

VOL VII

FEBRUARY, 1936

NO. 5

INTERNATIONAL



SHORT WAVE

RADIO

- Short Wave News.
- Accurate Station List.
- Hourly Tuning Guide.
- Police Stations.
- Aircraft Stations.
- And Other Features.

THE VOICE OF THE
INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO, U. S. A.

There is nothing "Just as Good"

as a **LYNCH HI-FI ANTENNA** or **FILTERADIO**

for reducing noise on ALL waves and bringing in stations that otherwise could never be heard!

the hallicrafters say:

"After having investigated the performance of most leading types of all-wave antenna systems, our engineering department has come to the conclusion that the LYNCH HI-FI Antenna System is the best, both electrically and mechanically. We are, therefore, recommending its use to all of our customers."

Now!

A Discount of 40% to ISWC members

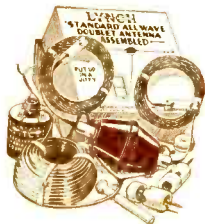
LYNCH HI-FI ASSEMBLED ANTENNA

All ready to hang. Saves 90% of installation time. Any novice can install it—quickly, easily, correctly. Makes every set perform better on ALL waves. Results are amazing.....

\$6.75
LIST

The above Kit with 50 feet of famous Lynch Giant-Killer Cable (instead of twisted pair).....

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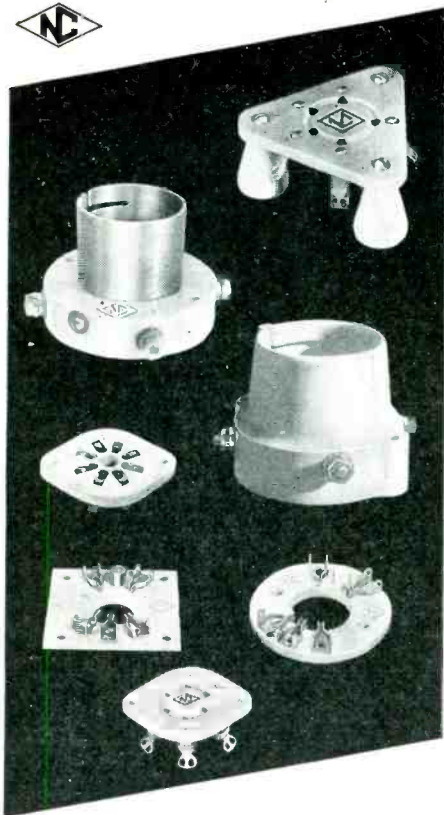
Cuts out objectionable noise from the light line, consumes no current. Makes interference from circuit breakers, motor generators, etc., practically negligible. Easy to install; simple to adjust. One type serves all purposes.....

\$5.00
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ORDER DIRECT
if your dealer cannot supply you.

ARTHUR H. LYNCH, Inc., Dept. S, 227 Fulton St., New York
PIONEER OF NOISE-REDUCING AERIALS



SOCKETS

... for Short
or Ultra Short-
Wave Use

The National Group of High Frequency Sockets includes a type for nearly every tube and purpose. At the top right is the JX-100, a big wafer-type low loss socket for power pentodes such as the RK-28 and RCA-803. Below it are two fifty-watt sockets with sturdy sidewipe contacts. Type XC-50 is entirely of low-loss Stentite; while Type VM-50 employs the more conventional metal shell and is lower in price. To the left of the fifty-watters is the new Isolantite wafer-socket for octal metal tubes. Two sockets are available for the little acorn tube. One, for the acorn pentode, is assembled on a square aluminum base and has built-in by-pass condensers for the stable high-frequency operation. For the acorn triode, the socket is of Isolantite. Both sockets employ special constant impedance clips. At the lower left is the old favorite, the receiving tube socket. It is made in 4, 5, 6 and 7 prong types as well as a special 6-prong coil model.

The new National General Catalog No. 250, just off the press, describes these and many other quality components in detail. Send for your copy.

National Company, Inc.,
Malden, Mass.

GENTLEMEN: Please send me your new General Catalog Number 250. I enclose 6c to cover mailing costs.

Name

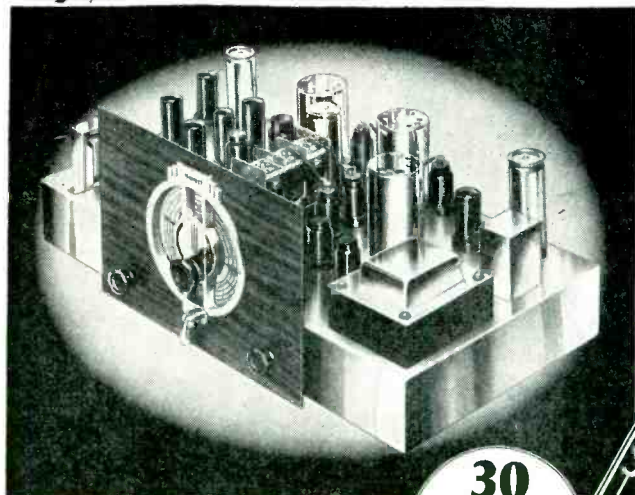
Address ISW-2

Again... MIDWEST RADIO

with a
MARVELOUS NEW

14-Tube

**FIVE WAVE BAND,
WORLD WIDE SET
9 TO 2400
METERS**



DEAL DIRECT WITH LABORATORIES

SAVE UP TO 50%

**30
DAYS
FREE
TRIAL**

\$39.50
with
New
**AUDITORIUM TYPE
SPEAKER**
(LARGE MODEL)

**EASY
PAYMENT
TERMS**

ONCE again, Midwest demonstrates its leadership by offering the world's most powerful Super DeLuxe 14-METAL Tube 5-band radio. It is a master achievement . . . today's most highly perfected, precisely built, laboratory adjusted set. It is a radio-musical instrument that will thrill you with its marvelous super performance . . . glorious new acousti tone . . . crystal clear "concert" realism . . . and magnificent foreign reception. Before you buy any radio write for FREE 40-page 1936 catalog. Learn about the successful Midwest Laboratory-To-You policy that saves you 30% to 50% . . . that gives you 30 days FREE trial. This super radio will out-perform \$100 and \$200 sets on a side by side test. It is so powerful, so amazingly selective, so delicately sensitive that it brings in distant foreign stations with full loud speaker volume, on channels adjacent to powerful locals. The 14 tubes permit of advanced circuits, make it possible to use the tremendous reserve power, and to exert the sustained maximum output of the powerful new tubes.



MIDWEST RADIO CORP.

DEPT. 44-II CINCINNATI, OHIO U.S.A.

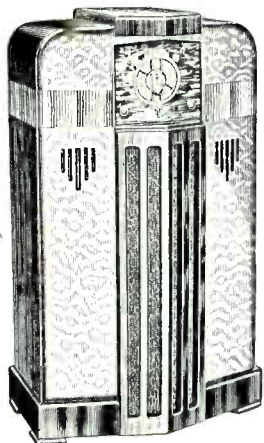
Established 1920

Cable Address MIRACO All Codes

Proves Its Leadership!

50 SENSATIONAL ADVANCEMENTS

Scores of marvelous Midwest features, many of them exclusive, explain Midwest glorious tone realism, super performance and thrilling world wide 5-band reception. They prove why nationally known orchestra leaders like Fred Waring, George Olsen, Jack Denny, etc., use a Midwest in preference to more costly makes. Five tuning ranges made it easy to parade the nations of the world before you. You can switch instantly from American programs . . . to Canadian, police, amateur, commercial, airplane and ship broadcasts . . . to the finest and most fascinating programs from Europe, Asia, Africa, Australia, South America . . . 12,000 miles away.



Acousti-Tone V-Spread Design

(U. S. Design Patent No. 96750)

The V-Front Dispersing Vanes established a new radio style overnight. They spread the beautiful lace-work of the "highs" throughout the room in a scientific manner . . . directing the High Fidelity waves uniformly to the ear. Now, get complete range of audible frequencies . . . achieving glorious new acousti-tone . . . assuring life-like crystal-clear "concert" realism.

No middlemen's profits to pay. You buy at wholesale prices, direct from Laboratories . . . saving 30% to 50%. You can order your 1936 Midwest radio from the new 40-page catalog with as much certainty of satisfaction as if you were to come yourself to our great laboratories. You save 30% to 50% . . . you get 30 days' FREE trial . . . as little as \$5.00 down puts a Midwest radio in your home. You are triply protected with a One-Year Guarantee, Foreign Reception Guarantee, Money-Back Guarantee.



Ted Wheems Enthuses Over Foreign Reception

"After comparing many radios, I can truthfully say that my Midwest out-performs other sets costing almost twice as much. In all my experience, I have never heard such life-like reproduction. My Midwest surpasses all my expectations, and in my opinion, is the finest radio receiver obtainable."
TED WHEEMS.

Send for FREE 40-page four-color catalog. It pictures the complete line of beautiful 1936 Midwest Acousti-Tone V-Spread consoles and chassis in their natural colors.



MAIL COUPON TODAY for

Free 30-DAY TRIAL OFFER
and 40-PAGE FOUR-COLOR Free CATALOG

MIDWEST RADIO CORPORATION
Dept 44 H Cincinnati, Ohio

Without obligation on my part, send me your new FREE catalog and complete details of your liberal 30-day FREE trial offer. This is NOT an order.

User-Agents
Make Easy
Extra Money
Check
Here
for details.

Name

Address

Town

State

Check if interested in a Midwest All-Wave Battery Radio

MIDWEST RADIO CORP.

DEPT 44-H CINCINNATI, OHIO U.S.A.

Established 1920 Cable Address MIRACO All Codes

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

Note:—Readers who may find it more convenient may send 5 shillings to Arthur Bear, 10 St. Mary's Place, Rotherhithe, London, S. E. 16, England.

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

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ARTHUR J. GREEN, Editor.

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Radio W3ATR
Philadelphia, Pa.

This Beautiful Globe for only \$2.75

F. O. B. Indianapolis, Indiana



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

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

A free globe hand-book included in each sale.

PLEASE SEND POSTAGE

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

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

Address your letters to—

INTERNATIONAL SHORT WAVE CLUB, East Liverpool, Ohio



PERLMAN'S PAGE of RADIO SPECIALTIES

"My Personal Approval + Guarantee with each item"

Have You an Antenna Problem? WRITE ME ABOUT IT!

I Recommend LYNCH CAGE ANTENNA SYSTEMS for Limited Space



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

lightning arrester, screw eye, nail-it knobs and lead-in tube.
List Price...\$23.00.
Your net cost
\$13.75!
Shipping weight 8 pounds.



No. 887 Hi-Fi Simplex (inverted L) 41 ft. cage with 50 ft. Giant Killer cable lead-in. Complete with new Hi-Fi receiver Coupler and double lightning arrester, screw

eye, nail-it knobs and lead-in tube.
List Price...\$19.50.
Your net cost
\$11.75
Shipping weight 8 pounds.

Forget Your Battery Troubles WITH THE WINCHARGER

Get a FREE and Constant Supply of ELECTRICITY FROM THE AIR!

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

UTILITY MODEL, for one storage battery. List price \$29.50.
Your Net Price.....**\$18.95**
(Shipping Wt. 49 lbs.)

DE LUXE MODEL, for charging up to three batteries (22 amperes), complete with tower. List Price \$44.50.
Your Net Price.....**\$26.75**
(Shipping wt. 76 lbs.)

I can supply equipment for WINCHARGER to eliminate dry B batteries of battery operated sets, or to operate directly any A. C. receiver. When inquiring give make and model of receiver and voltage and cycle rating.

MICROPHONES -- AMPLIFIERS

RECORDING EQUIPMENT



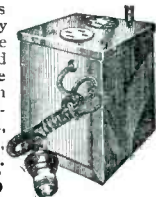
Do you want advice on the best possible choice of Microphones, Amplifiers and Recording Equipment? Write me about your requirements... Ask for the new price list on Amperite Velocity Microphones.

YOU CAN CUT OUT POWER LINE NOISES

WITH MY AMPLIVOX LINE FILTER

... or Your Money Back in Five Days!

One section is designed to suppress the noises on the high frequency end of the line, the other on the low frequency end. When inserted between the radio receiver and the electric outlet socket, or between any noise producing equipment (vacuum cleaners, motors, electric fans, etc.) and the electric outlet socket, it will suppress the disturbance.
List price, \$6.75.
Net Price to You... **\$3.95**



SOL PERLMAN, E.E. (W2JCU)

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

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

BIRTHDAY DX CONTEST

We realize that thousands of short wave fans are waiting anxiously for this list of winners in the Birthday DX Contest. This contest without the slightest doubt, was the greatest short wave contest ever conducted. The editor has "sat in" on every large short wave contest ever put on, either as a judge or as an advisor. And we can say without hesitation that this was the most successful and interesting contest ever put on. And now for the winners.

The First Grand Prize, a Silver Masterpiece IV, complete in every detail, one of the finest radios built, and contributed by the makers, The McMurdo Silver Corporation, 3351 N. Paulina Avenue, Chicago, was awarded to Theodore St. John Porcher, 7708 Navajo Street, Philadelphia, Pa.

The Second Grand Prize, one of the new Hallicrafter Super-Seven Receivers, a grand prize if ever there was one, contributed by the makers, Hallicrafters, 3001 Southport Street, Chicago, Illinois, was awarded to Mrs. Irvin Heglund, Box 182, Lake Worth, Florida.

The Third Grand Prize, an Amperite Velocity Microphone, a real professional job, selling for \$42.00, contributed by the makers, The Amperite Corporation of 561 Broadway, New York City, was awarded to Ernest E. Reese, 2241 Pierce Avenue, Niagara Falls, N. Y.

The Fourth Grand Prize, an Eagle 7-tube Super-het. Receiver, complete with tubes and speaker, contributed by the makers, The Eagle Radio Company, 84 Cortlandt Street, New York City, awarded to C. S. Whall, Box 1530, San Juan, Puerto Rico.

THE PRIZES

THE CONTRIBUTOR

No. 20 Taco Antenna System.....	Technical Appliance Corp., Long Island City, New York.
Awarded to Albert J. Young, Port-of-Spain, Trinidad, B. W. I.	
All-Wave Deluxe Hi-Fi Antenna System.....	Arthur H. Lynch, Inc., 227 Fulton Street, New York City.
Awarded to George Ebbecke, 7136 Torresdale Ave., Philadelphia, Pa.	
National PW-1 Condenser-Dial Assembly.....	National Co., Inc., Malden, Mass.
Awarded to Walter Jasiorowski, 964 West Mantoba St., Milwaukee, Wis.	
Power-Amplifier.....	Harrison Radio Co., 142 Liberty St., New York City.
Awarded to R. Braunholdt, 2715 Harrison Street, Evanston, Illinois.	
All-Wave Antenna Kit.....	Sol Perlman, 227 Fulton St., New York City.
Awarded to Wilfred Siddle, 722 South 27th Place, Birmingham, Ala.	
Acme Headphone Set.....	Sol Perlman, 227 Fulton St., New York City.
Awarded to Baron C. G. Turckheim-Baden, Tapachula, Mexico.	
Phone Receptor.....	Sol Perlman, 227 Fulton St., New York City.
Awarded to Chas. B. Lamm, 3131 North 13th St., Philadelphia, Pa.	
Model 106-F Featherweight Headset..	Trimm Mfg. Co., 1528 Armitage Av., Chicago, Illinois.
Awarded to P. M. Horton, State University, Baton Rouge, La.	

- Ribbon Battery**.....Burgess Battery Co., Freeport, Ill.
Awarded to Robert Woods, 14 West Broadway, Sand Springs, Okla.
- Alpha Antenna Kit**.....Alpha Wire Corp., 50 Howard St.,
New York City.
Awarded to Ramon Marti, Central Street 26, Santurce, Puerto Rico.
- \$10.00 Credit Check**.....P. R. Mallory Co., 3029 E. Wash-
ington St., Indianapolis, Indiana.
Awarded to Norman Kriebel, 116 Bethlehem Pike, Ambler, Pa.
- Brandes Headphone Set**.....Sun Radio Co., 227 Fulton St., New
York City, N. Y.
Awarded to J. R. McAllister, Postoffice, Struthers, Ohio.
- SW-4 Short Wave Coil Set**.....L. A. Hammarlund Mfg. Co., 424 W.
33rd St., New York City.
Awarded to Ernest Orchard, 14 Norwich Road, Weymouth, England.
- SW-4 Short Wave Coil Set**.....L. A. Hammarlund Mfg. Co., 424 W.
33rd St., New York City.
Awarded to Arthur F. G. Bruder, 11 Everette Street, Allston, Mass.
- Six Short Wave Condensers (6 prizes)**.....Sprague Products Co., N. Adams,
Mass.
H. J. Davison, Box 535, Bayamon, Puerto Rico.
Fred Clubine, 1A Fenwick Avenue, Toronto, Canada.
Russell Bean, 7618 South Lafayette Avenue, Chicago, Illinois.
Hyman Cohen, 751 East 178th Street, New York City.
W. T. Stephens, P. O. Box 417, DeLand, Florida.
Carl Forestieri, 2272 Bathgate Avenue, Bronx, New York.
- Ten Call-Books (ten prizes)**.....Radio Amateur Call-Book, Inc., 608
S. Dearborn St., Chicago, Illinois.
Raymond Peck, 1219 Grace Church Road, Silver Springs, Maryland.
Dr. J. S. Pugh, North Texas Building, Dallas, Texas.
R. E. Base, 4105 Alto Road, Windsor Hills, Baltimore, Md.
J. A. Edwards, 10 Oak Road, Sale, North Manchester, England.
Wm. Neal, 140 North Main Street, Southington, Conn.
Fred Karpen, 708 Russell Avenue, Johnstown, Pa.
Carlos F. DeMayo, Merce des y Palo Hincado, Santo Domingo, R. D.
L. S. Wheeler, Lutherville, Maryland.
Reginald De Souza, Avenida Industria, Maracaibo, Venezuela.
Harold Lamont, 5589 96th Street, Elmhurst, L. I., N. Y.
- Drip-O-Lator**.....Enterprize Aluminum Co., Oberlin
Road, Massillon, Ohio.
Awarded to Rudolph Maly, 347 East 72nd Street, New York City.
- Twelve-Inch World Globe**.....W. D. Martin, 2574 Kolowalu St.,
Honolulu, Hawaii.
Awarded to Herman S. Rappaport, 213 Sterling Street, Brooklyn, N. Y.
- Radio Handbook**.....Radio Pacific Bldg., San Francisco,
California.
Awarded to F. S. Anderson, Jr., 4703 New Kent Avenue, Richmond, Va.
- Dial**.....Crowe Nameplate & Mfg. Co., 1749
Grace St., Chicago, Illinois.
M. C. Lang, 2871 Humboldt Avenue South, Minneapolis, Minnesota.
- Bud Giant Coil Form**.....Bud Radio, Inc., 1923 E. 55th St.,
Cleveland, Ohio.
Awarded to W. A. Dean, Connecticut Life Insurance, Hartford, Conn.

