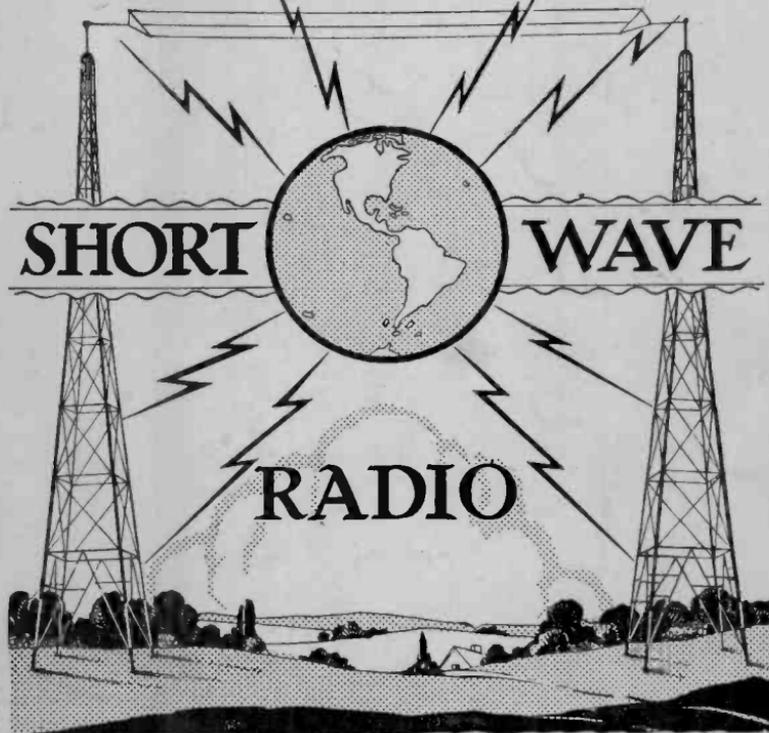


VOL. VI

FEBRUARY, 1935

NO. 5

INTERNATIONAL



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

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

THE VOICE OF THE
INTERNATIONAL SHORT WAVE CLUB

EAST LIVERPOOL, OHIO, U. S. A.

ALWAYS MENTION THE CLUB WHEN BUYING

**"Satisfactory Short Wave Reception
Under Worst Possible Conditions"**

LYNCH
HI-FI

TRADE MARK REGISTERED

(High-Fidelity)

ANTENNA SYSTEMS

"We are located on the ground floor of an eleven story office building. In this building are a number of doctors with X-ray equipment, etc., and within one hundred feet of us is another office building in which are over three hundred doctors with their associated electrical equipment. Reception conditions were so bad that in the daytime with a normal antenna, it was practically impossible to hear anything except local broadcast stations.

"We have installed two 20½ foot cages and are using one of your new HI-FI Coupling Kits with 240 feet of Giant Killer Cable. EAQ, Madrid, now comes through beautifully, with very little background noise. We have checked during the day and find that even if the X-rays are running, we are able to get sufficient decent reception to give a very convincing demonstration to a customer that a short wave radio will work satisfactorily with a LYNCH Antenna System."

(Name on Request)

**"No Radio Can Be Better Than Its Aerial—
No Aerial Is As Good As a LYNCH Aerial."**

Full Information on Request

**Arthur H. Lynch, Inc., 227 Fulton St., N. Y.
PIONEER OF NOISE-REDUCING AERIALS**

ANNOUNCEMENT

Sol Perlman, E. E., Technical Advisor, N. Y. Chapter, International Short Wave Club, has been made Manager of our Technical Correspondence Department. He will gladly advise you on the proper use of any Lynch Products.



NATIONAL XR-20 COIL FORMS

FOR Short Wave Receiver construction and experimental work when a small coil form at a low cost will fill the requirements. The XR-20 Coil Forms are made of Steatite, well known Low Loss National Dielectric. They are drilled for leads and left unglazed to provide a tooth for coil dope. Diameter $1\frac{1}{2}$ ". Made with 4, 5 or 6 prongs and fit Standard Coil-Sockets.

List Price, XR-20, Each **35c**

NATIONAL R-39 COIL FORMS. Machinable and drillable because made of R-39, outstanding exclusive National Dielectric. Length $2\frac{1}{4}$ ". Diameter $1\frac{1}{2}$ ". In 4, 5 or 6 prong types.

List Price, XR-4, XR-5 or XR-6, Each **75c**

List prices subject to 40% discount when purchased through an authorized NATIONAL Distributor.

USE COUPON BELOW

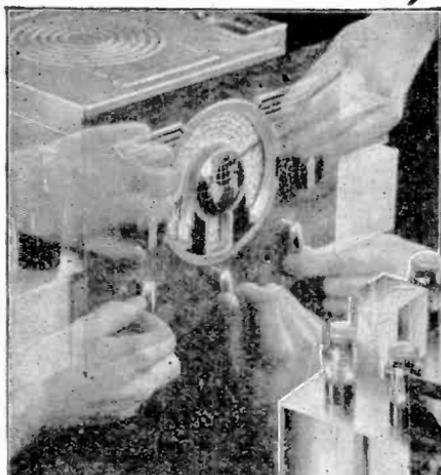
NATIONAL COMPANY, Inc., Malden, Massachusetts.

Gentlemen: Please send me your new Catalog No. 240. I enclose 6c to cover mailing costs.

Name

Address..... ISW-2-35

Invisible Hands Magically Assure **WORLD-WIDE**



HIGH FIDELITY RECEPTION
with *This Amazing New*
MIDWEST
16-TUBE ALL-WAVE
Radio!
(ALL FIVE WAVE BANDS)

30 DAYS
FREE
TRIAL

SAVE UP TO 50%

Direct from Midwest Laboratories

THE almost magical performance of this super radio is startlingly human! As domestic and foreign stations are brought in, many automatic adjustments are instantly being made inside the set. It might be said that a number of "Invisible Hands" enable you to bring in and hold any station you desire from the whole world of broadcast...regardless of fading and interfering conditions. Before you buy any radio, write for the new FREE Midwest "Fifteenth Anniversary" catalog and see how you can save from 1/3 to 1/2 by buying direct from Midwest Laboratories. Learn why Midwest outperforms sets costing up to \$200.00 and more. Now save 30% to 50%. Never before so much radio for so little money! Midwest gives you triple protection with: One-Year Guarantee, Foreign Reception Guarantee, Money-Back Guarantee.

ONLY RADIO COVERING
9 TO 2400 METERS
13,000 MILE TUNING RANGE

WORLD'S GREATEST
RADIO VALUE

\$57.50
with
New
Deluxe Auditorium-Type
SPEAKER

TERMS as low as **\$5.00** Down

NEW STYLE CONSOLES

The Midwest 36-page Catalog pictures a complete line of beautiful, artistic deluxe consoles and chassis in four colors. Write for new FREE Catalog... **TODAY!**

Midwest long range radios are priced as **\$27.50** low as --



DEAL DIRECT WITH LABORATORIES

Increasing costs are sure to result in higher radio prices soon. Buy before the big advance—NOW—while you can take advantage of Midwest's sensational values. No middlemen's profits to pay! You can order your Midwest High Fidelity radio from the new Midwest catalogue with as much certainty of satisfaction as if you were to select it in our great radio laboratories. You save 30% to 50% when you buy this popular way...you get 30 days FREE trial...as little as \$5.00 down puts a Midwest radio in your home. Foreign Reception, One-Year and Money-Back GUARANTEES protect you—Write for FREE catalog NOW... **TODAY!**

SAVE UP TO 50%

MIDWEST RADIO CORP.

DEPT. 1307 — CINCINNATI, OHIO, U. S. A.

Established 1920

Cable Address Miraco... All Codes

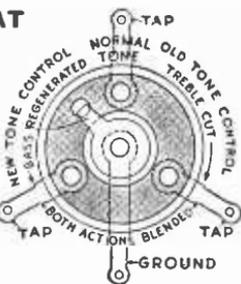
Only Midwest Gives You These Exclusive Features!

HERE are a few reasons why Midwest is generally accepted as the world's most "Universal" set. They explain why it is so popular in Africa, Spain, and other countries where reception conditions vary widely—illustrate why so many police, army, navy and consular officials as well as listening posts prefer it—prove why so many "hams," who own a number of sets, use the Midwest in preference to any other.

FIDEL-A-STAT

Three Taps
No Gap
No Stop

Absolutely new and exclusive with Midwest, this feature represents the only new departure in controlling potentials since about 1863. With the Midwest Fidel-A-Stat, the full beauty and rhythmic nature of modern music, together with the beautiful "lace work" of flutes, violins, piccolo and other reed instruments, may be brought out and accentuated to any degree desired. You'll be amazed and pleasantly surprised the first time you use this startlingly different control.



