

INSIDE FACTS

usually are interesting and valuable especially in communication type receivers. Component parts of high quality, rigidly tested before assembly, comprising workmanship which always invites inspection, result in a product of high merit. The RME-69 Single Signal Super Receiver is fully described in bulletin 69 giving you inside facts.

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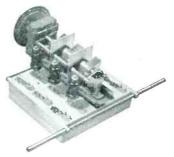
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NATIONAL COMPANY, INC., MALDEN, MASS.

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Model 4T AMPLIVOX NOISE BUCKER

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We can supply you with any of the following receivers, the Hallicrafter Sky Buddy, Sky Chief, Commercial Skyrider, and the Super Skyrider; any of the RME-69 models; National NC100, NC100X, HRO, HRO Jr., with or without crystal; Hammarlund "Super-Pro." These receivers are the choice of critical short wave listeners. On request we can Air Test your receiver before shipment, to be sure it is in perfect condition when shipped. We can help you select a receiver for your needs. Write to us for information, prices, and shipping arrangements.

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for calling on us when they need our services to RECONDITION their radio receivers for GOOD RECEPTION. We solicit business from MEMBERS of the I. S. W. C. and their friends, who live in and up to 25 miles from NEW YORK CITY, to PAT-RONIZE our RADIO SERVICE LABORATORY, completely equipped to REPAIR, and REALIGN for best operation as to SENSITIVITY, and FIDELITY, all makes and models of BROADCAST, ALL-WAVE and SHORT-WAVE RECEIVERS. All work is GUARANTEED. A POSTCARD, LETTER or PHONE CALL will bring one of our EXPERTS TO YOUR HOME. Laboratory Phone Dickens 2-2794.

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

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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.

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INTERNATIONAL SHORT WAVE CLUB, East Liverpool, Ohio

THE SPIRIT OF PROGRESS IS CO-OPERATION



Greetings, Friends, and thanks very much for the many letters and expressions of support received during the past month. As long as this spirit prevails, the future of this organization is assured.

To start this edition off, we will first of all tell you who is who in the group picture. In the upper left-hand corner we have Mr. Clive Peterson of Philipsburg, Island of St. Martin, West Indies. Mr. Peterson is an earnest worker for the club. Next we have Mr. John Hager of Jackson

Heights, New York. Mr. Hager is a long standing member of the club. In the large picture in the center is Mr. S. W. Parr of London, England. Note his HAC certificate and his ISWC membership certificate. The panel job is that of Mr. Robert O. Lane of Cinicinnati, Ohio. He has a receiver, a phonograph recorder and mike all fixed up there. The bottom left-hand photo shows member F. M. Murphy, 615 W. Franklin Street, Palestine, Illinois, a bed-fast member of the club. Mr. Murphy is a well-known DXer. He has been bed-fast for a number of years. Note his many verifications, also his I.S.W.C. membership certificate. The last photo is that of the den of W. Warner of Exeter, Devon, England, another wellknown DXer.

The following people would like to receive letters from other short wave listeners:

Thadeaus Grabek, 1921 Welch Avenue, Niagara Falls, New York. Jacob Zimpelman, R. R. 4., Wabash, Indiana.

Joseph Rudolph, 1403 Farnam Street, La Crosse, Wisconsin.

W. F. Herzog, Box 544, Center Moriches, New York (Foreign).

The contest for memberships is rolling right along. Most everyone knows that we are giving a brand new 1937 model Hallicrafter Sky-Chief Receiver to the person that sends in the most memberships before the first of May. There is also a slightly used National SW5 receiver and many other prizes. Everyone sending in five or more memberships will get a prize. The closing date is May first for North America, and then it is graduated so that members in foreign lands have a fair chance, and the closing date for Australia and Africa is May 31st. The leaders on January 20th were: L. E. Hansen, Durban, Africa,-8; Arthur Richards, Hagerstown, Maryland-7; J. O. Girouard, Veillardville, Canada-6; C. G. Hurtado, Curacao, West Indies-6; Jorge Julia, Santurce, Puerto Rico-6; J. Lippincott, Tufts College, Mass.-4; J. G. Van Gendt, Aruba, W. I.-4; Mario Bruscia, Brooklyn-3; F. L. Pope, Harrow, England-3; H. J. R. Ross, Syracuse, N. Y.-3 and R. J. Starr, Briercrest, Canada-3. The best way to get members is to ask your local dealer for a list of people who have bought all-wave sets recently. Then call on them, tune a few stations for them and show them how they can get better results by subscribing to this magazine.

We regret to announce that the news about a special broadcast from 2RO3. Rome, Italy, which took place January 27th, from 6:30 to 7:30 P.M., E.S.T., failed to arrive in time to be published in our January issue. This program was arranged by Arthur E. Bear and we wish to thank him and the station managers for the program.

We also regret to announce that the father of member Glenn Watt of Chanute, Kansas, died recently. Club-member Chester G. Dalzell, father of club-member Eugene W. Dalzell also passed away last month. The postoffice also informs us that member Charles M. Parrot of Swastika, Ontario, Canada, died recently. Mr. Parrot had been a member for many years.

H. B. Washburn of Charlotte, North Carolina and Frank B. Shuler of Hamilton, Ohio, each sent in five-year renewals last month, indicating their faith in the future of the organization. Mr. Shuler just finished up

a five year numbership and wrote "My last renewal for five years was not a gamble, so why should this one be." Our thanks.

The veries of Miss Hofmaster of Sandusky, Ohio, were on display in the windows of the Erie Norge Sales Company last month. Miss Hofmaster has 32 countries verified. And Tony Fuentes of HJ1ABE is now the proud father of a new boy, his first. Tony says the new son will carry on the work of HJ1ABE. Congratulations, Tony. And, we thank L. E. Hansen of Durban, for a very splendid book on Africa, too.

Members will, without a doubt, notice that our station list has been changed completely. In looking around we discovered that this was the only magazine in the U.S.A. that was giving any attention to telephone stations. These stations nearly all have "choppers" installed now and when they are on the air, which is very irregular, they cannot be understood. So, we have made an hourly guide out of the broadcast list, making it much easier to read and understand, and have moved the telephones to a separate list. Should the telephone list not appear in full, it means simply that the remaining stations will be listed the following month. We shall continue to give news on these telephone stations, even if we are just about the only publication that gives them any space.

CHAPTER NEWS

The London Chapter is now in their permanent club rooms at 80 Theobalds Road, Holburn WC1, in the heart of London. Receivers and a transmitter will soon be installed for use by members, as will also be a very complete library. They will meet every Friday at 7:30 P.M. and will also be open all day on Saturday and Sunday. The Friday night meetings will provide many interesting demonstrations and topics of great value. Don't forget, Friday at 7:30 P.M.

The Brighton, England, Chapter opened last month with a meeting at Brighton Technical College. We give special thanks to Dr. W. Mansergh Varley, M. A., Principal of the College, to the "Brighton and Hove Herald" and to John C. Bennett of 205 Braeside Avenue, Brighton 6. For further details write to Mr. Bennett.

The Guernsey Chapter now meets weekly at 5 Well Road, St. Peters Port. For details write to F. S. Le Pavoux, 8 Upper Canichers, St. Peters Port, Guernsey Islands.

The New York Chapter meets at Stuyvesant High School, Last 15th Street and Second Avenue, on the first and third Fridays of the month at 8:00 P. M. For details write to 2610 Glenwood Road, Brooklyn. Features planned for this season are: Television demonstrations, visit to a radio tube factory, 5 meters broadcast tests, photoelectric cells, visit to a large radio receiver factory. Code instructions are given at 7:30 P.M. each meeting night. Receivers are demonstrated and many other interesting topics are brought up each meeting. Anyone not now attending meetings should arrange to do so, or they will miss many interesting things.

FOR SALE—Scott Deluxe, large speaker, Tasman console cabinet. \$75.00. Glenn Watt, Chanute, Kansas.

SHORT WAVE NEWS

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

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

AUSTRALIA

Our list shows the following broadcast stations: VK2ME, Sydney, on 9.59 mc.; VK3LR, Melbourne, on 9.58 mc.; VK3ME, Melbourne, on 9.51.; VPD2, Suva, Fiji Islands, on 9.54 mc.; FO8AA, Papeete, Tahiti, on 7.10 mc.; VK8SC, Port Hedland, on 6.96 mc. and ZMBJ on the ship "Awatea" on 8.84 mc.

VPD2 is reported on a new frequency by two members. This is 8.70 or 8.71 mc., they are heard between 5:30 and 7:00 A. M. (Jessen, Oregon, and Walcott, Calif.) Reported on 9.54 mc. in late report, (Solito, Pa.) So we do not know where to list them. Please try both 9.54 and 8.70 mc.

FO8AA, Radio Oceanie, Tahiti, is still on 7.10 mc., but to get this one you must set dials on the frequency and then wait till the code stations happen to be silent for a few moments. A powerful Mexican amateur on voice is on this station most of the time, too. The time is Tuesdays and Fridays 11:00 P.M. to midnight, (Walcott, Riggle, Field, Beck, Bruscia, Scala, Poole, and Sparks.)

VK9MI, on the ship "Kanimbla" is back on the air broadcasting programs. Heard on 6.01 or 6.02 mc. around 7:00 A.M., (Jessen, Oregon; Kindell, New Zealand). Also heard on 11.70 mc. one Sunday 7:00 to 7:30 A.M., (Karpen, Pa.) Send reports to 94 William Street, Melbourne C2, Australia. They broadcast only when at sea. They also telephone New Zealand and Australia.

ZMBJ, on the ship "Awatea" is on 8.84 mc. broadcasting when at sea. They usually phone from 11:00 P.M. up to 6:00 A.M., but the broadcasts take place usually around 1:00 to 2:30 A.M. The transmitter has 400 watts power and L. H. Jones is the operator and they verify. Slogan, "The Ears and Voice of Tasmania." (Portmann, Vandecar, Walcott, Sparks, Solito, Kindell.)

VJI, "The voice of the Flying Doctor," Box 103, Cloncurry, Queensland, Australia, verifies and says they use voice at times on 14.02 mc., 8.63 mc., 6.96 mc., 7.01 mc. ann 2.05 mc., (Palmer, Ohio). This station is so weak that few, even in Australia, report it.

ZLT, Wellington, New Zealand, is heard phoning Australia between 11:00 P.M. and 6:00 A.M. on 11.05 mc. Australia has telephone stations at Sydney operating on 10.52 mc. and 9.76 mc. They are used to phone Java, New Zealand and England. When testing they use the call VK2ME. When

working Java they use VLJ. When working England they use VLK. When working New Zealand the call VLZ is used.

VK2ME on 10.52 mc. sent cricket matches to England, 3:30 to 4:30 A. M. last month, whenever the matches were played, (Studholme, England).

VK8SC, Port Hedland, West Australia, veries say they have 200 watts power and that the station is operated by Australian Inlands Mission to broadcast medical services for a flying doctor. Heard every Sunday between 4:30 and 5:15 A.M. (Moots, Mo.)

AFRICA

CR7AA, Lourenco Marques, Portuguese Africa, is testing a new 200 wait transmitter on 19.68 meters or 15.24 mc. and 25.60 meters or 11.718 mc. week-days, 12:45 to 3:15 P.M. and Sundays 8:00 to 10:30 A.M., (Hansen, Durban, Africa).

ZNB at Mafaking, is a new transmitter operating on 50.84 meters or 5.90 mc. between 2:00 and 3:00 A.M., 9:00 and 10:00 A.M. and 1:00 and 2:00 P.M. Send reports to Government Engineer, Mafeking, Bechuanaland, British Protectorate, South Africa. It has 250 watts power. A portable station ZNC is on almost the same frequency. Another one is on 7.20 mc., and the call is ZN1A, (Hansen, Durban, Natal).

EA9AH, Tetuan, Spanish Morocco, verifies and say they have 200 watts power, on 7.00 mc. daily at 3:00 P.M. with war news of General Franco's Army and also on 14.00 mc. Mondays, Wednesdays and Fridays. The address is Estacion EA9AH, Al Servicio de las Fuerzas Lilitaries de Marruecos, Spanish Morocco, (Bradley, Md.) Another says on 14.00 mc. at 7:00 and 9:00 P.M. and on 7.00 mc. at 2:15 P.M. (Legge, Pa.) Heard on 14.00 to 14.07 mc. 2:15 P.M. to 5:00 P.M. (Lippincott, Mass.; Stempel, conn.; Child, Pa.; Strick, Mass.) Heard on 14,00, 7:00 and 9:00 P.M. (Scala, N. Y.) On 7:00 mc. at 2:15 P.M. (Scala). At 2:20 P. M. (Studholme, England). On 7.08 or .09 mc., Address Box 124, (Salazar, N.Y.) On 7.05, 6:00 to 7:00 P.M. one Wednesday, (Karpen, Pa.) On 6.61 mc., 9:00 to 10:00 A.M. and 4:00 to 4:45 P.M. and verified, (Arickx, Belgium). This station must be moving around and using an irregular schedule, (Editor).