- Bruno Coil Kit**.....Charles Miller, 309 View Place,
Covington, Ky.
Augustin Portillo, Las Palmas, Canary Islands.
- Microphone**.....Frank Grey, 6530 Sinclair Avenue,
Berwyn, Illinois.
Awarded to Ed. C. Houlgate, 474 Chester Street, London, Ontario, Canada.
\$5.00 in trade.....Federated Purchasers, 20 Murray
St., New York City.
Awarded to John Davenport, 109 Montague Street, Brooklyn, N. Y.
- Genuine Sapphire Needle (for recording)**.....Meyer Koulish Co., 64 Fulton St.,
New York City.
Awarded to Douglas Robinson, 1114 Washington Avenue, Rensselaer, New York.
- One 24-hour Clock**.....Joseph B. Sessions, Sessions Fdy.,
Bristol, Conn.
Awarded to J. Arnsdorff, 6540 Minerva Avenue, Chicago, Illinois.
- Electric Soldering Iron**.....Blau, The Radio Man, 177 Green-
wich St., New York City.
Awarded to Francis Brewer, 2246 North Ninth Street, Phoenix, Arizona.
- Radio Touch Typewriting Course**....Candler System Company, Box 331,
Asheville, North Carolina.
Awarded to R. Brewster Williams, 108 Fourth Street, Garden City, N. Y.
- Junior Code Course**.....Candler System Company, Box 331,
Asheville, North Carolina.
Awarded to K. Knox, New York City.
- DeLuxe Antenna Kit**.....R.C.A. Mfg. Co., Camden, N. J.
Awarded to Emmett G. Riggle, 63 Marion Street S. E., Massillon, Ohio.
- Radio Operating Questions and Answers Book**.....McGraw-Hill Book Co., 330 West
42nd St., New York City.
Awarded to Rev. F. Hehn, St. Joseph College, Collegeville, Indiana.

In conclusion, we take this opportunity of thanking everyone who helped us make this contest a success. We thank the judges who worked so hard and so faithfully on the reports. We thank the persons who sent in reports. We thank the stations that took part. We thank the firms that contributed those wonderful prizes and we thank everyone that helped pass the news of the contest along.

Some interesting details may be added. Reports came from 34 countries, including Poland, Union of South Africa, Czechoslovakia and Roumania. Thirty-nine stations in twenty-two countries took part, while five other programs were announced too late to count in the contest, bring the total to forty-four stations in twenty-five countries. Almost exactly fifty pounds of reports were received and looked over by the judges, that is, without envelopes and containers. The list price of all the prizes amounted to over \$750.00. The only fault that could be found in the contest was that the list of stations arrived very late in many distant countries where we have members. But we did our best to get the stations signed up early.

The spirit and enthusiasm displayed in this contest would naturally call for such a contest each year. But we will need the co-operation of every member in getting the idea over with the stations and with contributors.

CHAPTER NEWS

The New York Chapter meets at the Stuyvesant High School, East 15th Street, between 1st and 2nd Avenues, New York City, on Feb. 21. This meeting will feature motion pictures, a new receiver and a talk by an eminent authority on radio. For details write to Jacob Kleimans, 2610 Glenwood Road, Brooklyn.

The London, England, Chapter meets at RACS Hall, Wandsworth Road, SW8, every Friday except the second in each month. Very shortly this Chapter will have their own club rooms, open all times to members. It will have a short wave receiver and transmitter, books on radio and similar things. Now is the time for all members to come to the aid of this Chapter, as this is an important step. This Chapter will hold an Annual Dinner-Dance at Maison Lyons, on Saturday, March 7. Tickets are 6/6 each. Last year this Dinner was attended by some of the most famous of radio men, as well as diplomats and high officials of both England and the United States. An early application for tickets is essential.

The Manchester Chapter meets at British Legion Hall, Long Street, Middleton, every Tuesday evening.

The Philadelphia Chapter failed to send in news in time for this issue. For details write to George Zehner, Jr., 2407 Orkney St., Philadelphia. This Chapter was making excellent progress, meeting on the second and fourth Fridays of the month at 7:15 P.M. at 438 Market Street.

Leicester Chapter meets at Foresters Institute, High Street, Leicester, on the first and third Wednesdays of the month.

IN SYMPATHY

We regret to announce that the Father of our good friend and fellow-member Arthur E. Bear of London, died on the last day of the old year. We know that we speak for every member of this organization when we say that our most sincere sympathy goes out to Mr. Bear.

BOOSTERS

It is with the greatest of pleasure that we thank the following members for securing new members for us during the past month. They are Raymond Bell, Jr., Yerbania, Dgo, Mexico; W. L. Runzel, Jr., Chicago Ill.; R. Palmer, Valparizo, Ind.; J. C. Sturtevant, Highland Park, Ill.; Irwin E. Close, Ashland, Mass.; Adson Radio, New York City; Jos. Zanky, Brooklyn, N. Y.; H. S. Northey, Cormbatore, South India; H. Wild, Manchester, England; Philco Radio, London, England; A. S. Floyd, Tucson, Arizona; William Robas, Ft. Monroe, Va.; George Himmelheber, Pekin, Illinois; Peter Westcott, Brooklyn, N. Y.; Dr. J. S. Pugh, Dallas, Texas; Luis Salazar, New York City; Drews Listenin Post, Pittsburg, Pa.; J. M. Encalada, Jr., Havana, Cuba; Dick Cooper, Norwood, Ohio.

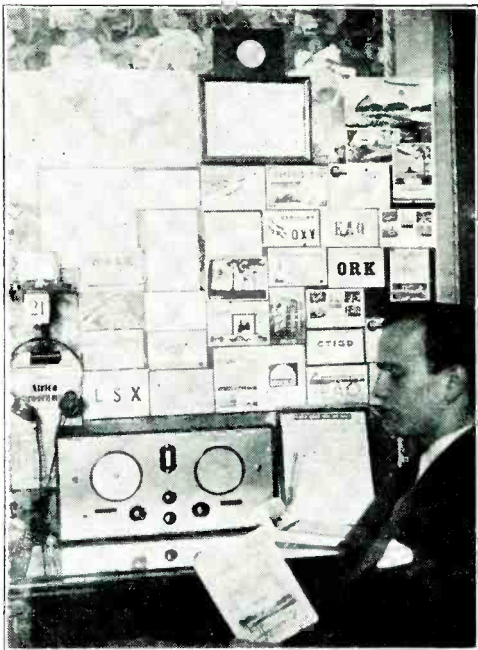
William Cremean, Toledo, Ohio; Harold Mack, New York City; John C. Dunagan, Fayetteville, Ark.; Howard Muir, Racine, Wis.; D. S. Valentine, Nelson, B. C., Canada; Fred Fahnaner, Leavenworth, Kansas; Charles Eggenweiler, West Los Angeles, Calif.; L. E. Hansen, Durban, Natal, South Africa; Midwest Radio of London, England; Tom C. Read, Garwood, Texas.

FLAVIO MASCARENHAS

Last month we took you to the homes of members in Shanghai, China and Oakland, California. This month we take you to Bordeaux, France.

In the picture here we have Flavio Mascarenhas of Bordeaux, France and his short wave listening den. Mr. Mascarenhas has been a very active member of the Club and has sent in some very helpful information. We are certain that many members will be glad to see this photograph.

Next month Mr. Mascarenhas will move to Rio de Janeiro, Brazil, where he will make his home for the next few years. This will give him an opportunity of comparing reception in Europe and South America, and also below and above the Equator. His reports should be followed with interest by everyone interested in making comparisons of



receptions in different parts of the world.

International Short Wave Radio is small in size, but after looking over several dozen magazines, we feel quite sure that members will find more real information in this issue than in all the other short wave magazines put together. We added seventeen new stations to our list and changed forty-five others that have altered their schedule or changed their wave. And failed to list many others that are mentioned but we do not have the exact details of.

FOR SALE—National AGSX Communication Receiver relay rack mounting with double power-pack speaker, coil racks and cabinet. Value \$465.00. Sell for \$225.00 cash, F. O. B., Augusta. Also Scott All-Wave Fifteen with Waverly console. Value 225.00. Sale price \$125.00. Write W. C. Fleming, 2631½ Walton Way, Augusta, Ga.

WANTED—Scott Full-Range Hi-Fidelity 23-tube console radio receiver. Kindly advise price of receiver. George Gundry, 2520 Thomas Street, Flint, Michigan.

SHORT WAVE NEWS

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

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

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

THE EUROPEANS

Direct from Germany comes the following schedule and list of short wave stations active at this time:

DJA on 31.38 Meter, 9.56 mc., from 12:30 to 2:15 A.M.; 8:00 to 11:30 A.M. and 5:00 to 9:30 P.M.

DJB on 19.74 meters, 15.20 mc., from 3:45 to 11:30 A.M.

DJC on 49.83 meters, 6.02 mc., Noon to 4:30 P.M.; 5:00 to 10:45 P.M.

DJD on 25.49 meters, 11.77 mc., from Noon to 4:30 P.M.

DJE on 16.89 meters, 17.76 mc., from 8:00 to 11:30 A.M. irregularly.

DJL on 19.85 meters, 15.11 mc., from 4:00 to 6:00 A.M. irregularly.

DJN on 31.45 meters, 9.54 mc., from 12:30 to 2:15 A.M.; 3:45 to 11:30 A.M.; 4:55 to 10:45 P.M.

DJO on 25.34 meters, 11.79 mc., from 5:00 to 7:00 A.M. irregularly.

DJP on 25.31 meters, 11.85 mc., from 2:00 to 4:00 A.M. irregularly.

DJQ on 19.63 meters, 15.28 mc., from 12:30 to 2:15 A.M. irregularly.

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

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

DZB on 28.79 meters, 10.42 mc., from 2:00 to 4:00 P.M. irregularly.

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

DJM on 49.34 meters, 6.08 mc., from 9:00 to 10:00 A.M. and 3:00 to 5:00 P.M. irregularly.

The stations marked irregular are experimental. Others are daily. This includes the schedule for February. Station DJJ has changed to DZB, we are told. DIP has changed to DZA. DJI on 31.02 meters, 9.67 mc., is not shown. DZA has been reported by members Heglund, Weaver, Solito, Slough, Hersowitz, Gagnon and Hofmaster. DZB, by members

Weaver, Heglund, Slough and Davison. DIP was reported by J. Reese and A. Federig. DJJ was reported by about fifty members. DIQ was reported by members Flagg and Solito. DJM was reported by members S. W. Parr, C. Miller, R. Legge, W. D. Flagg and S. Solito. DJP was reported at 9:00 A.M. by Mr. Parr, at 4:00 A.M. by members J. Cook and F. Karpen and at 4:00 P.M. by H. Slough. DJL was heard at 9:00 A.M. by Mr. Parr, and between 4:00 and 6:00 A.M. by H. Slough and J. Cook. DJO was logged at 2:00 to 4:00 P.M. by F. Karpen and 5:00 to 7:00 A.M. by Charles Miller. We also offer thanks to members H. S. Bradley, W. Siddle and Emil Anderson.

OXY, Skamlebaek, Denmark, has been moved to 31.51 meters, 9.52 mc., and is heard between 5:00 and 6:00 A.M. according to Dr. R. C. Kash. The schedule is week-days 1:00 to 6:00 P.M. and Sundays 11:00 A.M. to 6:00 P.M. according to S. Stevens, Romford, England, who reports them on 49.50 meters or 6.06 mc. and also on 9.52 mc. from 1:00 to 3:00 P.M.

LKJ1, Jeloy, Norway, on 31.48 meters or 9.53 mc. Schedule is 5:00 to 8:00 A.M. and 11:00 A.M. to 6:00 P.M. Reported on 31.5 meters by B. W. Castle and from 4:00 to 5:00 A.M. by Dr. Kash. Also 5:30 to 7:00 A.M. by Dr. Kash and Charles Miller.

HAS3, Budapest, Hungary, on 19.52 meters or 15.37 mc., Sundays from 9:00 to 10:00 A.M. broadcasting. Heard by many. Reported one Wednesday by one member. HAT4 on 32.88 meters, 9.12 mc., also heard by many Sundays from 6:00 to 7:00 P.M. HAS on 43.86 meters reported from 6:00 to 7:00 P.M. once by F. A. Beane.

TFJ, Reykjavik, Iceland, on 24.52 meters or 12.24 mc., broadcasts on Sundays from 1:40 to 2:00 P.M. Failed to broadcast three Sundays last month, due to break-down in station. Reported by several dozen members. TFK on 33.15 meters, 9.05 mc., also heard phoning GBC from 5:00 to 5:30 A.M. by H. Slough.

Russia. The broadcasts from here take place now over RW59 on 50.00 meters, 6.00 mc., daily from 2:00 to 5:00 P.M., some days until 6:00 P.M. RNE on 25.00 meters, 12.00 mc., still broadcasts the 6:00 to 7:00 A.M. program. RNE, along with RKI on 19.94 meters, 15.04 mc., and RIM on 19.68 meters, 15.25 mc., may be heard phoning each other from 5:00 to 9:00 A.M. irregularly. Using the call RNE on 50.00 meters, along with RKI on 39.97 meters, 7.50 mc., and RKK, a new station on 48.90 meters, or 6.13 mc., they phoned each other between 3:30 and 3:55 P.M. according to E. Orchard. RKI was reported at 11:20 A.M. and 7:30 A.M. by J. Cook and at 6:00 A.M. by F. Karpen. RIO on 29.50 meters, 10.17 mc., is heard by many phoning Moscow from 10:00 P.M. to 3:00 A.M. RIR, Tiflis, on 29.76 meters, 10.08 mc., also phones Moscow from Midnight to 2:00 A.M. according to some. Also heard at 5:00 to 7:00 A.M. by E. Riggle. J. B. Keenan, Sydney, Australia, reports phones on 24.58 meters, 12.21 mc.; 18.82 meters, 15.94 mc.; 20.39 meters, 14.71 mc., and 21.57 meters or 13.91 mc., sending music and talking to each other from 4:00 to 9:00 A.M. irregularly. W. D. Fagg reports an RKF on 27.93 meters, 11.74 mc., phoning Tashkent from 4:00 to 4:30 P.M. one Tuesday.

Switzerland has station HBH on 16.22 meters, 18.48 mc.; HBJ on 20.64 meters, 15.54 mc.; HBO on 26.35 meters, or 11.385 mc.; HBP on 38.47 meters, or 7.797 mc., and HBL on 31.27 meters or 9.595 mc. HBP and HBL broadcast Saturdays from 5:30 to 6:15 P.M. and have actually been sending music of late. HBL also heard at 11:45 A.M. once (L. D. Brewer). HBO and HBJ sent special programs between 11:00 A.M. and 3:30 P.M. several times last month (L. Gagnon, J. B. Wooten, S. Solito). HBH was heard once from 11:50 to 12:30 P.M. talking to Argentina (S. Solito).

Spain. A new station is reported. This one is owned by the Philips Iberica, Paseo de las Delicias 71, or P. O. Box 643, Madrid. It was heard on about 44.5 meters, 6.74 mc., broadcasting between 5:30 and 9:30 P.M., then on about 51.5 meters or 5.82 mc. broadcasting another night around 7:00 to 9:00 P.M. and then back on about 45.00 meters or 6.67 mc., again from 7:30 to 9:45 P.M. They said they were on 45.00 meters and also on 15.36 meters. They called a station EDX in the Canary Islands on one test. S. J. A. Nicholl, Salop, England, has a letter showing the address given above, while the station was heard by members Carl Cochrane, Abbey Anderson, C. H. Broughton, J. M. R. Studholme, Walter Wilson, F. A. Beane, B. W. Castle, John Edwards and L. Gagnon. EAQ, the old famous station on 30.40 meters, or 9.87 mc., broadcasts daily 5:15 to 7:30 P.M. and sometimes stays on until 9:30 P.M. Also on Saturdays from 1:00 to 3:00 P.M. EHY on 29.79 meters, 10.07 mc., phoned YVR at 4:15 P.M. (W. D. Flagg)

SPW, Warsaw, Poland, on 22.00 meters, 13.63 mc., seems to have broadcast Christmas and New Years Day. This was reported by a few members.

Italy. Station 2RO is still broadcasting on 25.40 meters, 11.81 mc., from 8:15 to 9:00 A.M., 9:15 to 11:15 A.M. and 11:30 A.M. to 12:15 P.M. Also on 31.13 meters or 9.64 mc. from 1:30 to 5:15 P.M. and 6:00 to 6:15 P.M. daily; on Mondays, Wednesdays and Fridays from 6:15 to 7:30 P.M., and Tuesdays, Thursdays and Saturdays from 6:15 to 7:45 P.M. However, we shall soon have them on 49.3 meters, 6.085 mc., from 6:00 until 7:45 P.M., instead of on 31.13. They have been testing on this wavelength. These tests have taken place between 4:35 P.M. and 9:00 P.M. and was reported by members A. Centanino, E. Orchard, R. Brady, Chas. Miller, S. Solito, R. Holland, R. Legge, W. Darby, L. Gagnon, H. L. Nixon and E. C. Bedford.

Italian phones. We find IRM on 30.52 meters, or 9.83 mc.; IRA on 20:37 meters, 14.73 mc.; IRY on 18.20 meters, 16.117 mc., and IRW on 15.37 meters, 19.526 mc., all engaged in phoning. These are owned by Italo Radio, Via Calabria 46-48, Rome. We have reports from H. S. Bradley, Chas. Miller, J. Cook, W. D. Flagg and W. Stevens. IAC, Piza, Italy, on 23.45 meters is on 23.33 meters according to Chas. Miller, who heard them at 10:30 A.M.

ORK, Brussels, Belgium, on 29.04 meters, 10.33 mc., broadcasts daily from 2:30 to 4:00 P.M.

CT1AA, Lisbon, Portugal, on 31.09 meters, 9.65 mc., broadcasts Tuesdays, Thursdays and Saturdays from 4:00 to 7:00 P.M. Moved to 9.68 mc. (J. B. Wooten).

CSL, Lisbon, on 48.78 meters, 6.15 mc., is still on the air from 7:15

A.M. to 12:20 P.M. most days according to W. J. Woodall. This is the first mention of this station in five months. CTV, Lisbon, on 26.91 meters, 11.51 mc., was heard calling CQK, Macao, at 3:00 P.M. according to J. B. Keenan, Australia. CQK was supposed to be on 33.4 meters, but was not heard. CTV was heard by others in December at 2:00 P.M.

Holland. PHI, Huizen, on 25.57 meters, 11.74 mc., broadcasts daily excepting Tuesdays and Wednesdays from 8:30 to 10:30 A.M., some days until 11:00 A.M. They also sent a special program New Years Day from 11:15 until 12:15 P.M. PCJ, Eindhoven, on 19.71 meters, 15.22 mc., sends a card saying they broadcast Tuesdays 3:00 to 6:00 A.M.; Wednesdays 7:00 to 11:00 A.M. and Sundays 8:00 to 10:30 A.M. Inguar Gullberg of Hedemora, Sweden, and B. W. Castle, Bournemouth, England, have these.

France. We believe everyone knows the schedule of broadcasts from France. It is shown in our station list. A new powerful station on 29.79 meters is reported between 3:15 to 4:45 P.M. on Wednesdays, Thursdays and Sundays by J. Reese, but we hardly believe this is in France. FTH, a phone on 10.94 mc., was heard at 4:30 P.M. by W. D. Flagg. FTH on 27.30 meters at 4:15 P.M. is reported by W. Chambers. A station TYA2, Paris, on 9.037 mc., was heard between 2:00 and 3:00 P.M. (W. Flagg). Heard 12:30 to 1:14 A.M.; 4:40 to 5:30 P.M.; Midnight to 2:00 A.M. (S. Solito). At 3:00 P.M. (L. Gagnon. FTK on 18.89 meters, 16.20 mc., works Saigin from 6:30 to 10:30 A.M. irregularly. The address of the Normandie is Mr. Bowman, The French Line, Havre, France (Sender unknown).