Only Midwest Gives you Multi-Function Dial



This dial is not an ordinary airplane dial. It is a many purpose unit that performs many functions. Send for FREE Miniature Dial showing many outstanding advantages: Dial calibrated in Kilocycles, Megacycles & Meters . . . Slow-Fast, Smooth-Action Tuning . . . Station Group Locator. . . Silent Shadow Tuning, Etc.

EXPERIENCED RADIO MAN PRAISES MIDWEST
Trenton, N. J.—I am firmly convinced that I have received the most for my money in my 15 years' experience. My Midwest

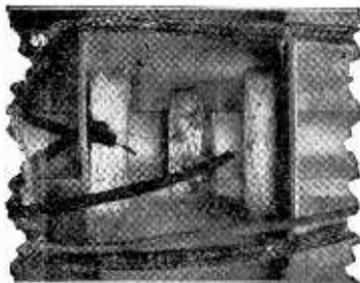
-16 brought in 12RO, Rome; EAQ, Madrid; FYN, France; GSA, GSB, Daventry; VK2ME, Sydney, etc. It has remarkable selectivity! With WCAU at 1170 KC and WOAI at 1190 KC, both 50,000-watt stations, transmitting at their peak about 9 P.M., I have cut between these stations and received KOB, New Mexico, at 1180 KC with loud speaker volume—and no interference. R. M. Scheid, Jr., 28 Boudinot Street.



50 ADVANCED FEATURES

Exclusive "Invisible Hands" features include: High Level Automatic Volume Control Action, Discriminating Automatic Tone Control, Multi-Function Dial, Micro-Tenuator, Fidel-A-Stat, etc. Only Midwest covers a tuning range of 9 to 2400 meters (33 Megacycles to 125 KC)—enabling you to easily and successfully tune in even low-powered foreign stations up to 12,000 miles away—with crystal-clear loud speaker, High Fidelity reception.

Micro-Tenuator--Midwest Expanding and Contracting I.F. Transformer



(U. S. Patent Pending
Serial No. 721,240)

This feature makes you master of your set's sensitivity. The "Electromagnetic Shield" is under your complete control at all times by means of the Micro-Tenuator lever on the front panel. By turning this lever entirely to the left, the "Electromagnetic Shield" cuts the coupling between the primary and secondary so low that the sensitivity of the set is barely sufficient to bring in local stations and powerful nearby stations. Send Coupon or 1c post card.

**MAIL COUPON TODAY! FOR
FREE MINIATURE DIAL.... FREE
30-DAY TRIAL OFFER.. FREE CATALOG**

**MIDWEST RADIO CORP.,
Dept 137 Cincinnati, Ohio.**

Without obligation on my part, send me your new FREE catalog, FREE Miniature Dial, 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

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Check here, if interested in Midwest World-Wide Battery Radio.
 Check here, if interested in a Midwest Auto Radio.

Learn Radio Code Easily & Quickly at Home

By CANDLER FAMOUS **SHORT-CUT** METHOD

YOU CAN soon learn to read the Code Signals you hear on your All-Wave or Short Wave Receiver as easily as you read a newspaper. You can listen to interesting press and other dispatches from all parts of the world.

A knowledge of code will enable you to pass the government examination and operate your own amateur station. It's easy, fascinating and instructive. **CANDLER** has put thousands of leading amateurs on the air.

Little Jean Hudson, W3BAK, 9 years old, won code receiving championship of the world in Class E, 2 months after beginning **CANDLER SHORT-CUT CODE COURSE**.

Read What These Amateurs Say:

"When I enrolled for your Short-Cut Code Course my speed was 3 wpm. In exactly 2 weeks from the day I began, I went to Boston, confident I would pass the government exam., which I did, easily. I can now copy 20 w.p.m., and speed still increasing."—Capt. John L. PenDell, W1DNA, 45 Customhouse Wharf, Portland, Maine.

"I am for Candler Short-Cut Code Course 100%." Dr. H. A. D. Baer, W3-EEY, Allentown, Pa.

"After a few weeks interesting study I was able to pass government exam., with 100% rating. Thank you, Mr. Candler."—Harry C. Hicks, W2GOH, 2471 University Ave., New York, N. Y.

"Before taking your Short Cut Code Course I knew nothing of code. I passed my test when I was on Lesson No. 5. It is the easiest and fastest way to acquire code speed."—Dewaine Hardin, W7DAV, Nyssa, Oregon.

"Just a line to tell you I passed the exam. and have my station on the air, thanks to your Short-Cut Code Course."—A. P. Blosser, W2HCP, 82 Dove St., Albany, N. Y.

"It was easy for me to secure my amateur license after taking your Short-Cut Code Course, which I found to be really more than I expected. 73."—C. J. Sligar, W7AHG, 1719 Carlisle Ave., Spokane, Wash.

Only \$5.00 (\$5.50 in Canada and Foreign Countries) for complete **SHORT-CUT CODE COURSE**
—10 Lessons—If your order is received before this Special Offer is withdrawn.

C O U P O N

CANDLER SYSTEM CO., Dept. W-1,
6343 S. Kedzie Ave., Chicago, Ill.

Enclosed is \$5.00, for which send me the complete **SHORT-CUT CODE COURSE** in 10 Lessons. If I do not find this **COURSE** to be the greatest value I have ever received, or if it is unsatisfactory in any way, I will return it to you and you will return my \$5.00 at once.

Name..... St. or Box.....
City..... State.....

FOR the "DX" | SHORT WAVE FAN

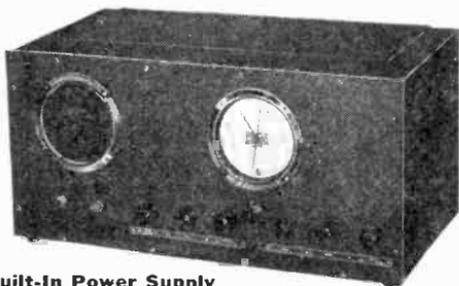
THE NEW RCA-ACR 136

COMMUNICATIONS RECEIVER

ALL-WAVE
15-550
METERS

•
PRE-
SELECTOR

•
BAND-
SPREAD



7-TUBE
SUPERHET

•
A. V. C.

•
BUILT-IN
SPEAKER

•
BEAT
OSCILLATOR

Built-In Power Supply

The ideal receiver for the Amateur and the DX Short Wave Listener! The ACR-136 is a new All-Wave Superhet with professional receiver features. Has pre-selection, true A.V.C., front panel band-switching, band-spread, separate r.f. and a.f. gain controls, etc. Circuit is built around the famous RCA "Magic Brain." An amazing receiver at an amazingly low price. Write for FREE complete descriptive bulletin and quotation.



**Send for this
Radio
Catalog**

Write for the new 1935 ALLIED Catalog — Radio's Leading Book. Packed with special Short Wave values covering all of the leading standard lines including National and Hammarlund. Complete listings of S-W and All-Wave Sets and Kits, transmitting gear, antenna systems, etc. Write for your FREE copy at once!



Build the sensational new *lower priced* ALL-STAR ALL-WAVE JR! Tunes 10-550 meters. A great 5-tube Superhet that can be assembled at a remarkably low price. Features band-spread, beat-note oscillator, pre-adjusted coils, etc. ALLIED is first with FOUNDATION KIT. Only \$2.25 will start you building. Order the Foundation Kit (includes drilled panels, instructions, etc.) or send for FREE DIAGRAM and PARTS LIST.

Allied Radio

833 WEST JACKSON BLVD., CHICAGO, ILL.

Dept. I.S.

Please send me: [] The 1935 ALLIED CATALOG. [] RCA-ACR Bulletin.
[] ALL-STAR DIAGRAM.

Name

Address

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 their subscriptions 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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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 map used in this globe was just finished in December, 1934.

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.

Address your letters to—

INTERNATIONAL SHORT WAVE CLUB, East Liverpool, Ohio

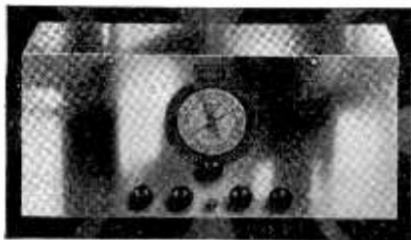
I'LL LET MASTERPIECE OWNERS TELL YOU THE STORY!

Certainly No One Knows Better Whether This Is ACTUALLY THE FINEST RADIO OF ALL TIME

None can contradict that "the proof of the pudding is in the eating." So, the value of a particular radio may well be gauged by what a number of owners get from it. The owners who report below know radio. They've all owned a great many receivers. They selected the MASTERPIECE after long experience, thorough investigation, test and comparison. They expected much. You judge whether they got it!