EAJ43. Santa Cruz de Tenerife, Canary Islands, on 10.37 mc. broadcasts daily 2:15 to 3:50 P.M. and 6:00 to 8:00 P.M. according to verifications, (Darby, Oxrieder, Arickx, Solito). This is the best African station on the air, so far as tuning is concerned. Heard as late as 9:36 P.M. (Solito). Address is Box 225.

EAJ, San Sabastian, Canary Islands, on 7.01 mc. is heard daily 5.00 and 10:09 P.M. and Sundays 6:00 and 7:00 P.M. sending news and music, (Flagg, Mass.)

Melilla, Spanish Morocco, on 6.52 mc. broadcasts music and talks 2:30 to 5:30 P.M. often, (Studholme, England).

Poste Prive Experimental at Tuis, North Africa, is a new station on 48.72 meters or 6.157 mc., heard daily using French, 12:30 to 2:30 P.M. (Orchard, England).

FIQA, Tananarive, Madagascar, relays FIU between 7:00 A.M. and 1:00

P.M., but they seem to roam between 5.98 and 6.02 mc., and it is seldom heard by anyone.

Readers will also find stations CR6AA, Lobito Angola on 9.66 mc.; ZEB, Buowaya, Rhodesia, on 6.14 mc.; ZTJ, Johannesburg, on 6.09 mc.; VQ7LO, Mairobi, Kenya, on 6.08 mc., and ZEC, Salisbury, Rhodesia, shown in our station list. African papers still shw CR6AA on 7.17 mc., not 9.66, but some members say it is on 9.66.

African phones. SUX, Cairo, Egypt, on 7.98 mc. phones England around 4:00 to 6:00 P.M. SUV, same city, on 10:05 mc. phones around 1:00 to 5:00 P.M. SUZ, same city, on 13.83 mc. phones around 11:00 A.M. to 1:00 P.M. VQG, Nairibo, Kenya, on 19.63 mc. phones London between 7:00 and 8:30 A.M. daily. Address is Box 777. OPL, Leopoldsville, Belgian Congo, on 20.04 mc. phones Belgium 10:00 A.M. to 3:00 P.M. OPM, same city. on 10.14 mc. phones between midnight and 2:00 A.M. and 2:00 and 3:00 P.M. ZSS, Capetown, on 18.89 mc. phones England between 6:30 A.M. and 1:00 P.M. CNR, Rabat, Morocco, on 12.82 mc. phones Paris between 3:00 and 4:00 P.M. irreguarly. IUG, Addis Ababa, Ethiopia, on 15.45 mc. is phoning Rome, Italy, between 8:15 A.M. and 11:30 A.M. almost every day. IUC, same city, on 11.95 mc. is heard between 11:00 P.M. and 2:00 A.M. next day. IDU, Asmara, Eritea, on 13.38 mc., phones Rome around 11:00 A.M. to 2:00 P.M. Alger, Algeria, on 12.12 mc, phones Paris around 10:30 A.M. to 1:00 P.M. The same station on 8.96 mc. phones Paris between 1:00 The address is 137 Rue de Constantine, Alger. and 5:00 A.M. FZE9. Station Intercoloniale de T. S. F. de Djibouti, Cote Francaise des Aomalis, French Somaliland on 7.567 mc., phones Paris at night, and FZE8 on 17.28 mc. phones Paris between 5:00 A.M. and 2:00 P.M. Verifications from IUD, IUG and IDU all come from Radio S. Paolo, Roma, Italy. We thank the following for their reports on African phones: (Studholme, Portmann, Bruscia, Solito, Walcott, Riggle. Walsott and Fellows). SUX and SUV sent the special program from Palestine on December 30th from 2:45 to 4:05 P.M. which was broadcast over the world, (Flagg and Child).

ASIA

Our list shows HSPJ, Bangkok, Siam, on 19.02 mc. and 9.35 mc.; VPB, Colombo, Ceylon, on 6.08 mc.; VUB, Bombay, India, on 9.57 mc.; Calcutta, India, on 6.11 mc.; Saigon, Indo-China, on 11.73 mc.; ZBW2, Hong Kong, on 6.09 mc.; ZBW3 on 9.52 mc.; XGOX, Nanking, China, on 6.82 mc.; JZJ, Tokyo, Japan, on 11:80 mc.; JZI, Tokio, on 9.53 mc.; JZK on 15.16 mc.; JVN on 10.66 mc.; YDB, Bandoeng, Java, on 9.65 mc.; PLP, Bandoeng, on 11.00 mc.; PMN, Bandoeng, on 10.28 mc.; YDC, Bandoeng, on 15.15 mc.; PMH, Bandoeng, on 6.72 mc.; PMY, Bandoeng, on 5.15 mc.; RV15. Khabarovsk, U.S.S.R. on 4.25 mc.; ZHJ, Penang, Malay States, on 6.08 mc.; ZHI, Singapore, Malay States, on 6.01 mc.; CQN, Macao, Portuguese China, on 9.57 mc. and ZGE, Kuala Lampur, Malay States on 6.15 mc.

India. New 10,000 watt stations are planned now for Bombay, Delhi, Madras and Calcutta, India. These stations will probably not be heard for a year, however. All India Radio, Ltd., has a transmitter now at Delhi operating between 50 and 200 meters, but we have no details. Norman

Baynes of Bangalore, India, sends us a letter he received from J. Pushparay, Director of station VU7MC, Wireless Station, Palace. Mysore, India, and it says they are on 49.03 meters or 6.085 mc. from 7:00 to 8:00 A.M., E.S.T. every Wednesday. A station VU2LZ at Rangoon, Burma, on 42.85 meters or 7.00 mc. was heard phoning the ship "Khandalla" from 7:00 to 8:00 A.M. once, (Cooke, India). VWY, Poona, India, on 8.98 mc. phones England between 6:00 and 10:00 A.M. VWY2 on 17.48 mc. phones England around 6:30 to 8:30 A.M. VVS a new phone at Mingaladon, near Rangoon, is on 23.31 meters or 12.87 mc. using inverted speech except at close down and phones between 5:00 and 6:30 A.M., (Keenan, Australia).

VPB, Colombo, Ceylon, is on 6.065 mc. and not 6.16 mc. according to verification received, (Orchard, England). Listen around 7:00 A.M. for this one.

HS8PJ, Siam, is on 19.02 mc. Mondays 8:00 to 10:00 A.M. and on 9.35 mc. Thursdays 8:00 to 10:00 A.M. HSP, a phone on 17.74 mc. works Berlin mornings, and HSG2 on 15.53 mc. test with JVE, Japan, Sundays at 11:00 P.M. and Fridays at 4:00 A.M. according to letter, (Walcott, Calif). Heard one Sunday 6:00 to 7:00 A.M. (Karpen, Pa.)

ZBW, Hong Kong, Asia, sends us a letter saying they are taking the transmitter on 8.75 meters off the air for good and will have the following frequencies, using a new, more powerful transmitter. ZBW2 on 49.26 meters, 6.09 mc. ZBW3 on 31.49 meters, 9.525 mc. ZBW4 on 19.75 meters, 15.19 mc. and ZBW5 on 16.90 mc. and 17.755 mc. The present schedule is as follows: Daily except Saturdays 11:30 P.M. to 1:15 A.M., Saturdays 9:00 P.M. to 1:30 A.M.; Tuesdays, Wednesdays and Fridays 3:00 A.M. to 10:00 A.M.; Mondays and Thursdays 4:00 to 10:00 A.M.; Saturdays 3:00 to 11:00 A.M. and Sundays 3:00 to 9:30 A.M. Stations ZBW2 and ZBW3 will be used in winter and ZBW4 and ZBW5 in summer. ZBW3 is now heard quite often in America between 5:00 and 10:00 A.M., while ZBW2 was reported by one member.

A verification from Establissement Boy-Landry, 211-213 D, Rue Catinat, Saigon, Indo-China, says the transmitter heard on 11.73 mc. is not F3ICD, but one made up from old Philco receiver parts. They have no call, and no license as yet. (Walcott, Calif.) This station was heard between 11.71 and 11.73 mc. between 5:30 and 9:30 A.M. for some time. Heard three times last month at 10:00 A.M., (Gallagher, Calif.) The phone FZS, Saigon, on 11.99 mc. was heard phoning Paris, (FTA on 11.94 mc.), one Saturday 6:00 to 7:00 A.M. (Karpen, Pa.) A station at Prom-Penh, French Indo-China is on 42.20 meters or 7.11 mc. daily 7:30 to 8:30 A.M. (Cooke, India.)

XGOX, Nanking, China, on 6.82 mc. broadcasts weekdays 5:30 to 9:40 A.M. and Sundays 7:00 to 9:00 A.M. according to schedule received, (Dick, N. Y.) Replys are signed by P. F. Woo, Central Broadcasting Administration. The power is 500 watts, (Stark, Mo., Sparks, Calif.)

Chinese Phones. XGW on 10.42 mc., XOJ on 15.79 mc., XGN on 17.64 mc. and XGU on 9.28 mc. are heard often. Shanghai phones California week-days, using stations XGW on 10.42 mc., XOU on 8.04 mc., XTD on 5.74 mc. (or XGV or XGG) or 7.41 mc., working KWY 9:30 A. M. to noon (Walcott, Calif.) XTD, Shanghai, on 5.74 mc. or XTC on 9.285 mc. phones

XTV, Hankow on 9.50 mc. or XTZ on 5.48 mc. daily 8:00 to 10:00 A.M. now, (Walcott, Calif.) XTV on 9.49 mc. and Shanghai on 9.285 mc. heard 6:30 to 7:00 A.M. and again 7:17 to 7:45 A.M. once, (Solito, Pa.) Hankow on 5.49 mc. daily at 6:55 P.M. (evenings). Shanghai also calls KWY on 7.41 mc. daily 7:15 to 8:30 A.M. (Sparks, Calif.) A station XQAK, location unknown heard on 6.48 mc. at midnight once and at 2:00 A.M. another time broadcasting, (Gallagher, Calif.) Was on 9.48 last month according to his report (Editor). WQV in New York called XGN or XGM at 6:50 P.M. once (Riggle, Ohio).

Japan is broadcasting daily now for America, from 4:00 to 5:00 P.M. over JZJ on 11.80 mc. and JVN on 10.66 mc. They are also broadcasting for European listeners over JZI on 9.53 mc. and JVP on 7.51 mc. from 2:00 to 3:30 P.M. These may be changed soon, however. Send reports to Overseas Section, Broadcasting Corp., Atagoyama, Shiba-ku, Tokyo, Japan, (Orchard, Verbrughe, Jessen, Walcott, Gallagher, Strick, Studholme, Atherton, Shaneyfelt, Solito, Stockbridge, Karpen, Herzog. Flagg, Stark, Stempel, Lively, Legge, Hersowitz). Station JZL on 17.78 mc. heard broadcasting 6:30 to 7:30 P.M. one Thursday (Karpen, Pa.)

Japanese phones. JVL on 11.66 mc. heard 6:00 to 7:00 A.M. JVT on 6.75 mc. heard 2:15 to 3:15 A.M. and 5:00 to 7:00 A.M. JVO on 10.37 mc. heard 3:00 to 4:00 A.M. JVD on 15.86 mc. almost all day and night phoning JVM on 10.74 mc. phones California 12:30 A.M. JVH on 14.60 mc. has been heard broadcasting and telephoning 5:30 to 11:30 A.M. and at 6:30 P.M. JZG on 6.33 mc. relayed JOAK once around 3:00 A.M. (Jessen, Oregon).

TDE, Shinkio, Manchukuo, on 10.065 mc. phones Japan between 11:00 P.M. and 4:00 A.M. next day. Also at 7:00 A.M. once, (Solito, Pa.) Station TDD, same city, on 5.83 mc., was heard between 6:30 A.M. and 9:30 A.M. (Walcott, Calif.) Station JDY, Dairen, Kuangtung, Manchukuo, works JVN and JVD on 9.925 mc. Heard 2:45 to 3:30 A.M. and once at 8:45 P.M. and once at 10:00 P.M. (Walcott, Calif.)

JFZC, on the ship "Chichibu Maru" was heard phoning KWU around 10:00 P.M. on 6.65 mc. (Grey, Ill.) At 9:00 P.M. (Gallagher, Calif.)

JIB, Taiwan, Japan, on 10.53 mc. telephones between 11:00 P.M. and 5:00 A.M. JIC, same city, on 5.89 mc. phones daily now that winter is here from 6:00 to 9:00 A.M.

Java. Stations YDB, on 9.65 mc., PLP on 11.00 mc., PMN on 10.28 mc. and YDC on 15.15 mc. broadcast the same program from 5:30 to 10:00 A.M. daily and some days till 11:00 A.M. PMH, Bandoeng, on 6.72 mc. also broadcasts between 5:30 and 9:30 A.M. YDA, Tandjongpriok, and a station on 4.87 mc. heard daily 6:00 to 10:30 P.M. on the Pacific coast, (Walcott, Calif.) PLP on 11.00 mc. also heard daily except Saturday 6:00 to 7:00 P.M. (Miller, Ky.) The phone PLV on 9.135 mc. heard sending music one Wednesday 6:45 to 7:30 A.M. and phoned YBG another time 6:35 to 7:06 A.M. (Solito, Pa.)