The programs from Daventry this month are scheduled as follows according to word direct from the operators:

- 2:15 A.M. to 4:15 A.M.—GSF on 19.82 (15.14) and GSB on 31.55 (9.51)
- 6:00 A.M. to 8:45 A.M.—GSG on 16.86 (17.79) and GSF on 19.82 (15.14)
- 9:00 A.M. to 10:15 A.M.—GSE on 25.29 (11.86) and GSF on 19.82 (15.14)
- 10:15 A.M. to 12:00 Noon—GSE on 25.29 (11.86) and GSB on 31.55 (9.51)
- 12:15 P.M. to 4:00 P.M.—GSD on 25.53 (11.75) and GSB on 31.55 (9.51)
- 12:15 P.M. to 2:15 P.M.—GSI on 19.66 (15.26)
- 2:30 P.M. to 5:45 P.M.—GSL on 49.10 (6.11)
- 4:15 P.M. to 5:45 P.M.—GSC on 31.32 (9.58) and GSB on 31.55 (9.51)
- 6:00 P.M. to 8:00 P.M.—GSA on 49.59 (6.05) and GSC on 31.32 (9.58)
and GSB on 31.55 (9.51).
- 10:00 P.M. to 11:00 P.M.—GSC on 31.32 (9.58) and GSL on 49.10 (6.11)

ASIA

ZBW, Hong Kong, China, on 34.29 meters, or 8.75 mc., is still broadcasting and being heard between 3:00 and 7:00 A.M. in the U. S. A., and up till 11:00 A.M. on the West Coast. The address is Box 200.

XGW, Shanghai, China, 28.79 meters or 10.42 mc. heard at 3:30 A.M. phoning (L. Brewer). XGN 17.00 meters, 17.64 mc. heard phoning GBA at 7:00 A.M. (F. Karpen). XGR on about 26.00 meters, 11.54 mc. also heard, no time given (Karpen).

VWY, Poona, India, 33.41 meters, 8.98 mc. phoning London, 4:30 to 5:05 P.M. (S. Solito).

KBB, Manila, P. I., a new phone on 34.48 meters or 8.70 mc. sending

music and testing around 7:00 A.M. A new station. (J. B. Keenan, Sydney). Station KZGF, Manila, phoning 3:00 A.M. to 5:00 A.M. on 5.805 mc. (Ashley Walcott). Several other Philippine stations were reported, but these are regular ones.

CQN, Macao, Portuguese China. A letter says they now broadcast on 31.00 meters or 9.665 mc. with 300 watts power Mondays and Fridays 7:00 A.M. to 8:30 A.M. (Arthur Kindell, Wellington, New Zealand). Club member Virgilia Lopez Correia of Macao, reported this last month, too. Heard one Friday from 7:00 to 8:30 A.M. saying they were on 9.52 mc. (Fred Karpen, Johnstown, Pa.) This station was on 49.83 meters, 6.02 mc., for years. It is owned by the Postal Department.

VUB, Bombay, India, on 31.36 meters, 9.57 mc. A letter says they broadcast Sundays 12:30 to 1:30 P.M.; Thursdays and Saturdays 11:30 A.M. to 12:30 Noon, and irregularly Mondays at 1:30 A.M. This one is heard in Europe.

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

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

JVD was heard phoning between 10:00 P.M. and 1:00 A.M. JVF was heard between 4:00 and 5:00 P.M. and at 6:34 P.M. JVM broadcasts every Tuesday and Friday from 2:00 to 3:00 P.M., and was heard phoning 12:50 to 2:35 A.M. and 7:00 A.M. JVN broadcasts Tuesdays and Fridays 2:00 to 3:00 P.M.; Mondays and Thursdays 4:00 to 5:00 P.M. and was heard phoning at 12:45 to 1:00 A.M., and at 4:30 A.M. JVO was heard phoning at 4:30 P.M. JVT was heard phoning between 4:00 and 7:00 A.M. JVU was heard at 1:45 A.M. and JVV was heard around 7:30 A.M. These were heard by many members.

JIB, Tawian, on 28.49 meters, 10.53 mc., was phoning JVN at 2:00 to 2:37 A.M. (S. Solito) and at 6:00 P.M. (Wm. Sparks). JIC, Tawian, on 50.93 meters, 5.89 mc., phoned JVV at 7:30 A.M. (H. Slough) at 6:35 A.M. (Ed. Schmeichel).

Manchuria. A letter from the Manchurian Telegraph and Telephone Company, Shinkia, says they verify station JZB on 10.065 mc., then say they have several stations. They show they work San Francisco on TDC on 13.98 mc., and TDB on 10.105 mc.; work Berlin with TDA on 6.762 mc.; TDH on 13.53 mc.; and TDG on 7.55 mc., work Tokyo with TDI on 15.90 mc.; TDF on 5.97 mc.; TDE on 10.065 mc. (same as JZB in wavelength); and TDD on 5.83 mc. (same as JZC). They say they use TDE from 10:00

A.M. to 1:00 P.M. daily. This was received by Ashley Walcott, San Francisco. JZB on 29.80 meters, 10.06 mc., phoned JVO at 4:30 A.M. (Slough), and at 6:00 P.M. (Wm. Sparks). JZC on 51.40 meters, 5.83 mc., phoned Tokyo at 6:15 A.M. (Ed. Schmeichel) and 6:00 to 7:00 A.M. (J. Miller).

Java. A letter from Club-member J. H. A. Hardeman of Tjimahi, Java, gives details of the short wave stations there. YDA, Batavia, is testing on 49.67 meters, 6.04 mc., around 5:00 A.M. YDB, Sourabaya, is now on 31.10 meters, 9.65 mc., relaying YDB. YDA5, Bandoeng moved from 49.02 meters to 120 meters. PLP, a government station at Bandoeng on 27.26 meters or 11.00 mc., relays YDA programs Sundays 5:00 to 11:00 A.M. PMN, Bandoeng government station on 29.25 meters, 10.26 mc., relays YDA daily 5:30 to 10:00 A.M. The NIRON stations, YDA and YDB usually work 5:30 to 10:00 A.M. and 6:00 to 7:00 P.M. PMY owned by Bandoeng Radio Society on 58.30 meters, 5.15 mc., broadcasts 4:30 to 10:30 A.M. and 5:30 to 7:30 P.M. Other reports show PLV, Bandoeng, on 31.86 meters, 9.42 mc., phoning K WV 9:45 to 10:15 A.M. (D. Vance). PLP and PMN were reported broadcasting Tuesdays and Thursdays from 5:30 up to 11:30 A.M., but these are over with, we believe. PLE, Bandoeng, on 15.93 meters, 18.83 mc., was phoning at 7:30 P.M. The station YDB was reported on 31.40 meters one Thursday 6:53 to 7:30 A.M. (J. Reese), on 31.00 meters, 9.655 mc., 6:30 to 7:30 A.M. (Robt. Rossi) and on 9.65 mc. (Slough)

SOUTH AMERICANS

VP3MR, Georgetown, British Guiana, is on 42.68 meters, 7.08 mc., although they announce 42.4 meters. They are heard between 4:00 and 9:00 P.M. week-days and 9:00 to 11:00 A.M. Sundays, it seems. Reported by members Woodall, Beane, Palmer, Castle, Solito, Legge, Nicholl, Flagg.

VP3BG, Georgetown, British Guiana, on 41.55 meters, 7.22 mc., called "The Voice of Georgetown," is heard on Thursdays from 6:00 to 7:45 P.M.;

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PZH, Paramaribo, Dutch Guiana, on 42.88 meters, 7.00 mc. Letter gives their time one hour and twenty minutes ahead of E.S.T., making schedule Monday, Wednesday and Friday 5:40 to 9:40 P.M.; Tuesdays and Fridays 2:40 to 4:40 and Sundays 9:40 to 11:40 A.M. The general manager of this station asks us to say they want reports. The address is P. O. Box 54. The other letter comes from W. D. Vandecar, Grand Rapids, Michigan.

CP5, La Paz, Bolivia. A letter says this station has not been on the air for some time. (S. W. Parr, London).

ZP10, Ascuncion, Paraguay, on 45.00 meters, 6.66 mc., is reported by Dr. Saylor in our January issue, reported now by F. Karpen from 11:00 P. M. to Midnight on 6.65 mc.

PRF5, Rio de Janeiro, Brazil, on 31.56 meters, 9.50 mc., broadcasts daily 4:45 to 5:45 P.M., but heard several times last month testing with W2XAF between 5:45 and 7:30 P.M. (J. Wooten, Fred Baxter, J. Reese, H. S. Campbell, H. S. Davison, Jr., and F. Karpen).

LRU, a new Buenos Aires station on 19.62 meters, 15.29 mc. This one is the short wave relay of station LR1, Radio El Mundo. A letter says they will have LRX on 9.58 mc. soon, and LRU on 15.28 mc., each with 5,000 watts power. The address is Calle Maipu 555, Buenos Aires (Ashley Walcott). LRU was reported between 5:30 P.M. and 1:30 A.M. usually testing for about an hour each time. Reported by members Chas. Dutrow, G. Van Honk, Charles Eggenweiler, L. A. Seiben, V. J. Fitzsimmons, H. J. Davison, Wm. Sparks, Fred Hafner, and G. McClellon. LSX, on 28.98 meters, 10.35 mc., was reported between 7:00 and 8:15 P.M. by J. Reese and H. S. Campbell.

CEC, Santiago, Chile, on 28.12 meters, 10.67 mc., continues to broadcast Thursdays and Sundays 8:30 to 9:00 P.M. They are also supposed to broadcast daily 7:00 to 8:00 P.M., but do not do so. L. G. Chavez, Los Angeles, says a station CE960 in Satiago has been on 31.25 meters, 9.60 mc., from 9:30 P.M. to Midnight. They gave their address as Cassilla 1342.

OAX4G, Lima, Peru, on 48.00 meters, 6.25 mc., gives their schedule now as daily 7:00 to 10:00 P.M., but it was reported as late as 11:00 P.M., and sometimes until Midnight.

HJU, Buenaventura, Colombia, "La Voz del Pacifico," owned by the National Railroads, has been heard the past month broadcasting tests between 6:00 and 11:00 P.M. As we go to press, they seem to be testing Tuesdays, Thursdays and Saturdays from 8:00 to 11:00 P.M. Mark that down. The wavelength stated in many reports range from 31.00 meters to 33.10 meters, or from 9.68 mc. to 9.06 mc. We believe they must be moving around on the dials, although they announce 9.10 mc., which would be 32.97 meters. Reports have come from members Ray Shaffer, F. Edwards, Eric Butcher, G. Van Honk, Carl Eder, L. W. Roberts, W. Chambers, H. P. Gensheimer, G. C. Gallagher, Chas. Miller, D. Vance, S. Solito, Ed. Schmeichel, H. Slough, H. S. Davison, Jr., Chas. Eggenweiler, F. L. Perkson, V. J. Fitzsimmons, Fred Karpen and G. M. McClellon.

HKV, Bogota, Colombia, on 34.10 meters, 8.79 mc., reported at 11:30 P.M. by E. Butcher and at 10:30 P.M. by L. Brewer.

HKB, Bogota, on 30.21 meters, 9.93 mc., reported calling a Carthago at 2:10 P.M. (J. Tinnon). HJP, Bogota, phone on 7.40 mc., 12:35 to 12:41 A.M. (V. J. Fitzsimmons); on 40.55 meters, 10:30 to 11:00 P.M. (D. Vance) and on 40.16 meters at 12:09 to 12:40 A.M. (W. Siddle).

HJN, the Bogota broadcast station on 50.26 meters, 5.97 mc., is broadcasting between 6:00 and 11:00 P.M. Reported by many, although Abe Federing insists they are on 50.45 meters.

HJ1ABB, Barranquilla, Colombia, on 46.51 meters, 6.45 mc. broadcasts from 4:30 to 10:00 P.M. daily, and is heard by thousands. Reported once around 12:30 A. M. by H. Davison, Jr.

HJ1ABE, Cartagena, Colombia, on 49.05 meters, 6.11 mc. broadcasts daily 7:30 to 9:00 P. M., with a special program Mondays 10:30 to 11:30 P.M. in English. Send special programs Christmas and New Year's Day around midnight. (C. Wills, J. Cook and H. Slough).

HJ1ABJ, Santa Marta, Colombia, on 49.95 meters, 6.01 mc. broadcasts 6:30 to 10:30 P.M., but reported once at 6:30 A.M. (Ed. Schmeichel).

HJ2ABD, Bucaramanga, Colombia, on 50.10 meters, 5.98 mc. We received a card giving the schedule as 11:30 A.M. to 12:30 P.M.; 5:30 to 6:30 P.M.; and 7:30 to 10:30 P.M. Sam Solito reports one now saying 6:00 to 10:00 P.M., and says it was heard 12:42 to 12:45 A.M.

HJ3ABH, Bogota, on 49.85 meters, 6.01 mc. Lee Williams, Jr., reports a card saying 6.012 mc. week-days 11:30 A.M. to 2:00 P.M. and 6:00 to 11:00 P.M.; Sundays Noon to 2:00 P.M. and 4:00 to 11:00 P.M. A station HJ3ABB, Bogota, on 49.50 meters, 6.06 mc., was reported between 8:00 to 10:00 P.M. by O. Hersowitz.

HJ4ABA, Medellin, Colombia, on 24.50 meters, 11.81 mc., broadcasts daily 11:30 to 1:00 P.M. and 6:30 to 10:30 P.M.

HJ4ABC, Ibague, Colombia, on 46.44 meters, 6.48 mc., broadcasts 8:00 to 10:00 P.M. The address is Apartado 39 and the frequency is 6.45 mc. according to Dr. R. C. Kash. Sam Solito says the one we called HJ4ABC on 6.23 mc., is really HJ4ABJ. Also W. D. Flagg agrees. HJ4ABC is at Pereira and on 6.08 mc. and not 6.04 mc. as we list it. Charles Miller and Sam Solito say this.

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

HJ4ABG, Medellin, on 7.10 mc., is working amateurs between 10:00 and 11:30 P.M. according to R. Legge. L. Brewer says there is an HJ4ABP on 6.13 mc., it is not HJ4ABD.

Elden Lagontiere of Cartagena, writes that the license for his station has been granted for 31.25 meters, 9.60 mc., but they have also applied for a 49 meter wave for night broadcasting. This station is not complete as yet. Reports should be sent to Apartado 37, Cartagena.

HC2CW, Guayaquil, Ecuador, 35.69 meters, 8.41 mc., broadcasts 8:00 to 11:30 P.M., but was heard as late as 1:30 A.M. HC2AT sold this station and HC2AT will build a new transmitter (W. Turpin).

HC2RL, Guayaquil, on 45.00 meters, 6.67 mc., broadcasts Sundays 5:45

to 7:45 P.M. and Tuesdays 9:15 to 11:15 P.M. W. D. Flagg insists they are on 6.63 mc., not 6.67.

HC2ET, Guayaquil, on 65.22 meters, 4.60 mc., broadcasts Wednesdays and Saturdays from 9:00 to 11:00 P.M.

HC2JSB, Guayaquil, on 38.12 meters, 7.87 mc., which was taken off our list last month after not being reported for six months, is still on the air. They have 500 watts power, and broadcast daily 9:00 A.M. to 2:00 P.M. and 6:00 to 11:00 P.M. on 38.19 meters, 7.854 mc., according to a card received by W. Siddle. It was reported on frequencies from 7.79 mc. to 7.89 mc. by members W. D. Flagg, Chas. Miller, Sam Solito, Carl Cochrane.

HCJB, Quito, Ecuador, on 34.21 meters, 8.77 mc., broadcasts daily excepting Mondays 7:30 to 9:30 P.M. but sometimes stays on until 11:30 P.M. Reported on 8.77 mc., at 1:15 A.M. once by S. Solito and on 34.09 meters instead of 34.21 by Carl Cochrane.

HCK, Quito, on 50.93 meters, or 5.89 mc., sends word they have 250 watts power on 5.885 mc. Mondays and Fridays 8:30 to 10:30 P.M. Ecuadorian Time. The address is Direccion General de Telegrafos, Telefonos y Inalamericca, Quito, Ecuador, Luther Hederson and G. Van Honk report these letters. Dr. J. S. Pugh says they are on 5.815 mc.

HC1PM, Quito, is reported. Known as "La Voz de Palomar" it was heard on 5.75 mc. at Midnight by W. Siddle, and on 6.99 mc. working Prado from Midnight to 1:15 A.M. by Sam Solito. They gave their address as Leonardo Ponce, Bolivar 24, according to Mr. Solito.

Prado, Riobamba, Ecuador, on 45.31 meters, 6.62 mc., broadcasts Thursdays 9:00 to 11:30 P.M. A station owned by Carlos Cordova, owner of Prado was using the call IFC on 7.21 mc. calling a 60A Argentina and 4CB, Argentina, and 12A, Costa Rica, at 1:30 A.M. when a special program was broadcast (Luis Salazar).

YV2RC, Caracas, Venezuela, on 51.72 meters, 5.75 mc., broadcasts 10:30 A.M. to 1:00 P.M. and 5:15 to 10:00 P.M. They sent a special program New Years at 11:30 P.M. (C. Wills).

YV4RC, Caracas, Venezuela, on 47.10 meters, 6.37 mc., broadcasts 6:45 to 9:30 P.M. Heard at Midnight (H. Slough). Identification is "Ecos del Avila," the name of a mountain surrounding Caracas (C. G. Hurtado).

YV9RC, Caracas, "Ondas Populares," on 38.31 meters, 7.83 mc., owned by Gonzalo Veloz Mancera, is broadcasting 7:00 to 8:30 P.M. according to Robert Rossi, while R. Lege reports them 9:00 to 11:00 P.M.

YV6RV, Velencia, on 46.01 meters, 6.52 mc., broadcasts Noon to 2:00 P.M. and 6:00 to 10:00 P.M.

YV8RB, Baraquisimeto, Venezuela, "La Voz de Lara," sends a card giving their schedule as daily Noon to 1:00 P.M. and 6:00 to 10:00 P.M. This kind of card received by members F. A. Beane, H. S. Bradley and W. Siddle. Another one says 11:00 A.M. to Noon and 6:00 to 10:00 P.M. their time. This kind received by E. Orchard and Carlos Lopez Ona. Still another is reported 6:00 to 10:00 P.M. and Midnight to 1:00 A.M., this one by Abe Federer. W. D. Flagg says they signed off at 8:45 P.M. at times. Some say this station is on 5.81 mc., others say 5.88 mc.

YV10RSC, San Cristobal, on 52.45 meters, 5.72 mc., sends out cards

which do not give their schedule. Dr. Kash, Sam Solito and Abe Federing have these.

YV5RMO, Maracaibo, Venezuela, on 51.28 meters, 5.85 mc., gives their schedule in Venezuelan time, which equals 11:00 A.M. to 12:30 P.M. and 5:00 to 9:30 P.M., E.S.T. Their cards say 5.65 mc. but this is wrong.

YV5AM, an amateur on 7.05 mc., has closed down on account of political influence according to Drews Listening Post, Pittsburg, Pa., while W. D. Flagg reports them broadcasting recordings at 10:15 P.M.

YV12RM, Maracay, on 47.51 meters, 6.30 mc., broadcasts 8:00 to 10:30 P.M. daily, and from 4:30 to 11:00 P.M. irregularly. Heard every night at 11:30 P.M. working HP5F (Sam Solito) at Midnight (H. Slough).

CENTRAL AMERICANS

XEME, Merida, Yucatan, Mexico, on 36.83 meters, 8.19 mc., sends a letter saying they broadcast daily 9:00 A.M. to Noon and 5:00 to 11:00 P.M., Merida Time, relaying XEFC. It is known as "La Vov de Yucatan desde Merida." The address is Calle 59, Numero 517. This all comes from Wilfred Siddle, Birmingham, Alabama. Charles Miller reports it on 8.10 mc. at 11:10 P.M. signing off.