McMurdo Silver



MASTERPIECE III

With new Watch Dial - new Bandsread - Class A Prime Audio - Single Channel Selectivity - Fractional Microvolt Sensitivity, controllable from all locations and conditions.

10 K. C. Selectivity Plus!

"Impossible to speak of mine as a radio, because it is not at all like the instruments we have come to know as radios—Music reproduction is smooth, soothing, fully rounded, has great depth and you hear all the treble and bass notes.—None can match the low noise level and wonderful sensitivity. Selectivity? Only one I've found to cut out local WBZ, 990 KC., whose antenna is 3/4 mile away and bring in WOC, Des Moines, 1000 KC. without slightest bit of cross talk."—Wm. L. Riley, Jr., Belmont Hotel, Springfield, Mass.

10 DAY FREE TRIAL

Send now for the "Blue Book of Radio" and abundant proof that this is really the finest radio of all time. Learn how I let the receiver itself do its own selling job with you, through a 10 days' test right in your own home. Also a Questionnaire covering your location for advice as to proper installation. All is FREE, no obligation. Mail the Coupon Today!

McMURDO SILVER, INC.

3351-B N. Paulina St. Chicago, Ill., U.S.A.

Quiet Operation

"The first thing that strikes a prospect is the quiet operation, for with a carrier above noise level, the ear can detect no indication of action when no signal is being received...the next is clear and brilliant tone."—F. J. Reese, 78 Main St., Hackettstown, New Jersey.

Reaches Out—Easy to Tune

"The tone is best I have heard (including the so-called hi-fidelity sets)...The ability of the MASTERPIECE to reach out and pull in foreign stations with such volume and tone and hold them is beyond me...also very quiet on short waves. The bandsread dial is great and makes short wave stations easier to tune than long waves on some sets.—Tuned in almost everything, including Japan."—Gene Morris, 5022 Bienville St., New Orleans, Louisiana.

South Pole in Colorado

"Upon my return from a meeting last night, Mrs. Finch reported receiving KFZ (Little America) direct...Reception clear and free from background noise...England, Germany and Spain are daily occurrences with us to amazement if our friends.—One former radio dealer remarked 'the first one I ever heard here that could deliver short wave reception which didn't sound like a bucket of coal falling downstairs!'—I am mildly insane over the set."—Donald F. Finch, 764 Gilpin Street, Denver, Colorado.

Foreigners Clear as Locals

"I am greatly pleased with my new receiver for its fine tone and selectivity.—Foreign stations are free from distortion, no fading and as clear as local broadcast."—Henry D. Hannah, Mansfield, Connecticut.

McMURDO SILVER, INC.
3351-B N. Paulina St., Chicago, Ill., U.S.A.

Send me full particulars and specifications
of MASTERPIECE III.

Name

Street

Town..... State.....



CONTEST WINNER

Mr. John B. Hinds, 85 St. Andrews Place, Yonkers, New York, winner of the Postal International Receiver which was offered to the person who secured the most new members for the Club from July, 1934, to January, 15th, 1935. Mr. Hinds is an accountant for the New York Central Railway and spends his spare time listening to short wave stations. He started in short waves late in 1930 and became an I.S.W.C. member shortly after that time. Mr. Hinds secured 82 new members for the Club during the contest. The Postal receiver, with tubes, speaker, cabinet and everything, was sent to him at the close of the contest.

Following Mr. Hinds in the contest were the following: J. C. Van Gendt, Aruba, Dutch West Indies (77 members); W. Hafemann, Cristobal, Canal Zone (73 members); W. D. Martin, Honolulu, Hawaii (61 members); E. F. Youngblood, East Cleveland, Ohio and Hal Thompson, San Francisco, California (25 each); Thomas Malone, New York City (21); Fred B. Heller, Jr., Philadelphia, Pa. (20); Harold Seaton, Sevierville, Tenn. (18); Z. Hinojosa, Jr., Maracaibo, Venezuela (15); W. Peterson, Brooklyn, New York (11); E. F. Gernardt, Berkeley, Calif. (9); W. H. Rowley, Plymouth, England (8). Mr. Hinds gets the Postal receiver. Mr. Van Gendt gets his choice of several prizes. Mr. Hafemann gets a world globe and his choice of another prize. Mr. Martin also gets a world globe and his choice of another prize. Mr. Youngblood gets a world globe. Mr. Thompson gets a set of Baldwin headphones.

The new contest for a Midwest 16-tube receiver is already started but so far there has been no one announce their intention of trying for this set. No doubt the number of memberships sent in on this last contest

has discouraged a great many, but we are inclined to believe that the new contest will be won with less effort and fewer memberships than this one for the Postal. The new contest will end August first for all people in the United States and Canada, and for all others in North America and the West Indies, and Central America on the tenth of August. To all others, the contest ends on August 15th. The contest closes at midnight on each of these dates. The rules are simple enough. No officer of the I. S. W. C. can enter. No renewal less than three months old counts. No one can start in the contest and then transfer their memberships to another. All memberships sent in by the contestants will count. All memberships received mentioning the name of the contestant will also count. There will be many other prizes, including world-globes, radio supplies, and other things. In this new contest, everyone sending in twenty or more memberships will receive some prize. So, start now and get ahead of the next fellow while you can. The person who hesitates has the hardest job to win.

A SPANISH LESSON

The Spanish-speaking stations of Central and South America and the West Indies are dominating the short wave bands these days. There are so many of these stations that only the most experienced listeners can tell who he, or she, is listening to. So, at the suggestion of Mr. Charles Miller, of Covington, Kentucky, and with his help, we are giving here the alphabet as spoken in Spanish. It will probably help many listeners to identify many of these stations.

- | | |
|--|--|
| A-ah (rhymes with Saw). | T-tay (rhymes with Day). |
| B-bay (rhymes with Day). | U-oo (like in Stew). |
| C-say (rhymes with Day). | V-vay (rhymes with Day). |
| D-day (rhymes with Say). | W-Doubly-vay (just say Doubly-Vay). |
| E-aye (rhymes with Day). | X-echee (the letter A and add Key). |
| F-effay (like F-A in English). | Y-yay (rhymes with Day). |
| G-hay (rhymes with Day). | Z-zed (rhymes with Red). |
| H-ah-chay (Aw, like in Saw
and Chay like in Chase). | 1-oono (like ew in stew and add No). |
| I-ee (like in See). | 2-dose (medicine). |
| J-ho-tah (O like in old
and Ta like in Tall). | 3-trace (rhymes with Case). |
| K-kah (like in Call). | 4-quarto (squaw without the S and
tro). |
| L-el-lay (L like in Tell and Lay
rhymes with Day). | 5-think-ko (the work think and ko). |
| M-Em-may (English M and then the
month of May). | 6-sase (rhymes with race). |
| N-En-nay (English N and add
neigh). | 7-sate (rhymes with mate). |
| O-Oh (same as English O). | 8-oh-cho (English O and cho like in
chosen). |
| P-Pay (What everyone wants). | 9-new-aye-vee (the word New, and
then rhyme with Navy). |
| Q-Ku(like in Cuckoo). | 10-diez (English letter D and add
ez). |
| R-Air-ray (like air-raid without the
D). | |

