

VOL. IX

NOVEMBER, 1937

NO. 2

INTERNATIONAL

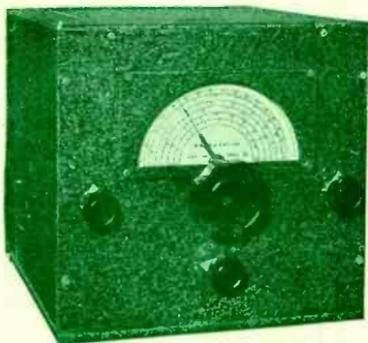


- Short Wave News.
- Accurate Station List.
- Hourly Tuning guide.

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

THE VOICE OF THE
INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO, U. S. A.



Improve!

YOUR PRESENT
RADIO RECEPTION
WITH A

**DB-20
PRESELECTOR**

THE performance of any receiver can be materially improved through the addition of a DB-20 Pre-selector.

The ability of this unit to build up the image rejection ratio to a value approximating 50,000 to 1 makes many contacts possible which otherwise would be lost in interference.

The additional gain obtained through the two radio frequency stages makes possible the reception of extremely weak signals which are usually lost without the additional unit.

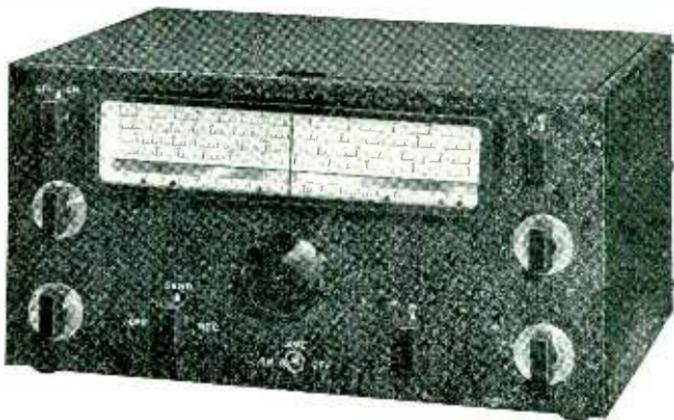
Many DX shortwave listeners are now using the DB-20 and their gratification is enthusiastically expressed in letters we have received from such users.

Add a DB-20 to your present receiver!

Literature is sent free upon request.

RADIO MFG. ENGINEERS, INC.

306 FIRST AVENUE, PEORIA, ILLINOIS



A BIG NEW RECEIVER

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

USE COUPON BELOW

NATIONAL COMPANY, INC., Malden, Mass.

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

Name

Address.....(IC11)

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

Note:—Readers who may find it more convenient may send 5 shillings to Arthur Bear, 100 Adams Gardens Estate, London, SE16, England.

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

Text and illustrations in this magazine are copyrighted and must not be reproduced without permission of the copyright owners. Copyrighted, 1937, by Arthur J. Green.

ARTHUR J. GREEN. Editor.

ADVISORY COMMITTEE

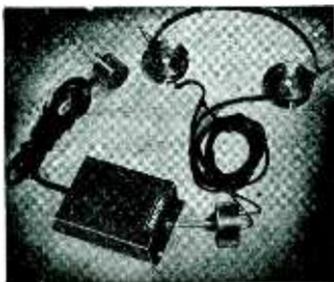
JOSEPH B. SESSIONS
Pres. Sessions Foundry Co.
Bristol, Conn.

JACOB KLEIMANS
Meyer Koulisch Co.
New York City

CHARLES SCHROEDER
Radio WJATR
Philadelphia, Pa.

SHORT WAVE LISTENER'S SUPPLIES

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



INTERNATIONAL PHONE RECEPTOR

More DX stations, clearer reception, and peaceful uninterrupted reception are yours with the INTERNATIONAL HEADPHONE RECEPTOR.

Enables you to tune while others sleep in the home. Ideal for the hard-of-hearing. Requires no tools to install. This is positively guaranteed. All you do is lift out a tube, push prongs through a wafer and insert tube back in the socket. When headphone plug is inserted, the speaker is automatically shut off. Comes complete with

six-foot extension cord. List price \$7.50. Your Price.

Plus postage on one pound..... **\$3.95**

Be sure to mention the make and model of your receiver when ordering.

TRIMM 24,000 OHM PHONES, lightest weight phones made, each..\$5.88

ACME DE-LUXE PHONES, 2000 ohm, each..... 1.25

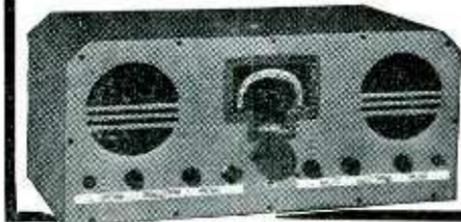
PHONE PLUGS for Single Phones, each..... .15

PHONE PLUGS for One to Four Phones, each..... .29

INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO

SHORT WAVE ACE



A Communication Receiver, Professional in Design, Appearance and Performance

FEATURES THAT SHOUT VALUE TO EVERY FAN!

1. Main dial calibrated in Meca-cycles for ease in locating stations.
2. Vernier Tuning Control with 100 to 1 ratio drive.
3. A heat oscillator which can be turned on or off with a switch on the front panel to locate weak stations, or stations which are not talking as you tune by them.
4. An antenna rejection filter to eliminate many unwanted signals.
5. A handsome, rugged metal grey finished cabinet—a professional job throughout.
6. A phone jack for weak signal reception (and so that you can listen whenever you will without disturbing anyone else).
7. 9 Metal Tubes.
8. 520 to 23,000 kes. or 655 meters to 13 meters.
9. 6-inch full electro-dynamic speaker.

HERE is a communication type receiver distinctly a *fan's* set, with razor selectivity and keen sensitivity that will enable you to get stations you never could hear before—and the headphone jack which automatically cuts out the loudspeaker, so that you can listen to your heart's content at all hours of the day and night without hearing the familiar cry—"For heaven's sake, turn that off!"

RCA Communication Receiver

ACR-155 **\$74.50**
Complete with tubes



For further information write to Dept. IS

Amateur Radio Section

RCA MANUFACTURING CO., INC., CAMDEN, NEW JERSEY

A Service of the Radio Corporation of America



ANNOUNCING *the* SCOTT SIXTEEN

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

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

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

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

SEND COUPON FOR DETAILS

E. H. Scott Radio Laboratories, Inc.
4434 Ravenswood, Dept. 8T7,
Chicago, Illinois.

Please rush FREE details, prices, and special offer. (No obligation.)

Name

Address.....

City..... State.....

We didn't write this page—



☆
Owners of the New
**1938
SUPER SKYRIDER**
—did it for us!

● Says W5APM "I cannot help but congratulate you on this most wonderful communications receiver. The photos and descriptions of it do not do it full justice. In my opinion it represents the very best value obtainable at any price." ● W1HWZ and WIDFS add "The audio quality surpasses anything we have ever heard. The band spread is the best ever. We heard about 15 Five Meter stations and could read most of them on the 'broad' IF position." ● W9ARA contributes "I have just received the SX-16 and it is everything I expected it to be. You are going to sell a great many of them." ● From W3GWP "Vy. fb. Like it very much 73." ● From the 6th District, J. C. Heath, Salt Lake City, sends this "Think your band spread a remarkable device and the entire set is built like a precision instrument." ● W2BTP adds this "Am very pleased with the receiver."

☆ These are
but a few of
the unsolicited
comments on
the New 1938
Super Sky rider.

OTHER PROMINENT AMATEURS NOW OPERATING 1938 SUPER SKYRIDERS

W9UJZ	W5FCI	VE1KY	W1SXT
W7BJS	W2AQV	VE1CA	W1GCD
W9SJV	W8PNN	W8PLD	W9BLI
W8MNX	W9MSH	W4DLK	W7CJR
	W5FZS	W9UHZ	

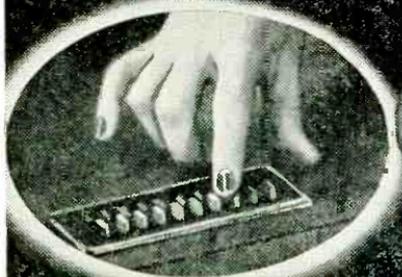
*Write for Free illustrated booklet describing the Super Sky rider
and other Hallicrafters' Receivers*

All Hallicrafters' Receivers now available on Liberal Time Payments

the hallicrafters inc.

2607 Indiana Avenue, Chicago, Ill. ● Cable Address "Hallicraft" Chicago
America's Leading Manufacturers of Communications Receivers

Amazing!... MIDWEST'S ELECTRIC TOUCH BUTTON TUNING..



**ELECTRIC MOTOR DOES
YOUR TUNING!**

**FACTORY-
TO-YOU
SAVES 50%**



**20
TUBES**

**6
WAVE BANDS**

only
\$49.95
LESS TUBES

**NEW LOW BASE
PRICE CHASSIS**

FLASH! Here's today's biggest radio news—Midwest and only Midwest gives you a combination of Mystic Movie Dial, Traveling Coloray Eye, Phantom Hand and Motorized Tuning! Just touch a button on top of the radio... that's all... and **FLASH!**... your station comes in perfectly tuned, in one second... just like magic... at the exact center of resonance. (You can also tune by hand whenever you desire.)

The famous Midwest factory-to-you plan, proven by 18 years of success, is just as exciting. It enables you to buy at wholesale prices... to save up to 50%... to make your radio dollar go twice as far... and to pay as little as 50 cents a week on the Midwest Easy Pay Plan.

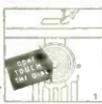
EVEN MORE GLORIOUS TONE

When you tune in a domestic or foreign program on this super 20-tube 6-wave band 12,000-mile range Motorized Midwest, you hear it with a new clarity, new depth and an intensity of feeling. Glorious, crystal-clear concert realism and brilliant foreign reception are now realities. Super power and 101 advanced features

enable you to bring in weak distant foreign stations like "locals." Now delight in American, Canadian, Police, Amateur, Airplane, ship broadcasts... and finest Foreign programs.

30 Days FREE Trial In Your Home Act at once on this unusual factory-to-you offer. We send any Midwest radio you desire to your home. You use it 30 days, and compare it with other radios you have owned or heard. You are triply protected with One-

Year Warranty, Money-Back, and Foreign Reception Guarantee. Send for **FREE 1938 Catalog**



Do not confuse Midwest "Instant" Motorized Tuning with ordinary so-called "Touch-Button" radios that require 3 to 5 times as long to tune... and on which you have to turn switches and controls. You don't even have to turn the Midwest on, or handle any controls... it does everything itself.

SERVICE MEN: Join nationwide Midwest service organization. Write for free details.

30 DAYS FREE TRIAL
TERMS AS LOW AS 50¢ A WEEK

PASTE COUPON ON 1¢ POSTCARD... OR

Write Today!

MIDWEST RADIO CORPORATION
Dept. FF-44 Cincinnati, O.
Send me your new **FREE** catalog and complete details of your liberal 30-day **FREE** trial offer. (Special offer and prices prevail only when dealing direct with factory by mail.)

Name _____
Address _____
Town _____ State _____
Use - Agents Make Easy Extra Money. Check Here for details
 Check here for 1938 BATTERY catalog

MIDWEST *factory-to-you* **RADIOS**

DEPT. FF-44 MIDWEST-RADIO CORPORATION, CINCINNATI, OHIO, U.S.A.
Manufacturers of Quality Radios Since 1920



L. SMITH, OF ENGLAND

Mr. L. Smith, until quite recently, lived in London, but recently moved to Inglewood, Fivehead, near Taunton, Somerset, England. We do not know how long it has been since an issue of International Short Wave Radio has been mailed out without some very helpful news from him. Notice his H-A-C certificate.

BOOSTERS

To the following people we owe a debt of gratitude and we hope that by mentioning their names here we are making them understand we appreciate their help. Each has secured new members for us since the last issue was printed. Ernest Orchard, Weymouth, England; George W. King, Liverpool, England; Frank Frahm, Jackson, Michigan; G. C. Gallagher, San Francisco, California; John Davenport, Brooklyn, N.Y.; Aubrey Williams, Honolulu, Hawaii; Howard Eck, East Lansing, Mich.; J. H. Donaldson, Hollywood, Calif.; Mr. Southern, Wilmington, Delaware; Ora E. Stark, Pierce City, Mo.; Walter McMenemy, Los Angeles, Calif.; Louis A. Baer, San Francisco, Calif.; Paul C. Metta, Chicago, Illinois; G. W. Dillman, Bradford, Pa.; Herbert O. Nelson, Chicago, Illinois.

JOSEPH T. LIPPINCOTT

Mr. Lippincott lives at Tufts College, Massachusetts, and spends quite a lot of his spare time at the dials of his shortwave receiver. His group of verifications, shown in the picture, indicates that he is quite successful at DX-ing.

We can add the fact that he has helped the I. S. W. C. gain several new members. We are glad to show this photo of him at his radio.

**SPECIAL PROGRAMS**

On December 1st, from 9:30 to 10:00 P.M. station HP5A, Panama City, Panama, on 11.70 mc. will broadcast the first I. S. W. C. Birthday program. Reports should be sent to the I. S. W. C. at East Liverpool, Ohio, and to the station. Reports sent to the I. S. W. C. will be judged and the person sending in the best report will receive a world globe, just like those we sell. The report should give the exact time and what was heard.

Station 2RO3, Rome, Italy, on 9.64 mc., will give a program December 8th from 6:15 to 7:15 P.M., E.S.T. (Dec. 8, 2315 to 0115 G.M.T.) A globe will be sent to the person sending us the best report on this program, also.

Station W2XAF, Schenectady, on 9.53 mc. and W2XAD on 15.33 mc. will broadcast a special program on December 20th from 4:00 to 4:30 P.M. and then W2XAF will broadcast alone from 11:00 to 11:30 P.M. Aglobe will be sent to the person sending the best report on either of the programs, since one globe will be offered for each of the programs. The time in G.M.T., so our overseas members will not be mixed up, is Dec. 20th, 2100 to 2130, and again Dec. 21st, 0400 to 0430 G.M.T.

