. Miller, Covington, Ky., reports SM5SD. Wallace Smith, Louisville, Ky., reports VPD and others on schedule.

Norman Lane, Long Beach, California, reports HRD, KTO and KKP. H. H. Whipple, San Pedro, Calif., reports KKH and JVN. Charles Eggenweiler, West Los Angeles, reports HBJ, HJ1ABE, HJ1ABP, OAX4G, SPW and JVH. A. Antognini, Greenfield, Calif., reports Java, Japan, Cuba, Russia, VPD, ZBW and HJ1ABE. Sam Aria, Los Angeles, reports HJU. William Sparks, San Francisco, Calif., reports Japan, Java, ZBW, ZHJ, XOJ, JIB, GSP, GSO, HJ1ABP, HJ1ABE, TGW, Alaska, Canada, Hawaii, and the Philippines. Ashley Walcott, San Francisco, reports HI9B, TGW, ZLT, VJI, GSP, DZD, PHI, RNE, RIO, HJ1ABP, JVE, JVD, JVM, JYS, XGOA, XOJ, ZHJ, KZRM, RV15, PLV, PLP, YDB, YDA, PMY.

H. W. Jessen, Eugene, Oregon, reports WXA, VRR4, TGW, TGWA, HJ1ABP, ETB, LRU, LRX and VE9CA. O. Hersowitz, Baltimore, Mary-

land, reports EAQ, GSP, PHI, CSW, HJ3ABX, HJ1ABE, HIG, HI3C and VE9DR. Herve, Bouvier, Central Falls, R. I., reports Japan. Fred Ather-ton, Rutland, Vermont, reports ETB, PCJ, TGW, TG2X, HRD, HJ1ABP and TI8AW. O. D. Shailer, Hartford, Conn., reports England's schedule. Bruce Hart, Pine River, Minnesota, reports HJ1ABP, SPW, OAX4G, HIX, HIT, HJ1ABG, LKJ1 and RNE. L. J. Markwardt, Madison, Wisconsin, sends England's schedule.

Joe Childs, Philadelphia, reports ETB, HJ3A. A Centanino, Freeport, Pa., reports PHI, GSP, SUV, IRY, JVN, DJD, GSO and JVP. Capt. Oxri-eder, State College, Pa., reports HJU, HJ1ABP, HJ1ABJ, HJ3ABX, HIX, HJ4ABP, GSO, GSP, HH3W, HP3W, HP5K, VE9DR and TI8WS. XDX, Philadelphia, reports HBP, HBL, PHI, PCJ, RKI, RNE and DZB.

Wm. C. Palmer, Cleveland, Ohio, sends news on YNLF, VQG, HI3C, SPW, DZC, HRD, HIG, VRR4, CEC, and VP5MK. Miss Eileen Hofmaster, Sandusky, Ohio, reports HJ1ABP and CT1AA. George Swimmer, Hubbard, Ohio, reports HVJ, CJRO and HJ4ABA. Malcomb Gavin, Cleveland, Ohio, reports HRD, COKG, HIT, HIX, HI1A, HJU, YV6RV, HJ3ABH, VRR4, HAT4, RIR, PHI, VPD, YDB and PLP.

W. D. Flagg, Holyoke, Mass., sends news on DFL, RNE, TI8WS, HRD, HP5J, HJ1ABP, GSP, GSO, DZB, DJO, VE9DR, VE9HX, HJU, DJR, XDC, HJ3ABD and HJ2ABD. F. Bookman, Boston, Mass., reports HJ1ABP. Joseph Stempel, Bridgeport, Conn., reports SPW, HJ1ABE, VE9DR, ETB, TPA3, DZA and DJM. S. H. Lawrence, Anamosa, Iowa, reports JVN, JVM, DFL, HJ1ABP, SPW, TFJ, HJU and ETB.

P. I. Ogilvie, Ponoka, Alberta, Canada, reports SPW, LZA, PCJ, PHI, GSO, GSP, JVD, Java, IDU, SUZ, HSP, and ETB. Robert Rossi, Phila-delphia, Pa., reports PZ1AA, HIG, RRR, VK7JB, ETB, HI8A, SPW, YNLF, HJ1ABP, VQG, EA8AO, SU8MA, YSJ, and amateurs. Joe Childs adds CEC, HBJ, HBO, HBH, EAQ, LSX, PHI and VPMR to his list above.

J. M. R. Studholme, London, England, reports PCJ, Germany, Russia, France, PLP, PMN, PLM, PLV, VNR, ETB, HJ1ABP, GBTT, CJHX, W3XAL, W2XAD, W8XX and WQP. H. J. Davison, Bayamon, Puerto Rico, sends news on WCT, HH3W, HI7B, TIEF, DZB, DZC, DZE, PHI, SUZ, HJ1ABP, HJ1ABE, W2XE, PLP, PMN and JVM. Joseph Miller, Brooklyn, New York, reports TG1X, OPM, JVF, YNLAT, ETB, JVD, FVA, CR7AA, KTR, PLP, EDR3, HBO, YBG, RSZ, LRU, VP3MR, CQN, PMY, ZBW, PLP, PMN. W. R. Peterson, Nashville, Tenn., reports many stations on schedule. Herman Rappaport, Brooklyn, N. Y., reports HJ1ABP, LSX, TGWA, HJ3ABX, HJA3, VP3MR, CO9DT, EAQ, GSP, DJK, VE9DR, ETB, Russia, Australia and HJ1ABP, HJ1ABE, LRU, OCI, HIT, KDR, TGW, ON4OA and PMA.

G. C. Gallagher, San Francisco, reports stations in Japan, Java, China, HP5O, RNE, RIO, GSP, DZB, DZC and TYA. George Feldrik, Cleveland, Ohio, reports LSX, COKG, PLP, JVN, ZBW, HJ1ABP. Ralph Brady, Brooklyn, reports ETB, HIG, HJU and HJ1ABP. A. B. McDonough, Well-ington, New Zealand, reports RNE, VJZ and VK5DI. Charles Miller, Cov-ington, Ky., reports KAY, JVD, PMA, VQG, WCT, FVA, TYA2, GCI, PLP, PMN; ZSS; YDB, CNR, OPL and HCJB.

Tom Erwin, Herrin, Illinois, in a letter adds PLP, HBJ, TIGPH, DZB, CO9JQ; COCO; LRU and JVM. Dr. Kash, Sevierville, Tenn., also adds GAS, HBJ, LRU, HIH, VRR, PHI, ZFB and HBO to those mentioned before. H. B. Oxrieder, State College, Pa., reports HJ4ABE, YV9RC and YV8RV.

Ingvar Gullberg, Hedemore, Sweden, reports SM5SD, P11J, 2RO, LZA, DZA, ICY, RKK, WCG, WQV. E. C. Laver, Morden, England, reports HJ1ABP. Thomas Russell, Belfast, Ireland, reports many addresses. J. R. Garrett Pegge, Chesham, England, reports CNR, SPW, ETB, LZA, HJ3ABX, HJ1ABE and PMN. A J. Hayward, Trowbridge, England, reports. Robert J. Hughes, Trowbridge, England, reports DZH, ETB, LSL, ports VLK, ZLT, ETB, SUZ, JVM, JVP, PMN, PHI, DZA and many amateurs. W2XAD, WIXAL, VK3LR and many amateurs. Sergt. J. Cramb of Leeson-Solent, Hants, England, reports several stations on schedule. William J. Wood, Oak Park, Illinois, reports a long list of amateurs heard on 20 meters.

John W. May, Wilkinsburg, Pa., reports PLP, PMN, YDB, ZBW, LZA, HJU, VPD, HI3C, HJ1ABP, RIM, RKI, RNE and RIR. Wilfred Siddle, Birmingham, Alabama, reports DJR, DZB, YNLF, TIX, TIRW, HRY, TGW, HP5K, XDA, XDC, XAP, XAM, XDR, HJU, HJ1, ABJ, HJ3ABD, HJ4ABP; CEC, HJA2, HJ3ABX, HC2ET, HI7P, HIG, WXE and WWV. W. F. Herzog, Center Moriches, New York, reports HJ1ABP, VE9DR and many amateurs. H. J. Gaffney, Chicago, reports W2XGB and KKH. William Mote, Beaver, Pa., reports JVN.

Reginald de Souza, Maracaibo, Venezuela, reports TI4WX, TIMC, HRD, HP5K, TIOW, YV11RB, YV11RMO, YV12RM, HJ5ABC, YNLF, HJ1ABP, HH3W, PCJ, and a new Chile station.