XEVI, Mexico City, on 50.17 meters, 5.98 mc., must have changed their schedule. Letters say they broadcast Mondays and Wednesdays 3:00 to 4:00 P.M.; Tuesdays and Fridays 7:30 to 8:45 P.M. and 10:00 P.M. to Midnight; Saturdays 9:00 to 10:00 P.M.; Sundays 1:00 to 2:15, with something said about Fridays 3:00 to 4:00 P.M. and 9:00 P.M. to Midnight. Dr. Kash, Dr. Pugh, Carlos Lopez Ona, Sam Solito and W. Siddle report this. The special I.S.W.C. program sent out by this station was reported only by Members Stitzinger, Pugh and J. Reese. The address is Box 2874.

XECR, Mexico City, on 40.65 meters, 7.38 mc., broadcasts Sundays 6:00 to 8:00 P.M. some say, while others say it is 7:00 to 8:00 P.M. W. D. Flagg, H. S. Campbell, M. Irons, Fred Baxter, Jr., Alan Teague, F. A. Beane and Fred Atherton deserve credit.

XEUW, Vera Cruz, Mexico, on 49.83 meters, 6.02 mc., broadcasts 8:00 P.M. to 12:30 A.M. Verifications say they are on 6.02 mc., and the address is Avenue Independencia 98. This is "El Eco del Sotaventa Veracruz." It is on 6.055 mc. according to Sam Solito.

XFA2, Vera Cruz, on 45.52 meters, 6.60 mc., reported 10:00 to 11:30 P.M. (J. Reese) and on 6.55 mc. daily 7:30 to 8:15 P.M. (W. Siddle).

XBJQ, Mexico City, on 27.26 meters, 11.00 mc., is testing with an amateur station W2BSD, not an Argentine, but a New Rochelle, N. Y., station. F. Murphy, Chas. Miller, S. Solito and W. D. Flagg report this. They were heard at 4:30, 6:30, 7:00 and 10:30 P.M.

XEFT, Vera Cruz, Merico, on 49.02 meters, 6.12 mc., sends a card saying they broadcast 11:00 A.M. to 4:00 P.M., 7:30 P.M. to 12:00 Midnight; Saturdays at 6:30 P.M. instead of 7:30 P.M., and Sundays 9:00 P.M. to 12:00 Midnight. The address is Avenue Independencia 28.

XEXA, Mexico City, owned by the Secretary of Public Education, sends out a card saying they broadcast 8:00 to 11:30 A.M.; 3:00 to 5:00 P.M.; and 7:00 to 11:00 P.M. Sam Solito has this. We have them reported on

48.55 meters, 6.18 mc., and on 6.15 mc. and 6.16 mc and as late as 11:30 P.M. Mr. Wooten, Wills, Flagg, Stevens and Miller report this.

XAM, Merida, Yucatan, was reported on 11.30 mc., not 11.00 mc., at 10:30 A.M. (Worrell). XERA, Raynosa, on 44.58 meters, 6.72 mc. is the seventh harmonic of XERA, not a short wave station. An XENE or XEME, Merida, on 6.06 mc., phoning from 9:15 to 10:15 P.M. is reported by Sam Solito. Ed. Schmeichel reports it on 37.04 meters, or 8.10 mc., at 8:00 P.M.

HJ5J, Panama City, on 31.29 meters, 9.59 mc., broadcasts from 7:30 to 10:00 P.M. according to many. Heard at 11:00 P.M. (R. Legge) and on 9.57 mc., instead of 9.59 (Paul Horton).

HP5B, Panama City, on 49.75 meters, 603 mc., sends a card saying they broadcast Noon to 1:00 P.M. and 8:00 to 10:30 P.M., but they added another hour recently, making it 7:00 to 10:30 P.M.

HP5F, Colon, Panama, on 49.34 meters, 6.08 mc., broadcasts 11:45 A.M. to 1:15 P.M. and 7:45 to 10:00 P.M. daily excepting Sundays when they are on 10:45 to 11:30 A.M. and 4:00 to 6:00 P.M. (Eric Butcher). Heard testing with YV12RM around 11:30 P.M. (S. Solito and R. Legge).

YNGU, Managua, Nicaragua, is reported by R. E. De Souza on 37.00 meters, 9.30 mc. (this is wrong as 37.00 meters is 8.11 mc. and 9.30 mc. is 32.26 meters). A letter gives the address as Apartado 295. The schedule is 1:00 to 2:30 P.M. and 6:00 to 7:30 P.M., and Sundays 12:00 to 1:00 P.M. YNVA, Managua, "De Rueben Dario," on 8.59 mc., from 7:30 to 9:30 P.M. (Chas. Miller) and 8:50 to 9:10 P.M. (S. Solito).

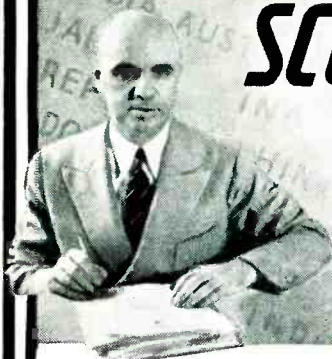
HRN, Tegucigalpa, Honduras, on 50.76 meters, 5.91 mc., has moved to this wave. They broadcast now from 12:30 to 2:00 P.M.: 6:00 to 7:30 P.M., and 8:00 to 9:30 P.M. weekdays and Sundays 3:00 to 5:00 P.M. and 8:00 P.M. to Midnight. They announce the time in Hondurian time, which is only a half-hour later than E.S.T., according to Paul Horton and Elmer Applegate. Many members mention the change in wavelength.

HRY, Tegucigalpa, on 47.24 meters, 6.35 mc., was calling Costa Rica at 11:10 P.M. to Midnight (Wm. Palmer). An HRW or HIW on announced wave of 27.14 meters, 11.04 mc., was heard testing around 6:30 to 7:30 P.M. several times. They said reports should be sent to the American Bank Bldg., New Orleans, La. This was reported by Ian Morgan, W. D. Flagg, Leslie Roberts, W. E. Koneczing, Wade Chambers and Ashley Walcott who also reports it on 6.35 mc. HRP1, San Pedro Sula, Honduras, on 6.35 mc. not 6.33 mc. was heard one Saturday 7:30 to 8:00 P.M. (Flagg)

HRL5, Nacaome, Honduras, a new phone station on 20.71 meters, 14.48 mc., was phoning WNC around 9:30 to 1:30 P.M. (W. D. Flagg, T. Weaver).

TGW, Guatemala City, say they are on 5.94 mc. with 200 watts power, in a letter to R. E. De Souza. TG2X, the National Police station at Guatemala City on 50.51 meters, 5.94 mc., is on this wave. We earnestly believe TG2X relays long wave TGW, and that TGW does not have their own short wave station. Many have letters from TG2X now. They broadcast most every night between 4:00 P.M. and Midnight. TGX, another station, say they will be back soon on 6.13 mc. (S. J. Nicholl).

TGS, Guatemala City, on 52.26 meters, 5.74 mc., sends out letters saying they are on 5.713 mc., but are heard between 5.71 and 5.74 mc. They have



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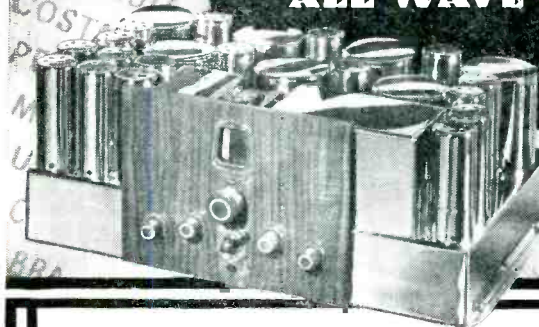
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200 watts power, and the identification is "Radioemisora de la Casa Presidencial" and the schedule is Wednesdays, Thursdays and Sundays 6:00 to 9:00 P.M. H. S. Bradley, Charles Miller, and Ed. Schmeichel have such cards, while Robert Rossi says his says 7:00 to 9:00 P.M. A TGR, Guatemala City, on 5.76 mc. was heard 8:00 to 9:05 P.M. (May be TGS) reports Mrs. I. Heglund.

TIEP, San Jose, Costa Rica, on 44.71 meters, 7.61 mc., broadcasts 5:00 to 10:00 P.M. irregularly, almost every night, though. Heard 11:00 P.M. to Midnight once (Chas. Miller). TIPG, San Jose, on 46.86 meters, 6.41 mc., broadcasts Noon to 2:00 P.M. and 6:00 to 11:30 P.M. Reported one Sunday morning from 2:00 to 5:00 A.M. (W. D. Vandecar, Thomas Smith).

TI5HH, San Romano, Costa Rica, on 54.74 meters, 5.48 mc., broadcasts 3:30 to 4:00 and 8:00 to 11:30 P.M. One card says 5.50 mc.

TI8WS, Puntarenas, Costa Rica, "Ecos del Pacifico" on 39.47 meters or 7.60 mc. broadcasts 6:00 to 11:00 P.M., although reports vary on it. A station "Ecos de la Provincia" on 7.55 mc. is reported. (R. E. De Souza). TI8WS on 7.14 mc. from 12:50 to 1:15 A.M. phoning YV12RM (Sam Solito) and a verification from the station, signed by Abel Salazar F, Apartado 75, says they are on 7.55 mc. (W. Siddle). John Tinnon says they are on 6.48 mc.

TI6RW, Port Limon, Costa Rica, on 43.80 meters or 6.85 mc., broadcasting between 11:00 P.M. and midnight and giving their address as Apartado 45. (P. Quintano Cabot). TI2M or N, San Jose, on 44.90 meters or 6.70 mc. heard 9:40 P.M. to 11:31 P.M. (J. Reese).

TIGPH "Estacion Almatica" broadcasts weekdays from 7:00 to 10:00 P.M., comes on the air with march from "Tannhauser" and signs off with Liszt's "Hungarian Rhapsodie." TIX on the same wave broadcasts weekdays 10:00 to 11:00 P.M., signing off with a marimba. (W. D. Flagg).

WEST INDIES

By official act, the name of the city of Santo Domingo, Dominican Republic, the oldest city in the New World, has been changed to Trujillo City. This information comes from W. D. Flagg and H. J. Davison. The word "Ciudad" is used in front of Trujillo to designate "City." The Dominican Republic has the most short wave broadcast stations of any place in the world for its size, we believe.

HIL, Trujillo, on 46.13 meters or 6.50 mc. broadcasts 6:30 to 9:00 P.M., irregularly. Reported at 7:30 A.M. and 3:00 to 5:00 P.M. (P. Quintano Cabot).

HIZ, Trujillo on 47.50 meters, 6:31 mc., broadcasts 5:00 to 9:30 P.M. Reported working with other stations as late as 11:30 P.M. (Centanio, Flagg and Slough) and a card says 11:30 and 5:30 P.M. (W. Wilson).

HI6F, Trujillo, on 42.78 meters or 7.02 mc., "El Hit del Aire" broadcasts around 10:00 P.M., owned by F. A. Sanabia. (Robert Rossi). HI8A, Trujillo, on 6.67 working HI9R Trujillo (on 7.24 mc.) 10:40 to 11:00 P.M. (Sam Solito), and at 3:00 P.M. broadcasting on 6.25 mc. and testing at 10:25 P.M. on 6.615 mc. (H. J. Davison). HI6Z, Trujillo, on 6.38 mc. broadcasting at 7:00 P.M. (Robt. Rossi).

HI5M, Trujillo, on 48.92 meters or 6.13 mc., "La voz del Alemacen" broadcasts 6:40 to 9:10 P.M. Reported on 6.15 mc. using 8-note chimes, broadcasting 6.15 to 7.15 A.M. Mondays, Tuesdays and Saturdays. (R. E. De Souza).

HI4D, Trujillo on 45.50 meters, 6.61 mc., "La Voz de Quisqueya" broadcasts 11:55 A.M. to 1:40 P.M. and 4:40 to 7:40 P.M. Was on 6.56 mc. not 6.61 mc. in one letter and on 6.557 mc. in another received from E. Reese. A card says they are on 46.25 meters (this is away wrong). Wednesdays and Saturdays 12:15 to 2:00 P.M. and 5:00 to 7:00 P.M. (B. W. Castle and Walter Wilson).

HI4V, Trujillo, "La voz dela Marina" on 45.73 meters, 6.56 mc. broadcasts 11:40 A.M. to 1:40 P.M., 5.10 P.M. to 6:40 P.M. The wave is given as 46.51 meters or 6.45 mc. Robert Rossi and H. S. Bradley have cards. W. D. Flagg reports them at 10:15 P.M. one Saturday. Somehow we, and others, are getting HI4D, HI4B and HI4V all mixed up.

HIX, Trujillo, on 50.17 meters or 5.98 mc. sends two different schedules on two different cards. One says Sundays 7:40 to 10:40 A.M., Tuesdays and Fridays 11:40 A.M. to 12:40 P.M., 4:40 P.M. to 5:40 P.M. and 8:10 P.M. to 10:10 P.M. The other one says every day they are on from 11:40 to 12:40 P.M. and 4:40 to 5:40 P.M. We thank Lee Williams and Albert Larkman. Reported from 5:00 to 6:00 A.M. one Sunday. (Dr. Pugh).

HI1S, Puerto Plata, came in for lots of reports last month, not all in agreement. Known as "La voz de Hispaniola" and using a three-note chime, they were reported from 5:00 to 11:30 P.M. A letter received says the schedule is daily 11:40 to 1:40 P.M., 5:40 P.M. to 7:40 P.M. and 9:40 to 11:40 P.M., with English programs Tuesdays and Fridays 7:10 to 7:40 (W. D. Flagg). Reported on 6.42 mc., 46.73 meters by most listeners, but as far as ten mc. off that by some others.

HIH, San Pedro de Macoris, on 44.12 meters, 6.81 mc., broadcasts daily 7:30 to 9:00 P.M.; Sundays 3:00 to 4:00 A.M. and 4:15 to 6:00 P.M. Reported at 6:45 to 7:30 A.M. one Sunday (D. Vance and H. J. Davison) and New Years Eve until 11:00 P.M. (Flagg).

HI1J, San Pedro de Macoris, on 51.15 meters, 5.86 mc., sends out a card saying they broadcast daily 12:30 to 2:00 P.M. and 6:30 to 9:00 P.M., E.S.T., and the address is Apartado 204 (Walter Wilson, Wesley Turpin). Reported at 10:00 P.M. (Pedro Cabot); at 5:30 P.M. (A. Centanino, H. J. Davidson) and reported on 41.6 meters giving time as 12:10 to 2:50 P.M. and 6:10 to 8:50 P.M. (R. Stevens).

HI3U, Santiago de los Caballeros, on 47.00 meters, 6.383 mc., broadcasted one Sunday on 1:10 A.M. (Carlos Lopez Ona). HI8Q, Santiago, on 47.00 meters was reported daily 6:00 to 8:00 P.M. (W. Siddle).

HI1A, Santiago de los Caballeros, on 48.50 meters, 6.19 mc., sends out a letter saying they broadcast 11:40 A.M. to 1:40 P.M. and 7:40 to 9:40 P.M. and the address is Box 423 (Walter Wilson and Wm. C. Palmer, Jr.). Reported week-days at 6:40 A.M. (H. J. Davison); at 9:25 P.M. (W. D. Flagg) and at 7:00 P.M. (H. Slough).

HI9B, a new station at Santiago de los Caballeros is on the air. This station is on the Mercedes Hotel and it is on 49.60 meters, 6.045 mc. It was heard testing between Midnight and 1:30 A.M. by several members,

and at 10:40 A.M. once, but we understand they will broadcast in the evenings around 6:00 to 9:00 P.M. We have reports from Carlos Hurtado, Curacao; H. J. Davison, Bayamon, P. R.; Norman Lane; Sam Solito; Walter Hamtramck; O. Hersowitz, and Wilfred Siddle.

VRR4, Jamaica, B. W. I., on 25.87 meters, 11.595 mc., was working tests with WNC, Florida, at 3:30 P.M. (John Tinnon); at 10:15 A.M. (O. Hersowitz), and at 4:00 and 6:00 P.M. (M. Gavin).

ZFA, Hamilton, Bermuda, on 59.76 meters, 5.02 mc., phoned the United States quite often between 7:00 and 11:00 P.M. and sent a special program New Years 10:30 to 11:00 P.M. according to quite a few reports.

COCO, Havana, Cuba, on 49.90 meters, 6.01 mc., broadcasts 9:30 A.M. to 12:30 P.M.; 4:00 to 7:00 P.M. and 8:00 to 10:00 P.M.; with a special program Saturdays from 11:30 P.M. to 2:00 A.M.

CO9GC, Santiago, Cuba, on 48.79 meters, 6.15 mc., has a very powerful harmonic on 24.39 meters, 12.30 mc., and it was reported as a new station by many members. This station is supposed to broadcast 8:30 to 10:00 A.M.; Noon to 1:30 P.M.; 3:30 to 4:30 P.M. and 10:00 to 11:00 P.M., but it was heard at 5:30 P.M. and again at 6:30 P.M. and at 1:00 A.M. and almost all hours of the day, just as though they had no schedule. We have reports from members Chas. Miller, W. D. Flagg, W. Siddle, Walter Wilson, Sam Solito, D. Hersowitz, L. Gagnon and William Robas. We believe everyone knows the waves and schedules of COCD and CO9JQ.

HH2T and HH2S, Port-Au-Prince, Haiti. W. D. Flagg tells us he heard it announced that HH2T is on long waves and HH2S is the short wave call. At least HH2S was heard on 50.85 meters, 5.91 mc., broadcasting between 7:30 and 10:23 P.M. by members L. Gagnon, Chas. Miller, Abe Federing, W. Siddle and at 3:26 A.M. one morning by V. J. Fitzsimmons. In addition, it was reported on 25.93 meters at 7:44 P.M. and between 6:00 and 7:00 P.M. by members C. Lopez Ona and Ralph Brady. Then, it was reported on 9.53 mc. between 11:00 A.M. and Noon (P. Q. Cabot) and on 9.585 mc., between HP5J and GSC from 8:00 to 9:00 P.M. (Carl Cochran).

HH3W, Port-Au-Prince, Haiti, on 31.27 meters, 9.595 mc. (announced) was heard giving the schedule as 1:00 to 2:00 P.M. and 7:00 to 8:00 P.M. They gave their address as Box 117. (Mrs. I. Heglund). Heard at 8:15 P.M. and said 1:00 to 3:00 P.M. (W. Siddle); at 6:45 to 7:30 P.M. (Ralph Brady) and at 7:30 P.M. (W. E. Koneczny).

AFRICA

Addis Ababa, Ethiopia, sends out cards saying they have stations ETA on 16.42 meters, ETB on 25.09 meters, ETD on 39.37 meters, and ETG on 51.02 meters. At least a hundred such cards were reported to us. ETB on 25.09, 11.95 mc., broadcasts just about every Wednesday at 4:50 P.M. Try for them. I. Gullberg, of Sweden, also reports them at 10:20 A.M. once; Sam Solito reports an ETC on 10.92 mc. calling Paris from 4:32 to 5:10 P.M. once, and F. Karpen reports ETA on 18.27 mc. at 11:30 A.M. to Noon once.

OPL, Leopoldsville, Belgian Congo, on 14.97 meters, 20.04 mc., phones

around 10:00 A.M. to Noon or 12:30 P.M. often. OPM on 29.58 meters, 10.14 mc., also phones from 1:00 to 4:00 P.M.

ZSR, Klipheuvall, South Africa, on 32.68 meters, 9.18 mc., was working London 4:00 to 5:15 P.M. once (Sam Sternberg) and sent a special program on Christmas. (F. Karpen).

EA8AB, Santa Cruz, Tenerife, Canary Islands, on 41.60 meters, 7.21 mc., sends a card saying they broadcast Mondays, Wednesdays and Fridays 3:15 to 4:15 P.M. Owned by the Radio Club Tenerife (H. S. Bradley) and heard at 2:40 P.M. (Eric Rickett of England). An EA8AF, Canary Islands, is working amateurs on 20 and 40 meters.