SPECIAL NEWS

Hear Africa. American fans now have an opportunity of hearing a strong African on 9.61 mc. from 11:45 P.M. until 12:45 A.M. The station relays Cape Town programs and is at Klipkeuval. It comes on the air about 11:40 P.M. with a whistle-like sound. At 11:45 there is a blast of trumpets, following which they broadcast setting-up exercises for ten minutes. From midnight on they broadcast musical programs and talks. The announcer says they are at Klipkeuval, they are on 31.23 meters or 9.65 mc. (heard on 9.61 though.) and they relay all the daytime programs of Cape Town. Reports should be sent to Box 4559, Johannesburg, not Cape Town, he says. Members Walcott of California, also says the station is heard between 9:00 A.M. and 11:40 A.M., with the best time 9:45 to 10:45 A.M. Others reporting the station are Mitchell, Ohio; Grey, Ill.; Chavez, Calif.; Keith, Wash.; Lucke Ill.; Gallagher, Calif.; Geer, Ind.; Arms, Mass.

Hear Poland. A new Polish station using a call like SPB, SPD or SPP is on 11.52 mc. broadcasting daily from 6:00 to 7:00 P.M. and Sundays until 8:00 P.M. SPW, Warsaw; on 13.63 mc. also sends the same programs. Send reports to Polski Radjo, S. A., 5 Mazowiecha St., Warsaw, Poland. On 11.52 (Oxrieder, Pa.); on 11.535 (Roberts, Ind.); on 11.535 (Scala, N.Y.); on 11.83 (Lendzioszek, Mass.); Heard (Russell, Md.)

CHAPTER NEWS

The New York Chapter met last on Friday, October 29th at the Stuyvesant High School, East 15th Street near 2nd Avenue at 8:30 P.M. They showed 50 minutes of movies on the "Story of Electricity," Arthur Lynch, well-known radio authority gave a talk on what the five-meter band holds for the future, a new Hallicrafter Super Skyrider was demonstrated and there was fifteen minutes of open discussion on stations heard. Future features planned will be visits to television and broadcast studios and a talk by Mr. Rickey of the A. T. & T.

The London Chapter meets every Friday at 30 Theobalds Road at 8:00 P.M. Sets are demonstrated, television tests are made, code lessons are given and special speakers are heard. The Chapter holds open house almost every night in their club-rooms also, where they have a receiver installed and also quite a nice library. They thank Kenneth Jowers, "Daily Sketch" and "World Radio" for their help.

The Brighton Chapter moved to Seafeld Dance Hall, Kingsway, Hove, and meet every Wednesday at 8:00 P.M. We are told that Mr. Bennett, who organized this chapter has met with an accident. We are sorry to hear this. For details of meetings write to John Bennett, 205 Braeside Ave., Brighton, 6.

The Guernsey Chapter still meets every Tuesday. For details write F. S. La Pavoux, 8, Upper Canishers, St. Peters Port, Guernsey.

STAMPS—50 different Italian colonies, including Tripolitania, Libia, Somaliland, Eritrea, Benadir, etc. Many unused. Only \$1.00 postpaid. Caldwell, 209 Maple Avenue, Altoona, Pa.



CHARLES A. HART, CURACAO

Mr. Hart was formerly an operator on the ship "S. S. Maracaibo," an American ship sailing the Caribbean seas. In 1929 this ship was taken by the Venezuelan revolutionist Rafael Simon Urbina, who attacked the fortresses of Curacao and took a number of men to Venezuela on this ship. Later Mr. Hart was radio operator on the ships "Merida" and "Trujillo." Anyone interested in hearing of his adventures may write to Mr. Hart at 26 Ferdinand Street, Curacao, D. W. I.

PEN PALS

The following people would like to correspond with other short wave fans:

- G. K. MacDonald, 52 Bordesley Sreet, Linwood E1, Christchurch, New Zealand. (Exchange cards)
- J. N. Prior, Box 87, Coonable, NSW, Australia. (Also exchange 9.5 mm. home movie films.)
- Ed. Lendzioszek, 73 Union Street, Easthampton, Mass. (Overseas)
- Ralph Brady, 457 East 9th Street, Brooklyn, N.Y. (Overseas)
- O. J. Baugh, 7 Charnwood Ave., Beeston, Nott, England. (Exchange cards)
- Frederic Waite, 133 Kimball Ave., Revere, Mass. (Swap photos)
- Johan Klimczah, 130 Columbia Ave., Passiac, New Jersey.
- W. Hallgren, Box 31, Santa Rosa, California. (Exchange cards)

FOR SALE—Studio Recorder (not amateur job) positively like new, instantaneous recordings of radio or microphone, acetate or aluminium, inside out—outside in, two speeds rim driven 1/20th horsepower General Electric motor, separate pick up, leatherette case, suitable any receiver, recordings equal to "store bought," list over \$300.00, real bargain \$125.00. J. Kleiman, 861 East 27 Street, Brooklyn, N. Y.

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.

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

Although Antonia Fuentes L. of station HJ1ABE, Apartado 31, Cartagena, Colombia, wrote us two months ago that they were moving to 4.86 mc. or 61.73 meters and that all Colombians would soon move near 4.85 mc. HJ1ABE remains on 9.50 mc. as we go to press. It is smothered by XEWW most of the time.

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

(General News) TI2H, San Jose, Costa Rica, uses call TIGPH2 now. (Oxrieder, Pa.) TIGPH is on 5.82 mc. and this TI2H is on 5.81 mc., which is very close. YV1RB, Maracaibo, Venezuela, 5.85 mc. heard until 11:00 P.M. signing off with "Strike Up the Band" when schedule says 10:00 P.M. only. (Amers, Calif.) HRN, Honduras, on 5.87 mc. heard until 11:00 P.M. and midnight when schedule says 10:00 P.M. only. (Pegge, Worcester.)

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

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

(New) CJCX, Sydney, N. S., Canada, is a brand new station on 6.01 mc., or 49.90 meters, broadcasting weekdays 7:00 A.M. to 1:00 P.M. and 4:00 to 8:00 P.M. Relays CJCB. (Baines, Sydney.) Heard 4:30 to 8:15 P.M. (Buchanan, Sydney.) Heard 5:00 until 5:30 P.M. when they signed off. (Smith, England.)

(New) A station CXA2, Montevideo, Uruguay, on 6.005 mc. is relaying station LS2, "Radio Prieto," from early evening until midnight. They announced 5,000 watts power. (Myers, Calif.) This must be CXA2, Montevideo, relaying LS2, which is across the bay from Montevideo, in Buenos Aires, Argentina.

(New) A station SVP, Greece Broadcasting Company, Athens, Greece, was heard testing on 6.72 mc. from 11:10 to 11:15 A.M. once only. (Boothroyd, England.)

(New) Station HJ1ABD, Cartagena, Colombia, which closed down in September 1934 was heard near 6.07 mc. again. (Stockbridge, Mass.)

There are several other HJ stations near here, so this might be a misunderstanding.

(New) A station WEEP is heard on the 49 meter band giving weather reports at 10:25 P.M. (Adler, N. Y.)

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

(New) A station H11L, Santiago de los Caballeros, Dominican Republic, West Indies, is on 6.49 mc. between 6:00 and 9:00 P.M., usually signing off at 7:00 and coming back at 8:00 P.M. (Oxrieder, Pa.)

(Frequency Changes) HJ4ABE, Medellin, Colombia, moved from 6.10 mc. to 6.14 mc. (Oxrieder, Pa.) A verie says 50.6 meters 11:00 A.M. to noon and 6:00 to 10:30 P.M. (Quayle, Canal Zone.) YNLG, Managua, moved from 8.50 mc. to 8.65 mc. (Oxrieder, Pa.) Philco Radio, Saigon, Indo-China, moved to 6.22 mc. and broadcasts daily until 9:30 A.M. starting some days at 4:30 A.M. and others at 6:00 A.M. (Walcott, Calif.) H17P, Trujillo, Dominican Republic moved from 6.78 to 6.80 mc. (Oxrieder)

(General News) COCO, Havana, Cuba, on 6.00 mc. broadcasts 7:55 A.M. until midnight now according to verie. (Quayle, Canal Zone.) Heard until midnight. (Stark, Mo.) HJ5ABD, Cali, Colombia, is on 6.09 mc., not 6.08, and heard signing off at 9:08 P.M., not 11:00 P.M. (Stark, Mo.) Stays until 11:00 P.M. often—Editor. YV1RD, Maracaibo, Venezuela, on 6.08 mc. heard at 6:38 P.M. when schedule shows starting at 7:00. (Sokolosky, Palestine.)

(General) HJ1ABJ, Santa Marta, Colombia, verie says 11:30 A.M. to 2:00 P.M. and 5:30 to 10:30 P.M. (Quayle, Canal Zone.) 9MI on the ship "Kanimbla" verie says they broadcast on 6.01 mc., have 50 watts power and are on every Sunday 6:00 to 7:30 A.M. (Myers, Calif.) A station XETW, Tampico, Mexico, heard on 6.04 mc. once at 9:52 P.M. (Velasco, Mexico.) W3XAU, Philadelphia, on 6.06 mc. is heard until 11:00 P.M. not just 10:00. (Stark, Mo.) W9XF, Chicago, on 6.10 mc. comes on at 6:00, not 5:00 P.M. (Stark, Mo.)

VQ7LO, Nairobi, Kenya, Africa, is on a new schedule. They are on 6.08 mc. weekdays 5:30 to 6:00 A.M. and 11:15 to 2:15 P.M., Sundays 10:45 A.M. to 1:45 P.M. and Tuesdays and Thursdays 8:15 to 9:15 A.M. (Rastall, England.)

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

H11A, San Pedro de Macoris, Dominican Republic, on 6.19 mc. heard at 6:50 P.M., when schedule says they start at 7:40 P.M. (Sokolovsky, Palestine.) OAX4G, Lima, Peru, verifies, saying 6:23 mc., not 6.26 mc. (Seymour, Md.) We publish the frequency the station is actually on—Editor.

H1N, Trujillo, Dominican Republic, on 6.24 mc. heard till 10:00 P.M., not just 9:15, (Stark, Mo.) YV5RJ, Venezuela, on 6.25 mc. sent special program at 1:35 A.M. October 1st, (Stark, Mo.)

Verie from COCW, Havana, Cuba. says 6.33 mc., not 6.32, (Atherton, Vt.) H11X, Trujillo, Dominican Republic, on 6.34 mc. heard till 10:10 P.M. instead of 4:45 to 6:00 P.M. as schedule shows, (Stark, Mo.) H14V verie says now San Francisco De Macoris instead of Trujillo, Dominican Republic. so station must have moved (Stockbridge, Mass.) Heard on 6:45 mc. now, (Oxriider, Pa.)

7:00 to 8:00 Mc. (7 to 8 Dial)

(New) A station called "La Radiodifusora del Pueblo" or "The Peoples Broadcaster" at Guadalajara, Jalisco, Mexico, is on 7.99 mc. daily 9:00 to 11:00 P.M. They sometimes say "Radio Nacional" and "This is the short-wave station of the National Revolutionary Party of Guadalajara, Mexico." The address is announced as Madero 210. They said they hoped to be in the 31 and 49 meter bands soon. (Chavez, Ulance, Oxrieder, Stark, Honda, Lane, Amers, Velasco, Grey, Seymour).

(New) A station at Hanoi, French Indo-China, is on 7.44 mc., has a lady announcing and signs off at 9:30 A.M. with "Marsellaise." (Amers, Calif.)

General News. Station CN8AJ, Casablanca, Morocco, did not send a special program last month as they promised. Was on 14.12 mc. that evening for a few moments and did not use 7.04 as they said, (Williams, New York).

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

RKI, Moscow, U.S.S.R., on 7.54 mc. is still broadcasting nightly from 7:15 till 9:30 P.M. or later, relaying same programs as RAN, (Oxrieder, Flag, Stockbridge).

HC2JSB, "Ecuador Radio" Apartado 805, Guayaquil, Ecuador, verie says 7.854 mc. or 38.19 mc., with 500 watts power, broadcasting daily 11:00 A.M. to 2:00 P.M. and 3:40 to 11:00 P.M. (Stockbridge, Mass.) Heard on 7.98, (Seymour, Md.)

YSD, San Salvador, El Salvador, on 7.98 mc. broadcasts daily, relaying YSS, from 7:00 to 11:00 P.M. as a rule, but was heard as late as 11:53. Letter says Julio Enrique Avila is in charge. Send reports to Director General of Communications, San Salvador, (Mayes, San Salvador). Heard as per news, (Worcester, Hawaii; Oxrieder, Pa.; Spuhler, Ohio; Eder, Miss. and Stockbridge, Mass.)

8:00 to 9:00 Mc. (8 to 9 on Dial)

(New) Station XEWW, Mexico City, heard on 8.58 mc. instead of 9:50 mc. at 11:00 P.M. once, (Eder, Minn.)

(New) HKV, Bogota, Colombia, is on 8.698 mc. Tuesdays and Fridays, 7:00 to 7:20 P.M., broadcasting now. Send reports to Ministry of War,

Bogota. Sr. Edward Nogeura, Chief Engineer of Army Communications is in charge, (Williams, N. Y.)

General news. HCJR, Quito, Ecuador, heard on 8:85 mc. between 8:45 and 10:25 P.M. (Stark, Mo.) On 8.83 mc. until 11:00 P.M. (Worcester, Hawaii). Has schedule to test with WCFL, Chicago, every Friday night at 10:15 P.M. and was heard relaying WCFL 1:15 to 1:36 A.M. on 8.945 mc. (Caldwell, Pa.) Mr. Jones used to be connected with WCFL before he went to Quito—Editor.

JRZB on the ship "Yashukuni Maru," was heard on 8.90 mc. phoning around 6:00 A.M. (Myers, Calif.) XEAW, Vera Cruz, Mexico, on 8.63 mc. heard testing between 8:00 an 11:00 P.M. using slogan "Auditorio del Continent," (Eder, Minn.; Erwin, Ill.; Rossi, Pa.) YNPR, "Radio Pilot," Managua, Nicaragua, verie says 8.65. Heard on 8.58, (Oxrieder, Pa.) COKG, Santiago, Cuba, heard on 8.92 mc. instead of 6.20 mc. once from 6:00 to 8:00 P.M. Said Apartado 137, (Stark, Mo.) Said COKC and on 8.94 till 9:30 P.M. (Eder, Minn.)