Java Phones. PMA on 19.35 mc. phones Holland between 5:30 and 11:00 A.M. and sometimes sends music. PLE on 18.83 mc. and phones Holland between 5:30 and 11:00 A.M. and phones the U.S.A. and Japan

between 6:50 and 8:00 P.M. PLV on 9.42 mc. is heard between 9:30 and 11:00 A.M. and 6:50 and 11:00 P.M. PMC on 18.135 mc. phones Holland between 5:50 to 6:15 A.M. YBA Menado, Celebes Islands is on 7.68 mc. phones PNI (8.775 mc.) between 5:50 and 6:10 A.M. (Walcott, Calif). YBG, Sumatra, on 10.40 mc. phones Bandoeng between 4:45 and 6:00 A.M. PMC was heard broadcasting music 9:00 to 10:17 P.M. once, (Child, Pa.) YBA, Menado, Celebes Islands, on 7.66 mc. phones PNI (8.55 mc.) and sent music once 5:00 to 6:00 A.M. (Karpen, Pa.) PNI once 7:30 to 7:48 A.M. (Solito, Pa.) YBG on 10.42 mc., not 10.40, heard 3:35 to 4:00 A.M. and 6:30 to 7:00 A.M. (Solito). YBA on 7:66 heard once 5:00 to 6:15 A.M.

Station KTP, Manila, P. I. on 8.12 mc. phones California daily except Sundays at 10:30 A.M. (Walcott, Sparks). Manila also has KAX on 19.98 mc. and KTO on 16.24 mc. quite active.

A letter from the Penang Wireless Society of 40 Park Road, Penang, says ZHJ on 6.08 mc. is on the air daily 12:40 to 14:40 G.M.T., which is 7:40 to 9:40 A. M., E.S.T. (Sparks, Calif.) This station is reported about twice a year.—Ed. Announces 49.3 meters, but on 49.7 (Cooke, India).

RV15, Khabarovsk, Siberia, after going to 5.72 mc. is back on 4.25 mc. again, although they were much better on 5.72 mc. They broadcast 1:00 A.M. to 10:00 A.M. (Balbi, Walcott and Gallagher). RWJ, Alma-ata on 12.18 mc. phones Moscow around 6:00 A.M. RFL Khabarovsk on 13.19 mc. phones around 9:00 A.M. ROU, Omsk on 14.79 mc. is heard around 6:00 A.M. phoning. RRR, Khabarovsk, on 15.95 mc. is heard between 5:00 and 8:00 A.M. phoning. RVU, Vladvostok, on 13.79 mc. phones around 6:00 A.M. RTZ, Irkutsk, on 14.79 mc. heard 11:00 P.M. to 1:00 A.M. and once on 12.88 mc. heard midnight to 2:00 A.M. (Karpen, Pa.) RVV on 10.35 mc. phoning 9:00 P.M. to 1:00 A.M. (Karpen, Pa.) RTZ is the call-sign used by a station at Naralria, near 7.00 mc. and 8.57 mc., as both were heard using it, one at 3:45 A.M., the other at 7:35 A.M. (Woods, England). John Keenan, Australia, sends us the following news: A station on 6.72 mc. (44.67 meters), one on 8.17 (36.72) and one on 8.28 mc. (36.32), broadcast special programs nearly every week-end from Moscow. One on 12.87 (23.30) relays RNE around 2:20 P.M. often. RAD on 6.83 (43.82) is heard at 8:00 A.M., one on 13.24 (22.66) at 8:00 A.M., one on 12.95 (23.17) at 9:00 A.M. RWG, Moscow, on 14.72 (20.38) and one on 7.36 (40.76) heard mornings. ROU is on 14.70, not 14.79 mc. (Lively, W. Va.) is on 14.79 and phones RKI 6:45 to 8:30 A.M. (Solito, Pa.) Beginning January 1st, RV15 presents English programs daily except the 6th, 12th, 18th, 24th, and 30th of the month from 4:00 A.M. to 5:00 A.M. A11 reports will be promptly answered. Address is Rowena Meyer, Editor, Station RV15 Khabarovsk (Hummerstein, Alberta). Heard one Tuesday night 8:30 to 9:00 P.M. (Flagg, Mass.) Most of these phones are not listed because we can not get definite information on them (Editor).

THE EUROPEANS

OER2, owned by Austrian Broadcasting Corp., Vienna, Austria, is now on 25.42 meters or 11.80 mc., broadcasting week-days 9:00 A.M. to 5:00 P.M. and Saturdays till 6:00 P.M., (Smith, England; Studholme, England;

Darby, Ireland, and Kindell, New Zealand). Actually on 11.78 mc., heard at 11:00 A.M. (Sparks, Calif.) On 11.78 actually, (Oxreider, Pa.) On 25:45 meters 2:00 to 3:00 P.M. and then on 49.41 meters (6.07 mc.) 4:00 to 5:00 P.M. (Gullberg, Sweden). On 11.83, verie says 11.80 (Boothroyd, England).

LKL, Jeloy, Norway, has been on 6.13 mc. since January 6th, broadcasting from 11:00 A.M. to 6:00 P.M. LKJ1 is still on 9.53 mc. from 5:00 to 8:00 A.M. (Studholme, England). Heard at 6:00 A.M. (Kindell, New Zealand). Heard daily till 9:10 A.M. (Thoreson, Alberta).

TFJ, Reykajavik, Iceland, on 12.24 mc. broadcasts Sundays 1:40 to 2:00 P.M. in English and 2:00 to 2:30 P.M. in German or Danish. This station also phones England and Denmark irregularly. Calls GBC 9:30 to 10:45 A.M. daily, and calls OXT which is supposed to be on 12.30 mc. at Copenhagen. (Walcott, Calif.)

OLR, Podebrady, Czechoslovakia. Podebrady is just outside of Praha, or as the English spell it, Prague. This station has been on the following waves at different times: 13.99 meters (21.45 mc.); 16.92 meters (17.73 mc.); 19.58 (15.82); 19.70 (15.23); 25.26 (11.87); 25.31 (11.84); 25.51 meters (11.76 mc.); 31.57 (9.50); 49.06 (6.11); 49.75 (6.03) and 49.92 meters (6.01 me.) No station should be allowed so many frequencies. You can never tell when or where you will hear this station. This station was heard last month on 5.98 mc. at 6:00 P.M., on 6.03 mc. 2:00 to 3:00 P.M. on 9.55 mc. 5:00 to 7:00 P.M. and on 11.87 mc. at 10:00 A.M. (Studholme, England). On 11.84 mc. 2:30 to 6:00 P.M. (Shaneyfelt, Indiana). On 49.75 meters, 31.41 meters and 25.34 meters (Woods, England). Heard on 6.01 and 6.03 mc., said was on 25.26 meters daytime and 49.92 evenings, (Flagg, Mass.) On 6.01 mc. or about 31.40 meters afternoons (Herzog, N. Y.) Stempel, Conn.; Pegge, England; O'Flynn, Ireland).

LZA, Sophia, Bulgaria, veries say they are on 20.04 meters, 14.97 mc. (Atherton, Vt.) But everyone agrees it is on about 14.87 mc. Heard in America between midnight and 3:00 A.M. (Vandecar and Stempel). For schedule see the list.

A new station called "Portuguese Catholic Radio Station" is heard on 50.17 meters or 5.98 mc. broadcasting programs between 2:00 and 4:45 P.M. (Orchard, Eng.; Studholme, Eng.) Started Thursdays and Sundays, now ou daily as late as 6:00 P.M. (Pegge, England). Heard at 5:00 P.M. (Boothroyd, England).

CSW, Lisbon, Portugal, is now broadcasting on about 11.04 mc. or 27.00 meters from 1:00 P.M. to about 5:00 or 6:00 P.M. Then they go up to 9.94 mc. and broadcast till about 9:00 P.M. Reports disagree on the actual frequency and on the time of the change, (Oxrieder, Pa.; Flagg, Mass.; Karpen, Pa.; Child, Pa.; Fuller, Quebec; Hersowitz, Md.; Stempel, Coun.: Darby, England; Thoreson, Alberta).

CT1AA, Lisbon, Portugal, moved between 9.664 and 9.77 mc. but say 9.65 mc. Broadcasts Tuesdays, Thursdays and Saturdays 4:00 to 7:00 P.M. (Oxrieder, P2.) On 9.68 mc. (Flagg, Mass.) On 9.67, (Thoreson, Alberta). Heard on 9.69 and also was on 12.12 mc. once from noon to 2:00 P.M. (Studholme, England). On 12.08 mc. at 1:55 P.M. once, (O'Flynn, Ireland).

SPW, Warsaw, Poland, on 13.63 mc. has changed schedule and now broadcast Mondays, Wednesdays and Fridays 12:30 to 1:30 P.M. Has 10 k.w. power, (Eder, Minn.; Oxrieder, Pa.; Atherton, Vt.)

France. The programs from Pontoise for February are: 15.25 mc.—TPA2—2:00 to 2:55 A.M. and 5:55 to 11:00 A.M. 11.90 mc.—TPA3—2:00 to 5:00 A.M. and 11:15 to 6:00 P.M. 11.71 mc.—TPA4—6:15 to 10:15 P.M. and 10:45 P.M. to 1:00 A.M.

French phones. A letter says TY1 is on 19.22 mc.; TY2 is on 13.76 mc., and TY4 is on 7.37 mc. (Beck, III.) Another letter says TY12 is on 4.185 mc. and works ships and Algeria Tuesdays and Thursdays 7:00 P.M., 9:00 P.M. and 12:00 P.M. and Wednesdays and Fridays 2:00 A.M. (Bradley, N. Y.) Station TYA on 12.22 mc. worked ships around 2:00 P.M. (Flagg, Mass.) Sent music once at 2:00 A.M. (Miller, Ky., and Child, Pa.) TYA2 on 9.04 mc. worked ships around 3:00 P.M. and CX, and TYE1 on 18.09 mc. are shown on verification. (Oxrieder, Pa.) TYE3 on 10.42 mc. phones New York daily now between 3:30 and 5:00 P.M. (Child, Pa.; Miller, Ky.) On 10.41, 3:30 to 7:00 P.M. (Herowitz, Md.) FTE on 18.25 mc. sent a special broadcast program to America January 17th, from 1:00 to 1:30 P.M. (Poole, Ohio).

Russia: The program schedule from the Soviet Republic is:

6.00 mc.-RV59-Daily 2:00 to 5:00 or 6:00 P.M.

9.60 mc.-RAN-Daily 7:00 to 8:00 P.M.

12.00 mc.—RNE—Sundays 6:00 to 7:00 A.M. and 10:00 to 11:00 A.M. Wednesdays 6:00 to 7:00 A.M.

RAN was reported as late as 8:20 P.M. (Eder, Maloney). RV59 was heard on 5.98 mc. at 10:00 A.M. (Gallagher). RKI, a phone on 7.50 mc. was heard broadcasting in French at 2:35 P.M. (Studholme, England). At 9:00 P.M. (Gullberg, Sweden).

Russian Phones. RNE, Moscow, on 12.00 mc. may be heard most any time of the day or night. RKI, Moscow, on 15.04 mc. is heard between 3:00 and 10:00 A.M. We list it on 15.09 mc. but it is on 15.04 mc. (Walcott, Calif.) RIM, Tashkent, on 15.25 mc. is heard 5:00 to 9:00 A.M. RIO, Bakou, on 10.17 mc. and RIR, Tiflis on 10.07 may be heard between 10:00 P.M. and 4:00 A.M. RKI on 7.51 mc. also phones daily now at 10:00 A.M. (Walcot, Cal.) RKI on 7.51 and RIM on 7.63 phone each other 9 to 10:30 P.M. (Sparks, Calif.) RKI on 7.51 sending music once 9:00 to 10:00 A.M. (Thoreson, Alberta). RIR on 10.08 mc. heard once 8:00 to 8:40 A.M. (Solito, Pa.) RIO on 10.17 mc. at 10:00 A.M. many times, (Gallagher). Stations on 6.72 and 5.98 mc. heard at 1:25 P.M. (Studholme, (England).

