

VOL. VII

APRIL, 1936

NO. 7

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.

THIS IS YOUR CLUB, MAKE IT WHAT YOU WILL

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.

Text and illustrations in this magazine are copyrighted and must not be reproduced without permissions of the copyright owners. Copyrighted, 1936, by Arthur J. Green.

ARTHUR J. GREEN, Editor.

ADVISORY COMMITTEE

JOSEPH B. SESSIONS
Pres. Sessions Foundry Co.
Bristol, Conn.

JACOB KLEIMANS
Meyer Koulisch Co.
New York City

CHARLES SCHROEDER
Radio W3ATR
Philadelphia, Pa.

This Beautiful Globe for only \$2.75



F. O. B. Indianapolis, Indiana

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

SHORT WAVE NEWS

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

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

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

AFRICA

Ethiopia. Several hundred members now have verifications from Addis Ababa saying that they have ETA on 16.42 meters, 18.27 mc.; ETB on 25.09 meters, 11.955 mc.; ETD on 39.37 meters, 7.62 mc., and ETG on 51.02 meters, 5.88 mc. ETA is used from 7:00 A.M. to 1:00 P.M. and ETB from 1:00 P.M. to 6:00 P.M. Most of the time they use code. Once in a while you hear them on voice. The Wednesday broadcasts have been concluded it seems. This was at 4:50 P.M., E.S.T. Sgt. Dent also has a letter from the operators saying the Italians have stations on the same frequencies, used to confuse people, we assume. IDX is on the same frequency as ETA, ICY on ETB, ICY on ETD and IDX on ETG.

EA8AB, Santa Cruz, Tenerife, Canary Islands, broadcasts on 41.60 meters, 7.21 mc., Mondays, Wednesdays and Fridays from 3:15 to 4:15 P.M. This is from the station. EA8AF, an amateur station, on 21.40 meters, 14.03 mc., may be heard between 3:00 and 5:00 P.M. Jimmie Reese claims EA8AB was heard from midnight to 1:30 A.M.

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. (Reported by C. W. J. Bird).

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.

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.

EDR3, W. Chambers reports a letter from Compania Telefonica Nacional de Espana, PIY, Margall 2, Madrid, Spain saying that EHZ-EDR3 in El Tablero, Canary Islands, phones Spain between 3:30 and 4:00 A.M.

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, Leopoldsville, 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. Reported broadcasting one Saturday from 5:30 to 6:00 P.M. on 8:03 mc. (J. Stempel). On 37.31 meters or 8:035 mc., broadcasting 4:52 to 6:06 P.M. (R. B. Williams).

CR7AA, Lourenco Marques, on 48.88 meters, or 6.137 mc. A letter says they have 300 watts power and broadcast daily 12:45 to 3:00 P.M.; Sundays 8:00 to 10:30 A.M. The address is Box 594. K. G. Schram, Ripon, Wisconsin, and W. G. Graham, Springs, Transvaal, Africa, send this. This station is never heard well.

VQG, Nairobi, Kenya, Africa, on 15.28 meters, or 19.62 mc., is a new telephone station. It is heard phoning London around 7:30 A.M. and once sent a special program at 8:30 A.M. Robert Rossi and H. L. Nixon report this one.

FVA, Algeria, is another new phone heard on 33.48 meters, 8.96 mc., phoning Paris between 3:00 and 6:00 P.M. according to Charles Miller, while Sam Solito reports it between 12:50 and 1:05 A.M. in the morning.

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 9:30 to 11:30 A.M. during April.

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.

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 JVM broadcast a program each Tuesday and Friday between 2:00 and 3:00 P.M. for European listeners. JVN and JVP broadcast every Monday and Thursday from 4:00 to 5:00 P.M. while JVP may also be heard Tuesdays and Fridays from 2:00 to 3:00 P.M. at times. JVN was reported phoning between Midnight and 7:55 A.M. JVM was also heard around Midnight, at 3:45 A.M., at 7:45 A.M. and 7:45 P.M. JVT was reported between 6:00 and 7:55 A.M. JVH was phoning around 6:00 to 7:00 A.M. Station JYS mentioned on 30.40 meters, 9.87 mc., by some and on 30.49 meters, 9.84 mc., by others was broadcasting music from 12:30 A.M. to 2:00 A.M. (R. Leeder) and at 2:53 A.M. (W. Chambers). JVD was heard at 8:00 P.M. phoning. JVE was heard at 7:00 P.M. and 9:00 P.M. and once at 12:15 A.M. JVF was heard at 3:55 P.M. JVL was heard at Midnight. JVO was heard at Midnight.

William Sparks has a letter from the Chureki Transmitting Station, International Telephone Company of Japan, Chureki Gai, Shinchiku State, Taiwan, Japan, saying 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. Mr. Sparks reports JIB phoning JVL from Midnight to 2:00 A.M. W.W. Howe reports it at 9:00 A.M.; Ed. Schmeichel at 6:15 A.M.

TDE and TDD. The Manchurian Telegraph and Telephone Company say they have station TDE on 29.80 meters, 10.065 mc. (we list it as JZB) and TDD on 5.83 mc. (we list it JZC). These stations telephone Japan irregularly. Wm. Sparks reports TDE nightly at Midnight phoning Japan. H. S. Bradley, sends the address, which is Kanjoshi Station, Manshu Den shin Denwa Kaisha, Ltd., Shinkio (Hsinking), Manchukuo.

VUB, Bombay, India, on 31.36 meters or 9.57 mc., broadcasts Sundays 12:30 to 1:30 P.M. and Thursdays and Saturdays 11:30 A.M. to 12:30 Noon. VWY, a phone station on 17.10 meters, 17.54 mc., was heard phoning England at 7:00 A.M. (F. Grey) and at 8:00 A.M. (W. Chambers). Station VWZ, Kirkee, India, on 8.69 mc., was reported calling London one Sunday from 4:30 to 5:08 A. M. by R. B. Williams. This is our first report on this.

CQN, Macao, Portuguese China, on 31.00 meters, 9.665 mc., broadcasts Mondays and Fridays from 7:00 to 8:30 A.M. Reported between 7:00 and 7:45 A.M. (R. Rossi and W. Chambers).

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.

XGW, Shanghai, China, on 28.79 meters, 10.42 mc., phones Japan between Midnight and 3:00 A.M. usually. An XGC on 33.01 meters, 9.09 mc., was testing with London between 2:00 and 4:45 A.M. (F. Karpen). A station in Shanghai on 15.90 mc., was phoning London between 6:45 and 7:00 A.M. often last month (W. A. Dean). XGN, Shanghai on 17.00 meters, or 17.64 mc., was working London around 7:00 A.M.

AFH or AZH, Kabul, Afghanistan. Two members mentioned a station AFH on 50.8 meters, 5.91 mc., in January, but neither gave any details. Now R. Brewster Williams, Garden City, New York, claims he heard a station AZH on that wave broadcasting a program in English one Sunday from 5:12 to 6:05 A.M.

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. (F. Grey, W. Chambers, Dr. Kash, H. M. Weatherly, E. Schmeichel, Wm. Sparks and W. H. Howe.)

Java Phones: Station PMA on 15.50 meters, 19.35 mc., phones between 7:00 and 10:30 A.M. PLE on 15.93 meters, 18.83 mc., was heard between 6:50 and 7:50 P.M. and 7:00 and 11:00 A.M. PLP on 26.26 meters, 11.00 mc., was heard broadcasting Sundays between 5:00 and 10:00 A.M. PMN on 29.25 meters, 10.26 mc., was heard sending music around 6:00 to 10:00 A.M. Sundays and once or twice in the week. A station on 11.50 mc. was heard between 6:00 and 7:30 A.M. relaying PLP (W. A. Dean). PLQ on 10.67 mc. was heard on Sunday 5:38 to 6:15 A.M. (R. B. Williams). PLQ was on 10.70 mc. and another was on 11.51 mc. and another on 10.05 mc., all relaying the same program (W. H. Howe). PLQ was on 10.675 mc. until 10:00 A.M. Sunday (Ed. Schmeichel). A station on 26 meters broadcasts Thursdays, Saturdays and Sundays in the early mornings (W. Chambers). A station PLI on 19.947 meters, 15.04 mc., was phoning Holland between 6:00 and 8:00 A.M. (F. Karpen).

PNI, Makassar, on 34.19 meters, 8.77 mc., sent music at 3:45 A.M. one Saturday (R. B. Williams and W. Chambers). Phoned Java at 4:50 A.M.

(Ed. Schmeichel). YBG, Medan Sumatra, on 28.80 meters, 10.40 mc., phoned Java around 5:00 to 11:00 A.M.

FZS, Saigon, Indo-China, on 18.388 mc. was heard phoning Paris at 8:30 A.M., then FZR on 16.25 mc. was used. A letter says FZR is on this wave, and others have said 16.20 mc., 16.21 mc. and 16.22, so these stations must be using different frequencies. The above was from W. Chambers. R. Leeder reports FZS phoning FTE at 10:30 A.M., Noon, 3:30 P.M. and 4:30 P.M. Ed. Schmeichel reports FZR phoning FTK at 9:00 A.M. and 10:10 A.M.

The Philippines. KTP on 8.12 mc., KTR on 10.91 mc., and KAX on 19.98 mc. are reported phoning almost daily. KBB on 34.48 meters, 8.70 mc., is reported between 6:00 and 8:00 A.M. phoning. KTO on 18.47 meters, 16.24 mc., phones the U.S.A. daily around Noon to 10:00 P.M. A station KZGF on 5.805 mc. is reported phoning between 3:00 and 5:00 A.M. The KYA mentioned last issue must be a mistake, as KYA is a long wave broadcast station in California (Houlgate).

SOUTH AMERICANS

CB960, Santiago, Chile, on 31.25 meters, 9.60 mc., known as El Praco and Radiodifusora Pilot, has been broadcasting between 8:30 and Midnight. Broadcasts Saturdays 9:00 to 11:30 P.M. (E. Schmeichel). Heard many nights at 10:00 P.M. (W. Sparks). Covered by Radio Cartagena (A. Walcott). Address is Casilla 1342.

CEC, Santiago, Chile, on 28.12 meters, 10.67 mc., broadcasts Thursdays and Sundays 8:30 to 9:00 P.M. Heard 9:30 to 10:00 P.M. once (A. Ogden). Reported by others around 7:30 to 8:15 P.M.

HJU, Buenaventura, Colombia, on an announced wave of 31.56 meters or 9.50 mc., broadcasts Mondays, Wednesdays and Fridays from 8:00 to 11:00 P.M. Several dozen members heard it and sent reports. M. Gavin says it was on 6.62 mc. almost daily 7:30 to 9:00 P.M. Could it be on two waves?