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

COBZ, "Radio Salaz," P. O. Box 866, Havana, Cuba, veries say they have 1500 watts power on 9.03 mc. Many have them. Heard Mondays to Saturdays 7:42 in the morning till 12:10 A.M. next day, (Quayle, Canal Zone). A strange station using call KUY phones DFZ Germany between 4:00 to 5:00 A.M., (Williams, N. Y.) COBX, San Miquel 194, Havana, Cuba, has 500 watts power, is on 9:20 mc., 8:00 A.M. to 11:30 P.M. daily. They use the slogan "De Los Talleres de Radio Alvarez." (Rubio, Cuba). On 9.22 mc. now (Amers, Calif.) Heard till midnight, (Pegge, England). (New) A phone DAF, Germany, is heard on 9.30 mc. mornings, Seymour, Maryland).

(New) HBL, Geneva, Switzerland. veries say they broadcast Fridays 2:30 to 2:45 P.M., 7:30 to 7:45 P.M. and 8:00 to 8:15 P.M. now, (McDermott, Pegge). This is on 9.43 mc. Was on daily between 7:00 and 8:00 P.M. during meeting of League of Nations, (Oxrieder, Weyrich, Dement).

COCB, Havana, Cuba, "El Progreso Cubano," say they are on 9.35 mc. Mondays to Saturdays 7:35 to 12:30 A.M. next day; Sundays 6:55 A.M. to midnight, (Quayle, Canal Zone). Veries say 9.35 mc., Box 132 (Orlob, Pegge, Amers, Atherton). Station has roamed around a bit, but settled on 9.31—Editor.

(New) OZF, Copenhagen, Denmark, is on 9.52 mc. broadcasting from 2:00 P.M. till 6:45 P.M. It is heard till 6:00 P.M. fair, then HJ4ABH comes on top of it, (Oxrieder, Eder, Nelleman, Spuhler, Atherton).

Radio Liberte, France, was heard on 9.52 mc. at 6:45 P.M. last month, (Atherton, Va.) YSH, San Salvador, El Salvador, on 9.52 mc. is used irregularly to relay YSS around 9:00 P.M., but was not reported this month.

(New) World Radio of London says HB9B, owned by Radio Club Zurich, Post Box 2, Zurich, Switzerland, is on 31.46 meters, 9.54 mc. Sundays 9:00 to 11:00 A.M. and Thursdays 1:00 to 3:00 P.M., with 1 kw. power, (Trecee, England).

HJ1ABB, Barranquilla, Colombia, heard on 9.545 mc. again from 10:00 to 10:50 P.M. instead of on 4.78 mc. (Honda, Calif.) HJ1ABB is still on

4.78 as we go to press.—Editor. OLR3A, Praha, Czechoslovakia, 9.55 mc., is broadcasting now from 2:30 to 4:30 P.M. daily, replacing OLR4A on 11.84 mc. This comes direct from the station. Heard till 4:45 P.M. once, (Nelleman, Ill.)

OAX5C, Ica, Peru, moved from 9.63 to 9.58 mc. and is now right below WIXK, Boston. Heard till 10:00 P.M. (Lane, Calif., Gallagher, Calif. Oxrieder, Pa.) HP5J, Panama City, sends verie saying they have HP5J on 9.59 mc., HP5F on 6.08 mc. and HP5L on long waves, indicating that the Station reported at HP5L near 11.50 mc. some months ago was an error. The address is Apartado 967, (Stockbridge, Mass.) KZRM, Manila, P. I., said over phone that they would move from 9.57 to 9.60 mc. to avoid interference, (McMenamy, Calif.)

RAN, Moscow, U S. S. R., is now broadcasting between 11:30 P.M. and 12:30 A.M. in addition to 7:15 to 9:30 P.M. (U lance, Pa.) CB96O, Chile, is off the air. Was on 9.60 mc. (Gallagher, Calif.)

Cape Town, South Africa, is being heard on 9.61 mc. daily 11:45 P.M. to 12:45 A.M. Read the details under the Special News section.

JFAK, Taihoku, Japan, is on 9.625 mc. between 4:00 and 10:30 A.M. daily heard best between 7:00 and 9:00 A.M. JIB on 10.535 mc. relays same program, (Walcott, Calif.) At 7:45 A.M. (Eder, Minn.) At 10:00 A.M. (Gallagher, Calif.) At 7:00 to 8:00 A.M. (Arms, Mass.)

CXA8, is located at Colonia, Uruguay, across the bay from Buenos Aires, Argentina. The address is Belgrano 1841, Buenos Aires, Argentina. It is heard best from 8:00 P.M. till midnight, (Galagher, Calif., Amers, Calif.; Worcester, Hawaii; Chavez, Calif.; Oxrieder, Pa.) Said were on air daily 7:00 A.M. till midnight, (Honda, Calif.)

2RO, Rome, Italy, returns to 9.64 mc. for their winter schedule. They will start on this wave at 12:30 noon, and are on 11.80 mc. from 6:30 A.M. till that time. On 9.64 mc. they will be heard till 7:30 P.M. all but Sundays when they sign off at 5:00 P.M. The American Hour may be broadcast daily after December 1st. (Forestieri, N. Y.)

HJ7ABD, Bucaramanga, Colombia, is on 9.63 mc. from 10:00 A.M. till noon and 4:00 P.M. till 10:00 P.M. using slogan "Radio Bucaramanga." Some say this is station HJ2ABD using a new call and wavelength. but we can not say, for HJ2ABD is lost in code signals, if it is on the air. Some report HJ7ABD as late as 11:00 P.M. (Chavez, Calif.; Flagg, Mass.; Neve, Mexico; Seymour, Md.; Atherton, Vt.; Oxrieder, Pa.; Weyrich, Md.; Lae, Calif.; Gallagher, Calif.)

CT1AA, Lisbon, Portugal, on 9.67 mc. now broadcasts Tuesdays, Thursdays, and Saturdays 4:00 till 7:00 P.M. (Atherton, Vt. and Arvin, England). Heard till 7:30 P.M. on 9.65 mc. now, (Stark, Mo.) Awarded new call which is CSW2 or CSW2A and on 9.65 mc. now, Wooten, Ala.) A verie from CR6AA, Lobito, Angola, Africa, says they use 9.66 mc. irregularly; 7.177 mc. regularly Wednesdays and Saturdays 2:45 to 4:30 P.M. However, the station is heard between 10:00 and 11:00 A.M. on 9.66 and was verified, (Myers, Calif.)

(New) TGWA, Guatemala City, is on 9.685 mc. irregularly between 9:00 P.M. and 1:00 A.M. the next day. They sometimes test with New

York, relaying musical programs, (Chavez, Calif.; Gallagher, Calif.; Lucke, Ill.; Amers, Calif.; Quijano, Calif.; Spuhler, Ohio; Stockbridge, Mass.; Honda, Calif.; Oxrieder, Pa.)

Radio Martinique, is on 9.685 mc. broadcasting usually from 6:36 to 7:36 P.M. but sometimes staying later. They always announce 9.73 mc. but everyone says 9.685 is the wave in use. Member Quayle of Haiti says the address is Boite Postal 136, Fort de France. Other reports come from members Weyrich, Waite, Eden, Gallagher, Amers, Atherton and Flag.

(New) Here is something special. Station XGOX, Nanking, China, is now on 9.80 mc. broadcasting the programs of XGOA from 6:00 to 10:00 A.M. English is used daily at 7:30 A.M. (Wallcott and Gallagher, Calif.)

COCM, Havana, Cuba, roams around, but seems to be on 9.84 mc. at present using the slogan "Transradio Columbia" and "Ondas Corta Comerciales." Heard around noon and between 6:00 and 11:00 P.M. Address is Apartado 33, Havana. JYS, Kemikawa-Cho, Japan, on 9.87 is heard many times relaying JOAK programs around 7:00 A.M. and once between 7:50 and 8:00 A.M. sent special program. Is positively not JFAK nor JDY according to report. (Seymour, Md.)

JDY, Dairen, Kwantung, Manchukuo, on 9.92 mc. is broadcasting daily 7:00 to 8:00 A.M. reading news in English between 7:45 and 8:00 A.M. Gave address as 7 Oyanmagori, Dairen. (Chavez, Calif.; Waite, N.Y., and others).

CSW, Lisbon, Portugal, has closed down for six weeks in order to increase power. New schedule will not be known until later. (Geer, Ind.) A station is heard on 9.625 mc., the same wavelength as JFAK and is heard after JFAK goes off the air at 10:30 A.M. and again around 11:00 P.M. A man talks and they sign off with some foreign announcement, (Amers, Calif.) Could be Cape Town—Editor.

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

(New) The station announcing as "Radio Nacional de Salamanca" and operated by the Franco army of Spain, was heard on 10.37 mc. by many. They are on the air every night between 8:00 and 9:45 P.M. with war news, but were also reported at other times. The news was passed out that this was a new station, but it was denied later when it was said that this is EAJ43, Canary Islands, relaying programs from Salamanca. Some members said EAJ43 moved, and this one is new. Now we hardly know which is true. The editor believes this is EAJ43. Is EAJ43. (Dean, Oxrieder) Is on 10.37, (Scala, Richards, Walcott) On 10.34. (Davenport and Waite) On 10.40. (Legge) On 10.43. (Taylor) On 10.50. (Weyrich) On 10.42, was on 10.35. (Gallagher) EAJ43 is still on 10.37, new station is on 10.42. (Flagg, Mass.) No wave given. (Dement, Lane and Eder.)

(New) LRA, Buenos Aires, Argentine, is on 10.37 mc. around 9:30 P.M. used slogan "Radio Libertado" and "Radio Telefonía" (Worcester, Hawaii).

CEC, Santiago, Chile, on 10.67 mc. sent special program July 29th and not on since, (Gallagher, Calif.) Heard around 10:00 P.M. now, (Honda, Calif.) LSX, Buenos Aires on 10.35 mc. tests around 11:30 P.M. to 1:00

A.M. now preparing for special Pan-American conference, (Amers, Calif.)

JIB, Taihoku, Taiwan, is on 10.535 mc. broadcasting between 9:00 and 10:25 A.M., relaying same programs as JFAK on 9.62, (Walcott, Gallagher and Chavez).

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

WMI, Lorain, Ohio, is reported giving weather reports on 11.05 mc. at 11:10 A.M. (Atherton, Va.) On 11.37, 10:00 to 10:10 P.M. (Stark, Mo.) On 25 meter band at 10:10. (Adler, N.Y.)

HBO, Geneva, Switzerland, on 11.40 mc. broadcasts Fridays 2:00 to 2:15 P.M. now, (McDermott, N. Y.) Heard daily at this time, (Smith, England).

A Java phone on 11.57 mc. sometimes broadcasts same programs as PLP till 10:00 A.M. and also phones irregularly 7:00 to 10:00 A.M. (Amers, Calif.) TPA4, Pontoise, France, for a while slipped up to about 11.703 mc. and right into HP5A, (Oxrieder, Pa.)

HP5A, Apartado 954, Panama City, veries say 500 watts, 11.70 mc. daily 11:45 A.M. to 1:00 P.M. and 6:00 to 10:00 P.M. Their slogan is "Radio Teatro Estrellt de Panama." Starts up with "Anvil Chorus."

CB1170, Santiago, Chile, moved up to 11.70 mc., almost on top of HP5A. They relay CB89 and use the slogans "Emisors Otto Becker" and "Las Broadcasting Populares para toda la America." Their address is announced as Ahunada 113, Santiago. Is usually heard 6:00 P.M. till 11:00 P.M. sometimes till midnight, (Oxrieder, Amers, Chavez, Lane, Gallagher, Velasco, Neve and an unsigned card).

YSM, San Salvador, El Salvador, on 11.71 mc. was not reported this month. They broadcast daily 1:30 to 2:30 P.M. and have 500 watts power, (Mayes, San Salvador). SBG, Motala, Sweden, on 11.71 mc. now broadcasts 1:20 to 2:05 A.M., 8:00 to 9:00 A.M. and 11:00 A.M. to 1:30 P.M.

CR7BH, Lourenco Marques, Africa, on 11.72 mc. broadcasts 12:15 to 1:00 A.M., :930 to 11:00 A.M. and 12:45 to 3:45 P.M. week-days and 5:30 to 7:00 A.M. and 10:00 A.M. to 12:30 P.M. Sundays. Heard often 3:15 to 4:14 P.M. according to member Seymour of Maryland, although not scheduled.

PHI, Huizen, Holland, on 11.74 mc., broadcasts Wednesdays and Sundays 8:00 to 9:00 P.M. now. Heard till 10:00 P.M. (Amers, Calif.; Gallagher, Calif.; Flagg, Mass., and Lucke, Ill.)

TGWA, Guatemala City, on 11.76 mc. was the "big noise" of October. This station was on 11.75 mc., then on 11.76 mc. and was heard testing between 6:00 P.M. and 1:00 A.M. next day by a good many people. About ten schedules have been sent to us, but it seems that they have no regular schedule, but may be on 9.68 mc. and 11.76 mc. any time of the day. Reports should be sent to the Ministerio de Fomento, Guatemala City, Guatemala. We have reports from the following: Amers, Geer, Weyrich, Stark, Edwards, Ulance, Nichols, Adler, Mitchell, Stickbridge, Oxrieder; McMenamy, Chavez, Cooper, Robert, Thoreson, Gallagher, Wooten, Hannah, Cancio, Lane, Williams and Honda.

OAX5B, on 11.796 mc. veries say daily noon to 4:00 P.M. and 7:00 to 11:00 P.M. Address is Avenida San Luis, Ica, Peru. COGF, Havana, Cuba,

has sent out four or five schedules, but latest ones say 11.80 mc., 1:00 to 4:00 P.M. and 6:00 to 10:00 P.M. week-days and 9:00 to 10:00 A.M. Sundays. Heard at 9:00 A.M. (Stark, Mo. and Edwards, Pa.) JZJ, Tokio, Japan, on 11.80 mc. is supposed to broadcast in November daily 8:00 to 9:00 A.M., 3:00 to 4:00 P.M. and 4:30 to 5:30 P.M.

W9XAA, Chicago, Illinois, on 11.83 mc. is not off the air. The report we published last month came from a man who visited W9XAA and was told they were leaving the air for good. They are still on 11.83 mc. in the afternoons, as early as 11:00 A.M. and as late as 6:00 P.M. (Stark, Van Bergen, Atherton and Oxrieder).