CHAPTER NEWS

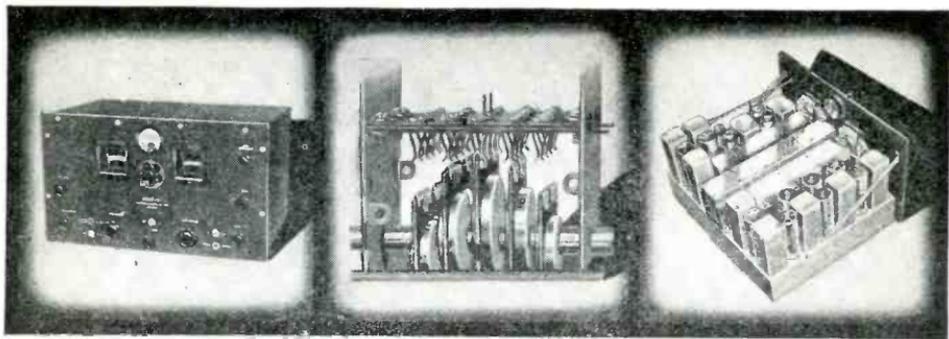
The London, England, Chapter meets at R.A.C.S. Hall, Cavendish Grove, Wandsworth Road SW8, on Fridays, excepting the second in each month. On April 18th they visited the London Reginal transmitters of the B.B.C. at Brookman's Park. On Saturday, May 16th they will hold a Stag Party at the Bridge House, London Bridge, which will be followed by a steak and kidney pudding dinner. The chapter has members who own light planes and special ultra short wave tests will be arranged this summer.

The Manchester, England, Chapter holds meetings every Tuesday except the last in each month at British Legion Hall, Long Street, Middleton. They will hold a "fest" sometime in June and have arranged for several field days.

The Philadelphia Chapter meets on the second and fourth Fridays of the month at 438 Market Street, Philadelphia, Pa. Mr. E. Vincent Stanton was elected to replace George Zehner as secretary recently. A membership and DX contest have been started, with many valuable prizes offered.

The New York Chapter will visit a radio tube factory on May 8th. On May 22nd they will meet at Stuyvesant High School, East 15th Street and Second Avenue, Manhattan. Motion pictures of foreign lands will be shown and a late model receiver will be demonstrated. For detailed information, write to J. Kleiman's, 2610 Glenwood Road, Brooklyn, N. Y.

Hammarlund "Super-Pro"



ADVANCED AMATEUR-PROFESSIONAL RECEIVER

THE "Super-Pro," the new Hammarlund amateur-professional receiver, incorporates a multitude of distinctive developments that will provide the exacting efficiency you want! The band changing switch, an exclusive Hammarlund unit, is an outstanding "Super-Pro" feature. This switch is a radical departure from switches now commonly used for this purpose. Its design incorporates the well-known knife switch principle, actuated by eccentric cams. Specially designed Bakelite sections with silver-plated, phosphor-bronze knife blades gradually slide into silver-plated phosphor-bronze spring clips, forming a 6-point positive contact. The tuning dial arrangement is another advanced idea. It is accurately calibrated in megacycles in ranges of 2.5 to 5; 5 to 10, and 10

to 20 and in kilocycles from 540 to 1160 and 1160 to 2500. Equipped with an ingenious mechanical shutter, which operates in conjunction with the band changing switch, only the frequency band in actual use is visible. Unusual tuning coil assemblies are another "Super-Pro" feature the radio-wise are talking about. Coils are wound on the highest grade Bakelite and mounted on Isolantite bases. Each unit has an inductance adjuster which aligns the circuits at the low frequency end of band. A variable trimming condenser aligns the circuits at the high frequency end. This makes it possible to obtain not only perfect alignment in both circuits, but also permits exact tracking of the calibrated dial. A host of other features includes band spreading, variable selectivity, etc.

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POLICE STATIONS

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

120.48	2,490 ()	122.85	2,442 ()	KGHS, Spokane, Wash.	
WPFJ, Clarksburg, W. Va.		WPGL, Binghamton, N.Y.		KGZN, Tacoma, Wash.	
WPDZ, Fort Wayne, Ind.		KGPX, Denver, Col.		WPDA, Tulare, Calif.	
WPFJ, Hammond, Ind.		WPEB, Grand Rapids, Mich.		WPGJ, Utica, N.Y.	
WPGO, Huntington, N.Y.		WMDZ, Indianapolis, Ind.			
WPDZ, Kokomo, Ind.		WPFJ, Jacksonville, Fla.		124.69	2,406 ()
KGZU, Lincoln, Nebr.		WPFJ, Lakeland, Fla.		KGVL, Little Rock, Ark.	
KGHJ, Long Beach, Calif.		WDDL, Lansing, Mich.		KGPW, Salt Lake City, Utah	
WPGS, Mineola, N.Y.		WPDE, Louisville, Ky.			
KGHX, Santa Anna, Calif.		WPFZ, Miami, Fla.		175.23	1,712 ()
KGZD, San Diego, Calif.		WNFP, Niagara Falls, S. Y.		WPED, Arlington, Mass.	
KGHD, Seattle, Wash.		WPFY, Yonkers, N. Y.		WPHF, Richmond, Va.	
KGHE, Snoqualmie, Wash.				KGPJ, Beaumont, Texas	
WPGN, South Bend, Ind.		122.85	2,442 ()	WPBC-C-D, Chicago, Ill.	
121.26	2,474 ()	WPFJ, Muskegon, Mich.		KVP, Dallas, Texas	
WPFW, Bridgeport, Conn.		WPFJ, Palm Beach, Fla.		WPEI, E. Providence, R.I.	
WPGX, Worcester, Mass.		KGPP, Portland, Ore.		KGPL, Los Angeles, Calif.	
WFO, Knoxville, Tenn.		WPFJ, Reading, Pa.		WPFN, New Bedford, Mass.	
KGHG, Las Vegas, Nev.		WPDH, Richmond, Ind.		WPEA, Newton, Mass.	
WDDP, Philadelphia, Pa.		WPES, Saginaw, Mich.		KGJX, Pasadena, Calif.	
KGHM, Reno, Nev.		KGZR, Salem, Ore.		WPDU, Pittsburg, Pa.	
WPFQ, Swarthmore, Pa.				WPGF, Providence, R.I.	
WRDQ, Toledo, Ohio		123.45	2,430 ()	WPSV, Boston, Mass.	
121.65	2,466 ()	WPDI, Columbus, Ohio		KGZY, San Bernardino, Calif.	
WPGA, Bay City, Mich.		WPDJ, Dayton, Ohio		WPEH, Somerville, Mass.	
KGOZ, Cedar Rapids, Iowa		WPFK, Hasensack, N.J.		KGZQ, Waco, Texas	
WPGK, Cranston, R.I.		KGPB, Minneapolis, Minn.			
KGPN, Davenport, Iowa		WPEK, New Orleans, La.		175.85	1,706 ()
KGZG, Des Moines, Iowa		KGZJ, Phoenix, Ariz.		WKDU, Cincinnati, Ohio	
WPDF, Flint, Mich.		WPGI, Portsmouth, Ohio		WPET, Lexington, Ky.	
WPEC, Memphis, Tenn.		WPDS, St. Paul, Minn.		KGPC, St. Louis, Mo.	
KGPI, Omaha, Nebr.		WPGE, Shreveport, La.			
WPFV, Pawtucket, R.I.		123.80	2,422 ()	178.36	1,682 ()
WPGB, Fort Huron, Mich.		WMJ, Buffalo, N.Y.		KGHO, Des Moines, Iowa	
KGPK, Sioux City, Iowa		KGFE, Kansas City, Mo.		WPGG, Findlay, Ohio	
WPEM, Woonsocket, R.I.		WPFU, Portland, Maine			
122.05	2,458 ()	KGZC, Topeka, Kans.		179.21	1,674 ()
WPDO, Akron, Ohio		KGPG, Vallejo, Calif.		KGHK, Palo Alto, Calif.	
WPDV, Charlotte, N.C.		WPDW, Washington, D.C.		KGPD, San Francisco, Calif.	
WRBH, Cleveland, Ohio		124.37	2,414 ()	KGPM, San Jose, Calif.	
KGZV, Lubbock, Texas		KGZV, Aberdeen, Wash.		KGZT, Santa Cruz, Calif.	
WPGD, Rockford, Ill.		WPGH, Albany, N.Y.		180.07	1,666 ()
WPDG, Youngstown, Ohio		KGZJ, Albuquerque, N.M.		WRDS, East Lansing, Mich.	
KGZI, Wichita Falls, Texas		WPDY, Atlanta, Ga.		WMP, Framingham, Mass.	
122.40	2,450 ()	KGPS, Bakersfield, Calif.		WPEW, Northampton, Mass.	
WPEF, Bronx, N.Y.		WPFH, Baltimore, Md.		WPEL, Bridgewater, Mass.	
WPEE, Brooklyn, N.Y.		WPFJ, Columbus, Ga.			
KGZF, Chanute, Kans.		WCK-WPDX, Detroit, Mich.		180.88	1,658 ()
KGZP, Coffeyville, Kans.		KGZM, El Paso, Texas		KSW, Berkeley, Calif.	
KGPO, Honolulu, Hawaii		KGZA, Fresno, Calif.		WPGC, S. Schenectady, N.Y.	
WPDK, Milwaukee, Wis.		WRDR, Grosse Point, Mich.		KGZE, San Antonio, Texas	
WPEG, New York, N.Y.		WMO, Highland Park, Mich.			
KGPH, Oklahoma City, Okla.		WPGM, Lagrange, Ga.		184.05	1,630 () Fire
WPHF, Richmond, Va.		KGZO, Santa Barbara, Calif.		WEY, Boston, Mass.	
KGPO, Tulsa, Okla.		KGPF, Santa Fe, N.M.		WKDT, Detroit, Mich.	
KGZP, Wichita, Kans.		KGPA, Seattle, Wash.		KGPD, San Francisco, Calif.	
				KIDA, Seattle, Wash.	