Radiodifusora Cartagena, owned by Club member Elden Lagontiere, is really on the air. They are on 31.25 meters, 9.60 mc., as mentioned before in this magazine and although they have been testing at irregular times, they will soon be on the air from 11:30 A.M. to 1:00 P.M. and 6:00 to 10:00 P.M. They have been heard from Noon to 12:30 A.M. They use the call sign HJ1ABP, or T or C. The last letter is still in doubt. They announce as "Radio Cartagena" and "La Voz de la Victor." They use a 4-note chime and the address is Box 37. The following members sent reports: W. Flag, V. Fitzsimmons, J. Stempel, F. Quijane, Dr. Kash, R. Oxrieder, Robert Rossi, R. Bossert, O. Hersowitz, Chas. Pedicora, R. Maley, R. Leeder, M. Horlick, F. A. Beane, Ingvar Gullberg, R. Piedra, R. Verbrughe, W. Howe, E. Schmeichel, K. McKinley, S. Solito, A. Walcott, I. Hofmaster, F. Karpen and W. Siddle.

HKB, Bogota on 9.93 mc. was broadcasting a test, 8:00 to 8:35 P.M. (Tom Erwin). HJN, Bogota, on 50.26 meters, 5.97 mc., broadcasts from

6:00 to 11:00 P. M. HKV, the army station at Bogota on 34.10 meters or 8.79 mc. has been testing between 11:00 P. M. and 1:00 A. M.

HJ2ABC, Cucuta, Colombia, is on 49.42 meters, 6.07 mc., according to O. Hersowitz, and on 5.967 mc., according to W. Siddle, while Edward Schmeichel says it was on an announced frequency of 5.275 mc. Well, all we can say we all agree on the station call-sign.

HJ2ABD, Bucaramangua, on 50.10 meters, 5.99 mc., said they were going on 6.14 mc. in February, in a letter to H. S. Bradley. On February 28th they did broadcast on that wave, but they did not stay there. It was for one night only. To show how members agree, H. S. Bradley insists they will move to 6.14 mc.; R. Oxrieder says they are on 5.97 mc.; O. Hersowitz says 6.09 mc. and W. D. Flagg insists we list it right exactly on the spot at 5.99 mc.

HJ3ABD, Bogota, on 49.55 meters, 6.05 mc., is broadcasting most every night. Some call it HJ4ABD. On 6.05 mc. (Bradley, Rossi and Miller); on 6.06 mc. (Siddle); on 6.04 mc. (Schmeichel); on 6.056 mc. (Oxrieder); on 6.068 mc. (Flagg); call is HJ3ABI on 6.07 mc. (M. Gavin).

HJ3ABX, Bogota, Colombia, on an announced wave of 49.00 meters, 6.122 mc., has been broadcasting between 7:00 P.M. and 11:30 P.M. This is a new station. They also use that signature "La Voz de Colombia," the same as HJ3ABD. The address is Call 14, No. 738, and they use a 9-note chime. H. S. Bradley says 6.15 mc.; W. Flagg says 6.13 mc.; R. Piedra says 6.18 mc.; S. Solito says 6.14 mc.; W. Siddle and E. Schmeichel say 6.125 mc.

HJ4ABA, Medellin, on 25.40 meters, 11.81 mc., broadcasts 11:30 A.M. to 1:00 P.M. and 6:30 to 10:30 P.M.

HJ4ABC, Ibague, on 46.44 meters, 6.48 mc., say they are on 6.45 mc. The schedule is daily 11:00 A.M. to Noon and 8:00 to 11:00 P.M. The power is 200 watts according to a letter received by H. S. Bradley and the address is not Apartado 38 at all but 39. Dr. Kash was wrong last month. F. Atherton, E. Schmeichel and L. Miller say so.

HJ4ABC, Periera on 49.67 meters, 6.04 mc., is using the same call-sign. They broadcast from 9:00 to 11:00 A.M. and 7:00 to 8:00 P.M. Edward Schmeichel and R. Oxrieder insist they are on 6.08, not 6.04 mc.

HJ4ABD, Medellin, broadcasts on 52.17 meters, 5.75 mc., now. The time is 8:00 to 11:30 P.M.

HJ4ABP, Medellin, is on 49.98 meters, relaying HJ4ABQ between 8:00 and 11:00 P.M. according to W. Vandecar, Jr., while W. Siddle says it is on 48.85 meters, 6.135 mc., and heard until W8XK comes on the air at 7:00 P.M.

HJ5ABC, Cali, Colombia, on 48.78 meters, 6.15 mc., also uses that signature "La Voz de Colombia," like HJ3ABD and HJ3ABX. They broadcast with 150 watts power daily excepting Saturdays and Sundays 7:00 to 10:00 P.M. and Sundays only from noon to 2:00 P.M. The address is Calle 12, No. 235.

VP3MR, Georgetown, British Guiana, on 42.37 meters, 7.08 mc., say they broadcast between 4:45 and 8:45 P.M. weekdays and 7:45 to 10:15 A.M. Sundays. This is printed right on their verification cards. Wm. Patton, Robert Hughes and Abbey Anderson send us this. W. Palmer says they are on Sundays 11:00 A.M. to 2:00 P.M. also. J. Reese sends a mixed schedule. VP3BG, Georgetown, on 41.55 meters, 7.22 mc., was not mentioned this month. It is never heard well. They broadcast between 5:00 and 8:45 P.M.

ZP3AC, Asuncion, Paraguay, on 43.45 meters, 6.90 mc. A letter to Alvin Ogden, Brooklyn, from Sr. Julio Rodriguez Leguizamon says the call ZP10 has not been used since the war and the call ZP3AC is used now. The station is on 6.90 and 14.30 mc. and the address is Banco el Hogar Argentino, Asuncion, Paraguay. This station was heard two months ago on about 45.00 meters and mentioned on these pages.

LRU, Buenos Aires, Argentina, on 19.62 meters, 15.29 mc., has been broadcasting irregularly between 3:00 and 7:00 P.M., usually around 3:00 P.M. Sundays. We have reports from J. Reese, R. Bell, W. Chambers, E. Schmeichel, W. Sparks and G. Gallagher. They relay "Radio el Mundo."

LRX on 31.25 meters, 9.59 mc., has also been heard between 11:00 P.M. and 1:00 A.M. by quite a few. They relay Radio El Mundo also. The address is Calle Maipu 555. S. Solito reports it at 5:30 to 6:00 P.M. and W. Howe reports it from 7:55 to 10:30 P.M.

LSX, Buenos Aires, on 38.98 meters, 10.35 mc., has been testing irregularly between 6:30 and 8:00 P.M. and was heard at Midnight once by W. Sparks. LSL, a phone on 15.81 mc., LSQ on 7.46 mc. and LSN on 10.3 mc. were all heard broadcasting a special program between 7:30 and 8:00 P.M. once by R. B. Williams, J. Childs and F. Karpen. R. Rossi says it was LSL and LSQ was on 10.40 mc.

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. PRAS, Pernambuco, Brazil, on about 49.90 meters or 6.025 mc., broadcasts from 2:30 to 8:30 P.M. They have a habit of roaming around on the dials. You may find them anywhere in the 49 meter band. A PPG in Rio was reported on 11.75 mc. calling LSX and using NBC chimes between 7:50 and 8:10 P.M. by W. F. Herzog.

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. HC2ET, Guayaquil, on 38.19 meters, 7.854 mc., say they broadcast 9:00 A.M. to 2:00 P.M. and 6:00 to 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 Telegrafos y Inalamericoa.

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, Velencia, Venezuela, on 46.01 meters, 6.52 mc., broadcasts from Noon to 2:00 P.M. and 6:00 to 10:00 P.M.

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. 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.

THE EUROPEANS

The British Broadcasting Corporation crossed us up last month, and we were wrong in our list. We hope it never happens again. At present they are broadcasting as follows:

GSA on 49.59 meters, 6.05 mc., from 6:00 to 8:00 P.M.

GSB on 31.55 meters, 9.51 mc., 12:15 to 2:15 A.M.; 12:15 to 5:45 P.M.

GSC on 31.32 meters, 9.58 mc., from 4:15 to 5:45 P.M.; 6:00 to 8:00 P.M.; 10:00 to 11:00 P.M.

GSD on 25.53 meters, 11.75 mc., from 6:00 to 8:45 A.M.; 12:15 to 5:45 P.M.; 6:00 to 8:00 P.M., and 10:00 to 11:00 P.M.

GSE on 25.29 meters, 11.86 mc., from 10:30 A.M. to Noon.

GSF on 19.82 meters, 15.14 mc., from 9:00 A.M. to Noon.

GSG on 16.86 meters, 17.79 mc., 6:00 to 8:45 A.M.; 9:00 to 10:15 A.M.

GSI on 19.66 meters, 15.26 mc., from 12:15 to 2:15 P.M.

GSJ on 13.93 meters, 21.53 mc., from 6:00 to 8:45 A.M.

GSL on 49.10 meters, 6.11 mc., from 2:30 to 4:00 P.M.

GSN on 25.38 meters, 11.82 mc., 12:15 to 2:15 A.M.

We wish to thank all those that sent reports on these stations. W. D. Flag reports stations on 9.80 mc., 8.71 mc., and 10.87 mc. relaying the Daventry programs. J. Childs reports GCB on 9.28 mc. sending a special program to Canada from 9:55 to 10:10 P.M. once.

Belgrade, Jugoslavia, on an announced wavelength of 49.18 meters, 6.10 mc., was heard broadcasting in French, Italian and Serbian between 2:00 and 4:00 P.M. one Sunday. Said they were on the air every day. (L. J. Niederle, Praha, Czechoslovakia).

LZA, Sofia, Bulgaria, on 20.04 meters, 14.97 mc., seems to be broadcasting Sundays from about 3:30 to 11:30 A.M. They have a lady announcing and use the signature "Radio Garre." F. A. Beane says it is on 20.15 meters, not 20.04. F. Karpen reports it at 7:00 to 10:00 A.M. John Edwards also sends news.

CSW, Lisbon, Portugal, on 31.98 meters, 9.38 mc., "National Broadcasting Station," was heard one Friday from 5:00 to 7:00 P.M. by O. Hersowitz. F. A. Beane, Ridgewell, England, says it is on 32.5 meters and they use English and have a lady announcing and sign off at 7.00 P.M.

CT1AA, Lisbon, Portugal, on 31.09 meters, 9.65 mc., broadcasts Tuesdays, Thursdays and Saturdays from 4:00 to 7:00 P.M., although cards say 31.25 meters, 9.60 mc. They will go on fast time soon and will be heard an hour earlier.

ORK, Brussels, Belgium, on 29.04 meters, 10.33 mc., broadcasts daily 2:30 to 4:00 P.M., but will soon be heard 1:30 to 3:00 P.M. according to reports.

EAQ, Madrid, Spain, on 30.40 meters, 9.87 mc., say now they are on 9.86 mc. They broadcast from 5:15 to 9:30 P.M. daily; Saturdays Noon to 2:00 P.M. The Madrid station on 45.00 meters that made such a hit in January has not been reported for two months.

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., Mozowiewka 5.