APPRECIATION

The following members have secured new members for the Club during the past month and deserve our sincere thanks: Wm. Appleby, Minneapolis, Minn.; Charles Miller, Covington, Ky.; August Hauser, Kalamazoo, Michigan; Fred Gustafson, Minneapolis, Minn.; L. E. Hansen, Esplanade, Durban, South Africa (6 members); Billy Barlett, Huntsville, Alabama; H. H. Bolton, Jr., Thomas, W. Va.; Louise J. Apple, Berkeley, California; S. H. Bartman, Anyoux, B. C.; P. E. Donnelly, Los Angeles, California; A. J. Bubnick, Curry, Alaska; Chas. Eggenweiler, West Los Angeles, California; C. S. Whall, San Juan, Puerto Rico; Robert L. Weber, West McHenry, Illinois; Robert Base, Baltimore, Md.; Walter Smith, Pittsburg, Pa.; Joseph Seiferman, Brooklyn, New York; K. M. Murphy, Minneapolis, Minn.; Henry J. R. Ross, Syracuse, N. Y.; G. H. Bell, Spokane, Washington; W. C. Gangloff, Cincinnati, Ohio; Rev. Wm. Ulltich, Syracuse, New York; H. C. Gross, St. Louis, Mo.; E. S. Hammond, New Orleans, La.; M. C. Conde, Bahai, Brazil; D. L. Simpson, Asheville, North Carolina; W. Hafemann, Cristobal, Canal Zone; W. Husband, Sault Ste. Marie, Canada; Wm. H. Beal, Revere, Mass.; Harold Ashton, Boston, Mass.; K. H. Stevens, New Rochelle, N. Y.; Paul M. Horton, Baton Rouge, La.; Arthur Bowes, Cicero, Illinois; R. A. Durham, Louisville, Ky.; John B. L. Hinds, Yonkers, N. Y.; Robert E. Lawrence, Montclair, New Jersey; W. D. Martin, Honolulu, Hawaii; Edward Sigmon, Chicago, Illinois; Harry Daniels, Cleveland, Ohio; DX Radio Sales, Beverly Hills, California; Thomas Grey, Lyons, Ill.; Robert Oughton, Glenside, Pa.; W. Taylor, Upland, Pa.; Wm. Rohrer, York, Pa.; S. L. Cavanaro, Riverheard, N. Y.; F. A. Cooley, Jr., Allegan, Michigan; R. Sanger, Hongkong, China; R. Delevante, Brooklyn, N. Y.; Dr. Paul K. Maloney, Brooklyn, N. Y.; Nelson S. Bell, Wellesley, Mass.; R. Lawton, Whitefield, England; H. Tilley, Market Harborough, England; Hector McCormick, Bucaramanga, Colombia; Philco of England; Vernon Showell, San Francisco, California; H. E. Vanderwoort, St. Petersburg, Fla.; Max Benschhoff, Pasadena, California; J. W. Montgomery, New Orleans, La.; Louis Strand, Chicago, Illinois; W. W. Spencer, Van Nuys, California; Martin F. Schultes, New York City; D. M. Carpenter, Knoxville, Tenn.; Fred Werner, Laredo, Texas; U. Darvin Webber, Charlotte, N. C.; Walter S. Fogg, Lansdowne, Pa.; F. W. Kuttner, Jersey City, N. J.; H. L. Hall, Guelph, Ont.; Edward Kalthoff, St. Louis, Mo.; Carl Anderson, Biggsville, Illinois; H. H. Whipple, Fort Randolph, Canal Zone; James Laughlin, Zellwood, Florida; W. B. Johnston, Hollywood, California; Mrs. Helen C. Hill, San Diego, California; G. C. Bachand, Rutland, Vt.; J. E. Close, Ashland, Mass.; Raymond Brooks, North Manchester, Indiana; John Darby, Long Beach, California; W. T. R. Morris, Jr.; Richmond, Va.; E. J. Howse, Wichita, Kansas; Ivan O'Loughlin, Chicago, Illinois; C. B. Bowling, Colombia, Missouri; D. R. D. Wadia, Bombay, India; Rud Myohl, Carolina, Puerto Rico; R. Lawton, Whitefield, England; W. F. Taylor, Morecombe, England; G. Len de Cou, Bartlesville, Okla.; Ben Roberts, Indianapolis, Indiana; David L. Harriss, Maracaibo, Venezuela.

FOR SALE—Lincoln R-9 receiver. James Harlan, Otsego, Michigan.

CHAPTER NEWS

The London, England, Chapter will hold a special Annual Dinner-Dance Saturday, March 9, at Maison Lyons, Shaftebury Avenue, London, W1. It will be attended by the American Consul-General, several broadcast authorities and radio manufacturers. An early application for tickets should be made. This chapter meets each Friday excepting the second one in each month at R. A. C. S. Hall, Wandsworth Road, London, W8, at 8:30 P.M.

The New York Chapter will only hold one regular meeting in February, on February 8, at Irving Plaza, Irving Street. At this meeting they will demonstrate an "interference finder" and have a "Junk Sale." Members will bring their unwanted parts to the meeting and trade or sell them. On Thursday, February 21, this chapter will meet at Irving Plaza and celebrate their fourth anniversary.

The Jersey City Chapter will meet at 2159 Hudson Blvd., Jersey City, at 8:00 P.M. on February 14 and 28. Receivers will be demonstrated.

The Manchester, England, Chapter will meet February 19, March 5th and 19th and April 2nd and 16th.

The Leicester, England, Chapter will meet each Wednesday at 4B Princess Road, at 8:00 P.M.

The Exeter, England, Chapter meets at 56 East Grove Road, on the Second and Fourth Fridays of each Month.

W. D. Martin, of 2574 Kolowalu Street, Honolulu, Hawaii, is trying to start a chapter there. He wants to hear from all members interested. His phone is 98901.

SPECIAL PROGRAM

By special arrangement made by club-member Francis A. Beane, Ridgewell, England, station HB9B, owned by the Radio Club of Basle, Post Office Box 1, Basle, Switzerland, will broadcast a special program to members of this club in English on Wednesday, February 13, from 22:00 to 23:00 GMT, or 5:00 to 6:00 P.M., E.S.T. This station is on 42.14 meters or 7.118 mc. Here is an opportunity that may never come again for members in the Americas to hear this station. We thank Mr. Beane and the station owners and suggest that other members arrange such programs from other stations.

MEGACYCLES AND METERS

There is no use denying it, megacycles will soon be used almost exclusively in short wave work. Practically every American-made radio receiver is marked in megacycles on the short wave bands. We can see that it is confusing to some people to see both meters and megacycles used, and soon we will have to adopt megacycles. This is going to go hard with many old-time short wave fans, including the editor. But we must accept the facts, and so we warn our readers to start thinking in terms of megacycles.

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.

SOUTH AMERICANS

OAX4B, 6.23 mc. 48.00 meters. Lima, Peru. A letter to headquarters from Roberto Grellaud & Cia, Apartado 1242, Lima, Peru, says, "OAX4B, our station, operates on 6.23 mc, 48.00 meters each Wednesday and Sunday, 7:00 to 9:00 P.M. We sometimes play a musical box during advertising and at 8:30 P.M. strikes a Chinese chime. We always sign off with the playing of the "Good Night Valz" with male singer in English. OAX4D the DUSA station, is relayed by All-American Cables. Their frequency is now 5.78 mc, 51.9 meters, and was formerly on 7.82 mc. We will be pleased to have your reports on our transmitter." So, this fixes OAX4B.

OAX4D, 5.78 mc, 51.90 meters. Lima, Peru. A letter from All-American Cables, to H. S. Bradley, Hamilton, New York, says that they are owners of OAX4D, formerly called OA4AD and also OAX4C, formerly OA4AC. They broadcast from 9:00 P.M. to 11:30 P.M. on Wednesdays and Saturdays. The announcer recently said that all reports should be sent to Apartado (post office box) 853, Lima, Peru. OAX4C on 7.83 mc. (and not 7.82 mc.) is reported again by one member one Wednesday from 9:00 to 11:30 P. M., so maybe they have gone back on this wave. This was from W. Jasiorkowski, Milwaukee, Wisconsin. Others who help us on this are W. A. Dean, Hartford, Conn.; Lewis R. Prettyman, Chicago, Illinois; and M. B. Barnhouse, Los Angeles, California.

Peru Phones. OCJ2 on 15.62 mc., 19.19 meters, works HJY daily now. OCI on 18.68 mc., 16.06 meters, is reported phoning WKK around 2:30 P. M. by M. Headley, Northfield, Minn. An OCP on 27.5 meters at 4:30 P.M. working HKB, Colombia, is reported by Charles Miller.

HJ4ABM, or L, or H, Manizales, Colombia, on 49.15 meters, 6.10 mc. a new broadcasting station, is on the air. We are not sure of the call-letters, because no one seems to know what they are. One member sent in four reports with four different calls given. Anyhow this station is on the air most every night from 6:00 to 7:00 P.M. They call themselves the "Ecos de Oxidents" and reports have come from J. A. Shanks, Tenn.; Mario Bruscio, N. Y.; Roy Waite, N. Y.; Henry Shaw, N. J.; A. D. Jordan, Pa.; Chas. Miller, Ky.; H. S. Bradley, N. Y.; W. Jasiorkowski, Wisconsin; Wilfred Siddle, Ala.; Carlos Irizarry, N. Y.; Sam Solito, Pa.; Dr. R. C. Kash, Tenn.; Mario Cassino, N. Y.; Norman Krubel, Pa.; Fred Hafner, N. Y.; John Tinnon, N. Y. We almost forgot to say they use an auto horn and announce in English.

HJ3ABD on 7.40 mc., 40.55 meters, uses cuckoo calls now and announces "Colombia broadcasting." T. Van Auken, Texas, reports.