CB1190, recently on 12.02 mc. is now on 11.913 mc., the station relays CB69, and uses the slogan "La Voz de Valdivia." They announce their address as Casilla (or Post Office Box) 642, Valdivia, Chile, Gallagher, Calif.; Worcester, Hawaii; Oxrieder, Pa. and Chavez, Calif.)

12.00 to 13.00 Mc (12 to 13 on Dial)

(New) A station CB120, "Radio Vitalicio," at Santiago, Chile, is on 12.00 mc. irregularly 8:00 to 11:00 P.M. This is positively not CB1190, once on 12.02 and now on 11.91, (Gallagher, Calif.) Station "Radio Service" of Chile, once on 12.30 mc. is off the air now (Galagher).

(New Schedule.) Station RNE, Moscow, on 12.06 mc. is now broadcasting between 8:00 and midnight, signing off at 9:15 P.M., returning at 10:00 P.M. with Russian language being used till 10:15 and then English for some time. Always says 12.00 mc. but on 12.06, (Oxrieder, Pa.) On 12.02 at 10:00 P.M. (Gross, N. C.) On 12.20 till 11:30 P.M. (Cancio, Cuba). On 12.07 8:00 till 11:00 P.M. (Gallagher, Calif.) News at 10:40 P.M. (Adler, N. Y.)

TPZ, Alger, Algeria, on 12.12 mc. broadcasts some afternoons 3:30 to 4:30 P.M. VVS, Mingaladon, Burma, 12.88 mc. and VVN, Fort St. George, Madras, India, phone each other 10:00 P.M. to 7:00 A.M. according to verie. Has 750 watts power. VVN is on 13.26 mc. (Walcott, Calif.) The MacGregor Expedition to Ellesmere Island, may broadcast on 17.31 mc., 12.8625 mc., 8.65 mc. or 6.24 mc. HP5K, "La Voz del Victor," Colon, Panama, has strong harmonic on 12.25 mc. (Canco, Cuba). Harmonic would fall exactly on 12.00 mc., not 12.25—Editor.

13.00 to 14.00 Mc.

(New) SPW, Warsaw, Poland, broadcasts on 13.63 mc. daily, 6:00 to 7:00 P.M. and Sundays till 8:00 P.M. (Oxrieder, Pa.; Lenzioszek, Mass.; Roberts, Ind.; Scala, N.Y.; Russell, Md.) Moved late in month to 14.50 mc. and heard 5:30 until 7:30 P.M. (Flagg, Mass.)

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

(General) Call of the phone on 13.00 mc. is TYC, Paris, according to verie. (Seymour, Md.) ZBG, Kuala Lumpur, Selanger, on 13.642 mc. was heard calling Java, 7:30 to 8:15 A.M., but letter says they will not verify. Address was Posts and Telegraph, (Walcott, Calif.) YSJ, San Salvador, a phone on 13.41 mc. heard at 11:30 P.M. when they usually work in daytime, (Stockbridge, Mass.)

14.00 to 15.00 Mc.

(New). A station OX2QY, located at Reindeer Point, Greenland, 600 miles from the North Pole and operated by the McGregor Expedition, is on the air almost nightly between 8:00 and 11:00 P.M. Members differ on the frequency, so we will show what each says. Reports should be sent to Amateur station W2QY, Cornwall-on-Hudson, New York, and will be verified after the operator returns. They have 400 watts power. On 14.30, (Brady, N.Y.) On 14.37. (Amers, Calif.) On 14.38. (Smith, Ky.; Geer, Ind.; Arms, Mass.; Waitc, N.Y.) On 14.36, (Roberts, Ind.; Atherton, Vt.) Wave not mentioned, (Spuhler, Ohio, Flagg, Mass.)

(New) KA1YL, on the schooner-yacht "Latitude," on 14.163 mc. was heard at 5.30 A.M. Also operates on 8.10 mc. Address is Marion Karolchuck, P. O. Box 3232, Manila, P. I. (Williams, N. Y.)

(New) Station SPW, Warsaw, Poland, and is now on 14.50 mc. broadcasting from 6:00 to 8:00 P.M. (Flagg, Mass.)

P11J, Norddrecht, Holland, was heard broadcasting on 14.16 mc. 8:00 to 8:20 P.M. Dr. Hellingmann announced this frequency and asked reports be sent to Technical College. Power is 50 watts. (McDermott, N.Y.)

EA9AH, Tetuan, Spanish Morocco, still attracts interest although they just seem to play the same music over and over and shout "Viva Franco." They are on 14.03 and sometimes work amateurs after 11:00 P.M. Gives news in English daily at 4:45 P.M., 8:00 P.M. and 10:00 P.M. according to member Treece, England.

The ship XW6A, heard in September, was not heard last month. It was on 14.15 mc.

15.00 to 16.00 Mc.

(New) A station CXA14 at Colonia, Uruguay, is on 15.17 mc. relaying LR3. "Radio Belgrano." 1841 Belgrano Street, Buenos Aires, Argentina, from 11:00 P.M. to 2:00 A.M., some mornings, (Chavez, Calif.)

(New) OAX4T, "Radio Nacional," at Lima, Jeru, was heard on 15.22 mc. in the mornings, (Cancio, Cuba).

(General) Station W2XE on 15.27 mc. was heard broadcasting till midnight instead of going to 11.83 mc. at 6:00 P.M. (Stark, Mo.) Perhaps the operator went to sleep, for our schedule comes straight from the station.

PRF5, Rio de Janeiro, Brazil, was heard on 15.00 mc. at 5:30 P.M. once, (Studholme, England). RKL, Moscow, on 15.08 mc. is no longer used to relay the evening programs of RAN, (Scala, N.Y.) JZK, Nazaki, Japan, on 15.16 mc., sends schedule showing them on the air 12:30 to 1:30 A.M., 8:00 to 9:00 A.M., 3:00 to 4:00 P.M. and 4:30 to 5:30 P.M. Heard till 1:50 A.M. often, (Honda, Calif.)

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

16.00 to 21.00 Mc.

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

W2XGB, Press Wireless, Hicksville, L. I., New York, on 17.31 mc. says schedule is daily except Saturday and Sunday 10:00 A.M. to 1:00 P.M. (Boothem, England) Says 10:00 A.M. to noon. (Bell, Scotland) Verie says 5 kw. power, want reports from Europe, Box 296, Hicksville, New York, (Rastall, England). Heard at 5:38 to 5:42 P.M. (Arvin, Eng.)

A ship "Yashukuni Maru" is on about 17.65 mc. phoning Japan and Germany. A JEZP heard on 15.40 mc. once phoning KWO at 11:25 P.M. (Seymour, Md.) We have no idea who this can be—Editor. W10XAB, MacGregor Expedition, on 17.21 mc., sent program to NBC once, no time stated in report. (Weyrich, Md.) RIF, Moscow, U.S.S.R. on 18.02 mc. sent musical program 11:39 P.M. to 12:10 A.M. (Studholme, England). TYU-1 Paris, France, is new phone on 18.25 mc. working WDP, New York, near 10:00 A.M. (Flagg, Mass.) JZL, Nazaki, Japan, on 17.78 mc. is testing irregularly.

HS8PJ, Bangkok, Siam, on 19.02 mc. broadcasts Mondays 8:00 to 10:00 A.M. This is heard in Europe much better than elsewhere. Member Legge of Pennsylvania, says HJ4ABH, Armenia, Colombia, has a harmonic on 19.04 mc. that helps to locate HS8PJ on 19.02.

GENERAL NEWS

Last month it was said that stations XOJ, XTB, etc., at Shanghai, China, were all destroyed. Now we have word that XOJ on 15.80 mc. was heard at 10:00 A.M., XGN on 17.64 was heard at 10:00 A.M. and XTV, Canton, on 9.50 mc. was heard at the same time. (Gallagher, Calif.)

Radio Nations, Geneva, Switzerland, sends a bulletin saying that every Friday they broadcast as follows:

HBO on 11.40 mc.—2 to 2:15 P.M. for English listeners in Europe & Africa.
HBL on 9.34 mc.—2:30 to 2:45 P.M. for French listeners everywhere.
HBL on 9.34 mc.—7:30 to 7:45 P.M. for English listeners in America.
HBL on 9.34 mc.—8:00 to 8:15 P.M. for Spanish listeners in America.

This comes from member McDermott of New York. Captain Oxrieder says HBL is used Thursdays, not Fridays, 7:30 to 7:45 P.M. and 8:00 to 8:15 P.M.

Veries from Java say they have YDA on 3.04 mc.; YDB on 9.62 mc.; YDC on 15.15 mc.; PLP on 11.00 mc. and PMN on 10.26 mc. broadcasting weekdays 10:30 P.M. to 2:00 A.M. and 5:30 A.M. to 10:00 A.M. (Saturdays until 10:30 A.M. and also 6:00 to 7:30 P.M.) and Saturdays 7:30 P.M. until 2:00 A.M. Sundays and 5:30 A.M. Sundays until 10:00 A.M. Many have shown us these veries.

Holland has cut up their schedule. They are now on 17.77 mc. Sundays 7:25 to 10:25 A.M.; Mondays, Tuesdays, Thursdays, Fridays, 8:25 to 10:00 A.M.; Wednesdays 8:00 to 10:30 A.M. and Saturdays 8:25 to 10:30 A.M. On 15.22 mc. they broadcast Tuesdays 4:00 to 6:30 A.M.

and Wednesdays 8:00 to 10:30 A.M. On 11.74 mc. they broadcast Sundays and Wednesdays 8:00 to 9:00 P.M. On 9.59 mc. Sundays 2:00 to 3:00 P.M. and 7:00 to 8:00 P.M.; Tuesdays 1:00 to 3:30 P.M. and 7:00 to 9:30 P.M.; Wednesdays 1:00 to 3:30 P.M. and 8:00 to 10:30 P.M. and Thursdays 9:00 to 11:00 P.M.

Weather reports are given by these stations: WWOJ, Sault St. Marie, Michigan, on 2.57 mc. at 10:15 P.M.; WMI, Lorain, Ohio, on 2.56 mc. at 10:00 P.M.; WMI, Lorain, Ohio, on 6.45 mc. at 10:00 P.M.; WNAC, Jamestown, N.Y., on 2.72 mc. from 8:00 to 10:00 P.M.

England tells us they will use this schedule in November, but we bet they will change it, for they always do. It would be a surprise to see them keep their printed schedule just once.

9.51 mc.—GSB, 3:15 to 5:30 A.M., 12:20 to 6, 6:20 to 7:30 and 9 to 11 P.

9.58 mc.—GSC, 9:00 to 11:00 P.M.

11.75 mc.—GSD, 3:15 to 5:30 A.M., 10:45 A.M. to noon, 12:20 to 3:45 P.M. America

6:20 to 7:30 P.M. and 9:00 to 11:00 P.M.

15.14 mc.—GSF, 9:00 A.M. to noon and 4:00 to 6:00 P.M.

15.18 mc.—GSO, 3:15 to 5:30 A.M., 5:45 to 9:00 A.M. and 4 to 6 P.M.

15.26 mc.—GSI, 12:20 to 3:45 P.M.

15.31 mc.—GSP, 4:00 to 6:00 P.M. and 6:20 to 7:30 P.M.

17.79 mc.—GSG, 3:15 to 5:30 A.M. and 5:45 to noon.

21.47 mc.—GSH, 5:45 A.M. to noon.

21.53 mc.—GSJ, 5:45 A.M. to noon.

Germany will use these:

6.02 mc.—DJC, 10:40 A.M. to 4:30 P.M. and 4:50 to 10:45 P.M.

9.56 mc.—DJA, 12:05 to 11:00 A.M. and 4:45 to 10:45 P.M.

9.51 mc.—DJN, 12:05 to 11:00 A.M. and 4:50 to 10:45 P.M.

11.77 mc.—DJD, 10:40 to 4:30 P.M. and 4:50 to 10:45 P.M.

15.11 mc.—DJL, 12:00 to 2:00 A.M., 8:00 to 9:00 A.M., 10:40 to 4:30 P.M.,
Sundays 6:00 to 8:00 A.M.

15.20 mc.—DJB, 12:05 to 11:00 A.M., 4:50 to 10:45 P.M., Sundays 11:10 to
12:20 P.M.

15.28 mc.—DJQ, 6 to 11 A.M., 4:50 to 10:45, Sundays 11:10 to 12:20 P.M.

15.34 mc.—DJR, 8:00 to 9:00 A.M. and 4:50 to 10:45 P.M.

17.76 mc.—DJE, 12:05 to 5:45 A.M., Sundays 11:10 to 12:25 P.M.

Germany also has experimental stations, DZA on 9.675 mc., DZB on 10.04 mc., DZC on 10.29 mc., DZE on 12.13 mc., DZG on 15.36 mc. and DZH on 14.46 mc. which may be used at times. DJO on 11.85 mc. is heard most every afternoon starting around 11:35 A.M. and lasting till 4:30 P.M. DZC, DZE, DZG and DZH broadcast every Wednesday for the Penambuco Radio Club (PRA8), Brazil, between 2:00 and 3:00 P.M. (Mascarenhas, Brazil. Heard 5:00 to 5:30 P.M. with these programs, (Hans. Al. 'ca). Heard at 2:00 P.M. (Studholme, England). On the 14th and first days of each month, stations DZC on 10.29 mc. and a station on 11.855 mc., either DJO or DJP relays a program from YUA, Belgrade. DZH, 14.46 mc. broadcasts quite regularly 10:00 P.M. to 11:30 P.M. or midnight. (Amers, Calif.) DJL, 15.11, and DJP, 11.85, sent special program from Norway 6:00 to 6:30 P.M., October 15. (Scala, N. Y.) DJO and DJP heard 8:30 to 9:00 P.M. with program for Canada once. (Weyrich, Md.

AMATEUR NEWS**Australia: 20 meters, 14 mc.**

1:00 to 2:00 A.M.—VK4JU, VK3AL, VK2AX. (Gallagher, Calif.) 9:00 to 11:00 A.M.—VK5AW, VK4LB, VK3AL. 7:00 P.M. to 2:00 A.M.—VK4JU, VK2HF, VK2ABD, VK2AZ, VK2ZZ. (Amers, Calif.)

Africa: 20 meters, 14 mc.