Amateurs by the dozen on 20.97 meters, 14.30 mc., to 21.26 meters, 14.11 mc., were reported last month. Try for these African amateurs between 2:00 and 6:00 P.M., although they are best from 2:30 to 4:00 P.M.

VQ7LO, Nairobi, Kenya Colony, on 49.31 meters, 6.08 mc., sends out a letter giving a very mixed schedule, but it is heard in Europe between 11:00 A.M. and 3:00 P.M. and in Asia around 12:30 to 1:30 A.M., so what does a schedule mean?

CR6AA, Lobito, Angola, on 41.80 meters, 7.17 mc., sends out a letter saying they broadcast Wednesdays and Saturdays 2:45 to 4:45 P.M. (E. Orchard, H. Homer, both of England). It is almost useless to list this station, as it is seldom heard.

SUX, Cairo, Egypt, on 38.06 meters, or 7.86 mc., phones around 4:00 to 6:00 P.M. SUV on 29.83 meters, 10.05 mc., phones around 1:00 to 5:00 P.M. SUZ on 21.70 meters, 13.83 mc., phones 11:00 A.M. to about 1:00 P.M. most every day.

IDU, Asmara, Eritrea, on 22.40 meters, 13.38 mc., is reported phoning Italy between 7:00 and 11:00 A.M. (J. B. Keenan, S. Solito, F. Karpen and John Tinnon). A station in Algeria on 8.96 mc. phoning TYA2, Paris, between 12:35 and 1:13 A.M. and 4:10 to 4:57 P.M. is reported by Solito.

NORTH AMERICAN

NX2V, a United States Naval transmitter at Hochstetter or Hofstater, Greenland, is working on 21.13 meters, 14.20 mc., testing with amateurs nearly every day. Some say it is NX2Z. It was heard between 3:00 and 8:00 P.M. and it has 1400 watts power. We have reports from A. J. Manning, Nick Gaug, W. D. Flagg, Jan Morgan and Roger Legge, Jr.

VE9DW, Canada, on 34.60 meters was heard 6:00 to 7:00 P.M. testing according to Nick Gaug. Was on 8.60 mc. (Ralph Brady) and on 8.64 mc. (W. D. Flagg). This station was believed to be at Winnipeg, Manitoba.

Goderich, Ontario, Canada. A station unlicensed as yet, is operated by a radio club in Goderich. It is on 50.00 meters, 6.00 mc., and has no schedule. Reported by Lee Williams, L. D. Brewer, W. Turpin, H. Slough, O. Hersowitz and Norman Lane.

VE9CA, Calgary, Alberta, Canada, on 49.75 meters, 6.03 mc., is still on the air. Heard between 9:00 and 10:00 A.M. by Wm. Sparks and Walcott.

VE9BK, Vancouver, B. C., Canada, on 62.56 meters, 4.80 mc., broadcasts daily 11:30 to 11:45 A.M.; 3:00 to 3:15 P.M.; 8:00 to 8:15 P.M.; Saturdays 7:30 to 7:45 P.M.; Mondays, Wednesdays and Fridays, 7:30 to 8:00 P.M.

(Wesley Turpin).

VE9DN, Drummondville, on 49.96 meters, 6.005 mc., broadcasts Saturday nights starting at 11:30 P.M., sending messages to the Far North.

VE9HX, Halifax, N. S., Canada, on 49.10 meters, 6.11 mc., sends a card saying they broadcast 10:30 A.M. to 2:30 P.M., and 6:00 P.M. to Midnight from Monday to Friday; Fridays 2:00 to 9:00 P.M.; Saturdays 3:00 P.M. to Midnight. Some say this is E.S.T., other that it is one hour ahead and still others two hours. (F. A. Beane, Walter Wilson, David McKie).

CJRX on 25.60 meters, 11.72 mc., and CJRO on 48.85 meters, 6.14 mc., broadcast the same programs daily 8:00 P.M. to Midnight, although it was heard by many as early as 5:00 P.M. on week-days and 3:00 P.M. Sundays.

VE9CS, Vancouver, B. C., on 49.40 meters, 6.07 mc., broadcasts 6:00 to 7:00 P.M. daily, Sundays 1:45 P.M. to 1:00 A.M. Wm. Sparks reports it nightly 10:00 P.M. to 1:00 A.M.

CFU, Rossland, B. C., on 5.66 mc., was broadcasting news 8:30 to 9:00 P.M. (G. C. Gallagher). CGA2 on 21.79 meters, 13.74 mc., and not CGA3 on 22.58 meters, phones England (L. Gagnon). Canadian airways station CZ5M on 61.22 meters, 4.90 mc., was heard between 5:30 and 5:40 P.M. (Ed. Davenport).

W2XE, Wayne, New Jersey, now broadcasts on 13.94 meters, 21.52 mc., from 10:00 to 11:00 A.M. and on 16.89 meters, 17.76 mc., from 11:00 A.M. to 1:00 P.M. on 19.94 meters, 15.27 mc., from 1:00 to 6:00 P.M. and on 49.02 meters, 6.13 mc., from 8:00 to 11:00 P.M. (B. W. Castle, A. Walcott and R. J. Hughes).

W1XAL, Boston, Mass. The January schedule was Sundays 5:00 to 7:00 P.M.; Tuesdays and Thursdays 7:00 to 9:00 P.M. on 49.67 meters, 6.04 mc., and daily 6:00 to 6:30 P.M. and Sundays 3:30 to 4:30 P.M. on 25.42 meters, 11.79 mc. Heard on 25.42 one Sunday 10:30 to 11:00 A.M. (Geo. Diamond).

WSXK, Pittsburg, is now on 11.87 mc. until 10:30 P.M., instead of just to 9:00 P.M. (H. J. Davison).

W4XB, Miami Beach, Florida, on 49.67 meters, 6.04 mc., say they broadcast 11:30 A.M. to 2:00 P.M. and 8:00 P.M. to Midnight. Heard signing off at 10:30 P.M. (Max Horlick). Sends DX programs Saturdays 3:00 to 6:00 A.M. (Chas. Miller).

Alaska. A letter from WXE, Anchorage, Alaska, says they operate now on 2.9975 mc., 8:00 A.M. to Noon Anchorage Time, which is three hours later than E.S.T. (A. Walcott).

Many phone stations have been reported, too many to mention. An WEM on 30.42 meters, 9.86 mc., and a WEN on 44.58 meters, 6.73 mc., sent a special New Years program, according to some while others say WEN was on 43.17 meters, 6.95 mc.

THE AMATEURS

There are several hundred amateur stations now heard on the 20 meter band. Due to the conflicting call-letters given, and to the irregularity of the stations, we can not list them. Try the following tuning schedule. For Africans try from 2:00 to 6:00 P.M. For Australians try

8:00 to 11:00 A.M. For the West Indies try 9:00 A.M. to 10:00 P.M. For Central Americans try from 9:00 A.M. to 10:00 P.M. For the Hawaiian stations try 4:00 to 11:00 P.M. For the South American stations try from 6:00 to 11:00 P.M. There are nearly 60,000 amateur stations. For a list of these we suggest Amateur Radio Call-Book, which sells for \$1.25. We will accept your order for this book.

WITH THE REPORTERS

With the introduction of this section last month, we received quite a number of comments. Some were very enthusiastic over the idea, some suggested leaving out names and addresses entirely and some complained bitterly over the fact that their reports received no more attention than others. This section was introduced for several purposes. First, it saves space, as you can not write the name and address of a person in as little space as you can the call-letters of a station. Second, it puts the news more-or-less in a section alone, thus saving the reader many minutes wasted in reading through names and addresses to get to the news. Third, by saving space, it permits us to give more news and more reports, too. Fourth, it permits us to set up a good portion of the magazine in print earlier in the month, thus saving time in getting out the magazine. Fifth, it shows the stations that are being heard in different sections of the world, thus enabling listeners to see what they should be able to get where they happen to live. In conclusion, the number of reports being received by us made it impossible to mention the party making the report on each and every station. This simply had to be done.

Wilfred Siddle, Birmingham, Alabama, reports XEMA, XEXA, XFA2, XBJQ, XEUW, XEVI, YNLF, TISWS, TIX, HH3W, HH2S, H11S, CO9GC, HC1PM, HC2JSB, YV8RB, HJP, GCU and a list of German stations. Wesley Turpin, Grand Coulee, Washington, reports VE9BK, VE9CS, and Papeete, Tahiti, on 7.10 mc. and the station at Goderich, Ont. Malcomb L. Gavin, Cleveland, Ohio, sends a list of many stations, most of them heard on schedule. He shows SUV, ZFB, H14B, H11J, H11S, H15N, TG2X, HBB, TFJ.

L. D. Brewer, Phoenix, Arizona, reports HJ4ABD, HKV, HC2CW, Goderich, YDB, ICK, HBL, HJ5ABC, XGW, YV6RV. Wm. Darby, Dublin, Ireland, reports VQ7LO, YV2RC, YV6RV, PRF5 and some Americans; 2RO on 49 meters. Francis A. Beane, Ridgewell, England, reports HCJB, PRAS, YV8RB, VP3MR, HJ4ABG, VE9HX, XECR, 2RO, OER2, OXY, DIQ.

G. C. Gallagher, San Francisco, California, reports stations in Java, Japan, Hawaii, Canada, Mexico, Venezuela, Russia, and mentions HJU and CFU. William Sparks, San Francisco, reports stations in Java, Japan, 2RO, JIB, JSB, ZBW, HVJ, DJI, OAX4G, HJN, HRN, HRW, TG2X, XBJQ, VE9CA; several Alaskans on 4.61 mc: WXA; fire prevention stations near 2.726 mc. and 3.385 mc., HJU, TFJ, VE9BK, he Clipper ships, YDE and others.

Reginald De Souza, Maracaibo, Venezuela, reports YNGU, TGW, TG2X, H15M, HIL, HIZ and CEC. Ray Shaffer, Waterloo, Iowa, reports HJU and HIZ. Dr. J. S. Pugh, Dallas, Texas, reports XEVI, HCK, HRN, HIX,

HAS-3, COCO and VE9DN. Dr. R. C. Kash, Sevierville, Tennessee, reports YV1ORSC, XEFT, XEVI, HJ4ABC, LKJ1, TFJ, DJN and HI1S. Cyrus Will, Glencoe, Illinois, reports HJ1ABE, YV2RC, 2RO and XEXA.

Arthur Woods, London, England, sends helpful news on VP3MR, PMN and COCD. Walter Wilson, of London, reports CT1AA, VP3MR, YVQ, HIZ, JVM, HI4D, CO9GC, VE9HX, HI1J, HI1A and a new Madrid station. Albert Larkman, Sidcup, England, reports XECR, HC2RL and HIX. S. W. Parr, London, reports CP5-JVP, JVM, JVN, DJP, DJM, DJI. J. W. Cook, Stratford, Sub-Castle, England, helps with news on HBO, TFJ, WQP, VE9DN, DJM, 2RO, VQ7LO, WEB, RKI, WSXK, COCD, DJP; J VH, JVM, IRM, HJ1ABE, HJ1ABJ, PMN and DJL. Dr. W. J. Woodell, Birmingham, England, helps a lot with news on VPD, HBL, CSL, JVN, PRADO, COJ2, HI1J and VP3MR. B. W. Castle, Bournemouth, England, sends news on PMN, COCD, COCH, HI4D, HIZ, VP3MR, HJ2ABD, YV8RB, YV5RMO, YV1ORSC, HP5B, XECR, XEBT, DJI, Russia, Germany, France, Norway. Ernest Orchard, Weymouth, England, reports PLP, CR6AA, 2RO, RKI, RIM and YV8RB. A. Gower, Overseal, England, reports a great many stations, with helpful news on ZTJ, VQ7LO, ETB, VUB, PMN, PLE, ZBW and the Japanese.

W. H. Howe, Tucson, Arizona, reports many stations including Java, Japan, Mexico, Colombia, England, Germany and Holland. Shokichi, Yoshimura, Moji, Japan, sends help on Pontoise, PRF5, DJQ, PLW, PMN, DJA and 2RO. Thomas Simpson, Leven, Fife, Scotland, reports RNE, RKI, PH1, DJM, WEA, DIP and PI1J. Abbey Anderson, Selkirk, Scotland, reports ZBW, YV6RV, W9XF, VP3MR, VK3LR, PMN, PLV, JVM, JVN, VQ7LO, VE9DN, and a Madrid station on 45 meters.

Ernest Reese, Niagara Falls, N. Y., reports TIPG, HI4D, HJ4ABA. Lee Williams, Jr., Clarksburg, W. Va., sends HJ3ABH and HIX. C. E. Wilks, Ashland, Kentucky, reports CRO4, CMA3 and JVM. Emmett Riggle, Massillon, Ohio, reports RIR, VQ7LO, DJJ and JVN. Carlos Lopes Ona, Havana, Cuba, helps a lot with news on KWU, KAZ, XECR, HI3U, GSL, HJ4ABD, HJ1ABJ, HP5J, HH2T, WEN, YV8RB and XEVI.

A dozen letters, filled with pages of news comes from W. D. Flagg, Holyoke, Mass. There were nearly all about new stations, stations off frequency and stations changing time. We cannot mention them all, but he shows HI1S, HRL5, HIL, NX2Z, VP3MR, HC2JSB, HC2ET, RKF, RKI, HH2S, HI1A, XEXA, XECR, XERA, XBJQ, TIX, TIGPH, FTH, TYA2, HJ1ABJ, VP3BG, VE9EW and HI4V.

Sam Solito, Leetsdale, Pa., also sends us a long list of stations, most of them either hard ones to log, or off schedule. We will not show them all here, but we see ZBW, VWY, JVP, JVM, JIB, HZH, SUZ, ETC; IDU; ZFA, HJ2ABD, T18WS, HP5F, XENE, XEUW, HBO, VP3MR, HC2CW, HC2JSB, DJM, OER2, TYA2, FTK, CTA2, HAS, TFJ, HI9B, HRV, TC1PM and ZLT.

Luis Salazar, New York City, helps with Prado, HJ4ABD, XEUW, TG2X, IFC and EASAB. James B. Wooten, Mobile, Alabama, helps with WET, LSX, TGX, JVN, HBO, WEN, DIQ, XEXA, PRF5, HBL, HBP and CT1AA. Eric Butcher, Cokeville, Wyoming, sends some news on several stations including HC2AT, HKV, VP3MR, HP5F, HRP1, HC2ET, OAK4G,

HP5J, HJU and HK1Z. Thomas Weaver, Baltimore, Md., reports DZA, DZB and HRL5. George Van Honk, Erie, Pa., reports LSI, HCK, HI1S and HJU. Angelo Centanino reports from Freeport, Pa., 2RO, HI1J, HIZ, DJI and W9XAA. Ian Morgan, Montreal, Canada, reports HRW, HI1S, YV9RM, DJE, DIP, NX2Z, HP5B, YV2RM and HRW.

John Keenan, Sydney, Australia, sends word of ETB, IDU, KBB, CTV2 and RNE. Pedro Quintana Cabot, Cifuentes, Cuba, reports DJA, HJ4ABA, HH2T, HI1J, W2XE, HI1A, HIL, and a TI6RW. R. Stevens, Rimford, Essex, England, sends news of OXY, IRY, DJM, XEXA, HI1J, LSL, YV2RC and HJ4ABC. Robert Rossi, Philadelphia, reports YV8RC, JVP, HI6F, TI5HH, TGS, YDB, HC2JSB, HI4V. Douglas Vance, Omaha, Nebraska, reports PLV, CO9JQ, TFJ, JVT, HAT4, HAS3, HJU, HJP, HIH. Joe Childs, Philadelphia, reports YVQ, HI1S and TFJ. H. S. Campbell, Upland, California, reports XECR, XBJQ, JVN, JVM, JVH, JVT, JVU, HCJB, KKH, LSX, PSH, XEUW, TIGPH, ETA, ETB, HP5J, OCI, CEC and DGU. Ralph Brady, Brooklyn, N. Y., reports 2RO, HI1S, HH2T, CO9GC, DJE and VE9EW.

Inguar Gullberg, Hedemore, Sweden, reports PCJ, PHI, W8XK, ETB. Bengt Ljungren, Gothenburg, Sweden, reports WLL YVR, VP3MR, SPW, RV59 and IRM. Harley Slough, Vancouver, Canada, reports HJU, PLP, PMN, YDA, TFJ, DZA, DZB, DJP, DJO, JVP, JVU, JVO, JIC, JZB, XECR and others. George Diamond, Jamaica, New York, reports WIXAL and DJB. Charles Miller, Covington, Kentucky, reports many stations including LSY, TGS, PMC, HH2S, SUX XEXA, RIO, IRW, YV4RC, HI1S, HJ4ABD, DJM, XBJQ, HC2JSB, HJ4ABC, TIEP, YNVA, XEFT, W4XB, CO9JQ, 2RO, ZLT, SUV, IAC.

Jimmie Reese, New York City reports DIP, XFA2, LSX, JVM, DJJ, TI2M, XEVI, YDA, HI1S, KKP, SUV, PRF5, HJ4ABA, HRN and VE9HX. F. T. Worrell, Ann Arbor, Michigan, has DJJ, OCI, YV12RM and XAM. Alden Fowler, Greenburg, Indiana, reports TIPG, HCK, HJ5ABC, CEC, HJ1ABC, HRN, HI1A, KKK. Leslie Roberts, Chicago, Illinois, has HJU, HIW, HRN. Wade Chambers, Tulsa, Oklahoma, logged DJI, DIQ, HAT4, FTH, FYA, RIO, EHY, ZLT, PIE, JVN, JVF, PLE, KTO, OPM, EHZ, HRW, HJU. Russell Leader, San Francisco, shows COCO, XEFT, PCJ, VE9CA, HVJ, XEVI.

Paul M. Horton, Baton Rouge, La., reports HRN, HP5J, PLP and JVN. Elmer Applegate, Newburg, N. Y., has HRN and TFJ. Moris Irvin Heglund, Lake Worth, Florida, reports TGR, DZA, HH3W, DZB, 2RO, HJ1ABE. Abe Federing, Bronx, New York, reports news of YV8RB, DIP, YV10RSC, HH2S, HJN, TG2X, CO9GC, HI1J, FTM. Carl Cochrane, Pittsburg, Pa., has news of HC2JSB and EDX. Roger Legge, Jr., Philadelphia, Pa., sends news of NX2Z, EA8AF, VP3BG, VP3MR, YV9RC, HP5J, HC2CW, HP5F, DJQ, DJM, 2RO, HJ4ABG, RIO, HJ4ABC, HJ4ABD, TFJ. H. J. Davison, Jr., Fond du Lac, Wisconsin, reports HJ4ABA, XEFT, HJN, CJRX, HRN, HJ1ABB, XEVI, HJU, PRF5, YV6RV and CO9GD.

Fred Baxter, Jr., Hohukus, New Jersey, sends word of XECR, HBO, HBJ, PRF5, HI1S, JVN, JVM and others. Max Horlick, Youngstown, sends news on stations in Germany, England, and the following: CEC, WWV, WIXAL, CJRX, KEJ and W9XAA. Captain R. B. Oxrieder, State

College, Pa., sends a long letter showing many stations on schedule. He also shows HJU and HJP. W. H. Jessen, Eugene, Oregon, also sends a long list of stations on schedule with stations in Japan, Philippines, Mexico, Cuba, Europe and the U.S.A. shown. Fred Hafner, Buffalo, New York, reports LRU, HIL, HH2S, VP3MR, HI4B, HJ5ABC, HJ4ABD.