LKJ1, Jeloy, Norway, on 31.48 meters, 9.53 mc., broadcasts from 5:00 to 8:00 A.M. and 11:00 A.M. to 6:00 P.M.

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 (Dr. Kash, R. Rossi).

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.

The schedule for the German broadcasts this month follows:

DJA on 31.35 meters, 9.56 mc., from 12:30 to 3:50 A.M.; 8:00 to 11:00 A.M. and 4:55 to 10:45 P.M.

DJB on 19.74 meters, 15.20 mc., from 3:50 to 11:00 A.M.

DJC on 49.83 meters, 6.02 mc., 11:35 to 4:25 and 4:55 to 10:45 P.M.

DJD on 25.49 meters, 11.77 mc., 11:35 to 4:25 and 4:50 to 10:45 P.M.

DJE on 16.89 meters, 17.76 mc., from 8:05 to 11:00 A.M.

DJL on 19.85 meters, 15.11 mc., from 6:30 to 8:00 A.M.

DJM on 49.34 meters, 6.08 mc., from 7:30 to 9:30 P.M.

DJN on 31.45 meters, 9.54 mc., from 12:30 to 3:00 A.M.; 5:30 to 11:00 A.M., and 4:55 to 10:45 P.M.

DJO on 25.34 meters, 11.79 mc., from 3:00 to 4:55 P.M.

DJP on 25.31 meters, 11.85 mc., from Noon to 2:00 P.M.

DJQ on 19.63 meters, 15.28 mc., from 12:30 to 3:30 A.M.

DJR on 19.56 meters, 15.34 mc., from 1:30 to 3:30 A.M.

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 2:00 to 4:00 P.M.

DZC on 29.15 meters, 10.29 mc., from 3:00 to 9:00 P.M.

DZH on 20.75 meters, 14.46 mc., from Noon to 2:00 P.M.

TFJ, Reykjavik, Iceland, on 24.52 meters, 12.24 mc., has discontinued the Sunday broadcasts according to a letter received by Edwin Adams, Stoughton, Mass. Reported phoning at 10:00 A.M. (Wm. Sparks).

A station DJI on 9.675 mc. (same as DZA) is reported by W. Chambers and F. Karpen. The station DZA is reported by many members. Dr. Kash reports a DJS on 12-13 mc. broadcasting 8:00 to 9:00 P.M. H. S. Bradley, F. Karpen, both say this is DZE and it was heard between 8:00 and 11:00 P.M. W. D. Flagg says DZE is on 14.475 mc. R. Hughes says DZB is on 14.46 mc.

TPA2, Pontoise, France, broadcasts on 19.68 meters, 15.25 mc., from 6:55 to 11:00 A.M. TPA3 on 25.23 meters, 11.90 mc., broadcasts from 4:00 to 5:00 A.M. and 11:15 to 6:00 P.M. TPA4 on 25.63 meters, 11.71 mc., broadcasts from 6:15 to 9:00 P.M. and 11:00 P.M. to 1:00 A.M. These stations will all make a drastic change sometime in April, so watch for it. Letters from the station says TPA 4 is on 25.60 meters, 11.70 mc. This cannot be true, as 25.60 meters is 11.72 mc. and 11.70 mc. is 25.64 meters. TPA4 is heard around Midnight in the U.S.A. now.

PCJ, Eindhoven, Holland, on 31.28 meters, 9.59 mc., is broadcasting Sundays from 7:30 to 8:30 A.M. for Asia; 1:00 to 2:00 for Africa, and 7:00 to 8:00 A.M. for America. This is reported by members T. Simpson, W. Flagg, Dr. Kash, O. Hersowitz, R. Oxrieder, R. Bell, and F. A. Beane. R. H. Greenland says he had them one Saturday from 3:15 to 3:50 A.M. on this wave. This station also broadcasts on 19.71 meters, 15.22 mc., on Tuesdays 3:00 to 6:00 A.M.; Wednesdays 7:00 to 11:00 A.M., and Sundays from 8:00 to 10:30 A.M.

PHI, Huizen, Holland, on 25.57 meters, 11.74 mc., broadcasts daily except Tuesdays and Wednesdays 8:30 to 10:30 A.M. They may change to 16.86 meters sometime late this month.

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. A station on 17.70 mc. works Asmara between 10:00 and 11:15 A.M. according to O. Hersowitz.

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 sent a special program March 2nd from 6:00 to 7:30 P.M. (Flagg, Houlgate). HBJ and HBO sent one March 8th from 1:40 to 2:30 P.M. (Wooten, Atherton, Grey, Childs, Schmeichel and Karpen). HBO tests with VK3LR at 2:30 A.M. each Monday (Wade Chambers).

Russia. The broadcasts from Moscow take place now on 25.00 meters,

12.00 mc., on Sundays from 6:00 and 10:00 A.M.; Wednesdays at 6:00 A.M. Then on 50.00 meters, 6.00 mc., daily 2:00 to 5:00 P.M.; Saturdays until 6:00 P.M. They use the call RNE on both waves. They are also broadcasting a special program now on Sundays 10:00 to 11:00 A.M. (Karpen).

Russian Phones. RIM, Tashkent, on 19.68 meters, 15.25 mc., is heard around 5:00 to 8:00 A.M. and 11:00 P.M. to 3:00 A.M. RIO, Bakou, on 29.50 meters, 10.17 mc., is heard between 11:00 P.M. and 4:00 A.M. RIR, Tiflis, on 29.76 meters, 10.08 mc., is heard around 9:00 to 10:00 A.M. and Midnight to 2:00 A.M. RRR, Khabarovsk, on 18.01 meters, 15.95 mc., is heard between 5:00 and 7:30 A.M. ROU, Omsk, on 20.28 meters, 14.79 mc., is heard between 5:00 and 7:30 A.M. A station on 11.98, 12.98 mc., phoning RIO at Midnight is reported by F. Grey. A special program on announced wavelength of 19.89 meters (RKI is the station) was sent one Sunday last month between 9:00 and 11:00 A.M. (I. Hofmaster, J. Wooten, Dr. Kash, A. Teague). F. Karpen says RKI broadcasts every Sunday from 10:00 to 11:00 A.M. J. Reese reports RKI between 11:20 A.M. and 2:10 P.M. testing with WQP, New York.

CENTRAL AMERICANS

HRD, La Ceiba, Honduras, is a new station. They broadcast on 48.11 meters, 6.235 mc., every night from 8:00 to 11:00 P.M., although they usually stay on a few minutes later. Their signature is "La Voz de Atlantida" and they say "H for Happiness, R. for Radio, and D for Delight" although nine out of ten members report it as HRV. The station verifies. Dr. Tulio Castaneda is the owner and we have reports from members E. Reese, Dr. Kash, C. Cochran, W. Flagg, R. Rossi, J. E. Church (England), H. W. Weatherly, O. Hersowitz, F. Grey, R. Piedra, E. Schmeichel, G. Gallagher, I. Hofmaster, F. Murphy, F. Hafner, R. Legge, W. Siddle and J. Coleman. It is one of the best stations in the U.S.A. now.

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.

HP5K, Colon, Panama, on 49.96 meters, 6.005 mc., "La Voz de la Victor," has been reported relaying a station HP5O between 7:30 and 9:00 P.M. according to members Ian C. Morgan, H. S. Bradley, W. Siddle and O. Hersowitz. S. Solito also reports it at 1:00 A.M. This is a new station they say, not HP5B relaying some station.

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. according to W. D. Flagg and is on 9.695 mc. between 2RO and W3XAU (P. Horton).

TGS, Guatemala City, on 52.26 meters, 5.74 mc., broadcasts Wednesdays, Thursdays and Sundays from 6:00 to 9:00 P.M. A station TGA, Guatemala City, on 8.58 mc. was heard phoning Peru from 5:30 to 6:00 P.M. (Chas. Miller).

TGW, TG1X and TG2X, Guatemala City. A station announcing as TGW has been heard on Sunday mornings between 1:00 and 6:00 A.M. (mornings) broadcasting a special program on 50.51 meters, 5.94 mc., and 31.75 meters, 9.45 mc. Only the call TGW has been reported so far, but we believe TGW is a long wave station, TG1X is on 31.75 meters and TG2X is on 50.51 meters. TG2X, as we all know, is heard most every night between 4:00 P.M. and 2:00 A.M. and is owned by the National Police. These special programs were reported by members E. Schmeichel, R. B. Williams, I. Hofmaster, Wallace Smith, W. Butts, S. Swope, Dr. Kash and W. Siddle.

YNLF, Managua, Nicaragua, "La Voz del Nicaragua," has moved to 45.00 meters, 6.67 mc., according to W. Siddle. They broadcast between 7:00 and 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). Heard 8:30 to 9:40 P.M. (W. Vandecar, Jr.).

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).

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, Pine River, Minnesota.

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.

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.

Several harmonics are heard of Mexican stations. An XEFA, Vera Cruz, was heard on 9.95 mc. (F. Grey). One on 6.995 mc., was heard at 8:00 P.M. (H. S. Bradley). An XEMO on 6.03 or 6.02 mc. between 8:00 P.M. and 2:00 A.M. is reported by R. Leader, G. Gallagher and A. Walcott, all in California. One in Tapachula on 10.50 mc. at 6:00 P.M. was reported by O. Hersowitz.

XDR, Mexico City, on 9.40 or 9.42 mc., has been relaying XECR programs Sundays 6:00 to 7:00 P.M. and was heard at 4:00 A.M. once, and a letter says they do not broadcast regularly (W. Siddle and G. Gallagher). They have tested irregularly for months. The Collins Radio Company say they installed XLC on the President's train and will soon have a station in the President's Palace. XLC was heard on 33 meters from 5:28 to 7:45 P.M. once (Wade Chambers).

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, or 7.61 mc., broadcasts 5:00 to 10:00 P.M. irregularly. TIGP, San Jose, on 46.86 meters, or 6.41 mc., "La Voz del Victor," broadcasts Noon to 2:00 P.M. and 6:00 to 11:30 P.M.

TIGPH, on 51.50 meters, or 5.82 mc., and a station TIX are reported on the same wave. They are heard between 6:00 and 11:00 P.M. irregularly. TI5HH, San Roman, on 54.74 meters, 5.48 mc., "La Voz del San Roman," broadcasts from 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.

WEST INDIES

HIZ, 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. (W. D. Flagg, Dr. Kash, W. Siddle and H. S. Bradley).

HIG, Trujillo, on 47.77 meters, 6.28 mc., broadcasts around 1:00 to 2:00 P.M.; 4:00 to 5:00 P.M. and 8:00 to 9:30 P.M. according to reports. No one reports a verification from this station as yet. It is quite new.

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.

HIL, Trujillo, on 46.13 meters, 6.50 mc., say they are on 6.50 mc. The address is Box 623 (Dr. Kash, W. Siddle).