Spain. The war has opened many stations in Spain. A Spanish newspaper says that ECN1, Barcelona, is on 6.99 mc. (42.88 meters) regularly, noon to 7:00 P.M. using the slogan "C. N. T. F. A. I." PSU1 at Barcelona, is on 7.128 mc. (42.08) from 2:30 to 5:30 P.M. ECP2, "Radio P.O. U. M." is on 7.143 mc. (42.00 meters) between 1:00 and 3:30 A.M. (Espoy, Calif.) EAH, General Union Workers' Station at Valleras, near Madrid is on 31.65 meters or 9.48 mc. irregularly now, 4:00 to 5:00 P.M. EASR1

"Habla Marina," operated by the Loyalist fleet off Cartagena was heard 3:30 to 5:30 P.M. once. The address of CNTFIA was given as Via Layetant 32 y 34, Barcelona. PSU1, Barcelona, on 7.18 was heard 3:50 to 4:10 P.M. and said it was owned by United Socialist Party of Catalonia. Hotel Colon. SNU. Barcelona, on 7.00 mc. was heard at 2:00 P.M. EAP1, on 7.08 was heard at 5:00 P.M. Radio Sponsqua, San Sabastian ,on 7.22 mc. is heard daily at \$:00 A.M. in French, 8:15 A.M. in English, 1:30 P.M. in English and 1:45 P.M. in French. All this news is from J. M. R. Studholme of England. EDR4, San Sabastian, is heard moving around on 6.535 mc., 6.565 mc. and 6.583 mc. (Oxrieder, Pa.) Heard on 6.54 mc. and broadcasts 4:00 to 5:05 P.M. now, (Herowitz, Md.) EAJ1, Barcelona, on 41.70 meters or 7.194 mc. is heard daily 4:00 to 5:00 P.M. (Orchard, England). EDN-EHY, Madrid, on 10.07 mc. broadcasts daily now 3:30 to 5:30 P.M. (Solito, Pa.) EAQ. Madrid, on 9.68 mc. say their schedule is 5:15 to 9:30 P.M. daily and 1:30 P.M. to 9:30 P.M. Saturdays (Stark, Mo.) Starts daily at 3:30 P.M. (Solito, Pa.)

PHI on 11.73 mc. broadcasts 8:30 to 10:30 A.M. daily except Tuesdays and Wednesdays. PCJ, Holland, on 15.22 mc. broadcasts Sundays 7:30 to 8:30 A.M., Tuesdays 4:30 to 6:30 A.M. and Wednesdays 8:00 to 11:00 A.M. PCJ on 9.59 mc. broadcasts Sundays 2:00 to 3:00 P.M. and 7:00 to 8:00 P.M., Tuesdays 1:30 to 3:00 P.M. and Wednesdays 7:00 to 10:00 P.M.

PCJ will close down for repairs they say, (Herowitz, Md.) Moved Wednesday night programs to Thursdays. (Karpen, Pa.) We believe this is wrong. They announce the program as Thursday in Holland, which is still Wednesday in America. Thursday 0000 to 03000 G.M.T. is Wednesday 7:00 to 10:00 P.M., E.S.T. (Editor). PHI on 17.78 mc. and PCJ on 15.22 mc. relayed wedding ceremony of Princess at 4:30 A.M. January 7th, (Herowitz, Md.) PHI sent special to U.S. A., January 20th, 3:50 to 4:30 P.M. (Van Bergen, N. Y.)

Switzerland. HBH is on 16.22 meters, 18.48 mc., HBJ is on 20.64 meters, 15.54 mc. HBO is on 26.31 meters, 11.402 mc. HBL is on 31.27 meters, 9.595 mc. HBP is on 38.47 meters, 7.797 mc. HBL and HBP broadcast every Saturday from 5:30 to 6:15 P.M. and the first Monday of each month from 4:00 to 7:00 P.M. A station HBF is reported on 18.45 mc. A card says HBO is used Mondays 1:30 A.M., HBL and HBP the first Monday from 7:00 to 8:00 P.M., and HBF and HBH are commercial stations. HBL and HBP heard first Monday 8:15 to 8:45 P.M. HBL tested a new frequency of 9.345 mc. once at 8:30 to 9:00 P.M. and HBP on 7.80 was heard 8:00 to 8:30 P.M. (Solito, Pa.; Chavez, Calif.) HBL tested with Portugal 4:30 to 5:00 A. M. once, (Studholme, England). On 9.345, 8:00 to 8:55 P.M. (Verbrugghe, Mich.)

The programs from England for February are: 21.47 mc.-GSH from 6:00 to 8:45 A.M. and 9:00 A.M. to noon. 17.79 mc.-GSG from 6:00 to 8:45 and 3:00 to 5:00 A.M. 15.26 mc.-GSI from 12:15 to 3:45 P.M. 15.18 mc.-GSG from 3:00 to 5:00 A.M. 15.14 mc.-GSF from 9:00 A.M. to noon. 11.75 mc.-GSD from 12:15 to 5:45 P.M.

9.58 mc.-GSC from 4:00 to 5:45 P.M.; 6:00 to 8:00 P.M.; 9 to 11 P.M.

9.51 mc.-GSB from 3 to 5 A.M.; 6 A.M. to noon; 12:15 to 5:45 P.M.; 6:00 to 8:00 P.M.; 9:00 to 11:00 P.M.

6.11 mc.-GSL from 9:00 to 11:00 P.M.-(may be GSD instead).

6.05 mc.-GSA from 6:00 to 8:00 P.M.-(may be GSD instead).

England has a very bad habit, however, of giving one schedule and keeping another. We do not guarantee this schedule to last two days. A new phone on 11.56 mc. was heard at 5.55 P.M. once, (Strick, Mass.) GAB a new phone on 18.04 mc phones CGA2, Canada, 10.00 A.M. to noon often, (Lively, W. Va.)

2RO4, Rome, Italy. on 11.81 mc. broadcasts from 6:43 A.M. to 12:30 P.M. and then 2RO3 cn 9.64 mc. broadcasts from 12:30 to 5:45 P.M. and 6:00 to 7:45 P.M., all except Sundays when they close down at 5:45 P.M.

Italian phones. IAC, Piza, Italy phones on 17.76 mc., 12.795 mc., 12.865 mc. and 6.35 mc. working ships, Addia Ababa and Asmara. Try on 17.76 mc. from 8:00 to 11:00 A.M. and on 12.86 from 11:00 A.M. to around 2:00 P.M. IAC is on 17.70 not 17.76 from 9:00 to 11:00 P.M. and on 12.80 after 11:00 A.M. (Walcott, Calif.) IAC is on 17.699 mc. (Oxrieder, Pa.) On 17.70 and not 17.76, (Studholme, England). Is on 17.76 daily 10:00 to 11:30 A.M. (Sparks, Calif. (Heard on 15.70 mc. once working Asmara 8:00 A.M. to noon, (Portmann, N.Y.) Heard on 6.65 mc at 2:40 P.M. phoning a ship, (Studholme). IQA on 14.73 mc. and IRJ on 13.22 mc. testing with WQP and WQV, New York, and sent special program, 10:00 A.M. to 2:30 P.M. (Lively, W. Va. and Herowitz, Md.) Call on 14.73 is IRA, (Teague, Mich.) IRY on 18.61 meters or 16.12 mc. heard calling WQP 8:30 to 9:15 A.M. once (Studholme). IBS, Rcme (San Paolo) on 14.435 mc. atlention, (Studholme).

The program from Germany for February follows:

17.76 mc.-DJE-12:05 to 5:15 A.M.; 5:55 to 11:00 A.M.

- 15.34 mc.-DJR -8:00 to 9:00 A.M.
- 15.28 mc.—DJQ— 6:00 to 11:00 A.M. Sundays 11:10 to 12:25 P.M.
- 15.20 mc.—DJB—12:05 to 5:15 A.M. 5:55 to 11 A.M. Sun. 11:10 to 12:25 PM.
- 15.11 me.—DJL.—12 to 2 A.M.; 8 to 9 A.M.; 11:35 to 4:30 P.M. Sundays 6:00 to 8:00 A.M.
- 11.77 mc.-DJD-11:35 A.M. to 4:30 P.M.; 4:50 to 10:45 P.M.
- 9.54 mc.—DJN—12:05 to 5:15 A.M.; 5:55 to 11 A.M.; 4:50 to 10:45 P.M.
- 9.56 mc.-DJA-12:05 to 5:15 A.M.; 5:55 to 11:00 A.M.; 4:50 to 10:45 P.M.
- 6.02 mc.-DJC-11:35 A.M. to 4:30 P.M.; 4:50 to 10:45 P.M.

Germany also has experimental stations, DZA on 9.675 mc., DZB on 10.04 mc., DZC on 10.29 mc., DZE on 12.13 mc., DZG on 15.36 mc. and DZH on 14.46 mc. which may be used at times. DJP on 11.85 mc. is heard most every afternoon starting around 11:35 A.M.and lasting till 4:30 P.M. (Hansen, Africa; Miller, Ky.; Eder, Miss.; Flagg, Mass.; Studholme, Eng., and Sparks, Calif.) DZC, DZE and DZH heard two Wednesdays 1:30 to 3:00 .M. DFL on 10.85 mc. heard broadcasting music 5:00 to 7:00 P.M. DDFF on the German ship "Reliance" heard on 26.93 meters or 11.14 mc. phoning Germany 4:00 to 4:25 P.M. once. All this from W. D. Flagg,

Mass. Zeesen was heard on 15.50 mc. one Wednesday 8:00 to 9:00 A.M. (Studholme).

ON4VR, Namur, Belgium, heard on 45.00 meters or 6.69 mc. testing 10:15 to 11:00 A.M. with lady announcing. Is amateur station preparing to start regular broadcast service. Address 66 Rue Malevey, St. Servais, Namur (Studholme, England).

Bucharest, Roumania, was heard on 6.40 mc. one Wednesday 2:50 to 4:10 P.M. broadcasting, (Boothroyd, England).

SOUTH AMERICANS

Čolombia has the following stations broadcasting: HJA7, Cucuta on 5.40. HJN, Bogota, on 5.95. HJ3ABH, Bogota, on 6.01 mc. HJ1ABJ, Santa Marta, on 6.02 mc. HJ4ABP, Medellin, on 6.03 mc. HJ1ABG, Barranquilla, on 6.04 mc. HJ3ABD, Bogota, on 6.05 mc. HJ3ABF, Bogota, on 6.07. HJ5ABD, Cali, on 6.08. HJ4ABE, Medellin, on 6.10. HJ1ABB, Barranquilla, on 6.11. HJ4ABB, Manizales, on 6.11. HJ3ABX, Bogota on 6.12. HJ4ABD, Medellin, on 6.14. HJ4ABU, Pereira, on 6.15. HKE on 7.22. HJ1ABE, Cartagena, on 9.50, HJU, Buenaventure, on 9.51. HJ4ABH, Armenia, on 9.52. HJ2ABC, Cucuta, on 9.57. HJ1ABP, Cartagena, on 9.62. HJ2ABD, Bucaramanga, on 9.63. For schedules, look at the station list.

HJ1ABE is on 9.50 mc. and also on long waves. The schedule is now daily 11:00 A.M. to 1:00 P.M. and 5.00 to 10:30 P.M., with a special program Mondays 10:00 to 10:30 P.M. for short wave clubs, (Foshay, N. J.) Verie says 11:30 A.M. to 1:00 P.M. Sundays and other days from 6:00 to 10:00 P.M. (Kash, N. Y.) So these do not agree (Editor). Heard at 5:00 P.M. (Herzog, N. Y.)

HJ1ABP, on 9.62 mc. heard at 7:00 A.M. now (Eder, Minn.) Heard signing off at 10:10 P.M., not 11:00, (Atherton, Vt.) HJ1ABB heard again on 9.56 mc. till 6:00 P.M. Solito, Pa.) HJ1ABJ, Santa Marta, on 6.02 mc. heard one Sunday at 4:00 A.M. (Chavez, Calif.) HJ4ABC, "Echos de Combeina," at Ibague, is back on 6.09 mc. and is heard between 7:00 P.M. and midnight, (Oxrieder, Pa.; Solito, Pa., and Legge, Pa.) HJ4ABU, Pereira, on 6.15 mc, is on a new schedule. It is 9:30 A.M. to noon, and 6:30 P.M. to 10:00 P.M. instead of 9:00 A.M. to noon and 5:00 to 10:00 P.M. (Stark, Mo. and Legge, Pa.) HJ4ABH, "La Voz de Armenia," at Armenia, Caldas, on 31.51 meters or 9.52 mc. has 1 k.w. power and broadcasts 8:00 to 11:00 A.M. and 6:00 to 10:00 P.M. Address is Aristizabal, Hoyos & Gutierrez, (Neyland, Pa.; Stark, Mo.; Salazar, N. Y.) Heard on 9.53, (Atherton, Vt.) HJ4ABB, Manizales, was on 49.15 meters or 6.10 mc. at 6:55 P.M. once, (Studholme, England). Announced "Radio Philco" and heard 12.30 A.M. to 12:49 A.M. once, (Barron, Scotland). A station HJA9 at El Paso or El Pasho, heard on 14.94 mc. at 2:39 P.M. phoning, (Teague, Mich.) Another one is HKVR heard on 11.83 mc. at 3:00 P.M. (Gallagher, Calif.)

OAX1A, Radio Delcar "La Voz de Chiclayo," Casilla No. 9, Chiclayo, Peru, is on 6.125 mc. daily 8:00 to 11:00 P.M. according to a verie, (P. Alberto, N. Y.) Called "La Voz de Ica" and "Radio Philco" and is on 6.164 mc., not 6.125. Signs off with "Good Night Song," (Oxrieder, Pa. and Gallagher, Calif.) Station announcing 9.52 but on 9.54 heard, (Salazar, New York).