HJ1ABJ on 5.94 mc., 50.5 meters, Santa Marta, Colombia, a new station is reported. H. S. Bradley, Hamilton, N. Y., tells us they are on this wave and also on 7.22 mc., 41.5 meters, from 7:00 P.M. to Midnight irregularly testing with stations in Colombia and Venezuela. W. Jasiorkowski, Milwaukee, Wisconsin, reports it on two different Wednesdays, one from 7:30 to 9:00 P.M. and the other at 10:00 P.M. on 5.94 mc. Sam Solito, Leetsdale, Pa., reports it on 5.92 mc., from 7:00 to 9:00 P.M. using chimes.

HJ1ABH on 47.8 meters, 6.23 mc., Cienaga, Magdalena, Colombia. First, Hector McCormick of Bucaramaga, Colombia, told us there was such a station. Then H. S. Bradley reported it using Spanish and English from 8:00 to 10:00 P.M. irregularly. They use the signature "La Voz de Cienaga." Wilfred Siddle, Birmingham, Alabama, reports an HJ1ABH on 50.4 meters, but that is where HJ3ABH is now located. Mr. McCormick also tells us there is another station HJ1ABI at Santa Marta on 41.55 meters and another one at Cienaga, too. He also adds that there is a station going on the air soon at Bucaramanga, his home city, and reports should be sent to him at calle 5, Number 630. He does not know the wave or call-sign as yet.

HJA7 on 5.40 mc., Cucuta, Colombia, says they are not to be considered a broadcasting station, but they will verify reports. They have 400 watts power and recently said they would test each Monday at 4:30 P.M. They can be heard until 7:45 P.M. Thanks for help goes to members Wilfred Siddle, Alabama; Fred Karpen, Johnstown, Pa., and Ed. Lips, Pittsburg, Pa.

HJ5ABD on 6.48 mc., 46.30 meters, Cali, Colombia. We have had a great many reports since we announced this station last month. Two members report it off schedule until 10:30 P.M. These are Fred Hafner, Buffalo, New York, and George Bank, Brooklyn.

HJ1ABD on 49.20 meters, 6.10 mc., at Cartagena, owned by Messrs. Ignacio Villareal and Ildesfonso Frances, known as "Onda de la Heroica" broadcasts daily excepting Sundays from 7:30 to 9:00 P.M. and on Sundays from 11:30 A.M. to 1:00 P.M. according to Elden Lagonterie, Cartagena, and H. S. Bradley, Hamilton, N. Y.

HJ1ABE on 49.05 meters, 6.12 mc., owned by Messrs. Fuente, Cartagena, was off the air for a time but now have a larger transmitter on the air. A letter from the owners say they will use an auto horn and traffic signal as an identification and will broadcast special programs for members of this club each Monday beginning at 10:00 P.M. There may be some mix-up with station HJ1ABD in the same city, but we are told they use a 5-note chime and announce in English and play Sousa's "Under the Silver Eagle" at the close-down. We thank members Elden Lagonterie, Cartagena, Arthur W. Lunn, Maplewood, New Jersey; H. S. Bradley, and Samuel Solito, Leetsdale, Pa.

HJ1ABB on 46.51 meters, 6.45 mc., sent a special program on December 31 and January 1, lasting from 6:00 P.M. until about 5:30 A.M. They have also been testing with station W2XAF, Schenectady, N. Y., almost every Monday around 6:00 to 6:30 P.M. and have also been heard on Thursdays. This is in addition to their regular schedule. Reports have come from members Stitzinger, Messel, Gallagher, Kirby, Ulrich, Kreibel, Emerson, Miller, Hafner, Burlison, McIntosh (of Alva, Scotland) Zehner, Centanino, Wooten and Delozier. Enrique Franceschini of Guayana, P. R., tells us this station will soon be on 23.00 meters in daytime.

HJ2ABC on 5.89 mc., 50.93 meters, at Cucuta, Colombia. This station has moved from 50.25 meters. It is heard between 6:00 and 9:30 P.M., and reports have come from Sam Solito, Leetsdale, Pa.; H. S. Bradley, Hamilton, N. Y.; W. Jasiorkowski, Milwaukee, Wisconsin; John Kirby, New York City; W. C. Motz, Amherst, Va.; Dr. R. C. Kash, Sevierville, Tenn.; Harold Lamont, Elmhurst, New York, and Charles Miller, Covington, Kentucky.

HJ2ABA on 48.60 meters, 6.17 mc., at Tunja, Colombia, has moved to exactly the same wave as YV3RC and giving some trouble. May change soon, however. Reports are from John Shanks, Russellville, Tenn.; Charles Miller, Covington, Ky., and H. S. Bradley, Hamilton, N. Y.

HJ3ABF on 6.17 mc., 48.62 meters, at Bogota, Colombia, is back on the air. They may be heard between 6:00 and 11:00 P.M. They are on top of YV3RC, says Dr. R. C. Kash. They use chimes and announce in English. They do not seem to be regular, but may be heard between 6:00 and 11:00 P.M. Reports have come from members W. Jasiorkowski, Milwaukee, Wisconsin; W. C. Motz, Amherst, Va., and Henry Shaw, Cape May, N. J., who says they were heard between 1:00 and 2:00 A.M. once.

HJ3ABH on 6.02 mc., 49.92 meters, Bogota, known as "La Voz dela Victor" moved. They went up to about 50.3 meters, 5.96 mc., but we are not sure they will stay there. Reports have come from members Carlos Lopez Ona, Havana, Cuba; John Tinnon, Larchmount, N. Y., and W. Jasiorkowski.

HJ4ABC on 48.00 meters, 6.25 mc., Pereira, known as "La voz de Pereira" sends a card to H. S. Bradley saying they have 50 watts power, broadcast daily from 9:30 to 11:00 A.M. and 7:00 to 8:00 P.M. and are owned by Sres Caesar y Mario Arango M. G. C. Gallagher, San Francisco, says he has a card, too, but he says they are on 49.22 meters or 6.09 mc. Anyhow, they are heard on 48.00 meters by H. S. Bradley, and by W.

Jasiorkowski from 7:30 to 8:30 P.M. and at 8:30 P.M. by Henry Shaw. So it seems they (the station owners) are all wrong.

HJ4ABB on 42.00 meters, 7.14 mc., at Manizales, Colombia, is heard now almost daily between 5:00 and 7:00 P.M. We thank Sam Solito, Frank Grey, Norman Kreibel, John Tinnon and Wilfred Siddle for their helpful reports.

Colombian phones. HJB on 40.16 meters, 7.47 mc., is back again. They phone Barranquilla late afternoons according to Norman Kreibel, Ambler, Pa. HKB on 9.93 mc. relayed a plane to OCJ2 at 4:30 P.M. one Tuesday according to a report from D. C. Whitmarsh, Pittsburg, Pa. HJY on 16.25 meters, 18.46 mc., works CEC and OCJ2 and others in the daytime, often using English.

YV6RV on 49.75 meters, 6.03 mc., (same wave as HP5B, Panama) is on the air at last and we have a great many reports. They say they are "La Voz de Carabobo" whatever that means, and are located at Valencia, Venezuela. They are usually heard between 5:00 and 7:00 P.M., but have been heard between 9:00 and 10:00 P.M., 4:45 and 5:00 P.M. and 10:00 to 11:00 P.M., so they must not have a regular schedule. Reports have come from members W. Jasiorkowski, Wisconsin; Charles Miller, Ky.; Dixon Russell, Maryland; Leo Lacroix, Vt.; Carlos Irizarry, N. Y.; Sam Solito, Pa.; F. L. Stitzinger, Pa.; J. Arnold Klein, N. Y.; Mario Cassino, N. Y.; Harold Lamont, N. Y.; John Tinnon, N. Y.; J. A. Centanino, Pa.;

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66 MAIN STREET

HAMILTON, N. Y.

E. Cobianchi, Conn.; W. E. Doty, N. Y.; F. W. Warner, N. Y.; Robert Stuart, Pa.; Fred Hafner, N. Y., and Carroll Foltz, Ohio. We almost failed to say that one member tells us they use chimes, sign off at 6:00 P.M. and come back at 8:00 P.M.

YV4RC on 47.10 meters, 6.37 mc., Caracas, Venezuela. We guess every one knows this station moved to this wave. Arthur Lunn of Maplewood, N. J., says they use an organ selection at the beginning and close of each program as an identification, while C. D. Hall, Chillicothe, Ohio, says they sign off with "Blue Danube Waltz."

YV5RMO on 51.28 meters, 5.85 mc., Maracaibo, Venezuela. Everyone should know this station moved to this wave by this time. However, it is now being heard on about 25.64 meters, 11.7 mc., and no one seems to know if this is the first harmonic of their other wave or whether it is used as a regular station. It is YV5RMO as they gave their address as Box 214. Reports have come from members Orion Myrup, Oakley, Utah; C. Foltz, North Baltimore, Ohio; Charles Miller, Covington, Ky.; Charles Hoffman, Terre Haute, Indiana; and W. P. Jennings, Los Angeles, California. Ralph Williams of Garden City, N. Y., reports a YV4RV, apartado 543 (note) at Velencia, Venezuela, on 11.62 mc. Try to figure this out. John Shanks also reports a station YV3D or C on 49.34 meters, 6.08 mc., talking with a station on 50.5 meters at 6:15 P.M. one Thursday. This may be YV2RC using an experimental call.