HI4D, Trujillo, on 45.50 meters say they are on 46.25 meters, and they broadcast 11:55 to 1:40 P.M. and 4:40 to 7:40 P.M. They are heard on 6.61 mc., most of the time. This is "La Voz de Quisqueya."

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.

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.

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). HIH in the same city on 44.12 meters, or 6.81 mc., say they broadcast daily 7:30 to 9:00 P.M.; Sundays 3:00 to 4:00 A.M. and 4:15 to 6:00 P.M. Reported between 6:00 and 8:00 A.M. by members W. Siddle, G. Van Honk and H. P. Genshiemer.

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).

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.

HI3C, La Romano, "La voz de la Feria," on 43.48 meters, 6.90 mc., say they broadcast from 12:30 to 2:00 P.M. and 7:30 to 9:00 P.M., but do not keep this schedule. This station broadcasts a special program for ISWC members every Monday, in English, from 10:40 to 11:40 P.M. and we suggest that members tune for this. Then, too, it is heard between 6:15 and 7:55 and sometimes until 8:30 P.M. (W. Flagg). Also between 12:45 and 1:20 A.M. once (J. Reese) and between 6:00 and 8:00 P.M. (S. Solito, R. Legge, Jr., and E. Schmeichel). The special ISWC program was reported by Robert Rossi.

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). An HI7P, Trujillo, on 6.80 mc., was reported daily from 7:00 to 8:00 P.M. by W. Siddle.

WCT, San Juan, Puerto Rico, on 13.40 mc., is reported by F. Grey. E. Schmeichel says it is WCT and on 13.41 mc. R. Legge says it is WCT, too. This was a new phone station that works WNC, Florida around 9:00 A.M. and 2:00 or 3:00 P.M. It was first called WPT and the wave was given as 22.50 meters, 13.34 mc. Until we get the right story, we will still list it that way.

VRR4, Stony Hill, Jamaica, on 25.87 mc., 11.595 mc., tests with WNC in daytime.

ZFB, Hamilton, Bermuda, on 29.83 meters, 10.05 mc., sent a special program March 6th from 5:15 to 5:50 P.M. (J. Reese, F. Atherton). This station phones ships and the U.S.A. every day. O. Hersowitz reports a ZFD on 10.33 mc. phoning VRR4 from 5:00 to 6:00 P.M.

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

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 they have 30 watts power and they are really on 9.62 mc. P. Horton claims they are between 2RO and HP5J.

CMA, CMA3, and CMB2, Havana, Cuba. Tom Erwin, Herrin, Illinois, reports CMA on 8.63 mc. testing with Rocky Point stations between 9:20 and 9:52 P.M. Also CMA3 on 15.505 mc. testing with WCG at 10:00 A.M. and CMB2 on 5.78 mc. testing nearly every night with WCG. Charles Miller reports CMA3 on 19.50 mc. testing with New York between 9:30 and 10:30 P.M. These stations are usually used for special broadcasts and it has been months since the last report was received. They are all owned by the Cuban Trans-Atlantic Telephone Corp. and usually use code.

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 (G. Feldrik).

CO9WR, Sancti Spiritus, Cuba, is now on 47.77 meters, 6.28 mc., testing Many report this. They are supposed to relay CMHB from 4:00 to 6:00 P.M. and 9:00 to 11:00 P.M. O. Hersowitz reports them on 9.285 mc. testing once from 8:30 to 9:00 P.M.

NORTH AMERICAN

W2XAD and W2XAF will change schedule April 1. W2XAD on 19.56 meters, 15.33 mc., will broadcast daily 10:00 A.M. to 3:00 P.M. W2XAF on 31.48 meters, 9.53 mc., will broadcast daily 4:00 P.M. to Midnight.

W9XAA, Chicago, Illinois. A letter tells us they are now located at

Downers Grove, Illinois, and they broadcast on 25.36 meters, 11.83 mc., from 6:30 A.M. to 5:00 P.M. and 10:00 P.M. to Midnight and very soon will fill out the time between 5:00 and 10:00 P.M. on 49.34 meters, 6.08 mc.

W2XE, Wayne, New Jersey, announces another change. They change schedule about once a week, or have been doing so for the past three months. The latest one is as follows: On 21.52 mc. from 7:30 to Noon, on 17.67 mc. from Noon to 1:00 P.M., on 15.27 mc. from 1:00 to 5:00 P.M., on 11.83 mc. from 5:00 to 10:00 P.M. and on 6.12 mc. from 10:00 to 11:00 P.M. By the time this is printed they will probably be on another schedule.

W1XAL, Boston, Mass., on 25.42 meters, 11.79 mc., broadcasts from 3:30 to 5:00 P.M. on Sundays; from 5:30 to 6:00 P.M. on weekdays. Then on 49.67 meters, 6.04 mc., Mondays from 7:00 to 8:30 P.M.; Tuesdays and Thursdays 7:00 to 9:00 P.M., and Sundays 5:00 to 7:00 P.M.

W3XAU, Philadelphia, say they are on 31.28 meters, 9.59 mc., weekdays from Noon to 8:00 P.M., Sundays Noon to 7:00 P.M. and on 49.50 meters, 6.06 mc., every day from 8:00 to 11:00 P.M. (Ray Bell).

W3XL, Boundbrook, New Jersey, on 6.425 mc., was heard testing during the flood period with W1XK and W8XK (Tom Erwin, E. Reese and I. Hofmaster).

VE9CA, Calgary, Canada, "The Voice of the Prairies," relays CFCN week-days 6:00 A.M. to noon and 7:00 P.M. to midnight and Sundays 2:00 P.M. to Midnight (W. Jessen). It is heard from Midnight to 2:00 A.M. most every night (W. Siddle).

Goderich, Ontario, on 50.00 meters, 6.00 mc., broadcasts around 1:00 to 3:00 A.M. Sunday mornings (J. Childs). Another one on 31.13 meters, 9.64 mc., was heard between 2:10 and 3:30 A.M. (J. Reese).

CJRO, 48.85 meters or 6.14 mc. and CJRX on 25.60 meters or 11.72 mc. broadcasts now from 5:00 to 11:00 P.M., C.S.T., or 6:00 P.M. to Midnight, E.S.T., according to a letter (Geo. Diamond).

VE9BK, Vancouver, Canada, owned by the Radio Sales Service, 780 Beatty Street, on 62.56 meters or 4.80 mc., works daily 11:30 to 11:45 A.M., 3:00 to 3:15 P.M., 8:00 to 8:15 P.M., Saturdays 7:30 to 7:40 P.M., Mondays, Wednesdays and Fridays, 7:30 to 8:00 P.M. (W. Turpin). VE9HX, Halifax, Canada, on 49.10 meters or 6.11 mc. say they broadcast 10:30 A.M. to 2:30 P.M., 6:00 P.M. to midnight Mondays to Fridays, Fridays 2:00 to 9:00 P.M. and Saturdays 3:00 P.M. to Midnight. Ernest Reese says VE9HX has moved to about 6.135 mc. between COCD and W8XK.

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.

A station VDO, Vancouver, B. C., on 4.865 mc., phoning at 8:00 P.M. (Wm. Sparks).

VE9DN, Drummondville, Canada, on 49.96 meters or 6.005 mc. broadcasts every Saturday night starting at 11:30 P.M. It was heard testing Saturday mornings by a number of members. VE9CS, Vancouver, Canada,

on 49.40 meters or 6.07 mc. broadcasts daily 6:00 to 7:00 P.M. and Sundays 1:45 P.M. to 1:00 A.M. next day, (they say). CZ5M and CZ5K, Canadian aircraft stations were heard announcing their frequency as 4.86 mc. between 4:30 and 5:00 P.M. (Ed. Houlgate). Station CJA4 on 26.29 meters working London between 2:30 and 3:00 P.M. once, is a new station reported by R. Brady.

Hawaii. Station KIO on about 25.63 meters or 11.71 mc. is heard sending music and testing around 6:00 P.M. and as late as midnight. KKH on 39.89 meters or 7.52 is heard just about every night around midnight relaying some program. They broadcast every Monday from 12:30 to 1:00 A.M. according to members Leader and Brooks.

Alaska. Station WVD, Seattle, Washington, works a number of Alaskan phones. W. Sparks, San Francisco, reports WXE, Anchorage, on 5.97 mc. at 8:00 P.M.; WZA, Kodiak on 4.13 mc. at 10:30 P.M.; WXH on 2.604 mc. at 1:50 P.M.; KMYB, a ship on 4.61 mc.; KYMA, Juneau and KBAI, Juneau, on 4.61 mc. and WXA, Juneau, on 8.05 mc., all on voice WXE on 6.475 mc. at 2:00 A.M. is reported by H. Slough. WXE is on 5.97 mc., not 6.475, and is heard around Midnight to 1:00 A.M. (R. Williams, and W. Siddle).

American Phones. Quite a few phone stations at Rocky Point, New York; Lawrence, New Jersey; Bolinas, California, and Dixon, California, may be heard testing and sending messages each day, as well as relaying a broadcast now and then. It is a big job to mention each of these, as a matter of fact it would take pages of space to take care of them. We might say this month that several stations have been using the call W2XBJ. Any station listed at Rocky Point can use this call. We also add that a station KKL on 15.47 mc., KES on 10.41 mc. and a KKR on 15.46 mc. are all reported this month, and not shown in our list.

THE AMATEURS

There are several hundred amateur stations now heard on the 20 meter band. Due to the conflicting call-letters given, and to the irregularity of the stations, we can not list them. Try the following tuning schedule. For Africans try from 2:00 to 6:00 P.M. For Australians try 8:00 to 11:00 A.M. For the West Indies try 9:00 A.M. to 10:00 P.M. For Central Americans try from 9:00 A.M. to 10:00 P.M. For the Hawaiian stations try 4:00 to 11:00 P.M. For the South American stations try from 6:00 to 11:00 P.M. There are nearly 60,000 amateur stations. For a list of these we suggest Amateur Radio Call-Book, which sells for \$1.25. We will accept your order for this book.

LAST MINUTE NEWS

Charlie Miller tells us that a station GAD in Rugby, England, is on 15.40 meters or 19.48 mc. working the new Nairobi station. He also says an Algiers phone on 8.96 mc. works Paris around 4:00 P.M. and he has a verification from Paris.

H. S. Bradley says he has a letter from the new station HP50, Colon, Panama, and it says they broadcast daily 7:30 to 9:00 A.M., noon to 1:00 P. M. and 6:00 to 9:00 P. M. They are on 49.96 meters or 6-005 mc., and announce "La Vos de la Victor" and the address is Box 33, Colon. This is not to be confused with station HP5B at all (6-03 mc.) He also reports TI60N, Limon, Costa Rica. on 6.86 mc. in the evenings.

WITH THE REPORTERS

Due to the fact that this section is made up, in part, early in the month, it is impossible for us to separate these reports into cities and states, like we have been requested to do. Keep in mind that these reports are not the complete list of stations heard by the reporter, but simply the call-signs of stations that the reporter helped us get information on. We are not interested in long lists of stations heard on schedule and cannot print such reports. We want news on new stations, stations changing schedules, stations changing wavelengths, stations that are hard to log and similar reports.