10:00 to 11:30 A.M.—ZS1B, Cape Town, 14.06 mc.; ZS1AV, 14.27 mc.; ZUIT, Noorder Pearl, 14.07; ZS5M, Glencoe, Natal, 14.314; ZT5P, Pietermaritzburg, 14.27; ZS6AA, Johannesburg, 14.33; ZS6AJ, Johannesburg, 14.13; ZS6AM, Johannesburg, 14.08; ZS6AY, Johannesburg, 14.315; ZT6Y, Benoni, 14.06; ZT6AK, Benoni, 14.055; ZT6S, Johannesburg, 14.08; ZU6N, Sandown 14.11; ZE1JA, Salisbury, 14.31; FB8AH, Madagascar, 14.275. (Walcott, Calif.) CN8AM, French Morocco, SU1SG, Egypt and EA8CH, Algeria. (Smith, England.) 11:20 P.M.—S11KG, Egypt, 14.20. 12:00 to 12:45 A.M.—SU6AF, EA8AE, Canary Islands, 14.41. (Seymour, Md.) 9:00 to 11:00 A.M.—ZU6N, ZS6HJ. (Amers, Calif.) CN8MG, Morocco, 4:20 P.M. (Sokolsky, Palestine.)

Asia: 20 meters, 14 mc.

1:00 to 2:00 A.M.—XE1IK, China; XE2XF, China; PK1KW, Java (Gallagher, Calif.). 9:00 to 11:00 A.M.—KA1ME, KA1YL, KA1MM, KA1AP and KA1HS in the Philippines; VS1AI, F. M. St.; VS2AK, F. M. St.; VS3AE, Japore, FMS, VS6AB, Hongkong; J2MI, Japan; PK1RI and PK1MX, Java. (Aers, Calif.) Between 9:30 and 11:00 A.M.—XZ2DY, Burma, 14.34 mc.; FI8AC, Hanoi, Fr. Indo-China; 14.275; VS6AG, Kowloon Hong Kong, 14.084 mc.; VS1AF, Singapore, 14.14; VS1AI, Singapore, 14.05; VS2AK, Kuala Lumpur, 14.255; KA1AC, Cavite, Philippines, 14.14. (Walcott, Calif.) 2:00 A.M.—ZM1DI, Pago Pago, British Samoa. (Seymour, Md.)

Europe: 20 meters, 14 mc.

L1KS, Italy, 3:30 P.M.; F8XT, France, 3:30 P.M.; F8VP, France, 3:30 P.M.; 11MG, Italy, Noon; DO4A, Germany, 6:56 P.M.; EA8EL, Spain, 4:30 P.M.; HA4E, Hungary. (Sokolsky, Palestine.) 2:00 P.M.—F8KW, France. 1:00 to 5:00 P.M.—EI2L, Ireland. (Smith, England.) 1:00 A.M.—ON4VK, Belgium. (Gallagher, Calif.)

South America: 20 meters, 14 mc.

CE1AA, Chile; CE1AO, Chile; CE3DW, Chile; HC1JW, Ecuador; LU1QA, Argentina; OA4C, Peru; OA4N, Peru; LU4KA, Argentina, heard 7:00 P.M. to 2:00 A.M. (Amers, Calif.) PY1FR, Brazil, 4:00 P.M. (Smith, England.) PY5AQ, 14.17 mc., 5:58 P.M.; LU5MZ, 14.30, 6:15 P.M.; HC1EC, 14.02 mc., 12:30 A.M.; KH1MD, 14.02 mc., 1:15 A.M.; CX1CC, 14.04 mc., 11.18 P.M. (Seymour, Md.)

28 mc. Band, 10 meters.

From 8:45 A.M. to 9:30 A.M.—G5RB, London; ONF4, Belgium; G5MI, England; SM5OI, Sweden; ZE1JR, Rhodesia, Africa; ZT6AK, Capetown; ZM8AB, Johannesburg; G6G6, England; OQ5AA, Belgian Congo; SU1GP, Cairo, Egypt; PK1GL, Java; PK1ZZ, Java; XZ2DX, Burma. (McDermott, New York.) Noon to 3:00 P.M.—ZT6AV, ZU6P, ZT2B in Africa; VK2GU, Australia, 7:00 P.M.; OK3VA, SM5OI, EI9J, EI2L, PAOBE, GM6RG; GW2UL heard 8:30 A.M. to 4:00 P.M., all in Europe. (Legge, Pa.)

RADIOS—*In Stock*

Model	Cash Price	Down Payment	12 Monthly Payments
RME-69	\$151.20	\$30.24	\$10.81
Breting 14	108.00	21.60	7.75
PR-15	109.50	21.90	7.86
Sky Buddy	29.50	5.90	2.20
Sky Challenger	69.50	13.90	4.15
Super Skyrider	99.00	19.80	7.11
ACR-155	74.50	14.90	5.38
ACR-111	189.50	37.90	13.51
Super Pro	238.14	47.62	16.95

All other receivers at wholesale prices on same 6% plan.

ALL RECEIVERS SHIPPED ON TEN DAYS TRIAL

You need send but \$5.00 with order. Trade in your receiver. Compare my terms with others. Write for information. Your inquiries are invited.

HENRY RADIO SHOP

211-215 North Main Street

Butler, Missouri

ULTRA-SHORT WAVES

The following list is made up of active ultra-short wave stations heard using voice. Send reports to police station to the Chief of police, City Building, in the city it is operating.

- 21.60—W9XJL, Superior, Misc. Relays WEBC around 11:00 A.M.
- 25.95—W6XKG, Los Angeles, Calif. Broadcasts 24 hours daily.
- 26.40—W9XAZ, Milwaukee, Wisconsin. Relays WTMJ 1 P.M. to midnite.
- 30.57—KBCH, Pasadena, Calif. U. S. Forestry Service.
- 30.61—W2XEN, Roselle Park, New Jersey, Police.
- 31.60—W8XKA, Pittsburgh, Pa. Relays KDKA 3:00 to 11:00 P.M.
- 31.60—W3XKA, Philadelphia, Pa. Relays KYW noon to 10:00 P.M.
- 31.60—W1XKA, Millis, Mass. Relays W1XK 9:00 A.M. to noon.
- 31.60—W4XCA, Memphis Tenn. Relays WMC, 7:30 A.M. to 11:00 P.M.
- 31.60—W3XEY, Baltimore, Md. Relays NBC 6 P.M. to midnite.
- 31.60—W8XAI, Rochester, N. Y. Relays WHAM.
- 31.60—W8XWJ, Detroit, Mich. 6:15-12:30 P.M., 2-5 P.M., 7-10 P.M.
- 31.60—W2XDV, Wayne, New Jersey. Relays WABC.
- 31.60—W9XHW, Minneapolis, Minn. 9:00 A.M. to 5:00 P.M.
- 31.60—W9XPD, St. Louis, Md. Relays KSD 9:00 A.M. to midnite.
- 31.60—W1XAQ, New Bedford, Mass. Relays WNBH 2:00 to 6:00 P.M.
- 33.10—W6XM, Stockton, California. Police
- 33.10—W6XEH, Long Beach, California, Police.
- 33.33—W2XEM, Newark, N. J., Police. City Hall.

- 33.33—W2XFA, Jersey City, N. J. City Hall.
 35.60—W1XAO, Boston, Mass., Police. City Hall.
 35.60—W2XMS, Police station, location not known.
 35.60—W3XFK, Police station, location unknown.
 35.60—W3XES, Baltimore, Md. Relays WCAO, 9:00 A.M. to 5:00 P.M.
 35.60—W2XDV, Wayne, N. J. Owned by CBS, 9-11 A. M.
 37.10—W2XHP, Kingston, N. Y. Police. City Hall.
 37.50—W3XES, Baltimore, Md. Broadcasts 5 to 11 P. M.
 38.60—W2XDV, Wayne, N. J. Relays WABC.
 41.00—W2XDV, Wayne, N. J. Relays WABC.
 41.00—W2XGH, Schenectady, N. Y., daily 8:00 A.M. to 11:00 P.M.
 55.50—W8XK, Pittsburgh, Pa., daily 1:00 to 9:00 P.M.
 55.50—W1XKA, Boston, Mass., daily 6:00 A.M. to midnight, Sundays starts at 8:00 A. M.

In addition to the above, we have a list of about thirty stations in New York and New Jersey which was sent to us by Nathan Rosen, of New York City. He insists they are all heard and using voice, but no one else has reported them and we do not have room to list them this month.

Members Roberts of Indiana, reports W6XWO, Compton, Calif. Police on 33.10 mc. W6XJK, Burlingame, Calif. police on 33.10 mc. W6XBA Los Angeles police on 33.10. W6XKW, Alameda, Calif. police on 33.10 and W6XGC. San Gabriel, Calif. police on 33.10 mc. Member Lane of Compton, reports W6XWI on 37.50 mc., not 33.10 mc. Member Williams of Garden City, New York, says Garden City police have W2XMA on 37.1 mc. W3XEY, Baltimore. on 31.60 mc. was heard signing off at 4:00 P.M. and not 6:00 to 12:00 midnight.

W9XJL must have moved to 21.60 mc. from 31.60 for it is now heard there. Announcer said 21.60 mc. 7:00 to 12:00 C.S.T. or 8:00 A.M. till 1:00 A.M. next day, E S. T. (Dement, Texas). On 21.60 mc. (Weyrich, Md.; Williams, N. Y.; Treece, England and Flagg, Mass.)

WITH THE REPORTERS

The following members have sent us useful information that enabled us to send you the news in this magazine. All sent one or more reports during the month.

Fred Baines, Sydney, N. S., Canada; Wm. Buchanan, Sydney, N. S., Canada; L. E. Thorson, Ponoka, Alta, Canada; E. Cooper, Victoria, B. C., Canada; J. G. Treece, Beeston, Nott., England; S. Boothroyd, Uppermill, England; L. Smith, London, England; P. Rastall, Manchester, England; W. Arvin, London, England; Unsigned, Watford,, England; J. R. Garrett Pegge, Chesham, Bucks, England; J. M. R. Studholme, London, England.

E. G. Neve, Torreón, Coah, Mexico; Alphonse Quayle, Jacmel, Haiti; Felix Quake, France Feld, Canal Zone; Dr. A. M. Cancio, Sancti Spiritus, Cuba; Ricard F. Rubio, Havana, Cuba; Reuven Sokolosky, Tel-Aviv, Palestine.

Ford Edwards, Wilmerding, Pa.; Miss E. L. Fortune, York, Pa.; Captain O. B. Oxrieder, State College, Pa.; Chester Dement,, Upper Rarby, Pa.; Ed. Ulance, Wilmerding, Pa.; Thomas Nichols, Philadelphia, Pa.; Roger Legge, Ja., Philadelphia, Pa.; Elmer Caldwell, Altoona, Pa.

Mills Van Bergen, Syracuse, N. Y.; Ralph Brady, Brooklyn, N. Y.; Roy

Waite, Balston Spa, N. Y.; Gus Adler, Little Neck, N. Y.; Captain George McDermott, Staten Island, N. Y.; Enrica Scala, Ja., Bronx, N. Y.; Ralph B. Williams, Garden City, N. Y.; Carl Forestieri, Bronx, N. Y.

Ora E. Stark, Pierce City, Mo.; Wm. A. J. Dean, Chicag,o Ill.; Henry Nelleman, Chicago; Thomas Grey, Lyone, Ill.; J. Lucke, Chicago; William Woods, Oak Park, Ill.; R. L. Taylor, Chicago; Ray Shaffer, Waterloo, Iowa; Robert Geer, Indianapolis, Ind.; Milton Orlob, St. Anthony, Idaho; Carl and Anne Eder, Willmar, Minn.

Fred Atherton, Rutland, Vt.; Ed. Lenzioszek, Easthampton, Mass.; Ed. Davenport, Pittsford, Vt.; Frank Stockbridge, Westboro, Mass.; W. D. Flagg, Holyoke, Mass.; Wm. T. Arms, Rowe, Mass.; Henry Hannah, Mansfield, Mass.; Neville Seymotr, Baltimore, Md.; Carroll Weyrich, Parksville, Md.; Arthur B. Richards, Hagerstown, Md.; Dixon Russell, Baltimore, Md.

Walter McMenamy, Los Angeles, Calif.; Louis G. Chavez, Los Angeles; Harry Honda, Los Angeles; Ashley Walcott, San Francisco; G. C. Gallagher, San Francisco; Norman Lane, Long Beach, calif.; James Keith, Northport, Wash.

Albert Spuhler, Cleveland, Ohio; A. M. Mitchell, Portsmouth, Ohio; Wm. C. Palmer, Parma, Ohio; Wallace Smith, Louisville, Ky.; James B. Wooten, Mobile, Ala.

We received probably as many reports after the regular closing date this month as we did in the regular period. We are sorry, but reports reaching us after the 24th of the month can not be used. We acknowledge late reports from members Atherton, Amers, Stempel, Bell Merleham, Greenland, Swope, Boothroyd, Field Southern, Pegge, Lowrey, Edwards, Miller, Hofmaster.

HS1BJ, Bangkok, Siam, an amateur on 14.07 mc. will broadcast a special program Nov. 11th, 12th, 13th and 14th from 6:15 to 7:00 A.M. each day. (Miller, N.Y.) A "Radio-difusora Villarrica" in Paraguay is on 6.04 mc. daily 5:00 to 5:00 P.M. (Greenland, Eng.) A "La Voz de Montevideo" in Uruguay is on 6.00 mc. at 6:30 P.M. (Greenland) Is CXA2 and heard 6:00 P.M. (Pegge, Eng.) Paramaribo, Suriname, heard on 17.68 mc. from 5:00 to 5:45 P.M. (Stempel, Conn.) HD, Trujillo, D. R., is on 9.505 mc. near XEWW some nights until 8:40 and others till 9:40 P.M. (Oxrieder, Pa.) COCU, Havana, Cuba, "De Garcia Serra," owned by Jorge Garcia Serra, Estrada Palma 25, Vedado, will be on the air soon from 7:00 A.M. to midnight relaying CMCU. Has 400 watts power. (Rubio, Cuba.)



Keep Your Home Orderly!



12 3/8 x 9 1/2"
3/4 x 9/16"

Don't leave magazines scattered all over the house. Gold Shield Holder will keep them CLEAN and in monthly sequence. Made of heavy cardboard, covered with genuine DuPont Fabricoid. Holds 24 magazines.