Miss Eileen Hofmaster, Sandusky, Ohio, reports TIPG, DZE and some unidentified stations. J. Barron, Aberdeen, Scotland, reports several stations including SUV, SUX, W2XE, COCD and HJN. F. A. Beane, Ridgewell, England, reports ETB, YV10RSC, HC2RL, HIL, YV12RM and HJ1ABE. J. M. R. Studholme, London, reports W1XAL and WQP. Wm. C. Palmer, Cleveland, Ohio, reports many stations including amateurs on 20 meters, TFJ, PRF5, PRA8, VP3MR, XECR, HRN, HRY and XERA. Carlos Lopez Ona, Havana, Cuba, added XEFT, HIZ, OAX4G, YV12RM and XEXA to his list.

H. J. Davison of Bayamon, Puerto Rico, reports many stations, with helpful news on W8XK, PRF5, DJI, DJJ, W1XAL, DZD, PLP, HI9B, HI1S, HI8A, SM8S, LRU, HIH and HI1A. M. Gavin, Cleveland, Ohio, reports EHY, RIR, VRR4, YVR and HJ4ABN. Rober Hughes, Trowbridge, England, reports DJE, RW59, W2XE, PLP, PMN, VP3MR, many 20 meter amateurs and a letter from Japan. S. J. Nicholl, Dartmouth, England, reports DJI, DJL, JVP, TGX, VP3MR, YV8RB, HJ4ABD, HJN. A. J. Hayward, Trowbridge, England, reports JVP, JVN, PLP, PMN, W1XAL. W. E. Koneczny, Stratford, Conn., reports SPW, WEM, HIW, CO9GC, PCJ, HH3W and DJI. Ned Conwell, Chester, Pa., reports quite a few stations on schedule. Fred Atherton, Rutland, Vermont, reports HC2RL, YV12RM, HC2ET, HRN, TIGPH, XECR, HIZ, HI5N, CO9GC, ORK, DGU and several others.

Ashley Walcott, San Francisco, California, reports many Alaskans on high waves, W2XE, VE9CA, XEXA, HRW, HJU, LRU, RKI, JZB, KZGF, JZC, JVV and JVU. Edward Schmeichel, Chicago, Illinois, reports HJU, XEME, HAT4, DZA, HI1S, CO9GC, XEXA, OAX4G, HJ1ABJ, FZR, JZC, JIC, RIR. John Tinnon, Haverford, Pa., reports HI1J, VRR4, HIX, HI4B, HI1S, HJ1ABC, VP3MR, HJ4ABJ, TISWS, HRF, XEXA, TGF. Fred Karpen, Johnstown, Pa., reports XGN, XGR, PLP, PLE, PMN, ZLT, FZR, JVF, KAZ, VIZ3, JVH. RIM, RNE, DJD, DJP, HBH, CQN, HAS3; IDU, ETA, ZP10, PRF5, HJU, LSX and HJA7. Lawrence Gagnon, Quebec Canada, reports CGA2, ZLT, PLP, JVM, JVN, DJJ, DJH, DFC, DJI, 2RO, HBJ, HH2S, TYA2, CO9GC, EDX, LSX, XBJQ and JVF.

O. Hersowitz, Baltimore, Maryland, reports HI9B, HI1S, CO9GC, SIZ, VRR4, HJ3ABB, DJK, KKP and the Goderich station. XDX, Philadelphia, Pa., reports many stations but we can not figure out the meaning of his marks. Wm. Robas, Fort Monroe, Virginia, reports RNE and CO9GC. Ralph Brady, Brooklyn, N. Y., reports HKV, HH3W, RIO, DJM and HCJB. Joseph Miller, Brooklyn, N. Y., reports OPM, EA8AF, SUZ, SUX, FZR, YDB, KAY, PMY, RIR, SPW, IAC, PPU: YN10P; VWF; JZC.

John Tinnon, Haverford, Pa., reports ZFD, HJ4ABC, HP5F, HRN, JVN and JVP. Robert Holland, Jr., Murray, Ky., reports HRN. Norman Lane, Long Beach, Calif., reports HJU, the Goderich station, HP5F, HRN,

TIRCC, YV12RM, TG2X, and HI9B. Edmund Davenport, Pittsford, Vt., reports CZ5M, HBP, DGU, SUV, EHY and others. Samuel Sternberg, Far Rocaway, N. Y., reports ZSR.

C. G. Hurtado, Curacao, D. W. I., reports HI9B, HJ3ABD and HJ1ABC. Ken McKinley, Vancouver, B. C., Canada, reports DJI, DIQ, XEVI, JVE, YV12RM, PRF5, HJU, LRU, TG2X. Jimmie Reese, New York City, reports quite a few stations, most of them on schedule. Ernest Reese, Niagara Falls, New York, reports HRP1, HI4B, H11S, HI4D, HC2RL, TIPG, HH2S, HJN, 2RO, CJRO, CO9GC and H11A.

We also acknowledge late reports received from Ralph B. Williams, Garden City, N. Y.; Nick Gaug, New York City; Herman S. Rapaport, Brooklyn, N. Y.; Hyman Cohen, New York City; Robert Stuart, Bernardsville, New Jersey; C. G. Hurtado, Curacao, D. W. I.; Russell Leader, San Francisco, California; A. Antognini, Greenfield, California; Dr. R. C. Kash, Sevierville, Tenn.; George S. Gilbert, Hollywood, California; Dr. H. S. Saylor, Altoona, Pa.; Cyril Gilmour, Kingston, Ontario; Fred Hafner, Buffalo, N. Y.; Luis Zalazar, New York City; Arthur Richards of Hagerstown, Md.; Jas. B. Wooten, Mobile, Ala.; Sam Swope, Rockville, Ind.; Robert Piedra, Havana, Cuba; Ray English, Passiac, N. J.

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SPECIFICATIONS: Small, 7"x5½"x2¾" Crackle finish case. Completely shielded. Easily attached to rear of radio receiver. Only one knob to adjust. Draws negligible power from receiver. Cannot affect its operation. Uses 3 genuine R.C.A. metal tubes.

IMPORTANT: Give make and model of receiver when ordering. FOR SUPER-HETERODYNE SETS ONLY.

ORDERS FILLED IN THE ORDER RECEIVED—Approximately 2 Weeks Delivery

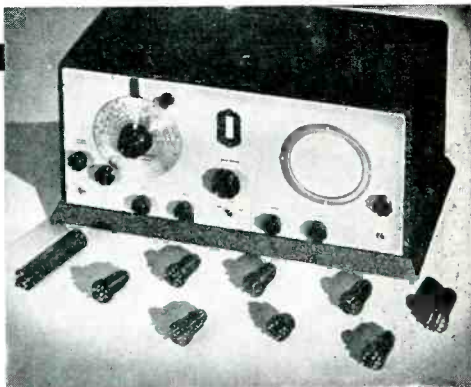
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Its controlled Crystal Filter Circuit gives true one signal selectivity. The Iron Core I. F. system provides sensitivity beyond all practical requirements. The advantages of the new Metal Tubes are used to the fullest degree.

But with all its features, the Super Skyrider is extremely moderate in price. See it today at your jobber's.

- 9 All Metal Tubes—greater stability and less noise.
- Iron Core I. F. System—greatly increased sensitivity.
- Duo-Micro-Vernier Band Spread provides improved logging accuracy.
- More efficient Crystal Filter Circuit—one signal selectivity without sacrificing sensitivity.
- Beat Oscillator with continuous range.
- Modern Band Changing System—covers entire short wave and broadcast spectrum.
- Compact—completely enclosed in one convenient cabinet, 19 $\frac{3}{4}$ "x10"x10".

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Today!*

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BEST STATIONS AND HOURLY GUIDE

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

Meg. Meters	Station	Country	Day	Write Local Time Here
17.79	16.86—GSG	England	Daily	6 7 8 9 10 s
17.78	16.87—W3XAL	U. S. A.	See List	9 10 11 N 1 2 3 4 s
15.34	19.56—W2XAD	U. S. A.	Daily	2 s
15.27	19.64—W2XE	U. S. A.	Daily	1 2 3 4 5 s
15.25	19.68—	France	Daily	7 8 9 10 s
15.22	19.71—PCJ	Holland	Irreg.	8 9 10 ½
15.21	19.72—W8XK	U. S. A.	Daily	10 11 N 1 2 3 4 5 6 s
15.20	19.73—DJB	Germany	Daily	4 5 6 7 8 9 10 11 s
15.13	19.82—GSF	England	Irreg.	2 3 s 6 7 8 9 10
15.11	19.84—HVJ	Vatican	Daily	½
11.90	25.20—	France	Daily	3 4
11.87	25.27—W8XK	U. S. A.	Daily	11 N 1 2 3 4 5 s
11.86	25.29—GSE	England	Daily	9 10 11 N
11.83	25.36—W2XE	U. S. A.	Daily	6 7 s
11.81	25.40—2RO	Italy	Daily	8 9 10 11 N
11.81	25.40—HJ4ABA	Colombia	Daily	N s
11.76	25.51—DJD	Germany	Daily	N 1 2 3 4
11.75	25.53—GSD	England	Irreg.	N 1 2 3 4
11.74	25.57—PHI	Holland	Irreg.	N 1 2 3 4
11.72	25.60—CJRX	Canada	Daily	½ 9 10 s
11.71	25.63—	France	Daily	8 9 10 11 s
10.74	27.93—JVM	Japan	Tues., Fri.	2 s
10.67	28.51—CEC	Chile	Th., Sat.	½ s
10.66	28.14—JVN	Japan	See List	2 3 4 s
10.33	29.04—ORK	Belgium	Daily	½ 3 s
9.87	30.40—EAG	Spain	Daily	5 6 7 8 ½
9.65	31.09—CTIAA	Portugal	Tu., Th., Sat.	½ 5 6 s
9.64	31.13—2RO	Italy	Irreg.	2 3 4 5 6 ½
9.59	31.27—HBL	Switzerland	Saturday	
9.59	31.28—VK2ME	Australia	Sunday	1 2 s
9.58	31.31—VK3LR	Australia	Daily	3 4 5 6 ½
9.58	31.30—GSC	England	Daily	4 5 6 7 s
9.57	31.36—WIXK	U. S. A.	Daily	6 7 8 9 10 11 N 1 2 3 4 5 6 7 8 9 10 11

"ON-THE-AIR"

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

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

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

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

Meters	Meg.	STATION	TIME
B-13.92	-21.54	W8XK, Pittsburgh, Pa., relays KDKA,	7:00 to 9:00 A.M.
B-13.94	-12.52	W2XE, Wayne, New Jersey,	daily 10:00 A.M. to 11:00 A.M.
T-14.01	-21.41	WKK, Lawrenceville, N. J.	Phones LSN, 8:00 A.M. to 4:00 P.M.
T-14.17	-21.16	LSL, Buenos Aires, Arg.	8:00 A.M. to 1:00 P.M. GAA and PSF.
T-14.23	-21.08	PSA, Rio de Janeiro, Brazil.	Phones WKK, WLK, daytime.
T-14.27	-21.03	LSN, Buenos Aires, Arg.	8:00 A.M. to 4:00 P.M. WKK and WLK.
T-14.38	-20.86	EHY-EDM, Madrid, Spain.	Phones South America, mornings.
T-14.72	-20.38	GAA, Rugby, England.	Phones LSL and PPU near 8:00 A.M.
T-14.97	-20.04	OPL, Leopoldville, Belgian Congo.	Phones ORG, mornings.
T-14.99	-20.02	DHO, Nauen, Germany.	Phones PPU and LSM mornings.
T-15.14	-19.18	WKN, Lawrenceville, N. J.	Phones GAU, daytime.
T-15.24	-19.69	CEC, Santiago, Chile.	Phones LSR, HJY near 11 A.M. and 4 P.M.
T-15.39	-19.50	LSQ, Buenos Aires, Argentina.	Heard testing near 2:00 P.M.
T-15.50	-19.35	FTM, Assise, France.	10:00 A.M. to 2:00 P.M. LSG.
T-15.50	-19.35	PMA, Bandoeng, Java.	Phones Holland, mornings.
T-15.57	-19.27	PPU, Rio de Janeiro, Brazil.	Phones FTM, 10:30 A.M. to 3:00 P.M.
T-15.58	-19.25	DFA, Nauen, Germany.	Phones 10:00 A.M. to 2:00 P.M. irregularly
T-15.62	-19.21	ORG, Brussels, Belgium.	Phones OPL, mornings.
T-15.68	-19.13	LSM, Buenos Aires, Argentina.	Phones EAQ, DHO, GAA, mornings.
T-15.88	-18.89	ZSS, Klipkeuval, S. Africa.	Phones GAS, 6:30 to 7; 10 to 10:45 A.M.
T-15.93	-18.83	PLE, Bandoeng, Java.	Phones Holland 6 to 11 A.M. KWV irregularly.
T-16.06	-18.68	OCI, Lima, Peru.	Testing with HJY near 2:00 P.M.
T-16.11	-18.62	GAU, Rugby, England.	Phones New York mornings.
E-16.22	-18.48	HBH, Geneva, Switzerland.	Used for special programs.
T-16.25	-18.46	HJY, Bogota, Colombia.	Phones CEC, LSR, 11 A.M. and 4:00 P.M.
T-16.30	-18.40	PCK, Kootwijk, Holland.	Phones Java near 7:00 A.M.
T-16.35	-18.35	WLA, Lawrenceville, N. J.	Phones England 8:00 A.M. to 4:00 P.M.
T-16.35	-18.35	FZS, Saigon, Indo-China.	Phones Paris 5:00 A.M. irregularly.
T-16.38	-18.31	GAS, Rugby, England.	Phones New York mornings.
T-16.39	-18.30	YVR, Maracay, Venezuela.	Phones Germany, 10:00 A.M.
E-16.42	-18.27	ETA, Addis Ababa, Ethiopia.	Used irregularly.
T-16.44	-18.25	FTE, St. Assise, France.	Phones LSM, PPU, mornings.
T-16.48	-18.20	GAW, Rugby, England.	Phones New York mornings.
T-16.50	-18.18	CGA, Drummondville, Canada.	Phones England, daytime.
T-16.50	-18.18	PMC, Bandoeng, Java.	Phones PCV, 3:10 to 9:20 A.M.
E-16.55	-18.12	LSY, Buenos Aires, Argentina.	Irregular.
T-16.63	-18.04	GAA, Rugby, England.	Phones Argentina, 10:00 A.M. to 2:00 P.M.
T-16.82	-18.05	PCV, Kootwijk, Holland.	6:00 to 9:00 A.M. Java.
B-16.86	-17.79	GSG, Davenport, England.	6:00 to 8:45 A.M.; 9:00 to 10:45 A.M.
B-16.87	-17.78	W3XAL, Bound Brook, N. J.	9:00 A.M. to 5:00 P.M. daily.
B-16.89	-17.76	W2XE, Wayne, New Jersey,	relays WABC 11:00 A.M. to 1:00 P.M.
T-16.89	-17.76	IAC, Piza, Italy.	Phones ships early mornings.
B-16.89	-17.76	DJE, Nauen, Germany.	7:00 to 11:30 A.M., irregular.
T-16.85	to 18.27	-17.80	-16.42—Ships. Heard in daytime.
T-16.92	-17.75	HSP, Bangkok, Siam.	Works Germany, 4:30 to 6:30 A.M.
T-17.00	-17.64	XGN, Shanghai, China,	phones London 7 to 9 A.M., Mon. Wed. Sat.

Meters	Meg.	STATION	TIME
T-17.10	-17.54	VWY, Poona, India.	Phones GBU, 2:00 to 8:00 A.M.
T-17.12	-17.52	DFB, Nauen, Germany.	Phones LSM and YVQ near 9:00 A.M.
T-17.37	-17.27	DAF, Norden, Germany.	Phones ships, irregularly.
T-17.52	-17.12	WOO, Ocean City, New Jersey.	Phones ships, irregularly.
T-18.20	-16.12	IRY, Rome, Italy,	phoning 7:00 A.M. to 1:30 P.M.
T-18.44	-16.30	WLK, Lawrenceville, N. J.	Phones England.
T-18.47	-16.24	KTO, Manila, P. I.	Phones Japan 5:00 to 9:00 P.M., irregularly.
T-18.51	-16.20	FZR, Saigon, Indo-China.	Phones Paris mornings.
T-18.71	-16.04	KKP, Kauhuku, Hawaii.	Phones KWU 1:00 to 7:00 P.M.
T-18.89	-15.88	FTK, St. Assise, France.	Phones Saigon 8:30 to 11:00 A.M.
T-18.91	-15.86	CEC, Santiago, Chile.	Phones OCJ 11 A.M., 1 and 4:40 P.M. irreg.
T-19.02	-15.81	LSL, Buenos Aires, Arg.	Phones GAA 8 A.M. to 1 and FTM 1-2 P.M.
T-19.15	-15.66	JVE, Nazaki, Japan.	Phones Java 3:00 to 5:00 A. M.
T-19.20	-15.61	JVF, Nazaki, Japan,	phones U.S.A. near 5:00 A.M. and 8:00 P.M.
T-19.47	-15.41	KWO, Dixon, California.	Phones Hawaii in place of KWU.
E-19.50	-15.46	KKR, Bolinas, California.	Tests irregularly.
B-19.52	-15.37	HAS-3, Budapest, Hungary.	Sundays 9:00 to 10:00 A.M.
T-19.54	-15.35	KWU, Dixon, California.	Phones Hawaii, 2:00 to 7:00 P.M.
B-19.56	-15.34	DJR, Zeesen, Germany,	1:30 to 3:30 A.M. irregularly.
B-19.56	-15.33	W2XAD, Schenectady, N.Y.	Daily 2-3 P.M., Sun. 10:30 A.M. to 4 P.M.
B-19.62	-15.29	LRU, Buenos Aires, Argentina,	testing 5:00 P.M. to 1:30 A.M.
B-19.63	-15.28	DIQ, Zeesen, Germany.	12:30 to 2:15 A.M.
B-19.64	-15.27	W2XE, Wayne, New Jersey,	relays WABC 1:00 to 6:00 P.M.
B-19.66	-15.26	GSI, Daventry, England.	12:30 to 2:15 P.M. irreg.
T-19.68	-15.25	RIM, Tashkent, U.S.S.R.	Phones RKI near 7:00 A.M.
B-19.68	-15.25	Pontoise, France,	7:00 to 11:00 A.M. daily.
B-19.71	-15.22	PCI, Eindhoven, Holland.	7:00 A.M. to 11:00 A.M., irregular.
B-19.71	-15.21	W8XX, Pittsburgh, Pa.	relays KDKA 10 A.M. to 7:00 P.M.
B-19.74	-15.20	DIB, Zeesen, Germany.	3:45 to 11:30 A.M. daily.
B-19.82	-15.14	GSF, Daventry, England.	2:15 to 4:15 and 6:00 to 10:15 A.M.
B-19.84	-15.11	HVJ, Vatican City.	10:30 to 10:45 A.M. daily.
B-19.85	-15.11	DJL, Zeesen, Germany.	4:00 to 6:00 A.M. irregularly.
T-19.92	-15.06	WNC, Hialeah, Florida,	phones many stations in daytime.
T-19.94	-15.04	RKI, Moscow, U.S.S.R.	Phones RIM near 7:00 A.M.
T-20.03	-14.98	KAY, Manila, P. I.	Phones DFS 5 to 7 A.M.; U.S.A., 7 to 8 P.M.
T-20.08	-14.94	HJB, Bogota, Colombia,	phones WNC daytime.
T-20.08	-14.94	HTI, Trujillo, Dominican Republic,	phones WNC daytime.
T-20.08	-14.94	HJA3, Barranquilla, Colombia,	phones WNC Florida.
T-20.19	-14.86	OCJ2, Lima, Peru.	Phones HKB-HJY-LSN, daytime.
T-20.29	-14.79	ROU, Omsk, Siberia,	phones Moscow 7:00 to 9:00 A.M. irregularly.
T-20.29	-14.79	IRKUT, U.S.S.R.	Heard around 7:00 to 9:00 P.M., phoning.
T-20.37	-14.73	IQA, Rome, Italy,	phones 8:00 to 11:00 A.M. irregularly.
T-20.42	-14.69	PSF, Rio de Janeiro, Brazil.	7 A.M. to 6 P.M. LSL, WLK, WOK.
T-20.45	-14.67	GBL, Rugby, England.	Phones JVH 1:00 to 7:00 A.M.
B-20.55	-14.60	JVH, Nazaki, Japan.	Phones Europe from 4:00 to 8:00 A.M.
T-20.56	-14.59	WMN, Lawrenceville, N. J.	Phones England daylight.
T-20.64	-15.54	HBI, Geneva, Switzerland.	Used irregularly.
T-20.65	-14.53	LSN, Buenos Aires, Argentina.	Phones New York daytime.
T-20.71	-14.48	HRLS, Nacaome, Honduras,	testing with WNC daytime.
T-20.71	-14.48	TIU, Cartago, Costa Rica,	phones WNC daytime.
T-20.71	-14.48	YNA, Managua, Nicaragua,	phones WNC daytime.
T-20.71	-14.48	HPF, Panama,	phones WNC daytime.
T-20.71	-14.48	HRF, Tegucigalpa, Honduras,	phones WNC daytime.
T-20.71	-14.48	TGF, Guatemala City,	phones WNC daytime.
T-20.73	-14.47	WMF, Lawrenceville, N. J.	Phones England daylight.
T-20.75	-14.46	GBW, Rugby, England.	Phones WNC 6:00 A.M. to 6:00 P.M.
B-20.75	-14.46	DZA, Zeesen, Germany,	Noon to 2:00 P.M. irregularly.
E-20.97	to 21.26	-14.30 to 14.11	—Amateur phones heard in daytime.
B-21.26	-14.10	HJ5ABE, Cali, Colombia.	7:00 P.M. to midnight, irregular.
E-21.58	-13.90	WQP, Rocky Point, N. Y.	Testing with RNE irregularly, mornings.
T-21.70	-13.83	SUZ, Cairo, Egypt.	Phones GAA 7:00 A.M. to 3:30 P.M.
E-21.91	-13.69	KKZ, Bolinas, California.	Used irregularly.