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"ON-THE-AIR"

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

B—Stands for Broadcast Station. These stations broadcast programs, usually **relaying** some long wave station.

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

Meters	Meg.	STATION	TIME
B-13.92-21.54	W8XK	Pittsburgh, Pa., relays KDKA	7:00 to 9:00 A.M.
B-13.95-21.52	W2XE	Wayne, N. J. Relays WABC	6:30 A.M. to 10:00 A. M.
T-14 01-21.41	WKK	Lawrenceville, N. J. Phones LSN	8:00 A.M. to 4:00 P.M.
T-14.17-21.16	LSL	Buenos Aires, Arg.	8:00 A.M. to 1:00 P.M. GAA and PSF.
T-14.23-21.08	PSA	Rio de Janeiro, Brazil. Phones WKK, WLK	daytime.
T-14.27-21.03	LSN	Buenos Aires, Arg.	8:00 A.M. to 4:00 P.M. WKK and WLK.
T-14.38-20.86	EHY-EDM	Madrid, Spain. Phones South America	mornings.
T-14.72-20.38	GAA	Rugby, England. Phones LSL and PPU	near 8:00 A.M.
T-14.97-20.04	OPL	Leopoldville, Belgian Congo. Phones ORG	mornings.
T-14.99-20.02	DHO	Nauen, Germany. Phones PPU and LSM	mornings.
T-15.14-19.18	WKN	Lawrenceville, N. J. Phones GAU	daytime.
T-15.24-19.69	CEC	Santiago, Chile. Phones LSR, HJY	near 11 A.M. and 4 P.M.
T-15.28-19.62	VOG	Nairobi, Kenya, Airica. Phones London	7:30 to 8:00 A. M.
T-15.39-19.50	LSQ	Buenos Aires, Argentina. Heard testing	near 2:00 P.M.
T-15.50-19.35	FTM	Assise, France. 10:00 A.M. to 2:00 P.M.	LSG.
T-15.50-19.35	PMA	Bandoeng, Java. Phones Holland	mornings.
T-15.57-19.27	PPU	Rio de Janeiro, Brazil. Phones FTM	10:30 A.M. to 3:00 P.M.
T-15.58-19.25	DFA	Nauen, Germany. Phones 10:00 A.M. to 2:00 P.M.	irregularly.
T-15.62-19.21	ORG	Brussels, Belgium. Phones OPL	mornings.
T-15.68-19.13	LSM	Buenos Aires, Argentina. Phones EAQ, DHO, GAA	mornings.
T-15.88-18.89	ZSS	Klipkeval, S. Africa. Phones GAS, 6:30 to 7; 10 to 10:45 A.M.	
T-15.93-18.83	PLF	Bandoeng, Java. Phones Holland 6 to 11 A.M.	KWX irregularly.
T-16.06-18.68	OCI	Lima, Peru. Testing with HJY	near 2:00 P.M.
T-16.11-18.62	GAU	Rugby, England. Phones New York	mornings.
E-16.22-18.48	BHJ	Geneva, Switzerland. Used for special programs.	
T-16.30-18.40	PCK	Kootwijk, Holland. Phones Java	near 7:00 A.M.
T-16.35-18.35	WLA	Lawrenceville, N. J. Phones England 8:00 A.M. to 4:00 P.M.	
T-16.38-18.31	GAS	Rugby, England. Phones New York	mornings.
T-16.39-18.30	YVR	Maracay, Venezuela. Phones Germany	10:00 A.M.
T-16.44-18.25	FTE	St. Assise, France. Phones LSM, PPU	mornings.
T-16.48-18.20	GAW	Rugby, England. Phones New York	mornings.
T-16.50-18.18	PMC	Bandoeng, Java. Phones PCV	3:10 to 9:20 A.M.
E-16.55-18.12	LSY	Buenos Aires, Argentina. Irregular.	
T-16.63-18.04	GAA	Rugby, England. Phones Argentina	10:00 A.M. to 2:00 P.M.
T-16.82-18.05	PCV	Kootwijk, Holland. 6:00 to 9:00 A.M.	Java.
B-16.68-17.79	GSG	Davenport, England. 6:00 to 8:45 A.M.	9:00 A.M. to Noon.
B-16.87-17.78	W3XAL	Bound Brook, N. J. 8:00 A. M. to 3:00 P. M.	daily.
B-16.88-17.77	PHI	Huizen, Holland. Daily, ex. Tues. and Fri.	7:30 to 10:30 A.M.
B-16.89-17.86	W2XE	Wayne, N. J. Relays WABC	10:00 A.M. to Noon.
T-16.89-17.76	IAC	Piza, Italy. Phones ships	early mornings.
B-16.89-17.76	DJE	Nauen, Germany. 7:00 to 11:30 A.M.	irregular.
T-16.85 to 18.27	17.80 to 16.42	Ships. Heard in daytime.	
T-16.92-17.75	HSP	Bangkok, Siam. Works Germany	4:30 to 6:30 A.M.
T-17.00-17.64	XGN	Shanghai, China, phones London	7 to 9 A.M., Mon. Wed. Sat.
T-17.10-17.54	VWY	Poona, India. Phones GBU	2:00 to 8:00 A.M.
T-17.12-17.52	DFB	Nauen, Germany. Phones LSM and YVQ	near 9:00 A.M.
T-17.52-17.12	WOO	Ocean City, New Jersey. Phones ships	irregularly.