Thomas Simpson, Leven, Fife, Scotland, reports PCJ on 31.8 meters, SPW, CO9GC and HI9B. Abbey Anderson, Selkirk, Scotland, reports VQ7LO schedule, VP3MR schedule, JVP, JVM, JVH, EA8AB and others. Ingvar Gullberg, Hedemora, Sweden, reports DJM, GSN and Radio Cartagena. Robert Hughes, Trowbridge, England, reports W2XE, W1XAL, JVM, JVP, RW59, VP3MR schedule, and amateurs. James Gallagher, Magherafelt, Ireland, reports XBJQ, CEC and others on schedule. F. A. Beane, Ridgewell, England, reports CSW, HIT, HJ1ABP, PCJ, CO9GC, XBJQ, LZA and HIL. J. E. Church, Huddersfield, England, reports OER2, HRD, COKG and HIT. J. R. M. Studholme, London, England, reports SPW. F. J. Lawson, East Barnet, Herts, England, reports HJN, NI9B and others.

Edward Houlgate, London, Ontario, Canada, reports HIT, HJU, HBP, HBL, TYA, SPW and YV4RC. N. E. Butler, Toronto, reports HIT. Ian C. Morgan, Montreal, reports DZA, OER2, JVP, JVN and DZH. Roberto Piedra, Havana, Cuba, reports HJ3ABX, MRV, HJ1ABC (or P) CO9WR, HIH, CT1AA, HJU.

George McClellon, Everett, Mass., reports HIT and HJU. W. D. Flagg, Holyoke, Mass., reports HIT, HI3C, HRN, YV8RB, TG2X, HBL, LZA, DZE, Radio Cartagena, HRV, HP5J, GSD, HJ4ABD, PCJ, HJ3ABK, HJ2ABD, IDU and FTE. Joseph Stempel, Bridgeport, Conn., reports CNR, YDB, HIT, OER2 and Radio Cartagena. Stuart Fuller, Providence, R. I. reports HJ1ABC and CR6AA. Fred Atherton, Rutland, Vermont, reports HJ1ABB, HJU, HJ1ABP, HJ4ABC, TGW, HRY, HIT, HI9B, ZFB, CT1AA, HBO, HBJ and DZA. A. L. Brooks, Hartford, Conn., reports KKH broadcasting.

Stephen Warring, Piru, California, reports HJU. Frank Quijan, Glendale, California, reports Radio Cartagena. Russell Leader, San Francisco, Calif., reports XEMO, KKH, JYS, JVN, VPD, Radio Cartagena, NNE, RIO, RIR, OPM and ZSS. Sam Arias, Los Angeles, reports HJU and Radio Cartagena.

Ernest Reese, Niagara Falls, New York, reports XECR, XEXA, HRV, VE9HX and HJU. Nick Gaug, New York City, reports W9XAA and W2XBJ. H. S. Bradley, Hamilton, N. Y., reports HIT, HP5K, YV8RB, HH3W, HI3U, HJ3ARK and a Mexican on 6.995 mc. George Diamond, Jamaica, N. Y., reports CJRX and W9XAA. W. F. Herzog, Center Moriches, N. Y., reports HIT, HRN, HBL and TPA4. Jimmie Reese, New York City reports W9XAA, HIT, LRU, RIO, JVN, XECR, EA8AB, TG2X, VP3MR, ZFB, HI3C and others on schedule. R. Brewster Williams, Garden City, N. Y. reports WXE, VE9DN, TG1X, SUZ, SPW, LSL, LSQ, LSN, VPD, PLE, PNI, KTO, VWZ, AZH, PLP, PLQ. R. Maly, New York City reports Radio Cartagena, and England.

Sam Swope, Rockville, Indiana, reports HJU and TGW. Guy Bigbee, Ft. Benning, Ga., reports HJU. Frank Grey, Berwyn, Illinois, reports XEFA, HJ3ABD, VWY, RIO, RNE, HJU, RIO, RDD, ZLT, DJP, TPA4, XBJQ, WCT and others. Don Gross, Asheville, N. C., reports HIT. V. J. Fitzsimmons, Jersey City, New Jersey, reports Radio Cartagena. Dr. R. C. Kash, Sevierville, Tenn., reports HRV, HJ3ABB, DJS, OER2, Radio Cartagena, HI5X, SPW, RKI, PCJ, HJU, HIT, HIG, YDB, HIL, PRA8, LRU, LRX, JVT, JVN, RV15. Paul Horton, Baton Rouge, La., reports HP5J, PLP, HJU, JVN. I. Goodeve, Kalamazoo, Mich., reports VPD and OER2. Stanley Fink, Detroit, Mich., reports GSN and HKF. James B. Wooten, Mobile, Alabama, reports HJB, Pontoise, KKR, RKI, PCJ, KEZ, KEL and W2XBJ.

Joe Childs, Philadelphia, Pa., reports GCB, HJU, HIT, TIPG, HBJ, KKL, RIM, LSL and RKI. Robert Rossi, Philadelphia, reports HRD, Radio Cartagena, HJU, HCJB, HI3C, CQN, OER2, LSL, LSQ, LSM. R. B. Oxrieder, State College, Pa., reports Radio Cartagena, DZA, HJ2ABD, HJ3ABD, HJ4ABC, HIG, HI3U, PCJ and DZC. W. D. Vandercar, Jr., Grand Rapids, Mich., reports JVN, JVM, YNLAT, OER2 and GSN. Dr. Saylor, Altoona, Pa., reports JVN, VE9DN, HIT and YV22RM. O. Hersowitz, Baltimore, Md., reports HJU, PSH, RKI, RIM, RNE, RIR, CSW, PCJ, DJM, HP5K, HRV, CO9WR, VLK, PMA, HJ2ABD and Radio Cartagena.

Thomas Grey, Lyons, Illinois, reports JVN, JVT, PLP, HBO and HBJ. George Feldrick, Cleveland, Ohio, reports JVN, VLK, TPA4 and COCH. Alan Teague, Millington, Mich., reports RKI and England. Raymond Bell, State College, Pa., reports HAS3, JVM, JVN, LRU, DJI, PCJ, W9XAA and ORK. W. W. Smith, Louisville, Ky., reports TGW. L. W. Roberts, Chicago, reports DJI, HRN, JVN and JVT.

Wm. Patton, Old Westbury, New York, reports HIT, VP3MR, HI1A and amateurs. Tom Erwin, Herrin, Illinois, reports HKV, YNC, XBJQ, CEC, SUV, YV9RC, ZFB, CMA, HJ5ABC, CMB2, CMA3, HIT, W3XL and HI1A. Joseph Miller, Brooklyn, reports HH3W, FTH, FZS, FZR, PMY, CT2AJ, PNI, HBH, CQN, PLE, RIO; HI1A, VPD, EHY, JVM, PMN, PLP, PMA, YDB, ZBW, JIB, VWY2, LRU. Wade Chambers, Tulsa, Oklahoma, reports DJI, DJP, GSN, RIO, OPL, SUZ, ZLT, VPD, JVN, JYS, PLE, PNI, YDB, LRU, HBO, and CNR. R. Verbrughe, Detroit, Mich., reports Radio Cartagena.

Alvin Ogden, Brooklyn, reports CEC, ZP3AC, HIT, and MPT. Edward Schmeichel, Chicago, reports HRD, XDR, HI5N, WCT, Radio Cartagena,

HJ3ABX, LRU, ZBW, HI3C, CB960, JZB, FZR, JIB, FZT, PLQ, PLV, YDB, PNI, YBG and others on schedule. H. H. Howe, Tucson, Arizona, reports Java, England, Germany, Japan, VIZ3, VPD, Radio Cartagena, HJU, LSL, LSQ, LRU; LRX, and others on schedule. Arthur Van Aken, Hindsdale, Illinois, reports ORK, CEC and Pontoise. William Sparks, San Francisco, California, reports many stations, including PLE, KTO, YDB, ZBW, JIC, JIB, JZB, many Japanese phones, RKI, RNE, RIR, TFF, Germany, LRU; CEC; HJU; XBJQ, JYS, VE9CA, VE9BK and others.

Wm. C. Palmer, Jr., Cleveland, Ohio, reports TG2X, HH2S, VP3MR and OER2. F. L. Perkson, Canton, Ohio, sends a long list of station addresses. H. H. Hill, Rothschild, Wisconsin, reports VPD and GSH. Malcolm Gavin, Cleveland, Ohio, reports SUV, XEME, XEXA, HH3W, HH2S, TG2X, HJU, HKU, HIX and others. Max Horlick, Youngstown, Ohio, reports England, Germany, Radio Cartagena, HC2JSB, W1XAL and XDA.

Roger Legge, Jr., Philadelphia, reports HRV, WCT, DZA, HI3C and HIT. J. V. Robbins, Willandport, Ontario, reports Germany, France, England, EAQ, Russia, HC2JSB, JVH, JYS, YDB, ZLT, VPD. Fred Hafner, Buffalo, New York, reports HBO, HBJ, DZA, DZB, DJI, HIG, HIT, HI1S, HRV, CO9WR and Radio Cartagena. H. L. Nixon, England, reports PLP, PMN, YDA, VQ7LO and W1XAL. And a station VQG, Nairobi.

James B. Wooten, Mobile, Alabama, reports PCJ, VPD, LRU and many U.S.A. phones. Russell Leeder, San Francisco, Calif., reports XEOK and XEMO (probably harmonics), LKJ1, TPA4. Miss Eileen Hofmaster, Sandusky, Ohio, reports HVJ, HJU, W3XL, HIT, HRD, 2RO, HAS2 and Radio Cartagena. Ashley Walcott, San Francisco, Calif., reports CEC, CB960, Radio Cartagena, HJ2ABD, ZFB, JIB, and others. Sam Solito, Leetsdale, Pa., reports OPL, SUZ, PVA, PLP, PNI, JIB, JVT, ZLT4, Radio Cartagena, HJ1ABE; HJ3ABX, HJU, CEC, LRK, HJ1ABJ, HI3C, HI5C, HP5K, HVJ, DAF, RKI, SPW, RIO.

John A. Edwards, Manchester, England, reports LZA, LRU, JVN, JVP, XECR, COCD and amateurs. Charles Miller, Covington, Ky., reports HJ4ABC, HCJB, CMA3, TGA, Algiers, PNI, XGW, FZR and Pontoise. Hyman Cohen, New York City, reports W9XBS, EDZ, IRM, WQR, KPH, DZA, YBG, DFE, LSI. C. D. Ward, Jr., Sioux Falls, South Dakota, reports HJU. George Ebbecke, Philadelphia, reports HRV, YNVA, HJU, Radio Cartagena and others. Floyd Murphy, Palestine, Illinois, reports EA8AF, W9XAA, HJU, HRD, and others. R. H. Greenland, Barnsley, Yorks, England, reports CO9GC, PCJ, RW59 and HI9B. W. Kuzmin, Agincourt, Ontario, reports JVN, JVT, RIR, SPW, and others.