Meters	Meg.	STATION	TIME
T-21.98	-13.65	HJY, Bogota, Colombia.	Phones irregularly.
T-22.09	-13.58	GBB, Rugby, England.	Phones Canada and Egypt, daytime.
T-22.35	-13.42	GCB, Rugby, England.	Phones JVH 3:00 to 8:00 A.M.
T-22.40	-13.38	IDU, Asmara, Eritrea,	phones Italy 8:00 A.M. to 3:00 P.M. irregularly.
T-22.40	-13.39	WMA, Lawrenceville, N. J.	Phones England, daytime.
T-22.48	-13.35	YVQ, Maracay, Venezuela.	Phones Florida, daytime.
T-22.50	to 24.3	-13.34	to 12.35—Ships. Heard in daytime.
T-22.58	-13.28	CGA3, Drummondville, Canada.	Phones ships and England daytime.
T-22.70	-13.22	IRJ, Rome, Italy,	phones Japan irregularly 5:00 to 8:00 A.M.
E-22.76	-13.18	DGG, Nauen, Germany.	Phones Asia mornings, irregularly.
B-22.95	-13.07	VPD, Suva, Fiji Islands.	Daily, except Sun., 12:30 to 1:30 A.M.
T-23.00	-13.04	German ships.	11:15 A.M. and 1:30 P.M.
T-23.36	-12.84	WOO, Ocean Gate, N. J.	Phones ships irregularly.
T-23.38	-12.83	CNR, Rabat, Morocco.	Phones St. Assise 5:00 to 8:00 A.M.
T-23.45	-12.80	IAC, Piza, Italy.	Works ships mornings.
T-23.47	-12.78	GBC, Rugby, England.	Phones ships irregularly.
T-24.20	-12.40	DAF, Norden, Germany.	Phones ships irregularly, mornings.
T-24.40	-12.30	PLM, Bandoeng, Java.	Phones VK2ME near 6:30 A.M.
T-24.41	-12.29	GBU, Rugby, England.	Phones America, evenings.
E-24.52	-12.24	TFJ, Reykjavik, Iceland.	Phones GSC irregularly.
T-24.56	-12.22	TYA, Pontoise, France.	Phones the Normandie, irregularly.
T-24.69	-12.15	GBS, Rugby, England.	Phones New York.
T-24.88	-12.09	PDV, Kootwijk, Holland.	Tests near 7:30 A.M.
B-25.00	-12.00	RNE, Moscow, U.S.S.R.	Irregular.
T-25.02	-11.99	FZS, Saigon, Indo-China.	Phones Paris mornings.
E-25.10	-11.95	ETB, Addis Ababa, Ethiopia,	2:00 to 6:30 P.M. irreg. Wed at 5 P.M.
E-25.11	-11.97	KKQ, Bolinas, California.	Heard irregularly, evenings.
T-25.12	-11.95	FTA, St. Assise, France.	Phones CNR 4 to 7 A.M., LSM 10 to 12 P.M.
B-25.23	-11.90	Pontoise, France,	3:00 to 4:00 A.M. 11:15 to 6:00 P.M.
B-25.27	-11.87	W8XK, Pittsburgh, Pa.,	relays KDKA 5:00 to 9:00 P.M.
B-25.29	-11.86	GSE, Daventry, England.	9:00 A.M. to Noon.
B-25.31	-11.85	DJP, Zeesen, Germany,	2:00 to 4:00 A.M. irregularly.
B-25.36	-11.83	W2XE, Wayne, N. J.	Relays WABC 6:00 to 8:00 P.M.
B-25.40	-11.81	2RO Rome, Italy.	8:15 A.M. to 12:15 Noon.
B-25.40	-11.81	HJ4ABA, Medellin, Colombia.	11:30 to 1:00 and 6:30 to 10:30 P.M.
B-25.42	-11.80	CO9WR, Sancti Spiritus, Cuba,	4-6 and 9-11 P.M.
B-25.42	-11.79	W1XAL, Boston, Mass.,	Sundays 4:00 to 7:00 P.M.; daily at 6 P.M.
B-25.43	-11.80	DJO, Zeesen, Germany,	5:00 to 7:00 A.M. irregularly.
B-25.49	-11.77	DJD, Zeesen, Germany,	12:00 Noon to 4:30 P.M.
B-25.53	-11.75	GSD, Daventry, England.	12.15 to 4:00 P.M.
B-25.57	-11.74	PHI, Huizen, Holland.	Daily, except Tues, and Wed., 8:30-10:30 A.M.
B-25.60	-11.72	CJRX, Winnipeg, Canada.	8:00 P.M. to Midnight.
B-25.63	-11.70	Pontoise, France,	6:30 to 9:30 P.M. and 10:30 to 1:00 A.M.
E-25.63	-11.71	KTA, Kauhuku, Hawaii.	Heard in the evenings testing.
E-25.73	-11.66	PPQ, Rio de Janeiro, Brazil.	Used irregularly in evenings.
B-25.93	-11.57	HH2T, Port-au-Prince, Haiti.	Heard irregularly, evenings.
E-26.09	-11.50	VIZ3, Fiskville, Australia.	Phones CJA4 irregularly.
E-26.09	-11.50	XAM, Merida, Yucatan.	Irregularly 1:00, 6:00 and 7:00 P.M.
T-26.29	-11.41	CJA-4, Drummondville, Ont.,	phones VIZ-3 6:00 to 11:00 P.M.. Irreg.
T-26.35	-11.39	HBO, Geneva, Switzerland.	Used irregularly.
T-27.15	-11.05	ZLT, Wellington, New Zealand.	Phones VLK 1:00 to 7:00 A.M.
T-27.26	-11.00	PLP, Bandoeng, Java.	Broadcasts Tues, and Thurs., 10-10:30 A.M.
T-27.26	-11.00	XBJO, Mexico City.	Testing irregularly now.
T-27.35	-10.97	OCI, Lima, Peru.	Phones HJY, evenings.
E-27.65	-10.85	DFL, Nauen, Germany.	Irregular.
T-27.67	-10.84	KWV, Dixon, California.	Phones Hawaii, daytime.
T-27.86	-10.77	GBP, Rugby, England.	Phones VLK 11:00 P.M. to 8:00 A.M.
E-27.93	-10.74	JVN, Nazaki, Japan,	Tues., Fri., 2 to 3 P.M. Phone 1:30 to 7:40 A.M.
T-28.09	-10.68	WNB, Lawrenceville, N. J.	Phones Bermuda, daytime.
B-28.12	-10.67	CNC, Santiago, Chile,	daily 7 to 8 P.M. Thurs., Sun., 8:30 to 9 P.M.
E-28.14	-10.55	JVN, Nazaki, Japan,	broadcasts Tues., Fri., 2-3, Mon., Thurs. 4-5 P.M.
E-28.28	-10.61	WEA, Rocky Point, N. J.	Tests irregularly with Europe.
T-28.44	-10.55	WOK, Lawrenceville, N. J.	Phones Brazil and Argentina, irregularly.

Meters	Meg.	STATION	TIME
E-28.49	10.53	JIB, Tawian, Japan.	Heard irregularly.
T-28.51	10.52	VK2ME-VLK, Sydney, Australia.	1:00 to 8:00 A.M. GBP.
E-28.79	10.42	XGW, Shanghai, China.	Testing near 6:00 A.M.
T-28.80	10.42	PDK, Kootwijk, Holland.	Phones Java, 7:30 to 9:40 A.M.
T-28.80	10.40	YBG, Medan, Sumatra.	5:30-6:30, 12:30-1:30 A.M., 7:30-8:30 P.M.
E-28.85	10.40	KEZ, Bolinas, California.	Used irregularly.
E-28.91	10.38	WCG, Rocky Point, N. Y.	Tests irregularly.
B-28.98	10.35	LSX, Buenos Aires, Argentina.	Irregular.
E-29.03	10.33	ZFD, St. Georges, Bermuda.	Heard afternoons, irregularly.
B-29.04	10.33	ORK, Brussels, Belgium.	2:30 to 4:00 P.M. daily.
E-29.13	10.30	LSQ, Buenos Aires, Argentina.	Used for special tests.
B-29.15	10.29	DIQ, Nauen, Germany.	broadcasts 3 to 9 P.M. irregularly.
T-29.25	10.26	PMN, Bandoeng, Java.	Near 5:30 A.M. daily. VLK.
E-29.27	10.25	LSL, Buenos Aires, Argentina.	testing 5:30 to 7:00 P.M.
T-29.45	10.22	PSH, Rio de Janeiro, Brazil.	Sending music, evenings.
T-29.50	10.17	RHO, Bakou, U.S.S.R.	Phones Moscow 8-10 A.M., 10 P.M. to 1 A.M.
T-29.58	10.14	OPM, Leopoldville, Belgian Congo.	Phones ORK 9-11 A.M., 3-6 P.M.
T-29.76	10.08	RIR, Tiflis, Siberia.	Phones Moscow 5:00 to 8:00 A.M., irregularly.
T-29.79	10.07	EHV, Madrid, Spain.	Phones YVR near 4:00 P.M., irregularly.
T-29.80	10.06	JZB, Shinkyo, Manchukuo,	phones JVO 10:00 P.M. to 3:00 A.M.
T-29.83	10.05	ZFB, Hamilton, Bermuda.	Phones U.S.A. and ships, daytime.
T-29.83	10.05	SUV, Cairo, Egypt.	Phones GAA after 3:30 P.M.
B-29.88	10.04	DZB, Zeesen, Germany.	2:00 to 4:00 P.M. irregularly.
T-30.09	9.97	KAZ, Manila, P. I.	Phones PLV near 2:00 A.M.
T-30.15	9.95	GCU, Rugby, England.	Phones New York evenings.
T-30.21	9.93	HKB, Bogota, Colombia.	Phones PSK irregularly, evenings.
T-30.30	9.90	LSN, Buenos Aires, Argentina.	6:00 P.M. to 6:00 A.M. WLO.
T-30.40	9.87	WON, Lawrenceville, N. J.	Phones England evenings.
B-30.40	9.87	EAQ, Madrid, Spain.	Daily 5:15 to 9:30; Sat. 1:00 to 3:00 P.M.
E-30.40	9.87	JYS, Kemikawa-Cho, Japan.	Relays JOAK Irreg., mornings.
T-30.52	9.83	IRM, Rome, Italy.	Phones Egypt afternoons.
T-30.60	9.80	GCW, Rugby, England.	Phones America, evenings.
E-30.61	9.80	LSI, Buenos Aires, Argentina.	Used irregularly, evenings.
T-30.75	9.76	VK2ME-VLK, Sydney, Australia.	Phones Java 4:00 to 8:00 A.M.
T-30.77	9.75	WOF, Lawrence, N. J.	Phones England, evenings.
T-30.90	9.71	GCA, Rugby, England.	Phones Argentina around 6:00 P.M.
B-31.00	9.66	CQN, Macao, China,	Monday and Friday 7:00 to 8:30 A.M.
T-31.08	9.67	DGU, Nauen, Germany.	Phones Egypt daily from 5 A.M. to 5 P.M.
B-31.09	9.65	CT1AA, Lisbon, Portugal,	4:00 to 7:00 P.M. Tues., Thurs., and Sat.
B-31.10	9.65	YDB, Sourabaya, Java,	broadcasts 5:30 to 10:00 A.M., 6 to 7 P.M.
B-31.13	9.64	2RO, Rome, Italy.	Daily 1:30 to 5:00 P.M. and 6:00 to 7:30 P.M.
B-31.27	9.59	HB�, Geneva, Switzerland.	5:30 to 6:15 P.M., Saturday.
B-31.27	9.59	HH3W, Port-Au-Prince, Haiti,	1 to 2 P.M.; 6:45 to 8:00 P.M.
B-31.28	9.59	W3XAU, Philadelphia, Pa.,	Noon to 6:45 P.M.
B-31.28	9.59	VK2ME, Sydney, Australia.	Sun. 1-3, 4:30-8:30 and 9 to 11 A.M.
B-31.29	9.59	HP5J, Panama City, Panama.	11:45 A.M. to 1:00 P.M. and 7:30 P.M. to 10:00 P.M.
B-31.30	9.58	GSC, Daventry, England.	4:15-5:45; 6:00-8:00; 10:00-11:00 P.M.
B-31.31	9.58	VK3LR, Melbourne, Australia.	10:30-3:00 irreg.; 3:15-7:30 A.M., daily.
B-31.36	9.57	W1XK, Boston, Mass. (Millis)	6:00 A.M. to Midnight.
B-31.36	9.57	VUB, Bombay, India,	Wed., Thurs., and Sat. 11:00 A.M. to 12:30 P.M.
B-31.38	9.56	DJA, Zeesen, Germany.	12:30-2:15 A.M., 8-11:30 A.M., 5:00-9:15 P.M.
B-31.45	9.54	DJN, Zeesen, Germany.	12:30 to 2:15 A.M.; 3:45 to 7:15 A.M.; 8:00 to 11:30 A.M.; 5:05 to 10:45 P.M.
B-31.48	9.53	LKJ1, Jeloy, Norway.	5:00-8:00 A.M., 11:00 A.M. to 6:00 P.M.
B-31.48	9.53	W2XAF, Schenectady, N. Y.	Daily 4:00 P.M. to Midnight.
B-31.51	9.52	QXY, Skamlebaek, Denmark,	heard 1:00 to 6:00 P.M. irregularly.
B-31.55	9.51	GSB, Daventry, England,	2:15 to 4:15 A.M.; 10:15 A.M. to 8:00 P.M.
B-31.55	9.51	VK3ME, Melbourne, Australia.	Daily except Sunday, 5 to 7 A.M.
B-31.56	9.50	PRF5, Rio de Janeiro, Brazil.	Daily 4:45 to 5:45 P.M., also irreg.
T-31.71	9.46	Tripoli, Africa.	Phones IAC, Italy, 6:00 A.M. to 1:00 P.M., irreg.
B-31.80	9.42	COCH, Havana, Cuba,	8:00 A.M. to 7:00 P.M.; 8:00 to 10:00 P.M.