LSX on 28.98 meters, 10.35 mc., is broadcasting from 8:30 to 9:45 P.M. according to Robert Woods, Sand Springs, Okla., while H. J. Davison, Bayamon, P. R., reports them broadcasting from 6:00 to 8:45 P.M. but does not say regularly. This station relays the programs from little America each Wednesday at 9:00 P.M. LSY on 16.55 meters, 18.12 mc., was sending music one day at 7:30 A.M. according to Art Lunn, and F. A. Beane, Ridgewell, England, reports them working Berlin and Madrid mornings around 10:00 A.M.

HCK on 5.75 mc., 52.17 meters, is reported on about this wave by several members and on 51.90 meters, 5.79 mc., same wave as OAX4D, by others. This one is at Quito, Ecuador. It is heard between 7:30 and 10:00 P.M. with no degree of regularity, it seems. Reports have come from F. C. Herriot and F. L. Barrows, Delaware, Ohio; W. Jasiorkowski, Milwaukee, Wisconsin; Wilfred Siddle, Birmingham, Alabama, and Sam Solito, Leetsdale, Pa.

HC2EP or HC2ET on 65.22 meters, 4.60 mc., seems to broadcast on Wednesdays and Saturdays from 9:00 P.M. to Midnight. They use three chimes repeated four times, as an identification, one member says and another says it is ten chimes. Reports have come from Charles Miller, Covington, Kv.; F. L. Stitzinger, Erie, Pa., Dr. H. S. Saylor, Altonna, Pa.; Max Horlick, Youngstown, Pa.; W. C. Motz, Amherst, Va., and John Tinnon, Larchmont, N. Y. This station is at Guayaquil, Ecuador.

Prado on 45.31 meters, 6.62 mc., Rio Bamba, Ecuador, has sent several special programs during January, in addition to their regular Thursday from 9:00 to 11:00 P.M. broadcasts. These were January 11

and January 15 from 7:30 to 8:00 P.M. and reported by Fred Hafner, Buffalo, New York; B. Goldman, Corona, N. Y., and Art Williams, Kingston, N.Y. They were also reported one Sunday back on 15.5 mc., although they said they would not use this wave before May. It was heard at 4:00 P.M. by Orion Myrup, Oakley, Utah, and at 5:40 by Henry Shaw, Cape May, New Jersey. HC2RL on 45 meters, 6.67 mc., at Guayaquil also broadcast one Friday from 9:00 to 11:00 P.M. when not scheduled. This from W. Jasiorkowski and George Sim of Cicero, Illinois.

CP5 on 49.34 meters, 6.08 mc., and CP7 on 19.61 meters, 15.30 mc., at La Paz, Bolivia. Letters to members H. S. Bradley of Hamilton, N. Y. and Wilfred Siddle, Birmingham, Alabama, say that CP7 is used daily from 11:00 A.M. to 12:00 Noon and CP5 daily from 8:30 to 10:00 P.M. For some reason CP7 has not been heard, not at that time of day. Roy Waite, Balston Spa, New York, reports them working LSX one Wednesday from 4:23 to 4:45 P.M. Their address is Casilla Correo 637, La Paz, Bolivia.

PREO on 49.75 meters, 6.03 mc. F. A. Beane, Ridgewell, England, insists we are not very good, as he has been reporting a station PREO, Pernambuco, Brazil, for the past five months without us listing it. He says it comes on the air around 4:30 P.M. daily, but has been heard at 3:30 P.M., and they stay on until 8:30 P.M. They use chimes and a siren (just like XEBT) and at first he said they relayed the Radio Club of Brazil but changed it to Radio Club of Pernambuco. We understood this is a small, somewhat barren place outside of Rio where the commercial phones are located. And, to make matters worse, this station was once on a lower wave but moved up, just like XEBT did. We urgently request our Brazilian members to help us on this. PPQ on 25.73 meters 11.66 mc., Pernambuco (Rio de Janeiro) is active again. They broadcast nearly every day last month around 5:30 to 6:00 P.M., but were heard

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from 2:00 to 7:00 P.M. according to one lone member, George Van Honk of Erie, Pa.

CWG on 33.71 meters, 8.90 mc., at Montevideo, Uruguay. This one was reported around 9:00 P.M. by members W. Jasiorkowski, Milwaukee, Wisconsin, and Ralph Williams, Garden City, New York. The CE3AC at Santiago, Chile, reported last month is CE3AG, an amateur station. They move around between 40 and 46 meters. H. S. Bradley.

CENTRAL AMERICANS

HP5B on 49.75 meters, 6.03 mc., Panama City, Panama, Box 910. This station has become one of the most popular in the world, and we have had hundreds of reports on it, too many to mention. They broadcast on this wave every day from Noon to 1:00 P.M. and 8:00 to 10:30 P.M. This from one of their cards, which is printed on pink paper with HP5B in red letters and a description of the station given in black ink. When working amateurs, usually around Midnight, they use the call HP5A. They use words like, "Where the land is divided so the world could be united" and "Where the palm trees blow and two oceans flow." We do not have the space to mention the hundreds of reports received.

WZAL on 42.88 meters, 6.99 mc., Albrook Field, Canal Zone. A letter from this station says they have 300 watts power and are on 6.38 mc. and 6.99 mc. They were reported by H. S. Bradley, Hamilton, N. Y., who got the letter, and Marston Headly, Northfield, Minn., calling station WVQB at Hawaii near Midnight.

The Mexicans. XEBT, Mexico City, has moved again, this time back toward their former wave, and are now on about 6 mc., 50 meters. They broadcast nightly from 6:00 P.M. to around 3:00 A.M., using a cuckoo call, siren, chimes and a rooster crowing. XAM, Merida, Yucatan, on 26.09 meters, 11.50 mc., tested one Thursday at 5:00 P.M. says Norman Kreibel, Ambler, Pa., and on 11.31 mc., at 5:00 P.M. one day and at 5:30 the following day says R. C. Anderson, Long Beach, California. An X1CX was heard on 7.12 mc. and 10.60 mc. according to Robert Woods, Sand Springs, Oklahoma. This is an amateur call, but not on an amateur wavelength.

YNLF, 50.3 meters, 5.96 mc., Managua, Nicaragua, "La Voz de Nicaragua" is on about this wave and not 46.8 meters as stated before. They were heard broadcasting between 6:00 P.M. and 8:00 P.M. by members H. S. Bradley, John H. Shanks, and Charles Nabours. They were heard one Monday at 11:30 P.M. by Wilfred Siddle, at 1:30 A.M. by W. Jasiorkowski, and from 1:12 A.M. to 12:22 A.M. by Harriot and Barrows of Ohio. Carlos Lopez Ona of Havana, Cuba, claims it was heard about 49.4 meters, close to W8XAL daily, around 9:00 P.M. Arthur W. Lunn reports a station YN—Managua on 46.80 meters, 6.41 mc. (between YV4RC and HJ1ABB) between 8:15 and 9:30 P.M. Robert Stuart, of Allentown, Pa., has a letter from Amando Cespedes, owner of TI4NRH saying that a station YB1GG, Managua, is on 46.5 meters, 6.45 mc. with 150 watts, daily, 8:30 to 9:30 A.M., 1:15 to 3:15 P.M. and after 7:15 P.M. Also YN2TG

Granada, on 7.10 mc. after 6:30 P. M. with 30 watts. Sr. Cespedes also says TI4NRH will be on 45.5 meters after January 15th with a crystal-controlled transmitter. W. Jasiorkowski reports TI4NRH on 6.58 mc. talking to amateurs around midnight.

Guatemala Stations. A station on about 50.50 meters, 5.94 mc. at Guatemala City is reported as TGX by some members and as TGW by others. It is heard irregularly. F. L. Stitzinger, Erie, Pa., heard it at 9:09 to 9:46 P. M., and says TGX. John Shanks, Russellville, Tenn., heard it one Monday 11:26 to 11:36 P. M. and one Wednesday 6:25 to 7:00 P. M. and insists it is TGW and not TGX.