OAX5B, Ica, Peru, on 25.42 meters or 11.796 mc. is relaying "Radio Universal de Ica" daily 11:00 A.M. to noon and 4:00 to 10:00 P.M. Address announced Estafeta de Correos (Neva, Mexico). Our list also shows OAX4G, Lima, on 6.25 mc. and OAX4D, Lima, on 5.78 mc. OAX4B is heard after JZJ signs off at 5:00 P.M. (Herzog, N.Y.) On 11.804, (Oxreider, Pa.)

OAX4J, Lima, Peru, on 9.35 mc. heard between 9:25 P.M. and 10:00 P.M. once and 11:30 P.M. and 1:15 A.M. once. Gave address as Box 1166, (Stark, Mo.)

VP3MR, Georgetown, British Guiana, veries say 6.01 mc. Sundays, 7:45 to 10:15 A.M. and week-days 4:45 to 8:45 P.M. But they are heard on 5.98 or 5.99 mc. (Flagg, Oxrieder, Studholme, Arickx, Coleman). VP3BG, same city, is on 48.89 meters or 6.13 mc. now, between 3:40 and 8:40 P.M.

Venezuela. This country changed the call-signs of almost all stations last month. YV10RSC, San Cristobal, is now YV3RC. YV2RC, Caracas, on 5.80 is now YV5RC. YV5RMO, Maracaibo, on 5.85 is YV1RB. YV8RB. Baraquisimeto, on 5.90 is YV3RA. YV15RV, Valencia, on 5.92 is YV4R (last letter not known). YV7RMO, Maracaibo, on 6.07 now YV1RE. YV3RC, Caracas, on 6.15 now YV5RD. YV5RP, Caracas, still YV5RP on 6.27. YV12RM, Maracay, on 6.30 is YV4RD or YV4DG. YV4RG, Valera, on 6.37 now YV1RG. YV4RC, Caracas, on 6.38 now YV5RF. YV1RH, Maracaibo, on 6.39 still YV1RH. YV9RC, Caracas, on 6.40 now YV5RH. YV6RV, Valencia, on 6.52 now YV4RB. YV11RB on 6.54 now YV6RB. Captain Oxrieder, W. D. Flagg and J. M. R. Studholme took particular pains to get us this information. We also have notes from Messrs. Lynch, Eder, Poole, Grey and Stark. The Berne list also shows a station YV5RF on 6.17 mc. and YVIRL, Cora, on 6.21, but these are not heard. All the above people do not agree on these calls, but we can not take the space to explain where each is right and wrong.

YV4RB (old YV6RV) new schedule is 11:00 A.M. to 2:00 P.M. and 5:00 to 10:00 P.M. instead of noon to 2:00 and 6:00 to 10:00 (Barron, Scotland). YV1RH announces frequency as 6.36, but really on 6.39. YV8RB (now YV3RA) heard daily at 5:00 P.M. when schedule calls from 6:00 to 11:00 P.M. (Flagg, Mass.) YV1RB (old YV5RMO) heard on the air at 6:30 A.M. giving news, (Solito, Pa.) YV4RC (now YV5RF) returned to the air last month. Gave address as Box 983, signs off with "March of the Toys" at 10:30 P.M. (Flagg). On 6.35 at 9:00 P.M. (Herzog, N. Y.) Others say it is on 6.38 mc.

Argentina. Station LSX on 10.35 mc. broadcasts every Monday and Friday 5:00 to 6:00 P.M. now (many reports). Announces 10.30 mc., not 10.35 (Herzog). LRU, Buenos Aires, on 15.29 mc. is supposed to broadcast from 7:00 A.M. to 4:50 P.M. but reported signing off from 3:30 to 7:00 P.M. LRX on 9.66 mc. supposed to broadcast 5:00 to 9:00 P.M. but heard between 7:00 and 1:00 A.M. last month. Phones. Flagg of Mass., says we should list the following: LSL on 29.13 meters, or 10.30 mc. LSK on 29.27 meters, or 10.25 mc.; LSN on 30.80 meters or 9.90 mc., and LSN6 on 9.70 heard once sending program 8:10 to 9:00 P.M. one Tuesday (Child, Pa.) LSY, no frequency given, sending music 5:30 to 6:00 P.M. (Lively, W. Va.) LSX heard on 9.68 mc. from 7:00 to 9:30 P.M. (Shaneyfelt, Ind.)



On Wednesday, October 7, 1936, at the SCOTT Radio Laboratories, a small group of radio engineers and short wave enthusiasts were shown, for the first time, the latest development of the SCOTT Research Laboratories. They intently watched two radio sets at one end of a room---both connected to the same lead-in with a two-way switch, and both tuned in to DJB, Germany, 15.20 megacycles.

Germany Blotted Out

Suddenly, within three feet of these receivers, a terrific barrage of interference was turned on from a violet ray machine, vacuum cleaner and automobile ignition coil, buzzing out streams of "man-made" static! What happened? From one receiver came a deafening roar such as you would hear in a boiler factory—and the program from Germany was completely blotted out!

Clear With "Magic Link"

The two-way switch on the antenna was then thrown to the 23-tube SCOTT equipped with

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4434 Ravenswood Avenue, Dept. 8B7 630 Fifth Avenue, New York, N. Y. Builders of the World's Fine: the sensational new "MAGIC LINK", the SCOTT Supershield Antenna Coupling System, and from Germany, over 4,000 miles away, the program came in as crystal clear, strong and enjoyable as a local station — all without the slightest trace of "man-made" static from the violet ray machine, vacuum cleaner and spark coil, each crashing and spluttering only three feet away from the antenna lead-in.

Quiet Foreign Reception Now Possible for First Time in Many Locations

The climax of 8 years of tireless research, this sensational new development means that "manmade" static on the short waves, caused by electrical appliances and picked up on the leadin has, for the first time, *been conquered without loss of signal strength*! Up to this time foreign reception from England, Germany, France, Italy and many other foreign stations has been spoiled for thousands of residents of apartment build-

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2

1. Doubles sensitivity or distance-getting ability of antenna and receiver combination, as compared with best results with any previous noise-reducing antenna with inefficient shielded coupler.

2. Improves antenna lead-in signal to noise ratio by 100 to 1.

3. Eliminates shielded coupler switch. Switching from broadcast to short wave bands is automatic with SCOTT Supershield Antenna Coupling System.

ings, hotels and homes by the static from electrical appliances picked up on the antenna lead-in. Now these programs can be heard clearly and quietly with the 23-tube SCOTT equipped with the new SCOTT Supershield Antenna Coupling System.

Compare In Your Own Home

We invite you to make a 30-day side-by-side comparison test of the SCOTT against any other receiver, regardless of price. If the SCOTT does not bring in foreign and domestic stations with more volume, greater clarity, and with finer and more natural tone, we will refund your payment price without question. The newSCOTT Supershield Antenna Coupling System 100times more effective than any other 'noise reducing' system is alshing away from the lead-in 'man-made' static so disturbing to enjoyable, dependable foreign reception.

It is impossible to describe the sensational increase in listening pleasure which this new development now makes possible. Only by an actual *listening test* can you appreciate how much more enjoyably foreign short wave stations can now be received on the 23-tube SCOTT.

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Send TODAY for complete proof — and full Jescription of this remarkable new development that now makes possible in conjunction with the 23-tube FULL RANGE HIGH FIDELITY SCOTT Receiver, unparalleled tone, and dis-



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tance performance in every continent of the globe. Discover this vast new world of radio entertainment you will never hear without a SCOTT. SEND COUPON NOW.

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	Name
	Address
14	City

Heard on 9.69 mc. evenings. (Espoy, Calif.) LSX and LQA from 8:00 to 9:00 P.M. once. (Britting, Calif.)

Chile. A new station called "Radio Service" or something like that is on about 12.30 or 12.31 mc. broadcasting between 4:00 and 8:00 P.M. according to their own announcement. Gave address as Casilla 761, Santiago, Chile. (Bradley, N. Y.; Atherton, Vt.; Walcott, Calif.; Legge, Pa.; Stark, Mo.; Sparks, Calif.; Espoy, Calif.; Britting, Calif.) CB710, Santiago, is on 12.41 mc. daily 6:00 to 9:00 P.M. (Gallagher, Calif.) CB710, Santiago, distance from 12.30. (Editor.) Radio Ferris on 11.41 mc. heard at 9:30 P.M. one Sunday, (Chavez, Calif.) This is also quite a distance from 10.30. CEBM, Magallanes, Chile, heard on 8.80 mc. at 12:30 A.M. once. (Stark, Mo.) CEC, Santiago, on 10.67 mc. and CED, Antogfagasta, on 10.23 mc. phone each other between 7:00 and 9:30 P.M. now. (many.)

Brazil. PRA8, Pernambuco, is on about 6.02 mc. between 4:00 and 9:00 P.M. Not reported often. PRF5, Rio de Janeiro, on 9.50 mc. broadcasts daily. A new phone, PSU on 14.97 mc., works New York 6:00 to 7:00 P.M. irregularly. (Karpen, Pa.)

CP6, La Pa, Bolivia, on 9.12 mc. was heard last month for the first time in a long time. Heard at 6:30 P.M. one Friday. (Gallagher, Calif.)

Ecuador. HC2ET, Guayaquil, is on 4.60 mc. HC1PM, Quito, is on 5.73. HC2RL, Guayaquil, is on 6.63. Prado, Rio Bamba, is on 6.62. HC2JSB, Guayaquil, is on 7.85. HC2CW, Guayaquil, is roaming between 8.25 and 8.34 mc., usually on 8.25. HCJB, Quito, is on 8.95 mc. News this month is that HCJB is on both 8.95 and 4.107 mc. at the same time. (Legge, Pa.) HC2RL says 6.67 and is on that and not 6.63 as claimed by many others. (Flagg, Mass.) HC2RA (new one), Guayaquil, heard on 9.443 mc. below new Martinique station between 9:00 and 10:00 P.M. (Oxrieder, Pa.) HC2ET schedule says 9:00 to 11:00 P.M., Wednesdays and Saturdays. Heard at 8:15 P.M. (Stempel, Conn.)

Radio Electrico de Montevideo, at Montevideo, Uruguay, in a letter to W. H. Chippendale of Asuncion, Paraguay, says they are on 48.98 meters or 6.125 mc. but gives no schedule. The letter was from Director Hector M. Laborde and the address is Mercedes 823. The station is heard around 5:00 P.M. Mr. Hesselman of South Africa, reports this station ever since May between 3:30 and 9:00 P.M. broadcasting.

NORTH AMERICA

Practically everyone knows the frequencies, call-signs and cities for all United States stations. These are shown in our station list, with the exception of the cities.

W1XK, Boston, is considering discontinuing their 6:30 A.M. to noon portion of their schedule and want reports. (Teague, Mich.) If they would verify, they would get reports. People do not like to write to stations that do not verify. (Editor.) W2XE on 21.52 mc. is heard until 7:00 P.M. now instead of signing off at 1:00 P.M. (Sparks, Calif.) W2XAD and W2XAF will carry the Metropolitan Opera programs Saturdays from about 2:00 to 4:00 or 5.00 P.M. each Saturday soon. This is not on their regular schedule. W9XAA say they are on 11.83 mc. until 3:45 P.M. Heard on 11.83 until 6:00 P.M. and then on 6.08 from 6:00 to 10:00 P.M.

(Flagg, Mass.) Verifications from W8XAL say 6:30 to 7:00 P.M. and 10:00 P.M. to 2:00 A.M. (Barron, Scotland). New schedule is 6:30 to 8:00 P.M. and 11:00 P.M. to 2:00 A.M. (Editor.) W9XF verie says daily except Saturday 11:05 P.M. to 1:00 A.M. (Barron, Scotland.) New schedule is 11:00 P.M. to 2:00 A.M. (Editor.) WVD, Seattle, Washington. on 8.61 mc. phones Alaska now around 1:00 P.M. KOU, Wilmington, California, is heard on 2.57 mc. around 9:00 P.M. phoning ships. (Espoy, Calif.)

Canada. Canada has VE9BK, Vancouver, on 4.79 mc.; CFCX, Montreal, on 6.00 mc.; VE9DN, Montreal, on 6.00 mc.; VE9CA, Calgary, on 6.03 mc.; VE9CS, Vancouver, on 6.07 mc., CRCX, Bowmanville, on 6.09 mc.; VE9HX, Halifax, on 6.13 mc.; CJRO, Winnipeg, on 6.15 mc. and CJRO, Winnipeg, on 11.72 mc.

VE9DN is the same transmitter as CFCX, the editor believes, and it is used Saturdays from about 11:00 P.M. to 2:00 A.M. Sundays to send special news to Far North listeners. Both are owned by the Canadian Marconi Company of Montreal and are on the same frequency. VOWQ, mentioned last month on 8.60 mc., reported this month on 8.65 mc. working a CZ9U and sending music at 7:30 P.M. (Hyde, Conn.) And on 8.63 mc. at 7:00 P.M. (Legge, Pa.) This is a Canadian Airways station at North West River, Laborador. Canadian Dominion Airways has CZ2S on 3.20 mc.; CY3N on 4.20 mc.; CZ5K on 4.80 mc.; CZ9U on 3.20 mc.; and one at St. Fleoien, 300 miles north of Montreal. Usually heard 6:45 to 9:00 P.M. weekdays and 7:45 to 8:30 A.M. Sundays. (Ward, Pa.) CZ5M on 4.86 heard calling CZ5K at 8:30 A.M. (Walcott, Calif.) Station CFA. Drummondville, heard on 6.69 mc. phoning ships 5:45 P.M. once. (Flagg.)