Meters	Meg.	STATION	TIME
T-18.20	-16.12	IRY, Rome, Italy, phoning	7:00 A.M. to 1:30 P.M.
T-18.44	-16.30	WLK, Lawrenceville, N. J.	Phones England.
T-18.47	-16.24	KTO, Manila, P. I.	Phones Japan 5:00 to 9:00 P.M., irregularly.
T-18.51	-16.20	FZR, Saigon, Indo-China.	Phones Paris mornings.
T-18.71	-16.04	KKP, Kauhuku, Hawaii.	Phones KWU 1:00 to 7:00 P.M.
T-18.89	-15.88	FTK, St. Assise, France.	Phones Saigon 8:30 to 11:00 A.M.
T-18.99	-15.80	XOJ, Shanghai, China.	Phones Japan 5:00 P.M. to midnight.
T-18.91	-15.86	CEC, Santiago, Chile.	Phones OCJ 11 A.M., 1 and 4:40 P.M. irreg.
T-19.02	-15.81	LSL, Buenos Aires, Arg.	Phones GAA 8 A.M. to 1 and 8:00 P.M.
T-19.15	-15.66	JVE, Nazaki, Japan.	Phones Java 3:00 to 5:00 A.M.
T-19.20	-15.61	JVF, Nazaki, Japan,	phones U.S.A. near 5:00 A.M. and 8:00 P.M.
T-19.47	-15.41	KWO, Dixon, California.	Phones Hawaii in place of KWU.
E-19.50	-15.46	KKR, Bolinas, California.	Tests irregularly.
B-19.52	-15.37	HAS-3, Budapest, Hungary.	Sundays 9:00 to 10:00 A.M.
T-19.54	-15.35	KWU, Dixon, California.	Phones Hawaii, 2:00 to 7:00 P.M.
B-19.56	-15.34	DJR, Zeesen, Germany,	1:30 to 3:30 A.M. irregularly.
B-19.56	-15.33	W2XAD, Schenectady, New York,	10:00 A.M. to 2:00 P.M. daily.
B-10.60	-15.31	GSP, Daventry, England.	6:00 to 8:00 P.M.
B-19.62	-15.29	LRU, Buenos Aires, Argentina,	Testing 3:00 to 9:30 P.M. irreg.
B-19.63	-15.28	DJO, Zeesen, Germany.	12:30 A.M. to 7:00 A.M.
B-19.64	-15.27	W2XE, Wayne, N. J.	Relays WABC noon to 5:00 P.M.
B-19.66	-15.26	GSI, Daventry, England.	12:15 to 4:00 P.M.
T-19.68	-15.25	RIM, Tashkent, U.S.S.R.	Phones RKI near 7:00 A.M.
B-19.68	-15.24	TPA2, Pontoise, France.	6:00 A.M. to 11:00 A.M.
B-19.71	-15.22	PCJ, Eindhoven, Holland.	7:00 A.M. to 11:00 A.M., irregular.
B-19.71	-15.21	W8XK, Pittsburgh, Pa.	Relays KDKA 9:00 A.M. to 7:00 P.M.
B-19.74	-15.20	DJB, Zeesen, Germany.	3:45 to 11:30 A.M. daily.
B-19.82	-15.14	GSE, Daventry, England,	9:00 A.M. to Noon.
B-19.84	-15.11	HVI, Vatican City.	10:30 to 10:45 A.M. daily.
B-19.76	-15.18	GSO, Daventry, England.	4:00 to 5:45 P.M.
B-19.85	-15.11	DJL, Zeesen, Germany.	5:45 to 7:30 A.M.
T-19.92	-15.06	WNC, Hialeah, Florida,	phones many stations in daytime.
T-19.94	-15.04	RKI, Moscow, U.S.S.R.	Phones RIM near 7:00 A.M.
T-20.03	-14.98	KAY, Manila, P. I.	Phones DFS 5 to 7 A.M.; U.S.A., 7 to 8 P.M.
B-20.04	-14.97	IZA, Sofia, Bulgaria.	Sundays 3:30 to 11:30 A.M., 3:30 to 4:30 P.M.
T-20.08	-14.94	HJB, Bogota, Colombia,	phones WNC daytime.
T-20.08	-14.94	HII, Trujillo, Dominican Republic,	phones WNC daytime.
T-20.08	-14.94	HJA3, Barranquilla, Colombia,	phones WNC, Florida.
T-20.19	-14.86	OCJ2, Lima, Peru.	Phones HKB-HJY-LSN, daytime.
T-20.29	-14.79	ROU, Omsk, Siberia,	phones Moscow 7:00 to 9:00 A.M. irregularly.
T-20.37	-14.73	IOA, Rome, Italy,	phones 8:00 to 11:00 A.M. irregularly.
T-20.42	-14.69	PSF, Rio de Janeiro, Brazil.	7 A.M. to 6 P.M. LSL, WLK, WOX
T-20.45	-14.67	GBL, Rugby, England.	Phones JVH 1:00 to 7:00 A.M.
B-20.55	-14.60	JVH, Nazaki, Japan.	Phones Europe from 4:00 to 8:00 A.M.
T-20.56	-14.59	WMN, Lawrenceville, N. J.	Phones England daylight.
T-20.64	-14.54	HBJ, Geneva, Switzerland.	Used irregularly.
T-20.65	-14.53	LSN, Buenos Aires, Argentina.	Phones New York daytime.
T-20.71	-14.48	YSJ, San Salvador, Salvador.	Phones WNC afternoons.
T-20.71	-14.48	HRL5, Nacaome, Honduras,	testing with WNC daytime.
T-20.71	-14.48	TIU, Cartago, Costa Rica,	phones WNC daytime.
T-20.71	-14.48	YNA, Managua, Nicaragua,	phones WNC daytime.
T-20.71	-14.48	HPF, Panama,	phones WNC daytime.
T-20.71	-14.48	HRE, Tegucigalpa, Honduras,	phones WNC daytime.
T-20.71	-14.48	TGF, Guatemala City,	phones WNC daytime.
T-20.73	-14.47	WMF, Lawrenceville, N. J.	Phones England daylight.
T-20.75	-14.46	GBW, Rugby, England.	Phones WNC 6:00 A.M. to 6:00 P.M.
B-20.75	-14.46	DZH, Zeesen, Germany,	Noon to 2:00 P.M.
E-20.97	to 21.26	-14.30 to 14.11	—Amateur phones heard in daytime.
T-21.19	-13.88	VJZ, Rabaul, New Guiana.	Testing at 5:00 P.M. and 5:00 A.M.
B-21.26	-14.10	HJ5ABE, Cali, Colombia.	7:00 P.M. to midnight, irregular.
E-21.58	-13.90	WQP, Rocky Point, N. Y.	Testing with RNE irregularly, mornings
T-21.70	-13.83	SUZ, Cairo, Egypt.	Phones GAA 7:00 A.M. to 3:30 P.M.
E-21.91	-13.69	KKZ, Bolinas, California.	Used irregularly.

Meters	Meg.	STATION	TIME
T-21.98	-13.65	HJY, Bogota, Colombia.	Phones irregularly.
B-22.00	-13.63	SPW, Warsaw, Poland.	Mon., Wed. and Fri., 11:30 A.M. to 12:30 noon.
T-22.09	-13.58	GJB, Rugby, England.	Phones Canada and Egypt, daytime.
T-22.35	-13.42	GCJ, Rugby, England.	Phones JVH 3:00 to 8:00 A.M.
T-22.40	-13.38	IDU, Asmara, Eritrea,	phones Italy 8:00 A.M. to 3:90 P.M. irregularly.
T-22.40	-13.39	WMA, Lawrenceville, N. J.	Phones England, daytime.
T-22.48	-13.35	YVO, Maracay, Venezuela.	Phones Florida, daytime.
T-22.50	to 24.3-	13.34 to 12.35	Ships. Heard in daytime.
T-22.58	-13.28	CGA3, Drummondville, Canada.	Phones ships and England daytime.
T-22.70	-13.22	IRJ, Rome, Italy.	phones Japan irregularly 5:00 to 8:00 A.M.
E-22.76	-13.18	DGG, Nauen, Germany.	Phones Asia mornings, irregularly.
B-22.95	-13.07	VPD, Suva, Fiji Islands.	Daily, except Sun., 12:30 to 1:30 A.M.
T-23.00	-13.04	German ships.	11:15 A.M. and 1:30 P.M.
T-23.36	-12.84	WOO, Ocean Gate, N. J.	Phones ships irregularly.
T-23.38	-12.83	CNR, Rabat, Morocco.	Phones St. Assise 5:00 to 8:00 A.M.
T-23.45	-12.80	IAC, Piza, Italy.	Works ships mornings.
T-23.47	-12.78	GBC, Rugby, England.	Phones ships irregularly.
T-24.20	-12.40	DAF, Norden, Germany.	Phones ships irregularly, mornings.
T-24.40	-12.30	PLM, Bandoeng, Java.	Phones VK2ME near 6:30 A.M.
T-24.41	-12.29	GBU, Rugby, England.	Phones America, evenings.
E-24.52	-12.24	TFJ, Reykjavik, Iceland.	Phones GSC irregularly.
T-24.56	-12.22	TYA, Pontoise, France.	Phones the Normandie, irregularly.
T-24.69	-12.15	GBS, Rugby, England.	Phones New York.
E-24.73	-12.13	DZE, Zeesen, Germany.	7:00-9:00 A.M., 5:00-9:00 P.M., irreg.
T-24.88	-12.09	PDV, Kootwijk, Holland.	Tests near 7:30 A.M.
B-25.00	-12.00	RNE, Moscow, U.S.S.R.	Beds. daily 2:00 to 6:00 P.M., Weds. 6:00-7:00 A.M., Sundays 6:00-7:00 A.M., and 10:00-11:00 A.M.
T-25.02	-11.99	FZS, Saigon, Indo-China.	Phones Paris mornings.
B-25.09	-11.95	ETB, Addia Ababa, Ethiopia.	Sundays 5:30 to 4:50 P.M.
E-25.11	-11.97	KKQ, Bolinas, California.	Heard irregularly, evenings.
T-25.12	-11.95	FTA, St. Assise, France.	Phones CNR 4 to 7 A.M., LSM 10 to 12 P.M.
B-25.27	-11.88	TPA3, Pontoise, France.	2:00-5:00 A.M., 11:15 A.M. to 6:00 P.M.
B-25.27	-11.87	W8XK, Pittsburgh, Pa.,	relays KDKA 5:00 to 9:00 P.M.
B-25.31	-11.85	DJP, Zeesen, Germany,	Noon to 2:00 P.M.
B-25.34	-11.79	DJO, Zeesen, Germany,	3:00 to 4:55 P.M.
B-25.36	-11.83	W2XE, Wayne, N. J.	Relays WABC 5:00 to 9:00 P.M.
B-25.36	-11.83	W9XAA, Chicago, Ill.	Schedule not known now.
B-25.38	-11.82	GSN, Daventry, England.	12:15 to 2:15 A.M.
B-25.40	-11.81	RRO, Rome, Italy.	8:15 A.M. to 12:15 Noon.
B-25.40	-11.81	HJ4ABA, Medellin, Colombia.	11:30 to 1:00 and 6:30 to 10:30 P.M.
B-25.42	-11.79	W1XAL, Boston, Mass.,	Sun. 3:30 to 5:00; Mon., Fri., 5:30 to 7 P.M.
B-25.43	-11.79	DJO, Zeesen, Germany.	3:00 to 4:20 P.M.
B-25.49	-11.77	DJD, Zeesen, Germany,	11:35 A.M. to 4:25 P.M.; 4:50 to 10:45 P.M.
B-25.53	-11.75	GSD, Daventry, England.	11:30 A.M. to 5:45 P.M., 6-8 P.M., 9-11 P.M.
B-25.60	-11.72	CRJX, Winnipeg, Canada.	4:00 P.M. to 11:00 P.M.
B-25.63	-11.71	TPA4, Pontoise, France.	6:15 to 9:00 P.M., 10:00 P.M. to 1:00 A.M.
E-25.63	-11.71	KIO, Kauhuku, Hawaii.	Heard in the evenings testing.
E-25.73	-11.66	PPQ, Rio de Janeiro, Brazil.	Used irregularly in evenings.
E-25.87	-11.59	VRR4, Stony Hill, Jamaica.	Testing with WNC in daytime.
B-25.93	-11.57	HH2T, Port-au-Prince, Haiti.	Heard irregularly, evenings.
E-26.09	-11.50	VIZ3, Fiskville, Australia.	Phones CJA4 irregularly.
E-26.09	-11.50	XAM, Merida, Yucatan.	Irregularly 1:00, 6:00 and 7:00 P.M.
T-26.29	-11.41	CJA-4, Drummondville, Ont.,	phones VIZ-3 6:00 to 11:00 P.M., Irreg
T-26.35	-11.39	HBO, Geneva, Switzerland.	Used irregularly.
T-27.15	-11.05	ZLT, Wellington, New Zealand.	Phones VLK 1:00 to 7:00 A.M.
T-27.26	-11.00	PLP, Bandoeng, Java.	Broadcasts Tues. and Thurs., 10-10:30 A.M.
T-27.26	-11.00	XBJQ, Mexico City.	Testing irregularly now.
T-27.35	-10.97	OCI, Lima, Peru.	Phones HJY, evenings.
E-27.65	-10.85	DFL, Nauen, Germany.	Irregular.
T-27.67	-10.84	KWV, Dixon, California.	Phones Hawaii, daytime.
T-27.86	-10.77	GBP, Rugby, England.	Phones VLK 11:00 P.M. to 8:00 A.M.
E-27.93	-10.74	JVM, Nazaki, Japan,	Tues., Fri., 2 to 3 P.M. Phone 1:30 to 7:40 A.M.