Costa Ricans. TIEP, 44.71 meters, 6.71 mc., San Jose is heard regularly between 6:00 and 10:00 P. M. A letter from TIGPH, "Radio Alma Tica," San Jose, say they are on 5.77 mc. and does not say anything about TIXGP3 or the words "The Queen of the Air," which is used by TIXGP3. Such letters have come to H. S. Bradley, Hamilton, N. Y.; Robert Woods, Sand Springs, Okla., and Wilfred Siddle, Birmingham, Ala. Mr. Siddle claims there are two station in Costa Rica near 51.5 meters and not just one. TIGPH is one and the other is a TIX, San Jose, which announces "La Reina del Aire" or "Queen of the Air." We have ten members in San Jose and five in Limon, and call on them here and now to clear up this matter. John Shanks reports a TI12 in Costa Rica, between HJ1ABB and YV4RC, on 48.60 meters, 6.41 mc., between 6:00 and 9:30 P. M. TIXGP3,

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45 ASTOR PLACE

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NEW YORK, N. Y.

San Jose worked with HJ1ABG one Monday at 11:15 P.M. according to C. E. Wilks, Huntington, W. Va. Max Horlick, Youngstown, Ohio, heard them at 9:31 to 10:00 P.M. one Wednesday. Herriot and Barrows, of Delaware, Ohio, reports them from 12:31 to 12:38 A.M. one Wednesday. Thomas Grey, Lyons, Ill., reports them working HP5B at 12:45 A.M.

Round Table. Mrs. Clara Kibblehouse, of Philadelphia, Pa., tells us that Dr. Hard, of Mexico, on a recent visit, said that amateurs in Central and South America and West Indies have formed a Round Table Forum which gets together each Wednesday at 10:30 P.M., using both English and Spanish. Enrique Franceschini, of Guayanilli, P. R., tells us the following make up the Round Table: HJ1ABB, 6.45 mc.; HJ3ABD, 7.40 mc.; HJ4ABB, 7.14 mc.; HJ1ABE, 6.12 mc.; YV4RC, 6.37 mc.; YV5RMO, 5.85 mc.; YVQ, 6.67 mc.; TIEP, 6.71 mc.; HI8X, 7.07 mc.; HI6F, 7.08 mc. HI8H, 7.37 mc.; Prado, 6.62 mc.; HC2RL, 6.67 mc.; YNLF, 7.23 mc.; (see note on this station please), CM8LC, 7.30 mc. and PRF5, 9.50 mc.

THE WEST INDIES

VP6YB, 42.42 meters, 7.07 mc. Radio Association of Barbados, Bridgetown, Barbados. This station was heard several times between 4:45 P.M. and 5:45 P.M. broadcasting music and giving cricket scores. The Radio Association of Barbados is a new organization composed mostly of members of the I.S.W.C. We have heard from them, but they never mentioned this station, for some unknown reason. Reports of reception came from H. S. Bradley, Hamilton, N. Y., and James Houlgate, London, Ontario.

A new Cuban, whose call-sign has not been definitely assigned has been heard. They have not been on one wavelength, either. So, we will have to give the dope as it appears. It has been heard on several waves between 48.79 meters, 6.16 mc. to 51.00 meters, 5.90 mc. They have been heard at 4:00 P.M., 5:00 P.M., 6:00 P.M., 11:00 P.M., 1:00 A.M. and 2:00 A.M. The early times they were broadcasting and the late ones they worked amateurs. The call sounded like CO9DC, GC, CC, BC and others. A letter received by Mario Cassino, Corona, N. Y., helps some. It says they are on 48.49 meters and they test between 5:30 and 11:30 P.M. and use the signature "La Voz de Santiago de Cuba" and have no license to operate as yet. Once it relayed CMKD. Another time they gave their address as P. O. Box 147, Santiago. And reports have come from John Kirby, New York City; W. C. Motz, Amherst, Va.; Henry Shaw, Cape May, N. J.; Ralph Williams, Garden City, N. Y.; Same Solito, Leetsdale, Pa.; Carlos Lopez Ona, Havana, Cuba; Wilfred Siddle, Birmingham, Ala.; Pedro Quintana Cabot, Cifuentes, Cuba; Frank Grey, Berwyn, Ill.; Thos. Grey, Lyons, Ill.; W. Jasiorkowski, Wilwaukee, Wis.; Charles Hoffman, Terre Haute, Ind., reports a CO2OA Cuba, on 7.10 mc. around 6:30 P.M. broadcasting. This is an amateur. CNPH of the Cuban National Police is on the air on 1.71 mc., and is heard around 9:00 P.M. according to Art Williams, Kingston, N. Y.

COC, 49.96 meters, 6.01 mc. Havana, Cuba. Boy, we wish this one would settle down. It not only roams all over the dials, but gives a different schedule on a card from what they say over the air and keeps a

different one from both of these. As an illustration, at 7:00 P. M. once they said they broadcast from 4:00 to 6:00 P. M. And they were on the air at 7:00 when they said it. This came from Charles Miller, Covington, Ky. The schedule on the card says 9:30 to 12:30 noon, 4:00 P. M. to 6:00 P. M. daily and 11:30 P. M. to 12:30 A. M. Saturday nights only. However, it is heard most every day now till 7:00 or 7:30 P. M. and often from 8:00 to 10:00 P. M. We thank Wm. Neal, Southington, Conn.; H. J. Davison, Bayamon, P. R.; Cyril Gilmour, Kingston, Ont.; Forest Messel, Chilli-cothe, Ohio, and V. F. Harrington, Allston, Mass.

COH, 31.80 meters, 9.43 mc., Havana, Cuba. This is another station that you can not depend on. Their card says they are on 10:00 to 11:00 A. M., 5:00 to 6:00 P. M., and 8:00 to 9:00 P. M. daily, but they are heard at 8:30 A. M. often, at 3:00 to 5:00 P. M. most every Sunday; from 11:00 A. M. to noon Thursdays and also at 4:00 to 5:00 P. M. Thursdays. This is taken from reports reaching us from Ralph Williams, Garden City, N. Y.; A. M. Pleyte, Yarmouth, Maine; John Shanks, Russellville, Tenn.; J. A. Centanino, Freeport, Pa.; Charles Miller, Covington, Ky.; F. L. Stitzinger, Erie, Pa.; Dr. R. C. Kash, Seiverville, Tenn.; Edward Goodloe, Chicago, Ill.; Fred Hafner, Bucalo, N. Y.; Albert Emerson, Cleveland, Ohio; H. J. Davison, Bayamon, P. R. George Zehner, Jr., Philadelphia, says they use bells after every two numbers as an identification.

ZFS, Hamilton, Bermuda, 66.50 meters, 4.51 mc. is heard again. They phone some station on 4.86 mc. around 10:00 P. M. W. Jasiorkowski, Milwaukee, Wisconsin.

HIL, 45.94 meters, 6.53 mc., Santo Domingo, Republic of Dominicana. A card from this station to H. S. Bradley says they are on 46.00 meters with 25 watts power, Saturdays from 8:00 to 10:00 P. M., but they are on wave we give here.

HI4D, 45.5 meters, 6.59 mc. "La Voz de Quisqueya," Santo Domingo, is on this wave and not 46.25 meters, 6.48 mc. Their card says they broadcast Mondays to Saturdays from 11:55 A. M. to 1:40 P. M., and 4:40 P. M. to 7:40 P. M., E.S.T. Members should remember that they are 20 minutes ahead of E.S.T., and show the time in Dominican time on their cards. One member reports them at 11:00 P. M. once. And we thank members H. S. Bradley, Wilfred Siddle, Arthur W. Lunn, Forrest Messel, F. L. Stitzinger and A. F. Larkman, of London, England.

HIX, 50.50 meters, 5.94 mc., Santo Domingo, R. D. This station has moved. They are reported on several waves, but the above seems to be the nearest correct. Reports say they are in between XEBT and YV5-RMO. John Shanks, Russellville, Tenn., says they are on 49.4 meters, 6.07 mc., but he must be mistaking some other station for it. A letter from Secretariu De E de Trabajo, Radiodifusiria HIX, says they are on both 518 and 50 meters daily at noon, Sundays at 7:30 A. M. and Tuesdays and Fridays at 8:10 P. M. their time, which is 20 minutes ahead of E.S.T. We thank members W. Warner, Oneonta, N. Y.; Frank Grey, Berwyn, Ill.; John Kirby, New York City; Wilfred Siddle, Birmingham, Ala.; W. Jasiorkowski, Milwaukee, Wis., and Eugene West, Springfield, Mo.

HIH, 44.12 meters, 6.80 mc., San Pedro de Macoris, R. D. This station

sent a special program to members of this organization on January 20th, from 3:00 to 4:00 A. M. and announced it many time before that date. They also broadcast New Year's from 10:00 P. M. to midnight. Reports have come from F. S. Anderson, Richmond, Va.; D. Lorenbini, Minotola, N. J.; Sam Solito, Leetsdale, Pa.; Wilfred Siddle, Birmingham, Ala.; Pedro Juintana Cabot, Cifuentes, Cuba, and Norman Kreibel, Ambler, Pa.