Hawaii has no broadcast stations, but they have these telephone stations. KKH on 7.52 mc., KKP on 16.04 mc., KIO on 11.68 mc., and KEQ on 7.37 mc. KIO or KKP is used Sundays at 8:30 P.M. to relay a special program to America. KKH is used Tuesdays 12:30 to 1:00 A.M. on 7.52 mc. KIO is also used on Wednesdays 8:00 to 8:30 P.M. (Poole, Sparks, Gallagher.)

Alaska. WXA, Juneau, Alaska, on 2.60 mc. phones these stations between 11:00 P.M. and 1:00 A.M. daily. KAKE, Yakutat; KIUZ, Koonah; KAEP, Tanakee; KAED, Angoon; KAEB, Hydaburg; KAEH, Kakemall on voice on 2.61 mc. (Walcott, Calif.) KAJJ, Atka, on 5:20 mc. works WXY Nome, on 2.60 mc. daily at 5:30 A.M. (Walcott.)

CENTRAL AMERICANS

Mexico seems to have been suddenly filled with short wave stations. Here are the regulars: XEBT, Mexico City, is on 6.00 mc.; XEUW at Mexico City, is on 6.02 mc.; XECW, Mexico City, is on 6.04 mc.; XBC, Vera Cruz, is on 6.55 mc.; XBA, Tacubaya, is on 6.98; XECR, Mexico City, is on 7.38.; XEME, Merida, is on 8.19 and XEWI is on 11.90 mc. Below is the latest news.

XEDQ, Guadalajaro, Jalisco, has been roaming between 9.47 mc. and 9.53 mc., but has settled down on about 9.48 mc. now. Verifications give the power as 500 watts, the owner as Radio-Fonografica de Guadalajara, Calle 16 de Septiembre 164, Apartado 197, the manager is Mario Bazzano and they relay XED. The station has been heard as early as 7:00 P.M. and as late as 12:30 A.M. (Gallagher, Calif.; Chavez, Calif.; Thoreson, Alberta; Bradley, N. Y.; Espoy, Calif.; Walcott, Calif.; Sparks, Calif.; Oxrieder, Pa.)

XEFT, Vera Cruz, once on 6.12 mc. has moved to 9.49 mc. The schedule is 11:30 A.M. to 4:00 P.M. and 7:00 P.M. to midnight. (Oxrieder, Pa.; Kash, N. Y.; Solito, Pa.; Stark, Mo.; Bradley, N. Y.)

Three stations are now reported on 6.11 or 6.12 mc., where XEFT vacated. XEPW, Mexico City, is reported between 9:00 P.M. and 12:05 A.M. daily. Some say the call is XETW. (Oxrieder, Pa.; Legge, Pa.; Walcott, Calif.; Chavez, Calif.) Relays XEFO and heard until 2:15 A.M. (Chavez.) Next XECU or XETU at Guadalajara, Jalisco, whose address is Hidalgo 579 is reported broadcasting until 11:00 P.M. (Oxrieder, Pa.; Gallagher, Calif.) Another station comes on the same frequency at 11:00 P.M. called XEFA by some, XEFO by some and XEUZ by some. (Oxrieder, Walcott, Chevez, Gallagher, Calif.) Some say this is at Mexico City, others say Guadalajara. This XEFO announces 6.24 mc. but is on 6.115. (Oxrieder.) La Voz del Agule Azeteca is on 6.11 mc. with a call like XEJ relaying XEJW as late as 3:00 A.M. when they sign off with a gong. (Quijano, California.)

XEBH, location unknown, is reported on 11.82 mc. (Sparks, Calif.) and on 11.88 (Field, Calif.) broadcasting Sundays. Heard 2:00 to 4:00 A.M. (Sparks) and all day Sunday and one Saturday 2:30 to 3:30 P.M. (Field.)

XEBN, Mazatlan, on 15.44 mc. relays XEBL at irregular times, but is on the air Sundays almost all day. On 15.36 daily. (Gallagher, Calif.) Heard at 10:00 A.M., noon, 4:30 P.M., 8:00 P.M.; 9:00 P.M., and 10:00 P.M. different times. (Walcott, Calif.) On 15.45 mc. heard at 11:00 A.M. and at 10:00 P.M. (Sparks, Calif.) Heard all day Sundays and 8:00 to 11:00 P.M. other itmes, (Espoy, Calif.) Gave address as Apartado 68, (Espoy). XEMI, Durango, heard on 6.70 mc. at midnight once. (Stark, Mo.) XBA on 6.98 mc. heard 11:00 P.M. (Gallagher) On daily 10:45 to 11:05 P.M. now. (Walcott) An XEBR at Heraldode, Sonora, on 11.81 mc. sent a verie giving address as Apartado 68, (Britting, Calif.) This would indicate that this is the station reported as XEBN on 15.44 mc. (Editor).

XEWI on 11.90 mc. say they broadcast Monday, Wednesday and Friday 3:00 to 4:00 P.M. and 9:00 P.M. to midnight; Tuesday and Thursday 7:30 P.M. to midnight; Saturday 9:00 P.M. to midnight; Sunday 12:30 to 2:00 P.M. and the third Sunday of the month at 6:00 P.M. (Orchard, England.)

TGWA, Guatemala City on 9.45 mc. broadcasts now noon to 2:00 P. M. and $\S:00$ P.M. to midnight weekdays and Saturdays \$:00 P.M. to 6:00 A.M. Sundays, (Stark, Mo., Erwin, 111.) Heard 6:00 to 7:00 P.M. one Sunday, (Flagg, Mass.) TG2X on 5.94 mc. sends two different schedules, one is shown on the list. TGS, Guatemala City on 5.74 mc. broadcasts Wednesdays, Thursdays and Sunday 6:00 to 9:00 P.M. according to their own statement. TGS cards say 6:00 to 8:00 P.M. now, not 6:00 to 9:00. (Legge, Pa.)

Honduras has HRD, La Ceiba, on 6.23 mc.; HRN, Tegucigalpa, on 5.87 mc.,; HRY, Tegucigalpa, on 6.35 mc. and HRP1, San Pedro Sula, on

6.36 mc. HRP1 sent out two schedules recently. One says daily 7:30 to 9:30 P.M. (Flagg, Mass.) The other says noon to 2:00 P.M. and 7:45 to 9:00 P.M. weekdays only with 75 watts power. Heard on 6.36. (Oxrieder) Pa.)

YSL, San Salvador, veries say they are on 14.985 mc. and they phone. (Salazar, N. Y.) Heard on 13.41 mc. at noon once. (Kash, N. Y.) A Salvador station heard on 6.00 mc. 10:00 to 11:00 P.M. once. (Hofert, Ill.) Call on 13.41 is YSJ (Kash).

Costa Rica has the following stations: TIMS, Puntarenas, on 5.90 mc.; TIGPH, San Jose, on 5.82 mc.; TI5HH, San Roman, on 5.48; TIPG, San Jose, on 6.41; TIOW, Port Limon, on 6.50; TIRCC, San Jose, on 6.55; TIEP, San Jose, on 6.69; TI8WS, Puntarenas, on 7.55 and TI4NRH, Heredia, on 9.69 mc.

TI4NRH veries say 9.67 but they are on 9.69. TIPG gives English program Saturdays 9:00 to 10:00 P.M. (Stark, Mo.) New Slogan for TIEP is "La Voz del Ithmo" which means "The Voice of the isthmus." (Oxrieder, Pa.) TIEP and TIGPH sent special programs at 1:00 A.M., December 29. (Gallagher.) TIOW heard on 6.85 mc. at 11:00 P.M. (Legge, Pa.) Heard 11:30 to 11:45 P.M. and announced in English at close down. (Fuller, Quebec.)

Panama has HP5K, Colon, on 6.00 mc.; HP5B, Panama City, on 6.03; HP5F, Colon, on 6.08 mc.; and HP5J, Panama City, on 9.59. A letter from Leo Marchosky Manager, Cia Chiricana Radiofusion y Television, Apartado 129, David, Chiriqui, Panama, says they will have station HP5L with 300 watts power on 11.74 mc. starting January 15. (Oxrieder, Pa.) A station HP5E or 5I at Aguadulce, was heard on 11.78 mc. at 9:00 P.M. once sending music. (Salazar, N. Y.) A plane base station at Canal Zone on 7.53 mc. was heard calling the U.S.S. Wright and the U.S.S. Rex at 8:20 P.M. and 11:20 P.M. (Child, Pa., and Hyde, Conn.) HP5K is now heard at 7:00 A.M. in the morning. (Eder, Minn., and Solito, Pa.) Heard one Sunday 10:30 to 11:00 P.M. with English program. (Sparks, Calif.)

Nicaragua has YNOP, Managua, on 5.75 mc.; YSLF, Managua, on 7.56 mc.; YNLAT, Granada, on 7.31 mc.; YNAM, Managua, on 7.20 mc.; YNLG, Managua, on 8.55 mc.; and YNGU, Managua, on 9.30 mc. A verie from YNVA says their call is now YNLG, power 500 watts and frequency is 34.92 meters or 8.59 mc. (Neyland, Pa.) Is on 8.50 ncw. (Oxrieder.) YN2L/T and YNLAT', reported last month, are the same station on about 7.31 mc. (Oxrieder.) Is at Granada, not Managua. (Legge, Pa.) YNIGG, "La Voz del Lagos," moved to 6.532 mc. and then back to 6.54 last month. (Oxrieder, Pa.; Legge, Pa.) Heard on 6.53 from 8:50 to 10:00 P.M. (Stark, Mo.) YNAM on 7.20 daily at 9:00 P.M. (Grey, Ill.; Legge, Pa.)

WEST INDIES

The Dominican Republic has the following stations: HI9B, Santiago City, on 5.88 mc.; HI1J, San Pedro de Macoris, on 5.86 mc.; H13U, Santiago City, on 6.01 mc.; H15N, Trujillo City, on 6.15; H11A, Santiago de los Cabaleros, on 6.19 mc.; H1N, Trujillo City, on 6.24 mc.; H18Q, Trujillo, on 6.20 or 6.24 mc.; HIG, Trujillo, on 6.28 mc.; HIZ, Trujillo, on 6.31 mc.;

HIT, Trujillo, on 6.33 mc.; HIX, Trujillo, on 6.34 mc.; HIIS, Santiago City, on 6.42 mc.; H18A, Trujillo, on 6.48 mc.; HI4V, San Francisco de Macoris, on 6.48 mc.; HIL, Trujillo, on 6.50 mc.; HI4D, 'Trujillo, on 6.55 mc.; HI3C, La Romana, on 6.73 mc.; HIH, San Pedro de Macoris, on 6.78 mc.; HI7P, Trujillo, on 6.80 mc.; HI2D, Trujillo, on 6.90 mc.; and HIN, Trujillo, on 11.28 mc. News is given below.

H18Q and H14D are announced over H18Q on about 6.29 mc. (Oxrieder, Flagg, Kash, Grey, Solito.) On 6.18 now (Grey.); on 6.24 (Solito). HISA says 6.479 mc. now instead of 6.60 (Atherton, Flagg, Oxrieder). Heard on 6.44 (Orchard, England). Schedule says 9:40 to 10:40 P.M. but heard at 9:00 (Flagg). HI1A heard on 6.24 not 6.19 mc. at 5:50 P.M. and then HIN covered it up at 6:15 P.M. (Stark, Mo.) HIN on 6.24 mc. heard 6:00 to 10:30 P.M. although schedule says 7:10 to 9:10 P.M. (Flagg.) Sent special program 5:00 P.M. to midnight January 15, (Gallagher, Pa.) HIL heard until 9:00 P.M. instead of closing at 7:40 P.M. (Herzog, N.Y.) HIIS on 6.42 mc. is at Santiago, not Puerta Plata now and was heard at 11:00 P.M. one Sunday (Pegge, England). Sends special English program Saturdays 7:30 to 8:30 P.M. for radio clubs. (Flagg, Mass.) H12D on 6.90 starts programs at 5:40 P.M. playing "Ava Maria." (Herzog, N. Y.) Heard at 6:15 P.M. (Solito, Pa.) HI3C, San Romano on 6.73 mc. moved schedule up one honr. Now heard 5:10 to 6:45 P.M., when they sign off. (Flagg, Mass.) HIZ on 6.31 mc. heard at 4:30 P.M., one hour ahead of schedule (Flagg). Heard until 9:35 P.M. instead of closing at 9:00. (Stark, Mo.) Phone HII on 10.06 mc. instead of 14.94 mc. it usually works on. Heard at 4:45 P.M. calling HKV. (Stempel, Conn.)

Martinique. A station operated by Radio Club Martinique, Fort de France, Island of Martinique, was heard roaming between 9.40 mc. and 9.48 mc. and seems to be settled near 9.50 mc. now, was heard for the first time last month. It was heard between 6:30 and 8:30 P.M., using French and English. (Stempel, Conn.; Dement, Pa.; Peterson, St. Martins; Oxrieder, Pa.) Address furnished. (Verburghe, Mich.)