Fred Karpen, Johnstown, Pa., reports LSL, PMA, PLI, YDB, RRR, HSH, XGN, XGO, XGC, VUB, KAX, VPD, DZE, RIM, RKI, LZA; GSJ; GSN, PHI. Wilfred Siddle, Birmingham, Alabama, reports GSN, VPD, HIL, HIT, HI7P, HI3C, CO9WR, HRD, HRN, TGW, HP5K, YNLF, XFA2; XDR, YV4RC, HJ3ABX, HJ4APP, HJ2ABC, Radio Cartagena, HJU, WWV, HC2ET, VE9CA, and WXE.

Ken McKinley, Vancouver, Canada, reports DZC, WOEH, JYS, YDB and Radio Cartagena. John C. Barron, Aberdeen, Scotland, reports a lot of stations on schedule. G. C. Gallagher, San Francisco, California, re-

ports HIT, HIG, HIZ, HRD, XFA2, XEMO, HJU, Radio Cartagena, LRU, LSQ, PMA, PMY, PLV, JVN, JVM, RKI, RV15. Ernest Reese, Niagara Falls, New York, reports HJU, Radio Cartagena, W3XL, and many phones.

George Feldrick, Cleveland, Ohio, reports VPD, RNE, HC2JSB, and KKH. Roger Legge, Jr., reports CO9GC, TG2X, H14D, HIT, HRN and H13C. H. J. Davison, Bayamon, Puerto Rico, reports WCT, KKR, KKZ, VE9DN, LRU, Radio Cartagena, and many stations in the West Indies, Europe and North America. He says H11A, H11J, HIG, HIZ, H14D, H1H and H13U, were all heard around 7:00 A.M. in the morning.

Late Reports. The flood conditions existing in East Liverpool and also in most of the Eastern section of the United States caused many reports to be late. We acknowledge late letters from H. S. Davison, Fond du Lac, Wisconsin; J. M. S. Studholme, London, England; Tom Erwin, Herrin, Illinois; Walter Wilson, London, England; S. W. Parr, London, England; F. W. Henning, Worthing, Sussex, England; Dr. R. C. Kash, Sevierville, Tenn.; Lt-Colonel K. A. Gosnell, Thal Fort, India; L. D. Brewer, Phoenix, Arizona; F. F. Tonn, Weehawkem, New Jersey; J. Stempel, Bridgeport, Conn.; H. J. Davison, Bayamon, P. R.; Charles Miller, Covington, Ky.; Ralph Brady, Brooklyn, New York; Wm. C. Palmer, Jr., Cleveland, Ohio; Charles Dutrow, Washington, D. C.; Fred Baines, Sydney Mines, Nova Scotia; W. Herzog, Center Moriches, New York; E. Scala, Jr., Bronx, New York; Joe Childs, Philadelphia, Pa.

AMATEUR ABBREVIATIONS

Amateur radio stations have a group of signals that may sound like a new language to the short wave beginner. Instead of sending out each letter and word on the station key, they use certain abbreviations that save time in sending a message. And when these stations are on phone, they use the same abbreviations. The following are some abbreviations that may be heard on most all short wave stations: CQ—a general call meaning the station would contact and work any station hearing them. YL—means Young Lady (girl friend). EX-YL—means former girl friend (usually refers to wife). OM—means Old Man, a friendly way of greeting another amateur. 73's—used when signing off with a station. Means I wish you lots of good distant work. DX—Distance, like distant station reception. QSO—means to talk to or receive from a station. QRM—means man-made interference. QRN—means atmospheric interference (static). QRA—name of station and address. QRH—wavelength.

There are many more of these, but those shown are the most commonly used. So the next time you hear a station calling "CQ" do not comb your dials looking for a station using that call.

The success of this organization lies in the hands of the members more than in the hands of the officers. By mentioning the Club when buying new equipment, when sending a report to a station or when writing to other short wave fans, you help the Club considerably.

CHAPTER NEWS

The Philadelphia Chapter meets at 438 Market Street on the 2nd and 4th Fridays of each month. They recently purchased a movie projector to give practical movie demonstrations. W3DFM is teaching code. A membership contest has just been started with several nice prizes offered for bringing in new members.

The London, England Chapter held their annual dinner-dance on Saturday, March 7. Members from as far distant as Sheffield and Channell Islands attended. Among those present were Mons M. F. Gallat, the French Consul General; D. L. Gill, American Chamber of Commerce of London; Ralph Stranger, well-known radio expert, and Carleton Dyer, known to all radio fans. This Chapter recently held a DX contest. A Midwest Receiver was won by F. A. Beane. A world-globe was won by S. J. A. Nicholl. another world-globe was won by C. O. Gray and a clock and barometer was won by S. W. Parr. This Chapter meets at RACS Hall, Wandsworth Road, every Friday except the second in each month.

The Manchester Chapter meets every Tuesday except the last in the month at British Legion Hall, Long Street, Middleton.

The New York Chapter will visit the National Broadcasting Company studios and control rooms on April 3rd. On April 24th a meeting will be held at Stuyvesant High School, East 15th Street, when a recording outfit will be used to record the voices of members. At the last meeting the following officers were elected and installed: President J. G. Reaney, Treasurer Thomas Malone, Secretary Jacob Kleimans, Recording Secretary Kenneth Knox and Technical Advisor Sol Perlman.

SPECIAL PROGRAMS

Station EAQ, Madrid, Spain, on 30.40 meters or 9.87 mc. will broadcast two special programs on April 25th. The first is from 3:00 to 3:50 P. M., E.S.T., or 2000 to 2030 G.M.T. The second is from 7:00 to 7:30 P.M., E.S.T. or 0000 to 0030 G.M.T. This is a special International Short Wave Club program arranged by Mr. Arthur E. Bear, our European representative, who will speak on both broadcasts. A special verification card will be sent to all persons sending reports to Mr. Bear at 10 St. Mary's Place, Rotherhithe, London S.E. 16, England.

Station P11J,, Dordrecht, Holland, on 42.35 meters or 7.085 mc. will also broadcast special programs on April 25th. This is one of the hard stations to log, and these special programs will enable many to tune in the station for the first time. The first program will take place from 8:30 to 9:00 A. M., E.S.T., or 1330 to 1400 G.M.T. The second part takes place from 5:30 to 6:00 P.M., E.S.T. or 2230 to 2300 G.M.T. These tests were arranged by E. H. Pickett of England. Reports should be sent to Dr. Hellingman, Radio Station P11J, Dordrecht, Holland. Be sure and mention the I. S. W. C.

Station XEFT, Vera Cruz, Mexico, on 49.02 meters or 6.12 mc. will broadcast a special program for members of this club on April 19th from 11:30 P.M. to midnight, E.S.T., which is April 20th from 0430 to 0500 G.M.T.

"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-13.93	-21.53	-GSJ, Daventry, England,	6:00 to 8:45 A.M. daily.
B-13.94	-21.52	-W2XE, Wayne, New Jersey.	Daily 7:30 A.M. to 11:00 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-15.39	-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	-PLE, Bandoeng, Java.	Phones Holland 6 to 11 A.M. KWX irregularly.
T-16.06	-18.68	-OCI, Lima, Peru.	Testing with HJY near 2:00 P.M.
T-16.11	-18.62	-GAU, Rugby, England.	Phones New York mornings.
E-16.22	-18.48	-HBH, 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.
T-16.86	-17.79	-GSG, Daventry, England.	6:00 to 8:45 A.M.; 9:00 to 10:45 A.M.
B-16.87	-17.78	-W3XAL, Bound Brook, N. J.	9:00 A.M. to 4:00 P.M. daily.
B-16.89	-17.76	-W2XE, Wayne, New Jersey,	relays WABC 11:00 A.M. to 1:00 P.M.
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	-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.
T-18.20	-16.12	-IRY, Rome, Italy,	phoning 7:00 A.M. to 1:30 P.M.

Meters	Meg.	STATION	TIME
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	ZFR, 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-18.91	-15.86	CEC, Santiago, Chile.	Phones OCJ 11 A.M., 1 and 4:40 P.M. irreg.
T-19.02	-15.81	LSL, Buenos Aires, Arg.	Phones GAA 8 A.M. to 1 and FTM 1-2 P.M.
T-19.15	-15.66	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-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 3:30 A.M.
B-19.64	-15.27	W2XE, Wayne, New Jersey,	relays WABC 1:00 to 6:00 P.M.
B-19.66	-15.26	GSI, Daventry, England,	12:30 to 2:15 P.M. irreg.
T-19.68	-15.25	RIM, Tashkent, U.S.S.R.	Phones RKI near 7:00 A.M.
B-19.68	-15.25	Pontoise, France,	7:00 to 11:00 A.M. daily.
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 10 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	GSF, Daventry, England,	9:00 A.M. to Noon.
B-19.84	-15.11	HVJ, Vatican City,	10:30 to 10:45 A.M. daily.
B-19.85	-15.11	DJJ, Zeesen, Germany,	6:30 to 8:00 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	LZA, Sofia, Bulgaria,	Heard 3:30 A.M. to 10:30 A.M., Irreg.
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 Janerio, Brazil,	7 A.M. to 6 P.M. LSL, WLK, WOK.
T-20.45	-14.67	GBI,, 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	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	HRF, 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.
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.
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	GBB, Rugby, England,	Phones Canada and Egypt, daytime.
T-22.35	-13.42	G CJ, 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 3:00 P.M. irregularly.
T-22.40	-13.39	WMA, Lawrenceville, N. J.	Phones England, daytime.