Meters	Meg.	STATION	TIME
Γ-28.09	10.68	WNB, Lawrenceville, N. J.	Phones Bermuda. daytime.
T-28.12	10.67	PLQ, Bandoeng, Java.	Heard testing broadcast 5 to 10 A.M., irreg.
θ-28.12	10.67	CEC, Santiago, Chile, daily	7 to 8 P.M. • Thurs., Sun., 8:30 to 9 P.M.
T-28.14	10.66	JVN, Nazaki, Japan.	Bclds. Tues. & Fri. 2-3 P.M., Mon. & Thur. 4-5 P.M.
E-28.28	10.61	WEA, Rocky Point, N. J.	Tests irregularly with Europe.
Γ-28.44	10.55	WOK, Lawrenceville, N. J.	Phones Brazil and Argentina, irregularly
E-28.49	10.53	JIB, Tawian, Japan.	Heard irregularly.
Γ-28.51	10.52	VK2ME-VLK, Sydney, Australia.	1:00 to 8:00 A.M. GBP.
E-28.79	10.42	XGW, Shanghai, China.	Testing near 6:00 A.M.
Γ-28.80	10.42	PDK, Kootwijk, Holland.	Phones Java, 7:30 to 9:40 A.M.
Γ-28.80	10.40	YBG, Medan, Sumatra.	5:30-6:30, 12:30-1:30 A.M., 7:30-8:30 P.M.
E-28.85	10.40	KEZ, Bolinas, California.	Used irregularly
E-28.91	10.38	WCG, Rocky Point, N. Y.	Tests irregularly.
B-28.98	10.35	LSX, Buenos Aires, Argentina.	Irregular
B-29.04	10.33	ORK, Brussels, Belgium.	1:30 to 3:00 P.M., daily.
E-29.13	10.30	LSQ, Buenos Aires, Argentina.	Used for special tests.
E-29.15	10.29	I>ZC, Zeesen, Germany.	3:00 to 9:00 P.M., Irregular.
T-29.25	10.26	PMN, Bandoeng, Java.	Near 5:30 A.M. daily. VLK.
E-29.27	10.25	LSL, Buenos Aires, Argentina,	testing 5:30 to 7:00 P.M.
T-29.45	10.22	PSH, Rio de Janeiro, Brazil.	Sending music, evenings.
T-29.50	10.17	RIO, Bakou, U.S.S.R.	Phones Moscow 8-10 A.M., 10 P.M. to 1 A.M.
T-29.58	10.14	OPM, Leopoldville, Belgian Congo.	Phones ORK 9-11 A.M., 3-6 P.M.
T-29.76	10.08	RIR, Tiflis, Siberia.	Phones Moscow 5:00 to 8:00 A.M., irregularly
T-29.79	10.07	EHY, Madrid, Spain.	Phones YVR near 4:00 P.M., irregularly
T-29.80	10.06	JZB, Shinkyo, Manchukuo,	phones JVO 10:00 P.M. to 3:00 A.M.
T-29.83	10.05	ZFB, Hamilton, Bermuda.	Phones U.S.A. and ships. daytime.
T-29.83	10.05	SUV, Cairo, Egypt.	Phones GAA after 3:30 P.M.
E-29.88	10.04	DZB, Zeesen, Germany.	7:00 to 9:00 P.M.
T-30.09	9.97	KAZ, Manila, P. I.	Phones PLV near 2:00 A.M.
T-30.15	9.95	GCU, Rugby, England.	Phones New York evenings.
T-30.21	9.93	HKB, Bogota, Colombia.	Phones PSK irregularly, evenings
T-30.30	9.90	LSN, Buenos Aires, Argentina.	6:00 P.M. to 6:00 A.M. WLO
T-30.40	9.87	WON, Lawrenceville, N. J.	Phones England evenings.
E-30.40	9.87	JYS, Kemikawa-Cho, Japan.	Relays JOAK Irreg., mornings
T-30.52	9.83	IRM, Rome, Italy.	Phones Egypt afternoons.
B-30.43	9.86	FAO, Madrid, Spain.	5:15 P.M. to 9:30 P.M. daily. Sat. 1-3 P.M.
T-30.60	9.80	GCW, Rugby, England.	Phones America, evenings.
E-30.61	9.80	LSI, Buenos Aires, Argentina.	Used irregularly, evenings.
T-30.75	9.76	VK2ME-VLK, Sydney, Australia.	Phones Java 4:00 to 8:00 A.M.
T-30.77	9.75	WOF, Lawrence, N. J.	Phones England, evenings.
T-30.90	9.71	GCA, Rugby, England.	Phones Argentina around 6:00 P.M.
B-31.00	9.67	DZA, Zeesen, Germany.	5:00 to 7:00 P.M.
B-31.00	9.66	CQN, Macao, China,	Monday and Friday 7:00 to 8:30 A.M.
T-31.08	9.65	DGU, Nauen, Germany.	Phones Egypt in daytime.
B-31.09	9.65	CT1AA, Lishon, Portugal.	Tues., Thur. & Sat. 3:30 to 6:00 P.M.
B-31.10	9.65	YDB, Soerabaja, Java,	daily 4:30 to 10:00 A.M.; Sat. until 11:00.
B-31.22	9.61	BH3W, Port-Au-Prince, Haiti.	1:00-2:00 P.M., 7:00-8:30 P.M. P.M.
B-31.13	9.64	2RO, Rome, Italy.	Daily 1:30 to 5:00 P.M. and 6:00 to 7:30 P.M.
B-31.25	9.60	CB960, Santiago, Chile.	Heard 9:30 P.M. to 1:00 A.M., Irreg.
B-31.25	9.60	HJ1ABP, Cartagena, Colombia.	11:00 A.M. to 1:00 P.M., 5:00 to 11:00 P.M. week days; Sundays 10:00 A.M. to 1:00 P.M., 3:00-6:00 P.M.
B-31.25	9.60	LRX, Buenos Aires, Argentina.	Testing near midnight now.
B-31.27	9.59	HBL, Geneva, Switzerland.	5:30 to 6:15 P.M. Saturday.
B-31.28	9.59	W3XAU, Philadelphia, Pa.	11:00 A.M. to 7:00 P.M.
B-31.28	9.59	PCJ, Eindhoven, Holland.	Sundays 7:30 to 8:30 A.M.; 1-2; 7-8 P.M.
B-31.29	9.59	HPSJ, Panama City, Panama.	11:45 A.M. to 1:00 P.M., 7:30 P.M. to 10:00 P.M.
B-31.31	9.58	VK3LR, Melbourne, Australia.	10:30-3:00 irreg.; 3:15-7:30 A.M., daily
B-31.32	9.58	GSC, Davenport, England.	6:00-8:00 P.M. and 9:00-11:00 P.M.
B-31.36	9.57	W1NK, Boston (Millis), Mass.	5:00 A.M. to 11:00 P.M.
B-31.36	9.57	VJUB, Bombay, India, Wed., Thurs.,	and Sat. 11:00 A.M. to 12:30 P.M.
B-31.38	9.56	DJA, Zeesen, Germany.	12:30-3:50 A.M., 8-11 A.M., 5:00-10:45 A.M.
B-31.45	9.54	DJN, Zeesen, Germany.	12:30 A.M. to noon. 4:55 to 10:45 P.M.