Cuba has COCO, Havana, on 6.10 mc.; COCD, Havana, on 6.13 mc.; COKG, Santiago, on 6.20 mc.; COHB, Sancti Spiritus, on 6.28 mc.; CLX, Havana, on 6.99 mc.; CO9JQ, Camagney, on 8.66 mc.; COCH, Havana, on 9.43 mc.; COCQ, Havana, on 9.75 mc.; and COCX, Havana, on 11.43 mc. COCX heard on 12.20 mc. now instead of 11.43. (Kash, N.Y.) On 12.48. (Herzog, N. Y.) COHB uses identifications like train whistles, bells, horns and baby crying, now. (Flagg, Mass.) Comes on the air at 8:00 P.M. instead of 9:00 now. (Solito, Pa.) CLX, Observatorio Nacional, Havana, verification says they broadcast weather reports at 12:00 P.M. daily and on Saturdays at 9:30 P.M. work XBA, Mexico. Signed by Jose Carlos Millas, Director. Beck, Ill.) CMA5, phone station, heard on 10.90 mc. once 10:45 to 11:00 P.M. (Walcott, Calif.) Send New Years eve program. (Hersowitz, Md.)

VP4PC, Port of Spain, Trinidad, on 6.93 mc. broadcast a musical program 10:30 to 10:50 P.M. one Friday. (Flagg, Mass.)

WGT, San Juan, Puerto Rico, on 13.70 mc. heard calling WNC, Florida, at 5:20 P.M. once, (Davenport, Vt.) WCU, same place, heard on 9.94 mc. phoning WNC at 7:20 P.M. (Walcott. Calif.)

Haiti has HH2S on 5.91 mc.; HH3NW on 6.34 mc.; and HH3W on 9.64 mc. all at Port Au Prince. HH3NW is not on the air at present. The frequencies given are not those the station claim to work on, but which they happen to be on. HH2S now on 5.925 mc. above YV15RV (Oxrieder). HH2R, Port Au Prince reported on 9.42 or 9.43 mc. once last month at 9:00 P.M. (Salazar, N.Y.) This may be the Martinique station mentioned before. (Editor.)

AMATEURS

There are thousands of amateurs heard around 14.10 mc. These stations work irregularly, so you can not print a schedule, nor can you list them. Some African amateurs heard between 14.04 and 14.60 mc. are CN8AA, CN8AC, CN8AD, CN8MB, FT1AG, FT1AH, FT4AG, SU1KG, SU1SG; SU1CH, SU1RK, EA8LW, EA8AT, EA8AL, EA8AH, EA8AJ, ZE1JR, ZU6P, SU1GK, ZS2X. Some Asiatics are VS7RA, VS2AK, VS2AR, KA1DH, KA1ME, KA1KY, PK1MD, PK1MX, PK1GW, PK1PK, PK3ST, PK4AU, VS6AQ, VU2CQ, and VS2AK. We are agents for Radio Amateur Call-Book which lists the names and addresses, as well as call-letters of over 60,000 amateur stations in the world. The cost of this call-book is \$1.25 postpaid. To get African and Asiatic amateurs try around 6:00 to 10:00 A.M. and 10:00 P.M. to 1:00 A.M.

LATE REPORTS

Here are some late reports received after the 24th of the month: Wm. Darby of Ireland reports JZI and JVP daily 2:30 to 3:30 P.M. Charles Miller of Kentucky reports VWY on 17.48 mc. at 9:30 A.M.; XTV on 9.49 mc. at 1:00 A.M. and CSW on 11.06 mc. Mr. Britting of California reports OER2 on 11.78 mc. (not 11.80.) LSX and LQA from 8:00 to 9:00 P.M., January 18th. Mr. Boothroyd of England reports DZC and DZH testing with Japan at 6:30 A.M. once; HJ3ABH at 2:55 in the morning once. Mr. Gullberg of Sweden reports LRX at 1:00 A.M.; PCJ on 19.71 meters one Wednesday 8:00 A.M. to noon and one Thursday on 31.28 meters at 1:30 P.M.; LZA on 20.20 meters testing almost daily at noon; 2RO4 on 25.40 meters until noon daily and not signing off at 10:30 A.M. as they say they do.

Western Australia Radio News says HS8PJ is on 9.35 mc. daily except Wednesday. A note from Africa says CR7AA on 6.137 mc. has added time and are now broadcasting 11:15 P.M. to 1:00 A.M. next day; 4:00 to 9:00 A.M.; 10:30 to 11:00 A.M. and noon to 3:30 P.M. Fred Atheron reports COCD until 1:25 A.M.; SUZ at 11:30 A.M.; TPA4 coming on the air at 10:00 P.M. instead of 10:45. Also a card from YNVA. W. A. Dean, Hartford, Conn., reports that HVJ will be heard February 7 at 9:00 P.M. Manila Time (8:00 A.M., E.S.T.) with a special program to Manila. HVJ is at Vatican City. He also reports HBL testing on 9.345 mc.

Frank Quijano of California says a station "El Pregonero del Pacifico" at Mazatlan, Sinaloa, Mexico; XEBM relays XEBL on 15.44 mc. up to 10:00 P.M. The address is Flores 103 Alto, Mazatlan. He also says the station on 12.30 mc., "Radio Service," is heard. L. L. Groves, Somerville, Mass., reports CT1AA down on about 12.00 mc. at 4:12 mc. at 4:12 P.M. once; CSW on about 10.80 mc.; RV15 at 7:00 A.M.; ZBW at 7:30 A.M.; and LZA, Sophia, on 14.97 mc. at 7:30 A.M. The verie received from LZA says they have 1500 watts power and broadcast 6:00 to 7:30 A.M. and 1:00 to 4:45 P.M., and on Sundays and Holidays 1:00 A.M. to 5:30 P.M.

Mr. Espoy of California reports OAX4J, Lima, Peru, on 9.33 mc. using the slogan "Radio International" and giving address as Apartado 1166. Lima. This is a new trequency reported. (Editor.) It is heard until midnight. He also reports OAX4B, "Radio Universal" at Ica, Peru, on 11.80 mc. until 10:30 P.M.

PHI, Holland, will leave 11.73 mc. or 25.57 meters on Sunday, Feb. 14, and return to their old frequency on 17.77 mc. or 16.88 meters the schedule will also be changed and this station will be heard Sundays 6:30 A.M. to 9:30 A.M.; Mondays, Fridays and Saturdays 7:30 to 9:30 P.M. instead of 8:30 to 10:30 A.M.

If you should fail to hear GSL, England, on 6.11 mc. from 9:00 to 11:00 P.M. it will be replaced by GSD on 21.75 mc., making GSC on 9.58 mc., GSB on 9.51 mc. and GSD on 11.75 mc. And in case you can not hear GSA on 6.05 mc. from 6:00 to 8:00 P.M. then try GSD on 11.75 mc., which will make GSC, GSB and GSD at this time of day also.

Try for stations OAX4J, Peru, on about 9.34 mc from 7:00 to 11:00 P.M. and HP51, Aguadulce, Panama, on 11.90 mc. around 10:00 P.M. to midnight.

WITH THE REPORTERS

This organization has, without a doubt, the largest group of reporters of any club or magazine in the world. This enables us to keep away ahead of others in matters of important information. We appreciate these reports. The people listed below are people who actually sent us a report last month, and is not just a list of people who have been appointed as listening posts or sent in reports two years ago. The editor received and copied news from nearly 400 cards and letters last month.

L. E. Hansen, Durban, Natal, Africa; Wm. Darby, Dublin, Ireland; Rene Arickx, Antwerp, Belgium; Norman Baynes, Bagalore, India; Clive Peterson, Philipsburg, St. Martin, W. I.; Constant Williams, Philipsburg, St. Martins, W. I.; R. E. Cook, Champion Reef, South India; Arthur Kin, dell, Wellington, New Zealand; F. Hummerstein, Ponoka, Alberta; Dr. George Fuller, Cowansville, Quebec; L. E. Thoreson, Ponoka, Alberta; Dr. Genge Fuller, Cowansville, Bugland; J. M. R. Studholme, London, England;; A. C. Woods, London, England; J. R. Garrett Pegge, Chesham, England.

H. S. Bradley, Hamilton, N. Y.; E. Scala, Jr., Bronx, N. Y.; Pierre A. Portmann, Woodside, N. Y.; J. C. Coleman, Brooklyn, N. Y.; W. F. Herzog, Center Horiches, N. Y.; Mario Bruscia, Brooklyn; Dr. R. C. Kash, Staten Island, N. Y.; James Maloney, Mechanicsville, N. Y.; Mills Van Bergen, Syracuse, N. Y.; Pablo Alberto, New York City; Louis Salazar, New York.

A. W. Field, San Diego, Calif.; W. H. Jessen, Eugene, Oregon; G. C. Gallagher, San Francisco, Calif.; Ashley Walcott, San Francisco; Louis Chavez, Los Angeles, Calif.; Ray Shaffer, Waterloo, Iowa; Paschall Lynch, Colorado, Texas.

Oliver Hersowitz, Baltimore, Maryland; Mrs. Alice Wilbur, Newark, N. J.; aLnier C. Lively, Charleston, W. Va.; Charles Dutrow, Washington, D. C.; Morgan Foshay, Nontclair, N. J.; James B. Wooten, Mobile, Ala.; Carl Eder, Willmar, Minn.; O. E. Stark, Pierce City, Mo.; F. Edward Fellows, Newark, N. J.

R. E. Ward, Jr., Dalton, Pa.; R. Neyland, Erie, Pa.; Chester Dement, Upper Rarby, Pa.; Sam Solito, Leetsdale, Pa.; Roger Legge, Jr., Philadelphia, Pa.; Fred Karpen, Johnstown, Pa.; Joe W. Child, Philadelphia, Pa.; Emmet Riggle,Massillon, Ohio; Forrest D. Poole, Portmouth, Ohio; Miss Eileen Hofmaster, Sandusky, Ohio; Wm. C. Palmer, Jr., Vandalia, Ohio; Grace M. Beck, Chicago, Ill.; Frank Grey, Berwyn, Ill.; Russell Shaneyfelt, Indianapolis, Indiana.

BOOSTERS

It makes us very happy this month to list here the many people who have secured new members for us since the last issue went to press. This is a very fine list and we certainly are lucky and happy to have so many boosters. Each of these people have earned the appreciation of this organization.

Franz Mayes, Mexico City; L. E. Hansen, Durban, Natal, Africa; W. M. Schwarzman, Evanston, Illinois; E. Erridge, Eastbourne, England; F. L. Pope, Harrow, England; Philco Radio of London, England; Midwest Radio of London, England; A. C. S. Ltd., London, England; R. B. Commans, Manila, Philippines; Wm. Darby. Dublin, Ireland; J. O. Girouard, Veillardville, Sask, Canada; Jorge Julia, Santurce, Puerto Rico; Ross Radio Service, Syracuse, N. Y.; Walter B. McManamy, Beverly Hills, California; L. Simpson, Havana, Cuba.

W. C. Gangloff, Cincinnati, Ohio; Edwund Davenport, Rutland, Vermont; Linwood Grives, Somerville, Mass.; James Coleman, Brooklyn, N. Y.; Alan K. Barlow, Chicago, Illinois; Arthur E. Sunny, New York City; A. J. Olsovi, Elmhurst. New York; Wm. Abel, Cleveland, Ohio; Mrs. J. O. Shepperd, Andover, Mass.; Dr. E. F. Good, Gaffney, S. Car.; Everett Jackson, Norwood, Ohio; Joseph T. Lippincott, Tufts College, Mass.; R. C. Hall, Houston, Texas; Richard Bradley, Baltimore, Md.; Mario Bruscia, Brooklyn, N. Y.; E. F. Mayne, Grosse Ile, Michigan; Carl Eder, Willmar, Minn.; Glenn Watt, Chanute, Kansas; Forrest D. Poole, Portsmouth, Ohio; Harold Strick, West Lynn, Mass.; A. F. Lovell, Cadhum, England; Louis Salaar, New York City; Louis Chavez, Los Angeles, California.

REPORT NEW EQUIPMENT

Last month many people wrote to us and asked about new equipment they intended to buy. We called on members previously to tell us when they bought some new receiver or part. Through their reports we were able to help every person that wrote to us, with but one exception. When you tell us how your new receiver works, it gives us an opportunity of passing the news along to those that need it.

WANTED TO BUY—Bar-Bell health and muscle builder. Write BA care of club headquarters stating price and weight.

ON THE AIR

station shown on 6.00 mc. will come in on 6 on a calibrated dial. A station shown at 7.00 will come in at 7 on the dial. Stations shown between 6.00 and 7.00 will be heard between 6 and 7 on the dial. The time is Eastern Standard. Add five hours for G. M. T. When $\frac{1}{4}$, $\frac{1}{2}$ or $\frac{3}{4}$ is shown the station starts or ends A The following stations are known broadcasters. Telephone stations are listed in another section.