AN IDEAL CHRISTMAS GIFT

Give them to your friends. (\$1.00 value). Holders 50c each, 10 for \$2.50 prepaid. Nickel Silver Autogram initial 10c each. Two or three initials look swell on the bottom right hand corner of the holder. Write for wholesale prices.

GOLD SHIELD PRODUCTS

99 Hudson St. Dept. I.R. 11th Floor
NEW YORK CITY

Meg.	Meters	Station	City	Day	A. M.											P. M.												
					1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.18	19.76	GSO	Daventry	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.19	19.75	ZBW4	Hong Kong	Irreg.	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.20	19.73	DJB	Berlin	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.21	19.72	W8XK	Pittsburgh	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.22	19.71	PCJ	Hilversum	See Note B.	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.24	19.68	TPA2	Pontoise	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.25	19.68	W1XAL	Boston	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.26	19.66	GSI	Daventry	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.27	19.64	W2XE	New York	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.27	19.68	H13X	Trujillo	S	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.28	19.63	DJQ	Berlin	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.29	19.62	LRU	Buenos Aires	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.31	19.60	GSP	Daventry	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.33	19.56	W2XAD	Schenectady	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.34	19.56	DJR	Berlin	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.37	19.52	HAS-3	Budapest	S	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
15.44	19.43	XEBM	Mazatlan	Irreg.	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
17.76	16.89	DJE	Berlin	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
17.77	16.88	PHI	Huizen	SMT TFS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
17.78	16.87	W3XAL	New York	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
17.79	16.86	GSG	Daventry	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
19.02	15.77	HS8PJ	Bangkok	M	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
21.47	13.97	GSH	Daventry	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
21.52	13.94	W2XE	New York	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
21.53	13.93	GSJ	Daventry	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M
21.54	13.92	W8XK	Pittsburgh	SMTWTFSS	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M

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

HARD-TO-GET STATIONS

The following stations can hardly be listed in a broadcast station list for they are heard very seldom. Due to the low power used, the wavelength they operate on or their irregular schedule, these stations are very "Hard to tune in."

- 3.45—87.10 YDL3, Djokjakarta, Java. Heard 4:00 to 10:00 A. M.
 3. — YDH4, Bandoeng, Java. Heard 4:00 to 10:00 A. M.
 4.81—62.36 YDE2, Bandoeng, Java. Heard 4:00 to 10:00 A. M.
 6.88—51.02 ZEA, Salisbury, Rhodesia, Africa. Mon., Wed. & Fri., 1:15 to 3:15 P.M., Tuesday 11:00 A.M. to noon, Thursday 10:00 A.M. to noon. . . .
 5.90—50.85 Philco Radio, Saigon, Indo-China. 5:30 to 9:30 A.M. Moves around.
 5.90—50.85 ZNB, Mafaking, Africa. 1:00 to 2:30 P.M. daily.
 6.00—50.50 Rangoon, Burma. 9:00 to 9:30 A.M. and 9:20 to 9:40 P.M.
 6.01—49.90 Radio Tananarive, Madagascar, Africa. 12:30 to 12:45 A.M., 3:30 to 4:30 A.M. and 10:00 A.M. to 11:00 A.M.
 6.08—49.34 Mysore, India, Palace station. 6:30 to 10:00 A.M., Irreg.
 6.12—49.00 CXA4, Montevideo, Uruguay. 7:00 to 11:00 P.M. Irregularly.
 6.16—58.70 CP12, Cochamba, Bolivia. 7:00 to 11:00 P.M., Irreg.
 6.23—48.15 CP1, Sucre, Bolivia. 9:00 to 11:00 P.M., Irreg.
 6.35—47.24 HRY, Tegucigalpa, Honduras. 6:45 to 10:00 P.M. Irregularly.
 6.43—46.66 WXAD, University of Florida. Irreg.
 6.47—46.37 ZEB, Bulawayo, Rhodesia, Africa. Mon., Wed. & Fri., 1:15 to 3:15 P.M., Tues. 11:00 A.M. to noon, Thur. 10:00 A.M. to noon.
 6.48—46.30 Japanese airports J2AA, J2IK, J3AI and J2FA, 2:00 to 5:45 A.M.
 6.50—46.13 TIOW, Port Limon, Costa Rica. 10 A.M. to noon and 2 to 3 P.M.
 6.55—54.65 HCVT, Ambato, Ecuador. Irregular evenings.
 6.79—44.18 T12M, San Jose, Costa Rica. Irreg. evenings.
 6.96—44.10 VK8SC, Port Hedland, Australia. 4:30 to 8:30 A.M., medical doctor.
 6.99—42.80 CLX, Havana, Cuba. 9:00 P.M. to midnight irreg.
 7.08—42.35 P11J, Nordrecht, Holland. Saturdays 11:20 to 12:20 P.M.
 7.17—41.78 CR6AA, Lobito, Angola, Port Africa. Wed. & Sat. 2:45 to 4:30 P.M.
 7.31—41.04 GLZ, Becon les Bruyeres, France. 4:15 to 4:45 P.M., Communist station.
 7.39—40.60 GLZ, Becon les Bruyeres, France, 3:10 to 3:55 P.M., Communist station.
 7.41—40.49 GLZ, Becon las Bruyeres, France, around 6:45 A.M., Communist station.
 7.44—40.32 Hanoi, Indo-China. Heard around 4:00 to 10:00 A. M.
 8.60—34.88 HCIEC, Quitc, Ecuador. Irregular, evenings.
 8.73—34.36 ZUD, Pretoria, South Africa. 7:00 to 8:00 A.M., Irreg.
 8.90—33.71 Capetown, South Africa. Sundays 5:00 A.M. to 3:00 P.M., Irreg.
 9.50—31.58 FIQA, Radio Tananarive, Madagascar, Africa. 12:30 to 12:45 A.M., 3:30 to 4:30 A.M., 10:00 to 11:00 A.M.
 9.56—31.48 OAX4T, Lima, Peru. 11:30 A. M. to 1:30 P. M.
 9.63—31.15 CXAS, Uruguay. Reays LRS Buenos Aires, Arg. 8:00 P.M. to 1:00 A.M.
 9.66—31.04 CR6AA, Lobito, Angola, Port Africa. Wed. and Sat. 2:45 to 4:30 P.M.
 9.80—30.61 XGOA or XGOX, China. Heard 6:45 to 10:00 A.M.
 10.07—29.79 GLZ, Becon les Bruyeres, France. 5:00 to 5:45 P.M.
 10.37—28.93 Salamanca, Spain. May be EAJ43 relayng another station. 9 to 9:45 P.M.
 10.70—28.04 GLZ, Becon les Bruyeres, France. 5:45 to 6:30 P.M.
 11.33—26.48 NEWB, Guadalajara, Jal, Mexico. Between 9 and midnight. (also 11.44 mc.)
 11.37—26.39 WMI, Lorain, Ohio. Weather reports at 10:00 A.M. and 11:00 P.M.
 11.55—25.97 WXA, Juneau, Alaska. Phones WVD 11:00 P.M. to 2:00 A.M.
 12.12—24.75 TPZ, Alger, Algeria, Africa. Beds. 3:30 to 4:30 P.M., Irreg.
 13.10—22.90 HC2FA, Guayaquil, Ecuador. Mondays. 8:00 to 10:00 P.M.
 13.87—21.66 GLZ, Becon les Bruyeres, France. Around 11:00 P.M.
 14.15—21.20 XW6A. On some ship.
 14.28—21.01 VE1IS, Bowdoin-Kent expedition.
 15.17—19.77 OAX4Z, Lima, Peru. Heard 5:00 to 6:00 P.M. once.
 15.19—19.75 GLZ, Becon les Bruyeres, France. 7:15 P.M., Irreg.
 15.19—19.75 VE9HS, on the ship "Nascopic" doing experimental work.
 17.41—17.33 W2XGB, Hicksville, L. I., New York. Mon. to Friday 10:00 A.M. to noon.
 17.78—16.87 JZL, Nazaki, Japan. Used irregularly.

TELEPHONE STATIONS

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

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

E—Stands for Experimental Stations. These stations are never on the air regularly. They are usually telegraph stations which are rented by some chain to relay a broadcast to some foreign country. You never can tell when you will hear them.

Meg.	Meters	STATIONS	TIME
E—	4.00	—75 to 75.8—	Amateurs on voice.
T—	4.10	—73.21—	WND, Hialeah, Florida. Phones irregularly with VPN.
T—	4.42 to 4.10	—67.87 to 73.17—	Ships. Heard irregularly.
T—	4.51	—66.50—	ZFS, Nassau, Bahamas. Works WND evenings.
T—	4.75	—63.13—	WOO, Ocean Gate, N. J. Phones ships irregularly.
T—	4.84	—61.98—	GDW, Rugby, England. Phones U. S. A. nights.
T—	4.90	—61.15—	CGAS, Drummondville, Canada. Phones ships irregularly.
T—	4.98	—60.26—	GBC, Rugby, England. Phones to ships, irregularly.
T—	5.02	—59.76—	ZFA, Hamilton, Bermuda. Phones U.S.A. and ships at night.
T—	5.08	—59.08—	WCN, Lawrenceville, N. J. Phones England, evenings.
E—	5.40	—55.56—	HJA7, Cucuta, Colombia. Mondays 4:30 to 7:30 P.M., irregularly.
T—	5.48	—54.74—	XTL, Hankow, China. Heard around 5:00 to 7:00 A.M., phoning.
T—	5.48	—54.74—	XTZ, Hankow, China. Phones Shanghai 4:00 A.M. to noon.
E—	5.66	—52.66—	CFU, Rossland, Canada. Works CFO and CFN near 1 P.M., irreg.
T—	5.74	—52.26—	XTD, Shanghai, China. Phones Hankow 4:00 A.M. to noon.
T—	5.80	—51.50—	HJA2, Bogota, Colombia. Phones HJA3 afternoons and evenings.
T—	5.83	—51.46—	TDD, Shinkio, Manchukuo. Phones Japan 10:00 P.M. to 6:00 A.M.
T—	5.85	—51.26—	WOB, Lawrenceville, N. J. Phones Bermuda, nights.
T—	5.89	—50.93—	JIC, Taiwan, Japan. Phones Nazaki 5:00 to 10:00 A.M., winter.
T—	5.91	—50.76—	XTW, Canton, China. Phones around 5:00 to 10:00 A.M.
5.00	to 6.00	mc—50.00 to 60.00 meters—	Aircraft stations.
E—	6.31	—47.54—	TG2, Guatemala City. Relays TGI around 5:00 to 9:00 P.M., irreg.
E—	6.35	—47.49—	JZG, heard relaying JVT, JOAK from 5:00 to 7:30 A.M., irregularly.
E—	6.41	—46.77—	HJA3, Barranquilla, Colombia. Phones HJA2, irregularly.
E—	6.42	—46.73—	W9XS, Chicago, Illinois. Heard irregularly broadcasting.
T—	6.55	—45.80—	XEM1, Mexico. Tests around 9:30 to midnight.
T—	6.65	—45.11—	JFZC, Ship "Chichibu Maru." Phones irregularly.
T—	6.65	—45.10—	IAC, Piza, Italy. Phones ships evenings.
T—	6.67	—44.96—	YVQ, Maracay, Venezuela. Phones irreg.
T—	6.67	—44.94—	HBQ, Geneva, Switzerland. Used for special broadcasts.
T—	6.72	—44.64—	XEM2, Guanacabi, Dur, Mexico. Tests around 9:30 P.M., irreg.
T—	6.75	—44.44—	JVT, Nazaki, Japan. 1:30 to 8:00 A.M. oftimes with music.
T—	6.75	—44.41—	WOA, Lawrenceville, N. J. Phones England nights.
T—	6.90	—43.45—	GDS, Rugby, England. Phones New York nights.
E—	6.98	—43.00—	XBA, Tacubaya, Mexico. 9:30 A.M. to 1:00; 7:00 to 8:30 P.M.
T—	6.98	—42.98—	KZGG, Cebu, P. I. 1:00 to 4:45 A.M. and 6:30 to noon.
T—	7.37	—40.71—	KEQ, Kauhuku, Hawaii. Phones Dixon, nights.
T—	7.51	—39.95—	RKI, Moscow, U.S.S.R. Heard 5:00 to 11:00 A.M. in winter.
T—	7.52	—39.89—	KKH, Kauhuku, Hawaii. Phones KWO evenings.
T—	7.56	—39.68—	FZE9, Djihouti, French Somaliland. Phones Paris.
T—	7.56	—39.68—	KWY, Dixon, Calif. Phones week-days 9:30 P.M. to midnight.
T—	7.39	—40.60—	ZLT2, Wellington, New Zealand. Phones Sydney 3:00 to 7:00 A.M., irr.
T—	7.61	—39.42—	KWX, Dixon, California. Phones Hawaii nights.
T—	7.63	—39.32—	RIM, Tashkent, U.S.S.R. Heard 5:00 to 1:00 A.M. in winter.
T—	7.68	—39.06—	YBZ, Manado, Celebes, D. E. I. Phones PNI 5:00-7:00 A.M.
E—	7.78	—38.50—	PSZ, Rio de Janeiro, Brazil. Heard between 6:00 and 11:00 P.M., irreg.
T—	7.86	—38.06—	SUX, Cairo, Egypt. Phones Rome and London afternoons.
T—	8.12	—36.95—	KTP, Manila, P. I. Phones KWX 10:30 to 11:00 A.M.
T—	8.19	—36.65—	PSK, Rio de Janeiro, Brazil. Sending music 6:00 to 7:30 P.M.
T—	8.38	—35.80—	IAC, Piza, Italy. Works ships irregularly.
T—	8.47	—35.42—	DAF, Norden, Germany. Phones ships irregularly.
T—	8.57	—35.02—	WOO, Ocean Gate, N. J. Phones ships irregularly.