Meters	Meg.	STATION	TIME
B-31.45	9.54	XGOA, Nanking, China.	Daily 3:30 to 5:30 A.M.
B-31.48	9.53	LKJ1, Jeloy, Norway.	5:00-8:00 A.M., 11:00 A.M. to 6:00 P.M.
B-31.48	9.53	W2XAF, Schenectady, N. Y.,	daily 4:00 P.M. to Midnight.
B-31.55	9.51	VK3ME, Melbourne, Australia.	Week-days 4:00 to 7:00 A.M.
B-31.55	9.51	HJL, Buenaventura, Colombia.	12-2 P.M., 8-11 P.M., Mon., Wed., Fri.
B-31.55	9.51	GSB, Davenport, England,	12:15 to 2:15 A.M.; 12:15 to 5:45 P.M.
B-31.56	9.50	PRF5, Rio de Janeiro, Brazil.	Daily 4:45 to 5:45 P.M., also irreg.
T-31.71	9.46	Tripoli, Africa. Phones IAC,	Italy, 6:00 A.M. to 1:00 P.M., irreg.
B-31.75	9.45	TGW, Guatemala City.	9:00 P.M. Saturdays to 6:00 A.M. Sunday.
B-31.80	9.42	COCH, Havana, Cuba,	8:00 A.M. to 7:00 P.M.; 8:00 to 10:00 P.M.
T-31.86	9.42	PLV, Bandoeng, Java.	Broadcasts Tues. and Thurs., 10:00-10:30 A.M.
B-31.98	9.38	CSW, Lisbon, Portugal,	between 5:00 and 7:00 P.M., irregularly.
T-32.15	9.33	CGA4, Drummondville, Canada.	Phones ships and England, irregularly
T-32.33	9.28	GCB, Rugby, England.	Phones CGA and SUV afternoons.
T-32.72	9.17	WNA, Lawrenceville, N. J.	Phones England evenings
T-32.83	9.14	YVR, Maracay, Venezuela.	Phones Europe afternoons.
B-32.88	9.12	HAT-4, Budapest, Hungary.	Sundays 6:00 to 7:00 P.M.
T-33.26	9.02	GCS, Rugby, England.	Phones New York evenings.
E-33.29	9.01	KEJ, Bolinas, California.	Tests irregular.
E-33.52	8.95	WEL-W2XBJ, Rocky Point, N. Y.	Testing irregularly, evenings.
T-33.41	8.98	VVY, Poona, India	Phones England near 8:30 A.M.
T-33.93 to	36.58-8.84 to 8.20	Ships.	Heard irregularly.
E-34.10	8.79	HKV, Bogota, Colombia.	Testing, 5:30 to 11:00 P.M., irregularly
T-34.19	8.77	PNI, Makassar, D. E. I.	Phones Java near 4:00 to 5:00 A.M.
B-34.21	8.77	HCBJ, Quito, Ecuador,	Daily excepting Mondays 7:30 to 9:30 P.M.
B-34.29	8.75	ZBW, Hong Kong, China.	Daily 11:30 P.M. to 1:15 A.M., Mon. and Thurs. 3:00 to 7:00 A.M., other days 6:00 to 10:00 P.M.
E-34.35	8.74	WXV, Fairbanks, Alaska.	Works WXH between 10 P.M. and 4 A.M.
T-34.56	8.68	GBC, Rugby, England.	Phones ships irregularly.
B-34.62	8.66	CO9JQ, Camaguey, Cuba.	5:30 to 6:30 P.M.; 8:00 to 9:00 P.M.
E-34.68	8.65	VVD, Seattle, Wash.	Testing irregularly.
B-34.72	8.64	YNVA, Managua, Nicaragua.	7:30 to 9:30 P.M., Irregular.
T-35.02	8.57	WOO, Ocean Gate, N. J.	Phones ships irregularly.
T-35.42	8.47	DAF, Norden, Germany.	Phones ships irregularly.
B-35.69	8.41	HC2CW, Guayaquil, Ecuador.	8:00 to 11:30 P.M., irregular.
T-35.80	8.38	IAC, Piza, Italy.	Works ships, irregularly.
T-36.65	8.19	PSK, Rio de Janeiro, Brazil.	Sending music 6:00 to 7:30 P.M.
B-36.65	8.19	XEME, Merida, Mexico,	9:00 A.M. to Noon, 5:00 to 11:00 P.M.
B-36.95	8.12	KTP, Manila, P. I.	Phones KWX 10:30 to 11:00 A.M.
T-38.06	7.86	SUX, Cairo, Egypt.	Phones Rome and London afternoons.
B-38.19	7.85	HC2JSB, Guayaquil, Ecuador.	9:00 A.M. to 2:00 P.M.; 6 to 11 P.M.
B-38.31	7.83	YV9RC, Caracas, Venezuela,	heard 7:00 to 11:00 P.M. irregularly.
B-38.47	7.80	HBP, Geneva, Switzerland.	5:30 to 6:15 P.M. Saturdays.
E-38.50	7.78	PSZ, Rio de Janeiro, Brazil.	Heard between 6:00 and 11:00 P.M., irreg
E-38.89	7.71	KEE, Bolinas, California.	Tests evenings irregularly.
T-39.34	7.63	RIM, Russia.	Phones RKI 6:00 to 8:15 A.M.
T-39.42	7.61	KWX, Dixon, California.	Phones Hawaii nights.
B-39.47	7.60	TI8WS, Puntarenas, Costa Rica,	heard 6:00 to 11:00 P.M. irregularly.
T-39.89	7.52	KKH, Kauhuku, Hawaii.	Phones KWO evenings.
E-39.95	7.51	JVP, Nazaki, Japan, broadcasts	Tues., Fri., 4 to 5 P.M. - phones 1 A.M.
T-39.97	7.50	RKI, Russia.	Phones RIM 6:00 to 8:15 A.M.
T-40.60	7.39	ZLT2, Wellington, New Zealand,	phones Sydney 3:00 to 7:00 A.M. irreg.
B-40.65	7.38	XECR, Mexico City, broadcasts	Sundays 6:00 to 8:00 P.M.
T-40.71	7.37	KEQ, Kauhuku, Hawaii.	Phones Dixon nights.
B-41.55	7.22	HKE, Bogota, Colombia.	Mon. 6 to 7 P.M.; Tues., Fri., 8 to 9 P.M.
B-41.55	7.22	VP3BG, Georgetown, B. G.,	between 3:00 and 8:45 P.M. irregularly.
B-41.60	7.21	EA8AB, Tenerife, Canary Islands,	Mon., Fri., 3:15 to 4:15 P.M.
B-41.80	7.17	CR6AA, Lobito, Angola, Africa,	Wed., and Sat., 2:30 to 4:30 P.M.
B-42.35	7.08	PIIJ, Dordrecht, Holland.	Saturdays 11:10 A.M. to 12:10 Noon.
B-42.37	7.08	VP3MR, Georgetown, Sun.	7:45-10:15 A.M.; weekdays 4:45-8:45 P.M.
B-42.88	7.00	PZH, Paramaribo, Dutch Guiana,	2:40 to 9:40 P.M. irregularly.
T-43.45	6.90	GDS, Rugby, England.	Phones New York nights.
B-43.48	6.90	HI3C, La Romana, R. D.	12:30 to 2:00 P.M., 7:30 to 9:30 P.M.