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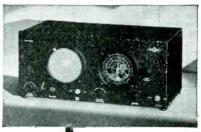
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Day 1 2 3 4 5 6 7 8 9 10 11 N 1 2 3 4 5 6 7 8 9 10 11 M	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	NOTES: A—Also broadcasts Sundays 11:10 to 12:20 P.M. B—Sundays 7:00 to 8:00 A.M., Tuesdays 4:30 to 6:00 A.M. and Wednesdays 8:00 to 10:00 A.M. C—Mondays, Wednesdays, Fridays 3:00 to 4:00 P.M. and 9:00 to midnight, Tuesdays and Thursdays 7:30 P.M. to midnight, Saturdays 9:00 P.M. to midnight and Sundays 12:30 to 2:00 P.M. D—Some Saturdays 8:00 P.M. to 6:00 A.M. Sunday mornings. E—Saturdays 9:40 to 10:40 P.M. F—Also Sundays 7:45 to 10:45 A.M. G—Daily 2:00 to 2:15 P.M. and Sundays 5:00 to 5:30 A.M. H—Also Sundays 1:00 to 2:00 P.M. I	RADIO SUPPLIES STATIONERY The club emblem, printed in blue ink, on a good grade of paper, typewriter size. Does not have a lot of names of officers and such things offer the stations. Many firms offer special discounts to I. S. W. C. members. Many stations. Many firms offer special discounts to I. S. W. C. methers and will verify faster if this stationery is used. Price 50c per hundred, postpaid. CLUB SEALS. The club emblem, printed in blue ink. For those members that wish to use their private stationery, but also wish to be known as an I. S. W. C. member. The price is 25c per hundred, postpaid. Methods after they have a stationery but also with the location of nearly all the short wave stations. Modern in every detail. Washable, and has a fine walhut stand, after they have received their first one. Price \$2.75 F. O. B., Indianapolis. Ask your postmater for the postage rate on eight pounds from Indianapolis and include the amount with your order.
40 Meg. Meters Station Country	 5.76. 52.08—YNOPNicaraguaIrregular	NOTES: A—Also broadcasts Su 4:30 to 6:00 A.M. and Wednesdays P.M. and 9:00 to midnight, Tuesday night and Sundays 12:30 to 2:00 P.I E—Saurdays 9:40 to 10·40 P.M. J Sundays 5:00 to 5:30 A.M. H—Also	FOR SALE — Amplirad 3- tube Preselector (Booster), practically new, perfect condi- tion, self-powered AC-110 v., airplane dial, complete, \$15. Perlman beat-note oscillator (station finder and home \$5.00 J. Kleinan, 2610 Glenwood Road, Brooklyn, N. Y. FOR SALE — Hammarlund late Pro Receiver, 14-550 met- ers, speaker, preselector, all litte rew. Selling for half on account of sickness. Herman Bieling, 535 Maple Ave., Glen

They're Bragging about the SKY BUDDY

The Sensational New Low Priced hallicrafters' Short Wave Receiver



A REAL communication receiver, with sensational performance characteristics. that's taking the short-wave world by storm. It compares favorably with many receivers at many times its astoundingly low price. Short wave operators everywhere are acclaiming the amazing performance of this new superheterodyne with its 16.5 M.C., to 544 K.C. range, 3 band tunning, Single Iron Core I. F. stage and improved mechanical band spread. Its selectivity and sensitivity are astonishing, as it pulls in stations from all over the globe.

- . Combined I.F. and Beat Frequency Oscillator.
- . Iron Core I.F. (High gain greater selectivity)
- 5 Tubes do the work of eight.
- Automatic Volume Control.
- . Greater Band Spread-36 to 1.
- · Bands changed with switch
- Direct-reading calibrated dial.
- · Built-in Speaker and Power Pack.

Here's what they say about the Sky Buddy:

"I am well pleased with its ease of reception and marvelous operation---it literally tunes the world for -Earle Smith, me." Elsmere, N.Y.

"I want to congratulate you on the Sky Buddy-we got amateur fone stations all over the U.S., Cuba, Mexico, South America and Hawaii, also London and Berlin broadcast."

-L. C. Mantell, Detroit, Mich. "I have found your Sky Buddy one of the best little receivers I have ever

come in contact with." -Andrew Conners,

Philadelphia, Pa.

"I have purchased Halli-crafter's Sky Buddy and it works wonderfully for DXing and C.W." —Edgar B. Murphy, Greensboro. N.C.

e hallicraf ters, ULTRA SKY RIDER SKY RIDER COMMERCIAL -i =2607 INDIANA AVENUE, CHICAGO, ILL., U. S. A.

TELEPHONE STATIONS

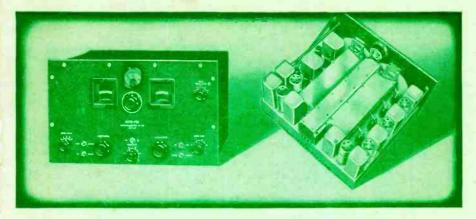
The time given is Eastern Standard. Add five hours for G. M. T.

T—Stands for Telephone Stations. These stations are used to relay telephone conversa tions 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.

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Meters M	eg. SI	TATION TIME
T14 0121.4	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 Ianerio 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 72-20	38_CAA	Buenos Aires, Arg. 8:00 A.M. to 4:00 P.M. WKK and WLK Rugby, England. Phones LSL and PPU near 8:00 A.M.
T_14 07_20	04_OPT	Leopoldsville, Belgian Congo. Phones ORG, mornings.
T 14.00 20.0		New Company Disease Difference of the monthings.
$T - 15 14 = 10^{-20}$	70 WEN	Tauen, Germany. Fnones FFU and Low mornings.
T 15.24 10	CEC	Nauen, Germany. Phones PPU and LSM mornings. I,awrenceville, N. J. Phones GAU, daytime. Santiago, Chile. Phones LSR, HJY near 11 A.M. and 4 P.M.
T 15.24-19.	OP-CEC,	Santiago, Chile. Phones LSK, HJI near 11 A.M. and 4 F.M.
T 15.28-19.	$b_2 - v_0 0,$	Nairobi, Kenya, Africa. Phones London, 7:30 to 8:00 A. M.
1-15.39-19.	50-LSQ,	Buenos Ares, Argenina. 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 1	Klipkeuval, S. Africa. Phones GAS, 6:30 to 7; 10 to 10:45 A.M
T-15 93-18	83_PIF	Bandoeng, Java. Phones Holland 6 to 11 A.M. KWX irregularly
T-16 06-18	68_OCT	Lima, Peru. Testing with HJY near 2:00 P.M.
T_1611_18	62 CAT	Rugby, England. Phones New York mornings.
F 16 22 10	AC HDH	Conversional Thomas New 1018 monthings.
T 16.22-10.	40-nbn,	Geneva, Switzerland. Used for special programs.
T-16.30-18.	40-PCK,	Kootwijk, Holland. Phones Java near 7:00 A.M.
		Lawrenceville, N. J. Phones England 8:00 A.M. to 4:00 P.M
r - 16.38 - 18.	JI-GAS,	Rugby, England. Phones New York mornings.
T-16.39-18.	30 - YVR,	Maracay, Venezuela. Phones Germany, 10:00 A.M. St. Assise, France. Phones LSM, PPU, mornings. Rughy, England. Phones New York mornings. Bandoeng, Java. Phones PCV, 3:10 to 9:20 A.M.
$\Gamma - 16.44 - 18.$	25—FTE,	St. Assise. France. Phones LSM, PPU, mornings.
T —16.48—18.	20—GAW,	Rughy, England. Phones New York mornings.
T-16.50-18.	18-PMC,	Bandoeng, Java. Phones PCV, 3:10 to 9:20 A.M.
C-10.55-18.	IZ-LSY.	Buenos Aires, Argentina, Irregular.
T-16.82-18.	05—PCV.	Kootwijk, Holland. 6:00 to 9:00 A.M. Java.
T-16.85 to 12	8.2717.80	to 16.42-Ships. Heard in daytime.
T-16.91-17.	74—HSP	Bangkok, Siam. Phones Japan, Germany and England.
T-17.00-17	64-XGN	Shanghai, China. Phones London 7 to 9 A.M., Mon., Wed., Sat.
T-17 12-17	52_DFB	Nauen, Germany. Phones LSM and YVQ near 9:00 A.M.
		2, Poona, India, phones England 7:00 to 10:00 A.M.
T_17 52_17	12WOO	Ocean City, New Jersey. Phones ships, irregularly.
T 19 31 16	20 ITT	Mogadiscio, Italian Samoliland, phones Italy daytime.
T-18.44-16.	30-WLK	Lawrenceville, N. J. Phones England.
T-18.47-16.	24—KTO,	Manila, P. I. Phones Japan 5:00 to 9:00 P.M., irregularly
T-18.51-16.	20—FZR.	Saigon, Indo-China. Phones Paris mornings.
T-18.71-16.	04—KKP.	Kauhuku, Hawaii. Phones KWU 1:00 to 7:00 P.M.
T-18.89-15.	.88—FTK.	St. Assise, France. Phones Saigon 8:30 to 11:00 A.M. Shanghia, China. Phones Japan 5:00 P.M. to midnight.
T-18.99-15.	80-XOL	Shanghia, China, Phones Japan 5:00 P.M. to midnight.
T-18 91-15	86—CEC	Santiago, Chile. Phones OCI 11 A.M., 1 and 4:40 P.M. trreg
T-19 02-15	81-LSU	Buenos Aires, Arg. Phones GAA 8 A.M. to 1 and FTM 1-2 P.W.
T 10 15_15	66_IVE	Nazaki, Japan. Phones Java 3:00 to 5:00 A. M.
T 10 20 15		Nazaki, Japan, phones U.S.A. near 5:00 A.M. and 8:00 P.M
1-19.20-13.	45 JJV#,	Addis Ababa, Ethiopia, phones Italy 7:00 to 10:00 A.M.
1	45-100,	Addis Adada, Ethiopia, phones Italy 7.00 to 10.00 A M.
r-19.47-15.	41 - KWO	, Dixon, California. Phones Hawaii in place of KWU.
T-19.54-15.	.35—KWU	, Dixon, California. Phones Hawaii, 2:00 to 7:00 P.M.

(Continued next month.)

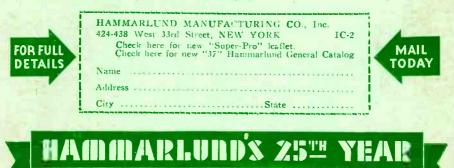


THE ULTIMATE IN RADIO

AMMARLUND'S new "Super-Pro" receiver, announced only last month, has already b.cn enthusiastically acclaimed by critical commercial and amateur radio authorities. In the new "Super-Pro" are unusual electrical and structural fcatures-never before incorporated in any receiver. For instance, only in a "Super-Pro" can you continuously vary selectivity from 3 to 16 kc. with a directly calibrated band-width panel control. So great is the ,'Super-Pro's" sensitivity and so faithful the fidelity that many large broadcast stations are using the receiver for rebroadcast purposes. The exclusive "Super-Pro" band-spread system with a special 12-gang condenser, spreads amateur and high frequency broadcast bands over practically the entire bandspread dial for extra easy tuning. A 12 to 1 ratio direct reading dial is calibrated to within 1/2% accuracy. In the complete, compact tuning unit is also the famous "Super-Pro" cam operated knife-switch and 20 laboratory adjusted tuning coils on Isolantite bases. Complete coverage from 20 megacycles to 540 kc. Eight glass and eight metal tubes afford maximum efficiency. Other features include electrostatic shielded input; four air-tuned I. F. transformers; three audio stages; visible tuning meter; AVC and Manual Gain control; C.W. Modulation switch; speaker-phone switch; separate grid bias supply, etc. A crystal filter model is also available providing variable selectivity from the knife-like point desired for C. W. to a wider degree of selectivity required for practical phone reception.

selectivity required for practical phone reception. The "Super-Pro" receiver consists of two major units—receiver proper and power unit. Both receiver and power supply chassis are cadmium plated steel.

Here is a 16 tube precision receiver that is the ultimate in radio! Write Dept. IC-2 for the new "Super-Pro" booklet with further details-



SHORT WAVE Fans are NASAW LONDON. 00 HOT WASAW LONDON. 00 HOT WASAW

SHORT WAVE FANS are

O Words of ours could tell a more convincing story of DX field than the following re-

ceived from India. Serg't H. J. Dent of the Bombay

Police Force recently won, with a PHILCO radio, the world's championship, being awarded a certifi-cate for Class 15"A" of the "Heard-All-Continents Club." This was accomplished with a regular 11-Tube 16B PHILCO, just as it came from the factory, with no aids to reception expect the PHILCO All-Wave Aerial. All reception on the loud AMERICA

Mr. Dent also informs us that he speaker. broke his own world's record by receiving a certificate in Class 17

This certainly substantiates any "A." claims we've made to you previously when we told you that best results were obtained on distance when you used a PHILCO. Here is convincing proof of PHILCO superiority. See your dealer today! The model illustrated is 116X DeLuxe.