Meg.	Meters	STATION	TIME
T	8.65-34.68	--VOWQ, North West River, Laborador.	Phones irreg.
E	8.65-34.68	--WVD, Seattle, Wash.	Testing irregularly.
T	8.68-34.56	--GBC, Rugby, England.	Phones ships irregularly.
T	8.71-34.44	--KBB, Manila, P. I.	Phones ships 5:00-9:00 A.M., irregularly.
T	8.77-34.19	--PNI, Makassar, D. E. I.	Phones Java near 4:00 to 5:00 A.M.
E	8.79-34.10	--HKV, Bogota, Colombia.	Testing, 5:30 to 11:00 P.M., irregular.
T	8.84 to 8.90	--36.58 to 33.93	Ships. Heard irregularly.
E	8.95-33.52	--WEL-W2XB, Rocky Point, N. Y.	Testing irregularly, evenings.
T	8.96-33.48	--TPZ2, Alger, Algeria, Africa.	Phones Paris, daytime.
T	8.98-33.41	--VWY, Poona, India.	Phones England 6:00-10:00 A.M., irreg.
E	9.01-33.29	--KEJ, Bolinas, California.	Tests irregularly.
T	9.02-33.26	--GCS, Rugby, England.	Phones New York evenings.
T	9.03-33.19	--TYA2, Paris, France.	Phones Algeria, 6 P.M. to midnight, irreg.
T	9.08-33.04	--XTK, Hankow, China.	Phones around 4:00 to 9:30 A.M.
T	9.12-32.89	--YCP, Biliikpapan, Borneo.	5:00-7:00 A.M., phones East Indies.
T	9.14-32.84	--YVR, Maracay, Venezuela.	Phones Europe afternoons.
T	9.17-32.72	--WNA, Lawrenceville, N. J.	Phones England evenings.
T	9.18-32.68	--ZSR, Klipkeual, So. Africa.	Phones England 1:00-7:00 P.M., irreg.
T	9.28-32.33	--GCB, Rugby, England.	Phones OGA and SUV, afternoons.
T	9.28-32.32	--XTC, Shanghai, China.	Phones 2:00 to 11:00 A.M., irreg.
T	9.33-32.15	--OGA4, Drummondville, Canada.	Phones ships and England, irregularly.
T	9.36-32.05	--XTR, Swatow, China.	Phones around 4:00 to 9:30 A.M.
T	9.37-32.02	--PLC, Kootyijk, Holland.	Phones 3:00 to 10:00 A.M., irregularly.
T	9.42-31.86	--PLV, Bandoeng, Java.	9:00-11:00 A.M., 6:00-11:00 P.M., irreg.
T	9.46-31.71	--Tipoli, Africa.	Phones IAC, Italy, 6:00 A.M. to 1:00 P.M., irreg.
T	9.49-31.61	--KEI, Bolinas, Calif.	Used irregularly.
T	9.50-31.58	--XTV, Canton, China.	Phones 2:00 to 11:00 A.M., irreg.
T	9.63-31.15	--CEA5, Drummondville, Canada.	Phones England daytime.
T	9.65-31.08	--DGU, Nauen, Germany.	Phones Egypt in daytime.
E	9.67-31.00	--DZA, Zeesen, Germany.	Broadcasts irregularly.
T	9.75-30.77	--WOF, Lawrence, N. J.	Phones England, evenings.
T	9.76-30.75	--VK2ME-VLK, Sydney, Australia.	Phones Java 4:00 to 8:00 A.M.
E	9.80-30.61	--LSI, Buenos Aires, Argentina.	Used irregularly, evenings.
T	9.80-30.60	--GCW, Rugby, England.	Phones America, evenings.
T	9.83-30.52	--IRM, Rome, Italy.	Phones Egypt afternoons.
E	9.87-30.40	--IYS, Kemikawa-Cho, Japan.	Relays JOAK, irregularly, mornings.
T	9.87-30.40	--WON, Lawrenceville, N. J.	Phones England evenings.
T	9.90-30.30	--LSN, Buenos Aires, Argentina.	6:00 P.M. to 6:00 A.M. W.L.O.
T	9.92-30.23	--IDY, Dairen, Manchucuo.	Phones Japan 2-4 A.M., 8-10 P.M., irreg.
T	9.93-30.21	--HKB, Bogota, Colombia.	Phones PSK irregularly, evenings.
T	9.95-30.15	--GCU, Rugby, England.	Phones New York evenings.
T	9.97-30.09	--KAZ, Manila, P. I.	Phones PLV near 2:00 A.M.
E	10.01-29.88	--DZB, Zeesen, Germany.	Irregularly.
T	10.05-29.83	--SUV, Cairo, Egypt.	Phones England around 1:00 to 5:00 P.M.
T	10.05-29.85	--ZFB, Hamilton, Bermuda.	Phones U. S. A. and ships, daytime.
T	10.06-29.80	--TDE, Shinkio, Manchukuo.	Phones Japan 1:00 to 9:00 A.M., irregularly.
T	10.07-29.79	--EHY, Madrid, Spain.	Phones YVR near 4:00 P.M., irregularly.
T	10.08-29.76	--RIR, Tifis, U.S.S.R.	Phones 10:00 P.M. to 10:00 A.M., irregularly.
T	10.14-29.58	--OPM, Leopoldsville, Belgian Congo.	12-2 A.M., noon-3:00 P.M., irreg.
T	10.17-29.50	--RIO, U.S.S.R.	Phones 10:00 P.M. to 10:00 A.M., irregularly.
T	10.22-29.45	--PSII, Rio de Janeiro, Brazil.	Sending music, evenings.
E	10.23-29.33	--CED, Antofagastan, Chile.	heard 7:00 to 9:30 P.M., irregularly.
E	10.25-29.27	--LSL, Buenos Aires, Argentina.	Testing 5:30 to 7:00 P.M.
E	10.29-29.15	--DZC, Zeesen, Germany.	4:00 to 9:00 P.M., Irregularly.
T	10.30-29.13	--PPM, Rio de Janeiro, Brazil.	Phones irregularly.
E	10.30-29.13	--LSO, Buenos Aires, Argentina.	Used for special tests.
E	10.33-29.04	--ORK, Brussels, Belgium.	1:30 to 3:00 P.M., daily.
T	10.33-29.04	--RVV, Vladivostok, U.S.S.R.	Phones around midnight.
T	10.37-28.93	--IVO, Nazaki, Japan.	Phones 6:00 P.M. to 11:00 A.M., irregularly.
E	10.38-28.91	--WOC, Rocky Point, N. Y.	Tests irregularly.
E	10.40-28.85	--KEZ, Bolinas, California.	Used irregularly.
T	10.42-28.80	--PDK, Kootwijk, Holland.	Phones Java, 7:30 to 9:10 A.M.
T	10.42-28.79	--XGW, Shanghai, China.	Phones almost any time.
T	10.42-28.79	--TYE3, St. Assise, France.	Phones U. S. A. 3:30 to 7:00 P.M.

Meg.	Meters	STATION	TIME
T-10.43	-28.76	YBG, Medan, Sumatra,	Phones Java 5:00 to 8:30 A.M.
T-10.52	-28.51	VK2ME-VLK, Sydney, Australia.	1:00 to 8:00 A.M. GBP.
T-10.54	-28.49	JIB, Taiwan, Japan.	Phones Japan 10:00 P.M. to 10:00 A.M.
T-10.55	-28.44	WOK, Lawrenceville, N. J.	Phones Brazil and Argentine, irregularly.
E-10.61	-28.28	WEA, Rocky Point, N. J.	Tests irregularly with Europe.
T-10.66	-28.14	JVN, Nazaki, Japan.	Phones 6:00 P.M. to 11:00 A.M., irregularly.
T-10.68	-28.09	WNB, Lawrenceville, N. J.	Phones Bermuda, daytime.
T-10.86	-28.09	PLQ, Bandoeng, Java.	PNT 8:00 to 10:00 A.M.
T-10.74	-27.93	JVM, Nazaki, Japan.	Phones 6:00 P.M. to 11:00 A.M., irregularly.
T-10.77	-27.86	GBP, Rugby, England.	Phones VLK 11:00 P.M. to 8:00 A.M.
E-10.85	-27.65	DFV, Nauen, Germany.	Irregular.
T-10.84	-27.67	KWV, Dixon, California.	Phones Hawaii, daytime.
T-10.86	-27.62	RQT, Irkutsk, U.S.S.R.	Phones around 3:00 to 5:00 A.M.
T-10.91	-27.50	KTR, Manila, P. I.	Phones ships around 7:00 to 10:00 A.M.
T-10.96	-27.37	ZLT2, Wellington, New Zealand,	11:00 P.M. to 7:00 A.M., Australia
T-10.97	-27.35	OCI, Lima, Peru.	Phones HJY, evenings.
E-11.40	-26.31	HBO, Geneva, Switzerland.	Used for special broadcasts.
T-11.41	-26.29	XTB, Shanghai, China.	Phones around 3:00 to 9:30 A.M.
T-11.47	-26.16	XTS, Swatow, China.	Phones around 2:45 to 9:00 A.M.
E-11.50	-26.09	XAM, Merida, Yucatan.	Irregularly 1:00, 6:00 and 7:00 P.M.
E-11.59	-25.87	VRR4, Stony Hill, Jamaica.	Testing with WNC in daytime.
T-11.66	-25.73	PPQ, Rio de Janeiro, Brazil.	Phones often and broadcasts, irreg.
T-11.66	-25.73	JVL, Nazaki, Japan.	Phones 6:00 P.M. to 11:00 A.M., irregularly.
E-11.71	-25.63	KIO, Kauhuku, Hawaii.	Heard in the evenings testing.
T-11.82	-25.38	RFM, Khabarovsk, U.S.S.R.	Phones around 7:00 to 11:00 A.M.
T-11.95	-25.12	FTA, St. Assise, France.	Phones CNR 4 to 7 A.M., LSM 10 to 12 P.M.
E-11.97	-25.11	KKQ, Bolinas, California.	Heard irregularly, evenings.
T-11.95	-25.09	IUC, Addis Ababa, Ethiopia.	Phones Rome around noon and midnight.
T-11.99	-25.02	FZS, Saigon, Indo-China.	Phones Paris, mornings.
T-12.00	-25.00	RNE, Moscow, U.S.S.R.	Almost any time. Try 11 P.M. to 10 A.M.
T-12.02	-24.96	JVK, Nazaki, Japan.	Phones 4:00 to 8:00 A.M., irregularly.
T-12:07	-24.86	XTU, Canton, China.	Phones China 2:00 to 9:30 A.M.
			4:30 P.M., irregularly.
T-12.12	-24.75	TPZ, Aler, Algeria.	Phones Paris midnight to noon, broadcasts 3:30 to
E-12.13	-24.73	DZE, Zeesen, Germany.	7:00-9:00 A.M., 5:00-9:00 P.M., irregularly.
T-12.15	-24.96	GSB, Rugby, England.	Phones New York.
T-12.18	-24.63	RWJ, Alma-Ata, U.S.S.R.	Phones 1:00 to 8:00 A.M., irregularly.
T-12.22	-24.56	TYA, Pontoise, France.	Phones the Normandie, irregularly.
T-12.24	-24.52	TFJ, Reykjavik, Iceland.	Phones GCB and OXT 5:00 to 10:00 A.M.
T-12.25	-24.49	TYB, Pontoise, France.	Teard late afternoons, irregularly.
T-12.29	-24.41	GBU, Rugby, England.	Phones America, evenings.
T-12.30	-24.40	PLM, Bandoeng, Java.	Phones VK2ME near 6:30 A.M.
T-12.36	to 13.34-24.30	to 22.50—Ships.	Heard in daytime.
T-12.40	-24.20	DAF, Norden, Germany.	Phones ships, irregularly, mornings.
T-12.78	-23.47	GBC, Rugby, England.	Phones ships, irregularly.
T-12.83	-23.38	CNR, Rabat, Morocco.	5:00-7:00 A.M., 2:00-4:00 P.M., irregularly.
T-12.84	-23.36	WOO, Ocean Gate, N. J.	Phones ships, irregularly.
T-12.86	-23.33	IAC, Piza, Italy.	Phones Africa 8:00 A.M. to 1:00 P.M.
T-12.87	-23.31	VVS, Mingaladon, India.	Phones 5:00-7:00 A.M., Irregularly.
T-12.88	-23.29	RTZ, Irkutsk, U.S.S.R.	10:00 P.M. to 10:00 A.M., irregularly.
T-13.00	-23.08	FYC, Paris, France.	Phones Ships, irregularly.
T-13.19	-22.74	RFL, Khabarovsk, U.S.S.R.	Around 4:00 to 10:00 A.M.
T-13.22	-22.70	IRJ, Rome, Italy.	Phones Japan irregularly 5:00 to 8:00 A.M.
T-13.28	-22.58	CGA3, Drummondville, Canada.	Phones ships and England, daytime.
T-13.35	-22.48	YVJ, Maracay, Venezuela.	Phones Florida, daytime.
T-13.37	-22.44	JVU, Nazaki, Japan.	Around 6:00 to 10:00 A.M.
T-13.39	-22.40	WMA, Lawrenceville, N. J.	Phones England, daytime.
T-14.38	-22.40	IDU, Asmara, Eritrea.	Phones Italy 8:00 A.M. to 3:00 P.M., irregularly.
T-13.41	-22.37	YSJ, San Salvador.	Phones WNC, daytime.
T-13.58	-22.09	GBB, Rugby, England.	Phones Canada and Egypt, daytime.
T-13.79	-21.73	RVU, Vladvostok, U.S.S.R.	4:00 to 10:00 A.A., irregular.
T-13.65	-21.98	HJY, Bogota, Colombia.	Phones irregularly.
E-13.69	-21.91	KKZ, Bolinas, California.	Used irregularly.