Meters	Meg.	STATION	TIME
E-43.82	6.84	KEN, Bolinas, California.	Used irregularly.
B-44.12	6.80	HI7P, Trujillo, D. R.	Heard 7:30 to 9:00 P.M.
B-44.31	6.67	HIH, San Pedro De Macoris, D. R.	7:30 to 9:00 P.M. daily.
T-44.41	6.75	WOA, Lawrenceville, N. J.	Phones England nights.
T-44.44	6.75	JVT, Nazaki, Japan.	1:30 to 8:00 A.M., oftimes with music.
B-44.71	6.71	TIEP, San Jose, Costa Rica.	5:00 to 10:00 P.M., irregularly.
B-44.90	6.70	TI2M, San Jose, Costa Rica,	heard 9:00 to 11:00 P.M. irregularly.
E-44.96	5.67	YVQ, Maracay, Venezuela.	Broadcasts 8:00 to 8:30 P.M. Saturday.
B-45.00	6.67	???	Madrid, Spain, testing around 5:00 to 9:45 P.M. irregularly.
B-45.00	6.66	ZP10	Asuncion, Paraguay, heard 10:00 to 11:45 P.M. irregularly.
B-45.00	6.67	HC2RL,	Guayaquil, Ecuador. Sun. 5:45-7:45, Tues. 9:15-11:15 P.M.
T-45.10	6.65	IAC,	Piza, Italy. Phones ships evenings.
B-45.31	6.62	PRADO,	Riobamba, Ecuador. Thursdays 9:00 to 11:30 P.M.
B-45.25	6.63	HIT,	Trujillo, D. R., 12:10 to 1:40; 5:40 to 8:40 P.M. weekdays.
B-45.52	6.60	XDC,	Vera Cruz, Mexico, heard between 7:00 and 11:00 P.M. irreg.
B-45.81	6.55	TIRCC,	San Jose, Costa Rica, daily 6 to 7; Thurs., Sun., 6 to 11 P.M.
B-45.81	6.55	HI4D,	Trujillo, D. R. 11:55 to 1:40 P.M., 4:40 to 7:40 P.M.
B-46.01	6.52	YV6RV,	Valencia, Venezuela. 12:00-2:00 P.M. and 6:00-10:00 P.M.
B-46.13	6.50	HI L,	Trujillo, D. R., 11:40 to 1:40; 5:40 to 7:40 P.M. daily.
B-46.30	6.48	HJ5ABD,	Cali, Colombia. 7:00 to 10:00 P.M.
B-46.50	6.45	YNLF,	Managua, Nicaragua. 12:30-2:30 P.M., 6:30-10:00 P.M.
B-46.51	6.45	HJ4ABC,	Ibague, Colombia, 11:00 A.M. to Noon; 8 to 11 P.M. daily.
B-46.51	6.45	HI4V,	Trujillo, D. R. 11:40 A.M. to 1:40 P.M., 5 to 10 P.M., Irreg.
B-46.51	6.45	HJ1ABB,	Barranquilla, Colombia. 4:30 to 10:00 P.M. daily.
B-46.73	6.42	HI1S,	Puerto Plata, D. R., 11:40-1:40; 5:40-7:40; 9:40 to 11:40 P.M.
E-46.73	6.42	W9XBS,	Chicago, Illinois. Heard irregularly broadcasting.
E-46.77	6.41	HJA3,	Barranquilla, Colombia. Phones HJA2, irregular.
B-46.86	6.41	TIPG,	San Jose, Costa Rica. Noon to 2:00 P.M., 6:00 to 11:30 P.M.
B-47.02	6.38	HI3U,	Santiago, D. R., 10:40 to 1:40; 4:40 to 9:40 P.M.
B-47.10	6.37	YV4RC,	Caracas, Venezuela. 4:30 P.M. to 10:30 P.M.
B-47.24	6.35	HRY,	Tegucigalpa, Honduras, heard testing 6:45 to 9:30 P.M.
B-47.39	6.33	HRP1,	San Pedro Sula, Honduras, heard 6:30 to 10:00 P.M. irreg.
E-47.39	6.35	JZG,	heard relaying JVT, JOAK from 5:00 to 7:30 A.M. irregularly
B-47.50	6.31	HIZ,	Trujillo, D. R., 11:30 to 2:45; 5:30 to 9 P.M. daily; Sat. 10 P.M.
B-47.51	6.30	YV12RM,	Maracay, Venezuela, 8:00-10:30 daily; 4:30-11:00 P.M. irreg.
B-47.77	6.28	HI G,	Trujillo, D. R. 7:10-8:40 A.M., 12:40-2:10 P.M., 8:10-9:40 P.M.
B-47.77	6.28	C09WR,	Sancti Spiritus, Cuba. 9-10 A.M., 12-1 P.M., 4-6 P.M., 9-11 P.M.
B-48.00	6.25	OAX+G,	Lima, Peru, daily 7:00 to 10:30 P.M., Wed. at 6:00 P.M.
B-48.11	6.23	HRD,	Le Ceiba, Honduras. Daily 8:00 to 11:00 P.M.
B-48.50	6.19	HI1A,	Santiago de los Cabaleros, D. R., 11:40 to 1:40; 7:40-9:40 P.M.
B-48.55	6.18	XEXA,	Mexico City, 8 to 11:30 A.M. • 3 to 5 P.M. • 7 to 11 P.M.
B-48.60	6.17	HJ2ABA,	Tunja, Colombia. 1:00-2:00 P.M. and 7:00 to 10:00 P.M.
B-48.62	6.17	HJ3ABF,	Bogota, Colombia. 7:00 to 11:15 P.M.
B-48.78	6.15	HJ5ABC,	Cali, Colombia, 7:00 to 10:00 P.M. except Sat. and Sun.
B-48.78	6.15	YV3RC,	Caracas, Venezuela, 10:00 A.M. to 1:00; 3:00 to 9:30 P.M.
B-48.78	6.15	COKG,	Santiago, Cuba. 8:30 A.M. to 11:00 P.M.
B-48.80	6.15	CJRO,	Winnipeg, Canada. 5:00 P.M. to 11:00 P.M.
B-48.86	6.14	W8XK,	Pittsburgh, Pa. Relays KDKA 9:00 P.M. to 1:00 A.M.
B-48.92	6.13	ZGE,	Kuala Lumpur, S. S. Sun., Tues. and Fri., 6:40 to 8:40 A.M.
B-48.92	6.13	HI5M,	Trujillo, D. R., 6:40 to 9:10 P.M.
B-48.92	6.13	VE9HX,	Halifax, Canada. 9:30-1:30 P.M., 5:00 to 11:00 P.M.
B-48.92	6.13	C0CD,	Havana, Cuba. Heard 5:00 P.M. to 1:00 A.M., irregularly.
B-49.00	6.12	HJ3ABX,	Bogota, Colombia. Heard 6:00 to 11:30 P.M., irreg.
B-49.02	6.12	XEFT,	Vera Cruz, Mexico. 11:30 to 4:00 P.M., 7:30 P.M. to 12 M.
B-49.02	6.12	W2XE,	Wayne, N.J. Relays WABC 7:00 to 10:00 P.M.
B-49.05	6.11	HJ1ABE,	Cartagena, Colombia. Daily 7:30-9:00; Mon. 10:30 P.M.
B-49.10	6.11	GSL,	Daventry, England, 2:30 to 4:00 P.M.
B-49.10	6.11	VUC,	Calcutta, India. 9:30 A.M. to Noon, Sat. 11:45 P.M. to 3 A.M.
B-49.15	6.10	HJ4ABB,	Manizales, Colombia. 8:00 to 11:30 P.M., irregularly.
B-49.18	6.10	Belgrade,	Jugoslavia. Heard 2:00 to 5:00 P.M., irreg.
B-49.18	6.10	W3XAL,	Bound Brook, N.J. Mon., Wed. & Sat. 4 P.M. to 1 A.M.
B-49.18	6.10	W9XF,	Chicago, Ill. Daily 12-1 A.M. Sun., Tue. & Thur. 8-1 A.M.
B-49.20	6.09	ZTJ,	Johannesburg, Africa. 3:30 o 7:00 A.M.; 9:00 A.M. to 4:00 P.M.