Meters	Meg.	STATION	TIME
T-22.48	-13.35	YVO, Maracay, Venezuela.	Phones Florida, daytime.
T-22.50	to 24.3	-13.34	-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.
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.	Irregular.
T-25.02	-11.99	FZS, Saigon, Indo-China.	Phones Paris mornings.
E-25.10	-11.95	ETB, Addis Ababa, Ethiopia,	2:00 to 6:30 P.M. irreg. Wed at 5 P.M.
E-25.11	-11.97	KKO, 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-25.23	-11.90	Pontoise, France,	3:00 to 4:00 A.M. • 11:15 to 6:00 P.M.
B-25.27	-11.87	W8XK, Pittsburgh, Pa.,	relays KDKA 5:00 to 9:00 P.M.
B-25.29	-11.86	GSE, Daventry, England,	10:30 A.M. to Noon.
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	WXE, Wayne, New Jersey,	5:00 to 10:00 P.M. daily.
B-25.36	-11.83	W9XAA, Chicago, Illinois,	6:30 to 5:00 P.M. and 10:00 P.M. to Mid.
B-25.38	-11.82	GSN, Daventry, England,	12:15 to 2:15 A.M.
B-25.40	-11.81	ZRO, 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	-11.80	DJO, Zeesen, Germany,	5:00 to 7:00 A.M. irregularly.
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,	6:00-8:45 A.M.; 12:15-5:45; 6-8; 10-11 P.M.
B-25.57	-11.74	PHI, Huizen, Holland.	Daily, except Tues, and Wed., 8:30-10:30 A.M.
B-25.60	-11.72	CJRX, Winnipeg, Canada,	6:00 P.M. to Midnight.
B-25.63	-11.70	Pontoise, France,	6:30 to 9:30 P.M. and 10:30 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	VRK4, 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.
T-28.09	-10.68	WNB, Lawrenceville, N. J.	Phones Bermuda. daytime.
B-28.12	-10.67	CEC, Santiago, Chile,	daily 7 to 8 P.M. • Thurs., Sun., 8:30 to 9 P.M.
E-28.14	-10.55	JVN, Nazaki, Japan,	broadcasts Tues., Fri., 2-3, Mon., Thurs. 4-5 P.M.
E-28.28	-10.61	WEA, Rocky Point, N. J.	Tests irregularly with Europe.
T-28.44	-10.55	WOK, Lawrenceville, N. J.	Phones Brazil and Argentina, irregularly.
E-28.49	-10.53	JIB, Tawian, Japan.	Heard irregularly.
T-28.51	-10.52	VK2ME-VLK, Sydney, Australia.	1:00 to 8:00 A.M. GBP.

Meters	Meg.	STATION	TIME
E-28.79	10.42	XGW, Shanghai, China.	Testing near 6:00 A.M.
T-28.80	10.42	PDK, Kootwijk, Holland.	Phones Java, 7:30 to 9:40 A.M.
T-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.	2:30 to 4:00 P.M. daily.
E-29.13	10.30	LSQ, Buenos Aires, Argentina.	Used for special tests.
E-29.15	10.29	1/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, Tifis, 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, Shinkyu, 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.
B-29.88	10.04	DZB, Zeesen, Germany.	2:00 to 4:00 P.M. irregularly.
T-30.09	9.97	KAZ, Manila, P. I.	Phones PLV near 2:00 A.M.
T-30.15	9.95	GCU, Rugby, England.	Phones New York evenings.
T-30.21	9.93	HKB, Bogota, Colombia.	Phones PSK irregularly, evenings.
T-30.30	9.90	LSN, Buenos Aires, Argentina.	6:00 P.M. to 6:00 A.M. WLO.
T-30.40	9.87	WON, Lawrenceville, N. J.	Phones England evenings.
B-30.40	9.87	EAO, Madrid, Spain.	Daly 5:15 to 9:30 P.M. Sat. noon to 2 P.M.
E-30.40	9.87	JYS, Kemikawa-Cho, Japan.	Relays JOAK Irreg., mornings.
T-30.52	9.83	IRM, Rome, Italy.	Phones Egypt afternoons.
T-30.60	9.80	GCW, Rugby, England.	Phones America, evenings.
E-30.61	9.80	LSI, Buenos Aires, Argentina.	Used irregularly, evenings.
T-30.75	9.76	VK2ME-VLK, Sydney, Australia.	Phones Java 4:00 to 8:00 A.M.
T-30.77	9.75	WOF, 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, Lisbon, Portugal,	4:00 to 7:00 P.M. Tues., Thurs., and Sat.
B-31.10	9.65	YDB, Soerabaja, Java,	daily 4:30 to 10:00 A.M.; Sat. until 11:00.
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	(????), Cartagena, Colombia.	11:30 A.M. to 1:00 P.M., 6 to 10 P.M.
B-31.25	9.60	LRX, Buenos Aires, Argentina.	Testing near midnight now.
B-31.27	9.59	HL13W, Port Au Prince, Haiti.	1:00 to 2:00 P.M., 7:00 to 8:30 P.M.
B-31.27	9.59	VK2ME, Sydney, Australia.	Sun. 1 to 3, 5 to 9, 9:30 to 11:30 P.M.
B-31.27	9.59	HBL, Geneva, Switzerland.	5.30 to 6.15 P. M., Saturday.
B-31.28	9.59	PCJ, Eindhoven, Holland.	Sundays 7:30 to 8:30 A.M.; 1-2; 7-8 P.M.
B-31.28	9.59	W3XAU, Philadelphia, Pa.,	Noon to 8:00 P.M. (Sun. only until 7:00)
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-31.30	9.58	GSC, Daventry, England.	4:15-5:45; 6:00-8:00; 10:00-11:00 P.M.
B-31.31	9.58	VK3LR, Melbourne, Australia.	10:30-3:00 irreg.; 3:15-7:30 A.M., daily.
B-31.36	9.57	W1XK, Boston, Mass.	(Millis) 6:00 A.M. to Midnight.
B-31.36	9.57	VUB, 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., 3-11 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.
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	GSB, Daventry, 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.
B-31.56	9.50	HJU, Buenaventura, Colombia,	Mon., Wed., Fri., 8:00 to 11:00 P.M.
T-31.71	9.46	Tripoli, Africa.	Phones IAC, Italy, 6:00 A.M. to 1:00 P.M., irreg.
B-31.80	9.42	COCH, Havana, Cuba,	8:00 A.M. to 7:00 P.M.; 8:00 to 10:00 P.M.

Meters	Meg.	STATION	TIME
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	VWY, Poona, India.	Phones England near 8:30 A.M.
T-33.93	to 36.58	-8.84 to 8:20	-Ships. Heard irregularly.
E-34.10	8.79	HKV, Bogota, Colombia.	Testing, 5:30 to 11:00 P.M., irregularly.
T-34.19	8.77	PNI, Makasser, D. E. I.	Phones Java near 4:00 to 5:00 A.M.
B-34.21	8.77	HCJB, 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	CO9IQ, Camaguey, Cuba.	5:30 to 6:30 P.M.; 8:00 to 9:00 P.M.
E-34.68	8.65	WVD, 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.
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	T18WS, 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	H13C, La Romana, R. D.	12:30 to 2:00 P.M., 7:30 to 9:30 P.M.
E-43.82	6.84	KEN, Bolinas, California.	Used irregularly.
B-44.12	6.81	HIH, San Pedro de Macoris, D. R.	Daily 7:30 to 9:00 P.M.; Sundays 3:00 to 4:00 A.M. and 4:15 to 6:00 P.M.
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., oftentimes 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.

Meters	Meg.	STATION	TIME
B-45.25	6.63	HIT, Trujillo, D. R.,	12:10 to 1:40; 5:40 to 8:40 P.M. weekdays.
B-45.31	6.62	PRADO, Riobamba, Ecuador.	Thursdays 9:00 to 11:30 P.M.
B-45.50	6.61	HI4D, Trujillo, D. R.,	11:40 to 1:40 P.M. • 4:40 to 7:40 P.M.
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-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	H1L, 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-46.51	6.45	HJ4ABC, Ibague, Colombia,	11:00 A.M. to Noon; 8 to 11 P.M. daily.
B-46.51	6.45	H14V, 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	H1IS, 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	H13U, 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	HRV, 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	H1Z, 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	HIG, Trujillo, D.R.	Heard 1:00 to 4:00 P.M., 5 to 9:30 P.M., Irreg.
B-47.77	6.28	CO9WR, Sancti Spiritus, Cuba.	4 to 6 and 9 to 11 P.M.
B-48.00	6.25	OAX4G, 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	H1A, Santiago de los Caballeros,	D. R., 11:40 to 1:40; 7:40-9:40 P.M.
B-48.55	6.18	NEXA, 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, Boyota, Colombia	7:00 to 10:15 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-48.85	6.14	CJKO, Winnipeg, Canada.	6:00 P.M. to Midnight.
B-48.86	6.14	W8XK, Pittsburg, Pa.,	relays KDKA 7:00 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	H15M, Trujillo, D. R.,	6:40 to 9:10 P.M.
B-48.02	6.13	HJ3ABX, Bogota, Colombia.	Between 7:00 and 11:30 P.M. testing.
B-48.92	6.13	COCD, Havana, Cuba.	Heard 5:00 P.M. to 1:00 A.M., irregularly.
B-49.02	6.12	W2NE, Wayne, N. J.	Relays WABC 8:00 P.M. to 11:00 P.M.
B-49.02	6.12	XEFT, Vera Cruz, Mexico.	11:30 to 4:00 P.M., 7:30 P.M. to 12 M.
B-49.05	6.11	H1IABE, 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	VE9HX, Halifax, Canada,	8:30 to 11:30 A.M.; 6:00 P.M. to Midnite.
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	W3XAL, Bound Brook, N. J.	Mon., Wed. and Sat. 5 P.M. to 1 A.M.
B-49.18	6.10	W9XF, Chicago, Ill.,	Sun., Tues., Thurs., 9-2 A.M.; Daily 1-2 A.M.
B-49.20	6.09	ZTI, Johannesburg, Africa.	3:30 o 7:00 A.M.; 9:00 A.M. to 4:00 P.M.
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-49.30	6.08	2RO, Rome, Italy,	may soon be 6:00 to 7:45 P.M. weekdays.
B-49.31	6.08	VO7LO, 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,	6:30 A.M. to 8 P.M.; 11 P.M. to 2 A.M.
B-49.50	6.06	W3XAU, Philadelphia, Pa.,	8:00 to 11:00 P.M. daily.
B-49.59	6.05	HI9B, Santiago City, D. R.,	heard 6 to 10 P.M. 12:30 to 1:40 A.M.

Meters	Meg.	STATION	TIME
B-49.55	6.05	HJ3ABD, Bogota, Colombia.	7:30 to 11:00 P.M.
B-49.59	6.05	GSA, Daventry, England.	6:00 to 8:00 P.M. daily.
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.	12:00 to 2:30 P.M., 8:30 to 10:30 P.M.
B-49.67	6.04	PRAB, Pernambuco, Brazil.	2:30 to 8:30 P.M.
B-49.67	6.04	WIXAL, 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 midnite P.M.	
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 to 4:25 P.M.; 4:55 to 10:45 P.M.	
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-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-50.00	6.00	XEBT, Mexico City. 6:00 P.M. to 3:00 A.M., irregularly.	
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	XEVI, Mexico City. Tues. and Fri. 6:30-7:45, 9 to 11 P.M., Sat 8-9 P.M.	
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	KKC, Quito, 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. 6:15 to 11:00 P.M., irregularly.	
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-51.99	5.77	YNLF, Managua, Nicaragua. Broadcasts 7:00 to 10:00 P. M., Irreg.	
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	TISHH, 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.	
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	to 73.17	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.	