Meters	Meg.	STATION	TIME
T-31.86	9.42	PLV, Bandoeng, Java.	Broadcasts Tues. and Thurs. 10:00-10:30 A.M.
T-32.15	9.33	CGA4, Drummondville, Canada.	Phones ships and England, irregularly.
T-32.33	9.28	GCB, Rugby, England.	Phones CGA and SUV afternoons.
T-32.72	9.17	WNA, Lawrenceville, N. J.	Phones England evenings.
T-32.83	9.14	YVR, Maracay, Venezuela.	Phones Europe afternoons.
B-32.88	9.12	HAT-4, Budapest, Hungary.	Sundays 6:00 to 7:00 P.M.
E-32.97	9.10	HJU, Buenaventura, Colombia.	testing 8 to 11 P.M. Tues., Thurs., Sat.
T-33.26	9.02	GCS, Rugby, England.	Phones New York evenings.
E-33.29	9.01	KEJ, Bolinas, California.	Tests irregular.
E-33.52	8.95	WEL-W2XBJ, Rocky Point, N. Y.	Testing irregularly, evenings.
T-33.41	8.98	VWY, Poona, India.	Phones England near 8:30 A.M.
T-33.93	to 36.58	8.84	to 8:20—Ships. Heard irregularly.
E-34.10	8.79	HKV, Bogota, Colombia.	Testing, 5:30 to 11:00 P.M., irregularly.
T-34.19	8.77	PNI, Makasser, D. E. I.	Phones Java near 4:00 to 5:00 A.M.
B-34.21	8.77	HCJB, Quito, Ecuador,	Daily excepting Mondays 7:30 to 9:30 P.M.
B-34.29	8.75	ZBW, Hong Kong, China.	Daily 11:30 P.M. to 1:15 A.M., Mon. and Thurs. 3:00 to 7:00 A.M., other days 6:00 to 10:00 P.M.
E-34.35	8.74	WXV, Fairbanks, Alaska.	Works WXH between 10 P.M. and 4 A.M.
T-34.56	8.68	GBC, Rugby, England.	Phones ships irregularly.
B-34.62	8.66	CO9JC, Camaguey, Cuba.	5:30 to 6:30 P.M.; 8:00 to 9:00 P.M.
E-34.68	8.65	WVD, Seattle, Wash.	Testing irregularly.
E-34.80	8.62	VE9DW, Canada,	testing 6:00 to 7:00 P.M. irregularly.
T-35.02	8.57	WOO, Ocean Gate, N. J.	Phones ships irregularly.
T-35.42	8.47	DAF, Norden, Germany.	Phones ships irregularly.
B-35.69	8.41	HC2CW, Guayaquil, Ecuador.	8:00 to 11:30 P.M., irregular.
T-35.80	8.38	IAC, Piza, Italy.	Works ships, irregularly.
T-36.65	8.19	PSK, Rio de Janeiro, Brazil.	Sending music 6:00 to 7:30 P.M.
B-36.65	8.19	NEME, Merida, Mexico.	9:00 A.M. to Noon, 5:00 to 11:00 P.M.
T-38.06	7.86	SUX, Cairo, Egypt.	Phones Rome and London afternoons.
B-38.12	7.87	HC2JSB, Guayaquil, Ecuador,	daily 9 A.M. to 2 P.M.; 6 to 11 P.M.
B-38.31	7.83	YV9RC, Caracas, Venezuela,	heard 7:00 to 11:00 P.M. irregularly.
B-38.47	7.80	HBP, Geneva, Switzerland.	5:30 to 6:15 P.M. Saturdays.
E-38.50	7.78	PSZ, Rio de Janeiro, Brazil.	Heard between 6:00 and 11:00 P.M., irreg.
E-38.89	7.71	KEE, Bolinas, California.	Tests evenings irregularly.
T-39.34	7.63	RIM, Russia.	Phones RKI 6:00 to 8:15 A.M.
T-39.42	7.61	KWX, Dixon, California.	Phones Hawaii nights.
B-39.47	7.60	TI8WS, Puntarenas, Costa Rica,	heard 6:00 to 11:00 P.M. irregularly.
T-39.89	7.52	KKH, Kauhuku, Hawaii.	Phones KWO evenings.
E-39.95	7.51	JVP, Nazaki, Japan.	broadcasts Tues., Fri., 4 to 5 P.M. • phones 1 A.M.
T-39.97	7.50	RKI, Russia.	Phones RIM 6:00 to 8:15 A.M.
B-40.55	7.40	HJ3ABD, Bogota, Colombia.	7:30 to 11:00 P.M.
T-40.60	7.39	ZLT2, Wellington, New Zealand,	phones Sydney 3:00 to 7:00 A.M. irreg.
B-40.65	7.38	XECR, Mexico City.	broadcasts Sundays 6:00 to 8:00 P.M.
T-40.71	7.37	KEQ, Kauhuku, Hawaii.	Phones Dixon nights.
B-41.20	7.28	HJ1ABD, Cartagena, Colombia.	7:30 to 9:00 P.M.
B-41.55	7.22	HKE, Bogota, Colombia.	Mon. 6 to 7 P.M.; Tues., Fri., 8 to 9 P.M.
B-41.55	7.22	VP3BG, Georgetown, B. G.	between 3:00 and 8:45 P.M. irregularly.
B-41.60	7.21	EA8AB, Tenerife, Canary Islands,	Mon., Fri., 3:15 to 4:15 P.M.
B-41.80	7.17	CRAA, Lobito, Angola, Africa, Wed., and Sat.,	2:30 to 4:30 P.M.
B-42.35	7.08	PIJJ, Dordrecht, Holland.	Saturdays 11:10 A.M. to 12:10 Noon.
B-42.68	7.08	VP3MR, Georgetown, British Guiana,	around 4:45 to 8:40 P.M.
B-42.88	7.00	PZH, Paramaribo, Dutch Guiana,	2:40 to 9:40 P.M. irregularly.
T-43.45	6.90	GDS, Rugby, England.	Phones New York nights.
B-43.48	6.90	HI3C, La Romana, R. D.	12:30 to 2:00 P.M., 7:30 to 9:30 P.M.
E-43.82	6.84	KEN, Bolinas, California.	Used irregularly.
B-44.12	6.81	HIH, San Pedro de Macoris, D. R.	Daily 7:30 to 9:00 P.M.; Sundays 3:00 to 4:00 A.M. and 4:15 to 6:00 P.M.
T-44.41	6.75	WOA, Lawrenceville, N. J.	Phones England nights.
T-44.44	6.75	JVT, Nazaki, Japan.	1:30 to 8:00 A.M., oftentimes with music.
B-44.71	6.71	TIEP, San Jose, Costa Rica.	5:00 to 10:00 P.M., irregularly.
B-44.90	6.70	TI2M, San Jose, Costa Rica,	heard 9:00 to 11:00 P.M. irregularly.
E-44.96	5.67	YVQ, Maracay, Venezuela.	Broadcasts 8:00 to 8:30 P.M. Saturday.
B-45.00	6.67	???, Madrid, Spain,	testing around 5:00 to 9:45 P.M. irregularly.
B-45.00	6.66	ZP10, Asuncion, Paraguay,	heard 10:00 to 11:45 P.M. irregularly.

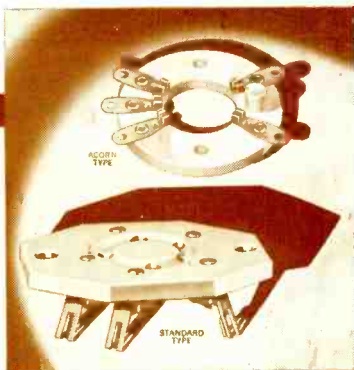
Meters	Meg.	STATION	TIME
B-45.00	6.67	HC2RL, Guayaquil, Ecuador.	Sun. 5:45-7:45, Tues. 9:15-11:15 P.M.
T-45.10	6.65	IAC, Piza, Italy.	Phones ships evenings.
B-45.31	6.62	PRADO, Riobamba, Ecuador.	Thursdays 9:00 to 11:30 P.M.
B-45.50	6.61	H14D, Trujillo, D. R.,	11:40 to 1:40 P.M.; 4:40 to 7:40 P.M.
B-45.52	6.60	XFA2, Vera Cruz, Mexico,	heard between 7:00 and 11:00 P.M. irreg.
B-45.73	6.56	H14V, Trujillo, D. R.,	11:40 to 1:40 P.M.; 5:10 to 6:40 P.M.
B-45.81	6.55	TIRCC, San Jose, Costa Rica,	daily 6 to 7; Thurs., Sun., 6 to 11 P.M.
B-46.01	6.52	YV6RV, Valencia, Venezuela.	12:00-2:00 P.M. and 6:00-10:00 P.M.
B-46.13	6.50	H1L, Trujillo, D. R.,	3:00 to 9:00 P.M., irregularly.
B-46.30	6.48	HJ5ABD, Cali, Colombia.	7:00 to 10:00 P.M.
B-46.44	6.46	HJ4ABC, Ibaque, Colombia.	Around 8:00 to 10:00 P.M.
B-46.51	6.45	HJ1ABB, Barranquilla, Colombia.	4:30 to 10:00 P.M. daily.
B-46.73	6.42	H11S, Puerto Plata, D. R.,	11:40-1:40; 5:40-7:40; 9:40 to 11:40 P.M.
E-46.73	6.42	W9XBS, Chicago, Illinois.	Heard irregularly broadcasting.
E-46.77	6.41	HJA3, Barranquilla, Colombia.	Phones HJA2, irregular.
B-46.88	6.41	TIPG, San Jose, Costa Rica.	Noon to 2:00 P.M., 6:00 to 11:30 P.M.
B-47.10	6.37	YV4RC, Caracas, Venezuela.	4:30 P.M. to 10:30 P.M.
B-47.24	6.35	HRV, Tegucigalpa, Honduras,	heard testing 6:45 to 9:30 P.M.
B-47.39	6.33	HRP1, San Pedro Sula, Honduras,	heard 6:30 to 10:00 P.M. irreg.
E-47.39	6.35	JZG, heard relaying JVT, JOAK	from 5:00 to 7:30 A.M., irregularly.
B-47.50	6.31	H1Z, Trujillo, D. R.,	5:00 to 11:30 P.M. irregularly.
B-47.51	6.30	YV12RM, Maracay, Venezuela,	8:00-10:30 daily; 4:30-11:00 P.M. irreg.
B-48.00	6.25	OAX4G, Lima, Peru,	daily 7:00 to 10:30 P.M. Wed. at 6:00 P.M.
B-48.50	6.19	H11A, Santiago de Caballeros, R. D.	11:40 to 1:40; 7:40 to 8:40 P.M.
B-48.55	6.18	XEXA, Mexico City,	8 to 11:30 A.M.; 3 to 5 P.M.; 7 to 11 P.M.
B-48.60	6.17	HJ2ABA, Tunja, Colombia.	1:00-2:00 P.M. and 7:00 to 10:00 P.M.
B-48.62	6.17	HJ3ABF, Bogota, Colombia.	7:00 to 11:15 P.M.
B-48.78	6.15	HJ5ABC, Cali, Colombia,	7:00 to 10:00 P.M. except Sat. and Sun.
B-48.78	6.15	YV3RC, Caracas, Venezuela,	10:00 A.M. to 1:00; 3:00 to 9:30 P.M.
B-48.79	6.15	CO9CG, Santiago, Cuba.	8:30-10:00 A.M., Noon-1:30 P.M., 3:30-4:30 P.M., 10:00-11:00 P.M.
B-48.85	6.14	CJRO, Winnipeg, Canada.	8:00 P.M. to Midnight.
B-48.86	6.14	W8XK, Pittsburg, Pa.,	relays KDKA 7:00 P.M. to 1:00 A.M.
B-48.92	6.13	ZGE, Kuala Lumpur, S. S. Sun.,	Tues. and Fri., 6:40 to 8:40 A.M.
B-48.92	6.13	H15M, Trujillo, D. R.,	6:40 to 9:10 P.M.
B-48.92	6.13	COCD, Havana, Cuba.	Heard 5:00 P.M. to 1:00 A.M., irregularly.
B-49.02	6.12	W2XE, Wayne, N. J.	Relays WABC 8:00 P.M. to 11:00 P.M.
B-49.02	6.12	XEFT, Vera Cruz, Mexico.	11:30 to 4:00 P.M., 7:30 P.M. to 12 M.
B-49.05	6.11	HJ1ABE, Cartagena, Colombia.	Daily 7:30-9:00; Mon. 10:30 P.M.
B-49.10	6.11	GSL, Daventry, England,	2:30 to 5:45 P.M. daily.
B-49.10	6.11	VE9HX, Halifax, Canada,	8:30 to 11:30 A.M.; 6:00 P.M. to Midnite.
B-49.10	6.11	VUC, Calcutta, India.	9:30 A.M. to Noon, Sat. 11:45 P.M. to 3 A.M.
B-49.15	6.10	HJ4AB, Manizales, Colombia.	8:00 to 11:30 P.M., irregularly.
B-49.18	6.10	W3XAL, Bound Brook, N.J.	Mon., Wed. and Sat. 6 P.M. to 12:45 AM.
B-49.18	6.10	W9XF, Chicago, Ill.,	Sun., Tues., Thurs., 9-2 A.M.; Daily 1-2 A.M.
B-49.20	6.09	ZTJ, Johannesburg, Africa.	3:30 to 7:00 A.M.; 9:00 A.M. to 4:00 P.M.
B-49.22	6.09	CRXC, Bowmanville, Canada.	5:30 to 11:30 P.M. daily, 11:45 A.M. to 11:30 P.M. Sundays.
B-49.30	6.08	2RO, Rome, Italy,	may soon be 6:00 to 7:45 P.M. weekdays.
B-49.31	6.08	VQ7LO, Nariobi, Africa.	11:00 A.M. to 3:30 P.M., 5:45 to 6:15 A.M.
B-49.34	6.08	W9XAA, Chicago, Illinois.	No apparent regular schedule.
B-49.34	6.08	DJM, Zeesen, Germany,	9:00 to 10:00 A.M.; 3:00 to 5:00 P.M. irreg.
B-49.34	6.08	HP5F, Colon, Panama,	11:45 to 1:15 and 7:45 to 10:00 P.M.
B-49.34	6.08	ZHJ, Penang, S. S.	Daily 6:40 to 8:40 A.M.
B-49.40	6.07	VE9CS, Vancouver, B. C.	Daily 6-7 P.M., Sun. 1:45 P.M. to 1:00 A.M.
B-49.42	6.07	OER2, Vienna, Austria.	9:00 A.M. to 5:00 P.M., week-days.
B-49.45	6.06	HJ4ABL, Manizales, Col.,	11-Noon, 5:30-7:30 daily, Sat. 10:30 P.M.
B-49.50	6.06	OXY, Skamlebaek, Denmark.	Daily 1:00 to 6:00 P.M.
B-49.50	6.06	W8XAL, Cincinnati, Ohio,	6:30 A.M. to 8 P.M.; 11 P.M. to 2 A.M.
B-49.50	6.06	W3XAU, Philadelphia, Pa.	7:00 P.M. to 10:00 P.M.
B-49.55	6.05	HJ4ABD, Medellin, Colombia.	Heard 8:00 to 11:30 P.M.
B-49.59	6.05	H19B, Santiago City, D. R.,	heard 6 to 10 P.M. 12:30 to 1:40 A.M.
B-49.59	6.05	GSA, Daventry, England.	6:00 to 8:00 P.M. daily.

Meters	Meg.	STATION	TIME
B-49.65	6.04	HJ1ABG, Barranquilla, Colombia.	6:00 to 10:00 P.M.
B-49.67	6.04	HJ2ABC, Pereira, Colombia.	9:30 to 11:00 A.M., 7:00 to 8:00 P.M.
B-49.67	6.04	W4XB, Miami Beach, Florida.	11:30-2:00 P.M., 8:00-12 Midnight.
B-49.67	6.04	PRAB, Pernambuco, Brazil.	2:30 to 8:30 P.M.
B-49.67	6.04	W1XAL, Boston, Mass.	7:15 to 9 P.M. Tues., Thurs.; 4-7 P.M. Sun.
B-49.75	6.03	VE9CA, Calgary, Canada.	9:00 to 10:00 A.M.
B-49.75	6.03	HP5B, Panama City.	12 Noon to 1 P.M.; 7:00 to 10:30 P.M.
B-49.83	6.02	XEUW, Vera Cruz, Mexico.	8:00 P.M. to 12:30 A.M. irregularly.
B-49.83	6.02	DJC, Zeesen, Germany.	12 Noon to 4:30 P.M. and 5:05 to 10:45 P.M.
B-49.83	6.02	CQN, Macao, China.	Monday and Friday, 3:00 to 5:00 A.M.
B-49.85	6.01	HJ3ABH, Bogota, Col.	11:30 A.M. to 2, 6-11 P.M., Sun. 4:19 P.M.
B-49.90	6.01	COCO, Havana, Cuba.	9:30 A.M. to 12:30 Noon; 4:00 to 7:00 P.M.; 8:00 to 10:00 P.M.; Saturdays at 11:30 P.M.
B-49.92	6.01	ZHI, Singapore.	Mon., Wed., Thurs., 5:40-8:10; Sat. 10:40-1:10 A.M.
B-49.95	6.01	HJ1ABJ, Santa Marta, Colombia.	6:30 to 10:30 P.M., irregularly.
B-49.96	6.00	VE9DN, Drummondville, Canada.	Saturdays at 11:30 P.M.
B-50.00	6.00	???	Goderich, Ont., Canada, no regular schedule.
B-50.00	6.00	RW59, Moscow, U.S.S.R.	2:30 to 5:00 or 6:00 P.M. daily.
B-50.00	6.00	HJ1ABC, Quibdo, Colombia.	daily 5-6 P.M.; Wed. and Sun. 9-11 P.M.
B-50.00	6.00	XEBT, Mexico City.	6:00 P.M. to 3:00 A.M., irregularly.
B-50.10	5.99	HJ2ABD, Bucaramanga, Col.	11:30-12:30; 5:30-6:30; 7:30-10:30 P.M.
B-50.17	5.98	XEVI, Mexico City.	Tues. 7-8; Thurs. 7-8, 9-10; Sat. 8-9 P.M.
B-50.17	5.98	HIX, Trujillo, D. R.	daily 4:40 to 5:40 P.M.; Tuesday and Friday 8:10 to 10:10 P.M.; Sundays 7:40 to 10:40 A.M.
B-50.26	5.97	HVJ, Vatican City.	Daily, 2:00 to 2:15 P.M., Sun. 5:00 to 5:30 A.M.
B-50.26	5.97	HJN, Bogota, Colombia.	6:00 to 11:00 P.M. irregularly.
B-50.26	5.97	HJ2ABC, Cucuta, Colombia.	11:00 A.M. to Noon; 6:00 to 9:30 P.M.
B-50.30	5.96	YNLF, Managua, Nicaragua.	6:00 P.M. to 1:00 A.M., irregularly.
B-50.51	5.94	TG2X, Guatemala City.	heard 4:00 P.M. to 2:00 A.M. irregularly.
B-50.60	5.93	HJ4ABE, Medellin, Colombia.	6:00 to 10:30 P.M.
B-50.85	5.91	HH2S, Port-Au-Prince, Haiti.	7:30 to 9:40 P.M. irregularly.
B-50.85	5.91	HRN, Tegucigalpa, Honduras.	6-7:30; 8:00-9:30. Sun. 3-5; 8-12 P.M.
B-50.93	5.89	JIC, Tawian, Japan.	phones JVV 6:00 to 8:00 A.M.
B-50.93	5.89	KCK, Quito, Ecuador.	Monday and Friday 8:00 to 10:00 P.M.
B-51.15	5.86	HI1J, San Pedro de Macoris, D. R.	12:10 to 1:40; 6:10 to 8:40 P.M.
T-51.26	5.85	WOB, Lawrenceville, N. J.	Phones Bermuda nights.
B-51.28	5.85	YV5RMO, Maracaibo, Venezuela.	11:00 A.M. to 12:30 P.M., 5-9 P.M.
B-51.50	5.82	TIGPH, San Jose, Costa Rica.	6:15 to 11:00 P.M., irregularly.
T-51.50	5.82	HJA2, Bogota, Colombia.	Phones HJA3 afternoons and evenings.
B-51.60	5.81	YV8RB, Baraquimeto, Venezuela.	11:00 A.M. to 1 P.M.; 6 to 10 P.M.
B-51.72	5.80	YV2RC, Caracas, Venezuela.	10:30 to 1:00 P.M., 5:15 to 10:00 P.M.
B-51.90	5.78	OAX4D, Lima, Peru.	Wed. and Sat. from 8:00 to 11:30 P.M.
B-52.17	5.75	HJ4ABD, Medellin, Colombia.	8:00 to 11:30 P.M.
B-52.26	5.74	TGS, Guatemala City.	Wed., Thurs., and Sun. 6:00 to 9:00 P.M.
B-52.45	5.72	YV1ORSC, San Cristobal, Venezuela.	7:00 to 11:30 P.M. irregularly.
E-52.97	5.66	CFU, Rossland, Canada.	Works CFO and CFN near 10 P.M., irreg.
B-54.74	5.48	TI5HH, San Roman, Costa Rica.	3:30 to 4:00; 8:00 to 11:30 P.M.
E-55.56	5.40	HJA-7, Cucuta, Colombia.	Mondays 4:30 to 7:30 P.M., irregularly.
B-58.30	5.15	PMY, Bandoeng, Java.	6:00 A.M. to Noon.
T-59.08	5.08	WCN, Lawrenceville, N. J.	Phones England evenings.
T-59.76	5.02	ZFA, Hamilton, Bermuda.	Phones U.S.A. and ships at night.
T-60.26	4.98	GBC, Rugby, England.	Phones to ships, irregularly.
T-61.15	4.90	CGA8, Drummondville, Canada.	Phones ships irregularly.
T-61.98	4.84	GDW, Rugby, England.	phones U.S.A. nights.
B-62.63	4.79	VE9BK, Vancouver, B. C.	2:00-4:00 P.M., 7-9 P.M., 11 PM.-1:00 AM.
T-63.13	4.75	WOO, Ocean Gate, N. J.	Phones ships irregularly.
B-65.22	4.60	H2CET, Guayaquil, Ecuador.	Wed. and Sat. 9:00 to 11:00 P.M.
T-66.50	4.51	ZFS, Nassau, Bahamas.	Works WND evenings.
T-67.87 to 73.17	4.42 to 4.10	Ships.	Heard irregularly.
T-70.65	4.25	RV15, Khabarovsk, U.S.S.R.	1:00 to 9:00 A.M.
T-73.21	4.10	WND, Hialeah, Florida.	Phones irregularly with VPN.
E-75 to 75.8	4.00 to 3.96	Amateurs	on voice.

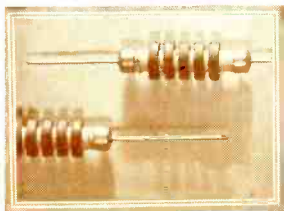
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