Meters	Meg.	STATION	TIME
B-49.22	6.09	CRCX, Bowmanville, Canada.	5:30 to 11:30 P.M. daily, 11:45 A.M. to 11:30 P.M. Sundays.
B-49.31	6.08	VQ7LO, Nariobi, Africa.	11:00 A.M. to 3:30 P.M., 5:45 to 6:15 A.M.
B-49.34	6.08	W9XAA, Chicago, Illinois.	No apparent regular schedule.
B-49.34	6.08	DJM, Zeesen, Germany.	7:30 to 9:30 P.M.
B-49.34	6.08	HP5F, Colon, Panama.	11:45 to 1:15 and 7:45 to 10:00 P.M.
B-49.34	6.08	ZHJ, Penang, S. S.	Daily 6:40 to 8:40 A.M.
B-49.40	6.07	VE9CS, Vancouver, B. C.	Daily 6-7 P.M., Sun. 1:45 P.M. to 1:00 A.M.
B-49.42	6.07	OER2, Vienna, Austria.	9:00 A.M. to 5:00 P.M., week-days.
B-49.45	6.06	HJ4ABL, Manizales, Col.	11-Noon, 5:30-7:30 daily, Sat. 10:30 P.M.
B-49.50	6.06	OXY, Skamlebaek, Denmark.	Daily 1:00 to 6:00 P.M.
B-49.50	6.06	W8XAL, Cincinnati, Ohio.	5:30-7:00 P.M., 10 P.M. to 1:00 A.M.
B-49.50	6.06	W3XAU, Philadelphia, Pa.	7:00 to 10:00 P.M.
B-49.59	6.05	HJ9B, Santiago City, D. R.	heard 6 to 10 P.M. 12:30 to 1:40 A.M.
B-49.55	6.05	HJ3ABD, Bogota, Colombia.	7:30 to 11:00 P.M.
B-49.65	6.04	HJ1ABG, Barranquilla, Colombia.	6:00 to 10:00 P.M.
B-49.67	6.04	HJ4ABC, Periera, Colombia.	9:30 to 11:00 A.M., 7:00 to 8:00 P.M.
B-49.67	6.04	W4XB, Miami Beach, Florida.	11 A.M. to 1 P.M., 7:30 to 10:30 P.M.
B-49.67	6.04	W1XAL, Boston, Mass.	Mon., Tues., Thurs., 7 to 9; Sun. 5-7 P.M.
B-49.75	6.03	VE9CA, Calgary, Canada.	6 A.M. to noon; 7:00 P.M. to midnight Sun.
B-49.75	6.03	HP5B, Panama City.	12 Noon to 1 P.M.; 7:00 to 10:30 P.M.
B-49.83	6.02	XEUW, Vera Cruz, Mexico.	8:00 P.M. to 12:30 A.M. irregularly.
B-49.83	6.02	DJC, Zeesen, Germany.	11:35 A.M. to 4:00 P.M.
B-49.83	6.02	PRAS, Pernambuco, Brazil.	3:00 to 8:00 P.M., irreg.
B-49.85	6.01	HJ3ABH, Bogota, Colombia.	11:30 to 2, 6 to 11 P.M. Sun. 4-11 P.M.
B-49.90	6.01	COCO, Havana, Cuba.	9:30 A.M. to 12:30 Noon; 4:00 to 7:00 P.M.; 8:00 to 10:00 P.M.; Saturdays at 11:30 P.M.
B-49.92	6.01	ZHI, Singapore.	Mon., Wed., Thurs., 5:40-8:10; Sat. 10:40-1:10 A.M.
B-49.95	6.01	HJ1ABJ, Santa Marta, Colombia.	6:30 to 10:30 P.M., irregularly.
B-49.96	6.00	VE9DN, Drummondville, Canada.	Saturdays at 11:30 P.M.
B-49.96	6.00	VE9DR, Drummondville, Canada.	5:00 P.M. to midnight, irreg.
B-49.96	6.00	HP5K, Colon, Panama.	7:30 to 9:00 A.M., 12-1 P.M., 6:00-9:00 P.M.
B-50.00	6.00	???	Goderich, Ont., Canada, no regular schedule.
B-50.00	6.00	RW59, Moscow, U.S.S.R.	2:30 to 5:00 or 6:00 P.M. daily.
B-50.00	6.00	HJ1ABC, Quibdo, Colombia	daily 5-6 P.M.; Wed. and Sun. 9-11 P.M.
B-50.10	5.99	HJ2ABD, Bucaramanga, Col.	11:30-12:30; 5:30-6:30; 7:30-10:30 P.M.
B-50.17	5.98	XEWI, Mexico City.	Tues. and Fri. 6:30-7:45, 9 to 11 P.M., Sat 8-9 PM
B-50.17	5.98	HIX, Trujillo, D. R.	daily 4:40 to 5:40 P.M.; Tuesday and Friday 8:10 to 10:10 P.M.; Sundays 7:40 to 10:40 A.M.
B-50.26	5.97	HVJ, Vatican City.	Daily, 2:00 to 2:15 P.M., Sun. 5:00 to 5:30 A.M.
B-50.26	5.97	HJN, Bogota, Colombia.	6:00 to 11:00 P.M. irregularly.
B-50.26	5.97	HJ2ABC, Cucuta, Colombia.	11:00 A.M. to Noon; 6:00 to 9:30 P.M.
B-50.51	5.94	TG2X, Guatemala City.	heard 4:00 P.M. to 2:00 A.M. irregularly.
B-50.60	5.93	HJ4ABE, Medellin, Colombia.	6:00 to 10:30 P.M.
B-50.85	5.91	HH2S, Port-Au-Prince, Haiti.	7:30 to 9:40 P.M. irregularly.
B-50.90	5.90	YV8RB, Baraquisimeto, Venezuela.	Noon to 1:00 P.M., 6 to 10 P.M.
B-50.93	5.89	JIC, Tawian, Japan.	phones JVV 6:00 to 8:00 A.M.
B-50.93	5.89	HCK, Juito, Ecuador.	Monday and Friday 8:00 to 10:00 P.M.
B-51.11	5.87	HRN, Tegucigalpa, Honduras.	1:15 to 2:15 P.M., 7:30 to 10:00 P.M. week-days. Sundays 3:30 to 5:30 P.M. and 8:30 to 9:30 P.M.
B-51.15	5.86	HI1J, San Pedro de Macoris, D. R.	12:10 to 1:40; 6:10 to 8:40 P.M.
T-51.26	5.85	WOB, Lawrenceville, N. J.	Phones Bermuda nights.
B-51.28	5.85	YV5RMO, Maracaibo, Venezuela.	11:00 A.M. to 12:30 P.M., 5-9 P.M.
B-51.50	5.82	TIGPH, San Jose, Costa Rica	Noon-2:00 P.M., 7:00 11:00 P.M.
T-51.50	5.82	HJA2, Bogota, Colombia.	Phones HJA3 afternoons and evenings.
B-51.72	5.80	YV2RC, Caracas, Venezuela.	10:30 to 1:00 P.M., 5:15 to 10:00 P.M.
B-51.90	5.78	OAX4D, Lima, Peru.	Wed. and Sat. from 8:00 to 11:30 P.M.
B-52.17	5.75	HJ4ABD, Medellin, Colombia.	8:00 to 11:30 P.M.
B-52.26	5.74	TGS, Guatemala City, Wed., Thurs., and Sun.	6:00 to 9:00 P.M.
B-52.45	5.72	YV1ORSC, San Cristobal, Venezuela.	7:00 to 11:30 P.M. irregularly.
E-52.97	5.66	CFU, Rossland, Canada.	Works CFO and CFN near 10 P.M. irreg
B-54.74	5.48	TI5HH, San Roman, Costa Rica.	3:30 to 4:00; 8:00 to 11:30 P.M.
E-55.56	5.40	HJA-7, Cucuta, Colombia.	Mondays 4:30 to 7:30 P.M., irregularly.

Meters	Meg.	STATION	TIME
B-58.30	5.15	PMY, Bandoeng, Java.	6:00 A.M. to Noon.
T-59.08	5.08	WCN, Lawrenceville, N. J.	Phones England evenings.
T-59.76	5.02	ZFA, Hamilton, Bermuda.	Phones U.S.A. and ships at night.
T-60.26	4.98	GBC, Rugby, England.	Phones to ships, irregularly.
T-61.15	4.90	CGA8, Drummondville, Canada.	Phones ships irregularly.
T-61.98	4.84	GDW, Rugby, England,	phones U.S. A. nights.
B-62.63	4.79	VE9BK, Vancouver, B. C.	2:00-4:00 P.M., 7-9 P.M., 11 PM.-1:00 AM.
T-63.13	4.75	WOO, Ocean Gate, N. J.	Phones ships irregularly.
B-65.22	4.60	HC2ET, Guayaquil, Ecuador.	Wed. and Sat. 9:00 to 11:00 P.M.
T-66.50	4.51	ZFS, Nassau, Bahamas.	Works WND evenings.
T-67.87	4.42	to 4.10	Ships. Heard irregularly.
B-70.65	4.25	RV15, Khabarovsk, U.S.S.R.	1:00 to 9:00 A.M.
T-73.21	4.10	WND, Hialeah, Florida.	Phones irregularly with VPN.
E-75 to 75.8	4.00 to 3.96	Amateurs on voice.	

SHIP STATIONS

These stations are telephone stations but are sometimes rented to broadcast a special program from a ship. They operate on four 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.

VQJM, Monarch of Bermuda; GLSQ, Olympic; GFJY, Caledonia; GMJQ, Belga-land; GFVV, Majestic; GDLJ, Homeric; GMBI, Empress of Britain; DOAH, Breman; DOAL, Suropa; DHEY, Deutchland; DHJZ, Hamburg; DOAX, Columbus; DHAO, Hansa; DHRIL, New York; ICEJ, Rex; IBLI, Conte de Savonia; GBZW, Berengaria; DHDL, Cap Arcona.

MEMBERS' SUPPLIES

Stationery. The club emblem, printed in blue ink, on a good grade of writing paper, and without a lot of names and addresses like other clubs have. Many firms offer discounts to I. S. W. C. members, and many station owners are members of this club. By using this special stationery, a member can save money and get more verifications and it costs only 50c per hundred sheets. This price includes postage anywhere.

Club Seals. Many members like to use their private stationery, but want to be known as members of this club, and take advantage of the discounts offered members and get verifications from stations faster. For these members we have a sticker, or seal, that can be purchased for only 30c per hundred. We pay the postage.

Club Lapel Button. Members everywhere are writing in to tell us about meeting other members. Why not show everyone you meet that you are a member by wearing one of our lapel buttons. A gold-filled button, with the club emblem in blue. Not a flashy cheap button, but a neat one that will suit every occasion. Priced at only 25c postpaid. For any of these things, just write to Club headquarters at East Liverpool, Ohio.

Just about everyone knows that we are giving a beautiful Hallicrafter Super-Seven Receiver, complete with tubes, and everything else, to the person sending in the most new members in a contest which closes in August. There are many other prizes, too, including a set of dishes made in East Liverpool, the home of the club. All you do to win is get persons to join the club. They can either have you send in the membership, or they can send in and mention your name. It is so easy to win that everyone should try. The closing date for North America is August first, for Europe and South America August 15th and for Africa, Asia and Australia Aug. 31.



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