BE A BOOSTER FOR THE CLUB

POLICE STATIONS

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

120.48	2,490 ()	122.85	2,442 ()	KGHS, Spokane, Wash.	
WPFJ, Clarksburg, W. Va.		WPGI, Binghamton, N.Y.		KGZV, Tacoma, Wash.	
WPDZ, Fort Wayne, Ind.		KGPK, Denver, Col.		WPDN, 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.	KGZB, Little Rock, Ark.		
KGHJ, Long Beach, Calif.		WDDL, Lansing, Mich.	KGZC, Salt Lake City, Utah		
WPGS, Mineola, N.Y.		WPDE, Louisville, Ky.			
KGHX, Santa Anna, Calif.		WNEP, Miami, Fla.	175.23	1,712 ()	
KGZD, San Diego, Calif.		WNEP, Niagara Falls, S. Y.	WPED, Arlington, Mass.		
KGHD, Seattle, Wash.		WPFY, Yonkers, N. Y.	WPHF, Richmond, Va.		
KGHE, Snoqualmie, Wash.			KGPI, Beaumont, Texas		
WPGN, South Bend, Ind.		122.85	2,442 ()	WPDB-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.	KGPI, Los Angeles, Calif.		
WFO, Knoxville, Tenn.		WFFE, Reading, Pa.	WPFN, New Bedford, Mass.		
KGHJ, Las Vegas, Nev.		WPDH, Richmond, Ind.	WFFA, Newton, Mass.		
WPDF, Philadelphia, Pa.		WPES, Saginaw, Mich.	KGJX, Pasadena, Calif.		
KGHM, Reno, Nev.		KCZR, Salem, Ore.	WPDU, Pittsburg, Pa.		
WFO, Swarthmore, Pa.			WPGF, Providence, R.I.		
WRDQ, Toledo, Ohio		123.45	2,430 ()	WPSV, Boston, Mass.	
121.65	2,466 ()	WPDJ, Columbus, Ohio		KGZY, San Bernardino, Calif.	
WPGA, Bay City, Mich.		WPDJ, Dayton, Ohio	WPEH, Somerville, Mass.	KGZQ, Waco, Texas	
KGZO, Cedar Rapids, Iowa		WPFK, Hasensack, N.J.			
WPGK, Cranston, R.I.		KGPB, Minneapolis, Minn.	175.85	1,706 ()	
KGPN, Davenport, Iowa		WPEK, New Orleans, La.	WKDU, Cincinnati, Ohio		
KGZG, Des Moines, Iowa		KGZJ, Phoenix, Ariz.	WPET, Lexington, Ky.		
WPDF, Flint, Mich.		WPGI, Portsmouth, Ohio	KGPC, St. Louis, Mo.		
WPEC, Memphis, Tenn.		WPGS, St. Paul, Minn.			
KGPI, Omaha, Nebr.		WPGE, Shreveport, La.			
WPFV, Pawtucket, R.I.		123.80	2,422 ()	178.36	1,682 ()
WFGB, Port Huron, Mich.		WMJ, Buffalo, N.Y.		KGHO, Des Moines, Iowa	
KGPK, Sioux City, Iowa		KGPE, Kansas City, Mo.	WPGG, Findlay, Ohio		
WPEM, Woonsocket, R.I.		WPFU, Portland, Maine			
122.05	2,458 ()	KGZC, Topeka, Kans.	179.21	1,674 ()	
WPDQ, 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		KGZV, Albuquerque, N.M.	WRDS, East Lansing, Mich.		
KGZJ, Wichita Falls, Texas		WPDY, Atlanta, Ga.	WMP, Framingham, Mass.		
122.40	2,450 ()	KGPS, Bakersfield, Calif.	WPEW, Northampton, Mass.		
WPEE, 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.		
KGQO, Honolulu, Hawaii		KGZA, Fresno, Calif.	WPGC, Schenectady, N.Y.		
WPDK, Milwaukee, Wis.		WRDR, Grosse Point, Mich.	KGZE, San Antonio, Texas		
WPEC, New York, N.Y.		WMO, Highland Park, Mich.			
KGPH, Oklahoma City, Okla.		WPGM, Lagrange, Ga.	184.05	1,630 ()	
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.		

BE A BOOSTER FOR THE CLUB

AIRCRAFT STATIONS

This group of stations is used to relay messages to and from airplanes, such as the location of the plane, flying conditions, etc. They come on the air suddenly, deliver their message and go right off again. This list contains only the land stations, but the planes can be heard on the same wavelengths. When you tune in one, leave your dials set and others will no doubt be heard.

Frequency Index in Meters. Underlined frequencies are the ones normally used.

"A"—95.31, 94.86, 94.56, 94.27, 90.29, 58.67, 53.84, 53.73, 53.63, 52.98.

"B"—103.23, 97.63, 97.15, 60.39, 60.14, 54.45, 54.15, 52.89, 52.7.

"C"—95.92, 92.81, 92.52, 87.02, 86.77, 61.01, 53.55, 53.45, 53.26.

"D"—105.12, 99.83, 55.79.

"E"—129.53, 127.33, 86.52, 63.29, 45.87, 45.8, 45.23, 37.44.

"F"—102.67, 101.84, 100.47, 72.77, 54.07.

"G"—175.64, 104.54, 97.42, 55.5, 53.7, 46.5, 34.44, 28.35.

"H"—203.38, 45.35.

GROUP "A"

Bakersfield, Calif. **KQX**
 Boise, Idaho **KRA**
 Burbank, Calif. **KEU**
 Cheyenne, Wyo. **KOE**
 Cleveland, Ohio **WNAK**
 Chicago, Ill. **WUGG**
 Des Moines, Iowa **KQM**
 Elko, Nevada **KKO**
 Fort Worth, Texas **KGUI**
 Fresno, Calif. **KGT**
 Iowa City, Iowa **KQQ**
 Kansas City, Mo. **KNAS**
 Kylertown, Pa. **WNAW**
 Lincoln, Neb. **KRF**
 Medford, Ore. **KGE**
 Moline, Ill. **WNAU**
 Newark, N. J. **WNAO**
 North Platte, Nebr. **KMR**
 Oakland, Calif. **KFO**
 Oklahoma City, Okla. **KNAV**
 Omaha, Neb. **KMP**
 Pasco, Wash. **KRD**
 Ponca City, Okla. **KGUZ**
 Portland, Ore. **KVO**
 Redding, Calif. **KTU**
 Rock Springs, Wyo. **KQC**
 Sacramento, Calif. **KFM**
 Salt Lake City, Utah. **KOD**
 San Diego, Calif. **KGOC**
 Seattle, Wash. **KZJ**
 Spokane, Wash. **KGZT**
 Toledo, Ohio **WNAO**
 Tulsa, Okla. **KNAU**
 Wichita, Kansas **KGTE**

GROUP "B"

Amarillo, Texas **KSV**
 Albuquerque, N. M. **KSX**
 Burbank, Calif. **KSI**
 Butte, Mont. **KGTY**
 Camden, N. J. **WAEE**
 Columbus, Ohio **WHG**
 Cresson, Pa. **WAEG**
 Cheyenne, Wyo. **KGTT**
 Chicago, Ill. **WAEO**
 Denver, Colo. **KGSS**
 Goodland, Kansas **KG SJ**

Indianapolis, Ind. **WHM**
 Kansas City, Mo. **KST**
 Kingman, Ariz. **KGTL**
 Las Vegas, Nev. **KG TJ**
 Harrisburg, Pa. **WAED**
 Newark, N. J. **WAEF**
 Oklahoma City, Okla. **KGSC**
 Pittsburgh, Pa. **WAEC**
 Pocatello, Idaho **KGTX**
 Pueblo, Colo. **KGSR**
 Robertson, Mo. **KGTR**
 Salina, Kansas **KGSM**
 Salt Lake City, Utah. **KGTH**
 San Bruno, Calif. **KGSB**
 Springfield, Mo. **KGTO**
 Tulsa, Okla. **KSY**
 Wichita, Kansas **KGTD**
 Winslow, Ariz. **KGTA**

GROUP "C"

Albany, N. Y. **WSDM**
 Abilene, Texas **KGUL**
 Atlanta, Ga. **WQDP**
 Beaumont, Texas **KCTV**
 Berea, Ohio **WSDO**
 Big Springs, Texas **KGUG**
 Birmingham, Ala. **WDSE**
 Boston, Mass. **WSDD**
 Brownsville, Texas **KGUE**
 Buffalo, N. Y. **WSDO**
 Burbank, Calif. **KGUR**
 Chicago, Ill. **WSDG**
 Cincinnati, Ohio **WSDI**
 Columbus, Ohio **WSDP**
 Detroit, Mich. **WAEI**
 Douglass, Ariz. **KGUN**
 Elmira, N. Y. **WAEO**
 El Paso, Texas **KGUA**
 Evansville, Ind. **WAEN**
 Fort Worth, Texas **KGTF**
 Glendale, Calif. **KGUR**
 Houston, Texas **KGUB**
 Indianapolis, Ind. **WSDZ**
 Indio, Calif. **KGUQ**
 Jackson, Miss. **WSDB**
 Lake Charles, La. **KG TU**
 Little Rock, Ark. **KG UU**
 Louisville, Ky. **WSD F**

Memphis, Tenn. **WSDK**
 Murfreesboro, Tenn. **WSDH**
 Mobile, Ala. **WA EK**
 Newark, N. J. **WSDC**
 New Orleans, La. **WQDO**
 Phoenix, Ariz. **KGUP**
 Robertson, Mo. **KGUT**
 San Antonio, Texas **KGUD**
 San Diego, Calif. **KGQZ**
 Shreveport, La. **KGUK**
 Springfield, Ill. **WAEI**
 Texarkana, Ark. **KG TB**
 Tucson, Ariz. **KGUO**
 Waco, Texas **KGUW**
 Portables .. **WEAP & KGSH**
 Portable **WME R**

GROUP "D"

Billings, Mont. **KGSK**
 Bismark, N. D. **KGTP**
 Chicago, Ill. **WSDS**
 Fargo, N. D. **KNFB**
 Helena, Mont. **KG SW**
 Madison, Wis. **WSDR**
 Milwaukee, Wis. **WAEH**
 Missoula, Mont. **KG SY**
 Pembina, N. D. **KNWC**
 Spokane, Wash. **KG SX**
 St. Paul, Minn. **KNWA**

GROUP "E"

Blythe, Calif. **KGUS**

GROUP "F"

Atlanta, Ga. **WEEA**
 Baltimore, Md. **WEEB**
 Charleston, S. C. **WEEC**
 Greensboro, S. C. **WEEG**
 Jacksonville, Fla. **WEEJ**
 Linden, N. J. **WEEN**
 McRae, Ga. **WEEH**
 Miami, Fla. **WEE M**
 Orlando, Fla. **WEE O**
 Richmond, Va. **WEE R**
 Spartanburg, S. C. **WEE F**
 Washington, D. C. **WEE K**

GROUP "G"

Brownsville, Texas **KGJW**
 Fairbanks, Alaska **KFIM**
 Miami, Fla. **WKDL**
 San Juan, P. R. **WMDU**

GROUP "H"

Suffield, Ohio **WMEP**
 Portable **WMEW**