Meg.	Meters	STATION	TIME
T-13.76	-21.77	-TYE2, St. Assis, France.	Phones Africa, daytime.
T-13.83	-21.70	-SUZ, Cairo, Egypt.	Phones GAA 7:00 A.M. to 3:30 P.M.
E-13.90	-21.58	-WQP, Rocky Point, N. Y.	Testing with RNE irregularly, mornings.
E-13.98	-21.46	-PZ1AA, Paramaribo, Dutch Guiana.	in the evenings.
E-14.11	-14.30	-21.26 to 20.97	-Amateur phones, heard in daytime.
E-14.46	-20.75	-DZH, Zeesen, Germany.	Irregular.
T-14.46	-20.75	-GBW, Rugby, England.	Phones WNC 6:00 A.M. to 6:00 P.M.
T-14.47	-20.73	-WMF, Lawrenceville, N. J.	Phones England, daytime.
T-14.48	-20.72	-IBS, Rome, Italy.	Phones Africa, mornings.
T-14.48	-20.71	-TGF, Gautemala City.	Phones WNC, daytime.
T-14.48	-20.71	-HRF, Tegucigalpa, Honduras.	Phones WNC, daytime.
T-14.48	-20.71	-HPF, Panama.	Phones WNC, daytime.
T-14.48	-20.71	-YNA, Managua, Nicaragua.	Phones WNC daytime.
T-14.48	-20.71	-TIU, Cartago, Costa Rica.	Phones WNC daytime.
T-14.48	-20.71	-HRL5, Nacaome, Honduras.	Testing with WNC, daytime.
T-14.48	-20.71	-YSJ, San Salvador.	Phones MNC, afternoons.
T-14.53	-20.65	-LSN, Buenos Aires, Argentina.	Phones New York, daytime.
T-14.54	-20.64	-HBJ, Geneva, Switzerland.	Used irregularly.
T-14.58	-20.58	-RTV, Moscow, U.S.S.R.	Phones around 7:00 A.M.
T-14.59	-20.56	-WMN, Lawrenceville, N. J.	Phones England, daytime.
T-14.60	-20.55	-JVH, Nazaki, Japan.	Phones and also broadcasts at times.
T-14.67	-20.45	-GBL, Rugby, England.	Phones JVII 1:00 to 7:00 A.M.
T-14.73	-20.37	-IQA, Rome, Italy.	Phones 8:00 to 11:00 A.M., irregularly.
T-14.79	-20.29	-ROU, Omsk, Siberia.	Phones Moscow 7:00 to 9:00 A.M. irregularly.
E-14.80	-20.27	-WQV, Rovky Point, N. Y.,	heard irregularly
T-14.95	-20.08	-HJA3, Barranquilla, Colombia.	Phones WNC, Florida.
T-14.94	-20.08	-H11, Trujillo, Dominican Republic.	Phones WNC, daytime.
T-14.94	-20.08	-HJB, Bogota, Colombia.	Phones WNC, daytime.
T-14.98	-20.03	-KAY, Manila, P. I.	Phones DFS 5 to 7 A.M.; U.S.A., 7 to 8 P.M.
T-15.01	-19.99	-RCH, Kerbi, Sierra.	Phones midnight to 9:00 A.M.
T-15.04	-19.95	-RKI, Moscow, U.S.S.R.	Phones almost any time.
T-15.06	-19.92	-WNC, Hialeah, Florida.	Phones many stations in daytime.
T-15.25	-19.68	-RIM, Tashkent, U.S.S.R.	Phones RKI near 7:00 A.M.
T-15.35	-19.54	-KWU, Dixon, California.	Phones Hawaii, 2:00 to 7:00 P.M.
E-15.36	-19.53	-DZG, Zeesen, Germany.	Broadcasts irregularly.
T-15.41	-19.47	-KWQ, Dixon, California.	Phones Hawaii in place of KWU.
T-15.45	-19.42	-IUG, Addis Ababa, Ethiopia.	Phones Italy 7:00 to 10:00 A.M.
E-15.50	-19.35	-C09XX, Tuinucu, Cuba.	Testing irregularly 5:00 to 9:00 P.M.
T-15.53	-19.31	-HSG2, Bangkok, Siam.	Tests Sunday 11 P.M., Fri. 4:00 A.M.
T-15.61	-19.20	-JVF, Nazaki, Japan.	Phones U.S.A. near 5:00 A.M. and 8:00 P.M.
T-15.66	-19.15	-JVE, Nazaki, Japan.	Phones almost any time.
T-15.81	-19.02	-LSL, Buenos Aires, Arg.	Phones GAA 8 A.M. to 1 and FTM 1-2 P.M.
T-15.86	-18.91	-CEC, Santiago, Chile.	Phones OCI 11 A.M., 1 and 4:40 P.M., irreg.
T-15.86	-18.91	-JVD, Nazaki, Japan.	Phones almost all day and night.
T-15.80	-18.90	-XQJ, Shanghai, China.	Phones Japan 5:00 P.M. to midnight.
T-15.88	-18.89	-FTK, St. Assise, France.	Phones Saigon 8:30 to 11:00 A.M.
T-15.95	-18.81	-RRR, Khabarovsk, U.S.S.R.	Phones 11:00 P.M. to 9:00 A.M., irreg.
T-16.04	-18.71	-KKP, Kauhuku, Hawaii.	Phones KWU 1:00 to 7:00 P.M.
E-16.11	-18.62	-IRY, Rome, Italy.	Used irregularly for special broadcasts.
T-16.14	-18.59	-GBA, Rugby, England.	Phones China-Japan, 3:00 to 10:00 A.M.
T-16.20	-18.51	-FZR, Saigon, Indo-China.	Phones Paris, mornings.
T-16.24	-18.47	-KTO, Manila, P. I.	Phones Japan 5:00 to 9:00 P.M., irregularly.
T-16.30	-18.44	-WLK, Lawrenceville, N. J.	Phones England.
T-16.35	-18.34	-RTW, Moscow, U.S.S.R.	Phones midnight to 9:00 A.M.
T-16.38	-18.31	-ITK, Mogadiscio, Italian Somaliland.	Phones Italy, daytime.
T-16.42	-17.80	-18.27 to 16.85	-Ships. Heard in daytime.
T-17.12	-17.52	-WOO, Ocean City, New Jersey.	Phones ships, irregularly.
T-17.28	-17.36	-FZE8, Djibouti, Fr. Somaliland.	Phones Paris 5 A.M.-2 P.M., Irreg.
T-17.47	-17.16	-VWY2, Poona, India,	phones England 7:00 to 10:00 A.M.
T-17.52	-17.12	-DFB, Nauen, Germany.	Phones LSM and YVO near 9:00 A.M.
T-17.31	-17.33	-W2XGB, Hicksville, N. Y.	Tests Irreg., relaying WOR.
T-17.64	-17.00	-XGN, Shanghai, China.	Phones London 7 to 9 A.M., Mon., Wed., Sat.
T-17.70	-16.94	-IAC, Piza, Italy.	Phones Africa, 5:00 A.M. to noon.

F-76
S-37

Meg. Meters	STATION	TIME
T-17.74-16.91	HSP, Bangkok, Siam.	Phones Japan, Germany and England.
T-18.05-16.82	PCV, Kootwijk, Holland.	6:00 to 9:00 A.M. Java.
T-18.04-16.63	GAB, Rugby, England.	Phones Canada 10:00 A.M. to noon.
T-18.09-16.58	TYE2, Pontoise, France.	Phones U. S. A. 8:00 A.M. to 3:00 P.M.
E-18.12-16.55	LSY, Buenos Aires, Argentina.	Irregular.
T-18.18-16.50	PMC, Bandoeng, Java.	Phones PCV, 3:10 to 9:20 A.M.
T-18.20-16.48	GAW, Rugby, England.	Phones New York, mornings.
T-18.25-15.44	FTT, St. Assise, France.	Phones LSM, PPU, mornings.
T-18.30-16.39	YVR, Maracay, Venezuela.	Phones Germany, 10:00 A.M.
T-18.31-16.38	GAS, Rugby, England.	Phones New York, mornings.
T-18.35-16.35	WLA, Lawrenceville, S. J.	Phones England 8:00 A.M. to 4:00 P.M.
T-18.40-16.30	PKK, Kootwik, Holland.	Phones Java near 7:00 A.M.
E-18.45-16.26	HBF, Geneva, Switzerland.	Used for special purposes.
E-18.48-16.22	HBH, Geneva, Switzerland.	Used for special programs.
T-18.62-16.11	CAU, Rugby, England.	Phones New York, mornings.
T-18.68-16.06	OCL, Lima, Peru.	Testing with HJY near 2:00 P.M.
T-18.69-16.05	XGS, Shanghai, China.	Heard 7:00 to 8:00 A.M., irregular.
T-18.83-15.93	PLE, Bandoeng, Java.	Phones Holland 6 to 11 A.M. KWX, irregular.
T-18.89-15.88	ZSS, Klipheval, S. Africa.	Phones 6 A.M. to 2:30 P.M., irregular.
T-19.13-15.68	LSM, Buenos Aires, Argentina.	Phones EAQ, DHO, GAA, mornings.
T-19.21-15.62	ORG, Brussels, Belgium.	Phones OPL, mornings.
T-19.25-15.58	DFA, Nauen, Germany.	Phones 10:00 A.M. to 2:00 P.M., irregularly.
T-19.27-15.57	PPU, Rio de Janeiro, Brazil.	Phones FTM, 10:30 A.M. to 3:00 P.M.
T-19.35-15.50	PMA, Bandoeng, Java.	Phones Holland, mornings.
T-19.35-15.50	FTM, Assise, France.	10:00 A.M. to 2:00 P.M. LSG.
T-19.50-15.39	LSO, Buenos Aires, Argentina.	Heard testing near 2:00 P.M.
T-19.62-15.28	VOG, Nairobi, Kenya, Africa.	7:30 to 9:30 A.M., England.
T-19.69-15.24	CEC, Santiago, Chile.	Phones LSR, HJY near 11 A.M. and 4 P.M.
T-19.98-14.01	KAX, Manila, P. I.	Phones daytime.
T-19.78-15.14	WKN, Lawrenceville, N. I.	Phones GAU, daytime.
T-20.04-14.97	OPL, Leopoldville, Belgian Congo.	Phones ORG, mornings
T-20.38-14.72	GAA, Rugby, England.	Phones LSL and PPU near 8:00 A.M.
T-21.03-14.27	LSN, Buenos Aires, Arg.	8:00 A.M. to 4:00 P.M. WKK and WLK.
T-21.06-14.24	KWN, Dixon, Calif.	Phones irregularly.
T-21.08-14.23	PSA, Rio de Janeiro, Brazil.	Phones WKK, WLK, daytime.
T-21.16-14.17	LSL, Buenos Aires, Arg.	8:00 A.M. to 1:00 P.M. GAA and PSF.
T-21.41-14.01	WKK, Lawrenceville, N. I.	Phones LSN, 8:00 A.M. to 4:00 P.M.

SHIP STATIONS

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

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

APPOINTMENT

We are happy to appoint Mr. George W. King, 116 Sheil Road, Newsham Park, Liverpool 6, England, as special program arranger for the I. S. W. C. Mr. King was the first person to arrange four special programs for us within the allotted time, which is one year. Any person arranging for special programs for us within one year becomes an official program arranger and may use the title on all letters.

FOR SALE OR TRADE—Silver Three, crystal. Want Patterson Sixteen. Glenn Watt, Chanute, Kansas.



"SUPER-PRO" CONSOLE A HIT!

THE new Hammarlund "Super-Pro" professional receiver-console model — presenting professional efficiency, stirring acoustical reproduction and a distinctive console — though announced only a few weeks ago, has already become the talk of the country! The brilliant highs and lows, characteristic of real high fidelity are now completely available when this new type console model with its wide range heavy duty 15" speaker enclosed in a specially developed sealed sound chamber. With this new type sound chamber the "boominess" or cabinet resonance, is completely eliminated. In addition, the range of the loud speaker is extended approximately an octave. The receiver itself affords the marked superior efficiency the professional demands for his critical measurement and air patrol work. Among its outstanding features

are: 2 stages of R. F. on all bands; fractional micro-volt sensitivity; electrical band spread; absolute image rejection on all bands; models for 7½ to 240, 15 to 560, and 15 to 2000 meters, etc. For guaranteed superior results, install this new Hammarlund "Super-Pro" console model. Mail coupon below for further details!

HAMMARLUND MFG. CO., INC. IC-11
424-438 W. 33rd St., New York City.

[] Please send me "Super-Pro" Console Bulletin.

Name.....

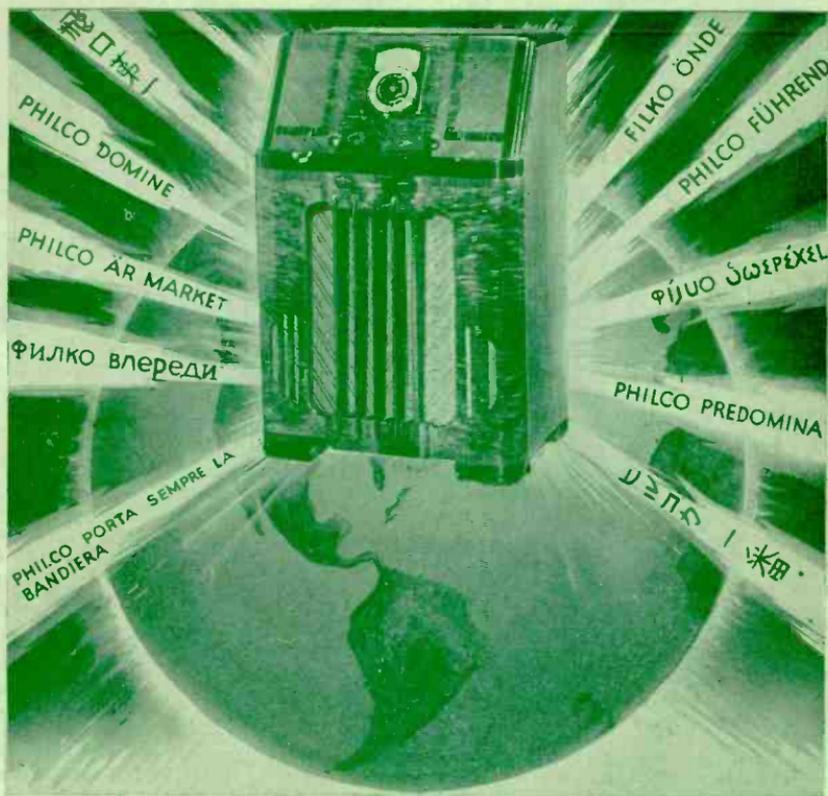
Address.....

City..... State.....



HAMMARLUND

WLBMP



PHILCO PREDOMINATES

Throughout The World

ASK other Short Wave fans why PHILCO enjoys world-wide predominance and they'll tell you it's because the PHILCO Foreign Tuning System enables them to obtain twice the usual number of foreign stations—that the Spread Band Dial separates stations 6 times farther apart for accurate tuning—that the High Efficiency Aerial combined with PHILCO'S outstanding selectivity and sensitivity give them the finest kind of DX performance. These are the reasons that make

PHILCO-*The Favorite of Short Wave Fans*