HI1A, Santiago de los Caballeros, R. D. and not San Pedro de Macoris, as we said last month, seems to be moving around a bit. Their card says they are on 45.50 meters, 6.18 mc., with 50 watts power, and scheduled 11:40 A. M. to 1:40 P. M. and 7:40 to 9:40 P. M. E.S.T. Their address is Box 423. They were also reported at 1:30 A. M. one Sunday by Herriot and Barrows, of Delaware, Ohio, and from 5:40 A. M. to 4:00 P. M. on New Year's day by Enrique Franceschini, of Guayanilla, P. R. Herriot and Barrows also reports them once at 8:30 P. M., between OAX4B and YV3RC. We also thank Bernard Goldman, Corona, N. Y.; F. Worrell, Ann Arbor, Mich., and Wilfred Siddle, Charles Miller and W. Jasiorkowski.

THE ASIATICS

VPD or VP1A, 22.75 meters, 13.08 mc., Suva, Fiji Islands. An amateur message relayed by K6FV and W4CBY from W. D. Martin, Honolulu, Hawaii, tells us that the call-sign of this station is VP1A, and it is testing daily except Saturdays and Sundays, from 12:30 to 1:30 A. M. Reports should be addressed to Amalgamated Wireless Co., Suva, Fiji Islands.

VIY or VK3ME, about 24.5 meters, or 12.05 mc., Australia. A station using the call VK3ME, but using the transmitter VIY, was heard testing with CJA montreal, Canada, last month. These tests took place between 11:00 A. M. and noon. CJA was also on voice, on 12.24 mc. Different wavelengths were given by different members for VIY, so we are not certain of the above. Reports came from Seymour Hastings, Santa Monica, California; Ed Lips, Pittsburgh, Pa.; Jack Watrous, San Mateo, Cal.; A. Antognini, Greenfield, Cal., and C. W. Eggenweiler, West Los Angeles, Cal.; Sam Solito, Leetsdale, Pa.

CQN, 49.83 meters, 6.02 mc., Macao, China. This station is on a new schedule according to letters received by Adolph Dick, Jr., Brooklyn, N. Y., and Myron Reamy, Yonkers, N. Y. They broadcast Mondays and Fridays, 8:00 to 10:00 G. M. T., which is 3:00 to 5:00 A. M., E.S.T. (probably so no one will mistake HIX for them again).

RV15, 70.65 meters, 4.25 mc., U. S. S. R. Now is the time to get this station in the United States. Some reports follow: Heard up till 11:00 A. M. by Jack Watrous, San Mateo, Cal.; at 11:30 A. M. by James Keith, Northport, Minn.; 5:30 to 8:00 A. M. by Thos. Van Auken, Livingston, Texas; 2:15 to 2:40 A. M. by H. S. Campbell, Upland, Cal.

VUB, 31.36 meters, 9.57 mc., Bombay, India. This station is still heard on Sundays irregularly between 7:00 and 7:30 A. M. here in America, so they must be making this a regular schedule. They broadcast Wednesdays and Saturdays 11:30 A. M. to 12:30 Noon regularly. Some now say they are on every day, but we are not sure. Cards showing the "Gateway

of India," received from the station director, Indian State Broadcasting Service, Bombay, India, have been reported by members Dean, Dorr, Motz, and Hoffman.

FZS, 16.33 meters, 18.35 mc. and 25.02 meters, 11.99 mc., and FZR 18.51 meters, 16.25 mc., Saigon, Indo-China. A letter from this station says FZS on 18.35 mc. works phone at 5:00 A. M., and FZR on 16.25 mc. works phone at 8:30 A. M. It also says they never broadcast. And it does not mention FZS on 25.02 meters. But regardless of this, FZS on 25.02 is heard nearly every noon, sometimes sending music to test modulation. The same is true of these others, they send music for tests. What they mean is that they are not commercial broadcast stations. W. A. Dean, Hartford, Conn., has the letter and F. L. Stitzinger, Erie, Pa., reports the station at noon.

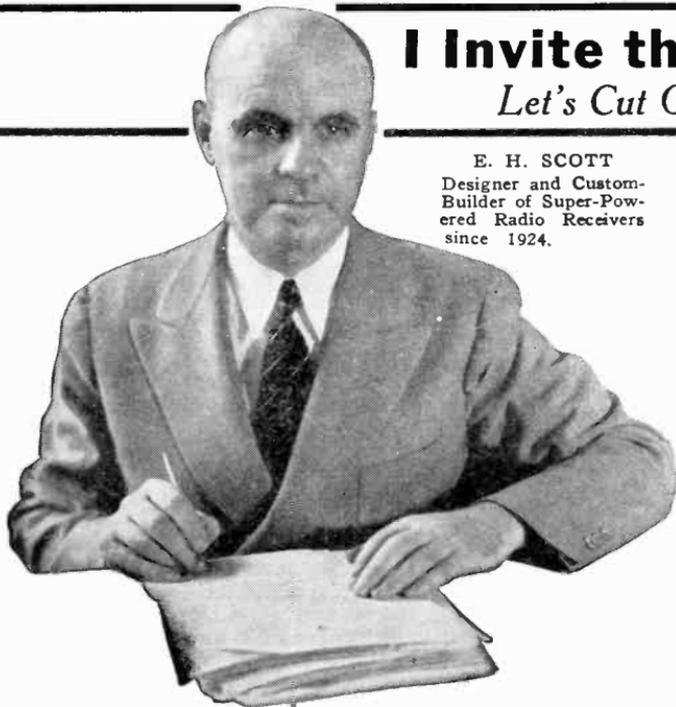
ZHJ, 49.34 meters, 6.08 mc., Penang, Straights Settlement. Lionel F. Stetson, of Chicago, sends us a newspaper clipping showing that a new station, ZHJ, owned by the Penang Wireless Society, went on the air December 5th on the above wavelength. They have 49 watts power and broadcast Mondays, Wednesdays and Saturdays, 7:00 to 9:00 P. M. their time, which will be 8:00 to 10:00 A. M., E.S.T. The address is 40 Perak Road.

YDA, 49.02 meters, 6.12 mc., Bandoeng, Java. This station continues to come in during the early mornings and we have dozens of reports. We have some interesting news taken from several letters received by members. The owners of this station, the N. I. R. O. M., operates a group of twelve stations. One is YDA on 49.02 in charge of J. de Munck Montier, Tegallega Oost 23, Bandoeng, schedule 5:30 to 10:00 A. M., 11:00 P. M. to 2:00 A. M. and 6:20 P. M. to 6:40 P. M. Another is at Tandjong Priok on 50.00 meters, 6.00 mc., schedule not given. Another is at Soerabaia on 67.11 meters, schedule is 7:30 P. M. to 8:00 P. M., midnight to 3:00 A. M., and 7:00 A. M. to 9:00 A. M. It is operated by H. Harms, Embong Malang, 65, Soerabaia. Others are above 100 meters. A new transmitter will soon be opened and station YDA will be taken off the air, they say. It will operate on 49.6 meters and 74.00 meters relaying PHI and PCJ Holland. This information is taken from several letters. John De Myer, Lansing, Mich., got his from Konigsplein W5, Batavia Centrum. We do not know where the others got their replies, but we thank John Shanks, Russellville, Tenn.; D. R. D. Wadia, Bombay, India; R. Lawton, Whitefield, England, and Jack Watrous, San Mateo, Cal., for their help. Mr. Lawton says a new Java station is on 40 meters testing now. Thos. Van Auken, Livingston, Texas, says the station he hears in on 68.22 meters, not 67.11. The Java phones are reported as follows: PLV, 9.42 mc. uses music for modulation tests around 6:10 to 6:25 A. M., according to H. J. Davison, Bayamon, P. R. They sent a special New Year's program around 6:00 A. M. according to Gerald Taylor, Stadhamton, England. They phone California around 9:50 P. M. quite often, according to R. Lawton, Whitefield, England. PLE, 15.93 meters, 18.83 mc. phoned K WV California one Thursday at 7:00 P. M. according to F. V. Richard, Vanadium, New Mexico.

JZG on 47.39 meters, 6.35 mc. This station has been relaying station JVT, Japan, who in turn was relaying JOAK. The time was around 5:00

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to 7:30 A.M. We do not know where this station is located but the call-sign is correct. It is reported by members Stan Smith, Los Angeles, California; Robert Woods, Sand Springs, Okla.; John Gregory, Hollywood, California; and Thomas Van Auken, Livingston, Texas.

JIB on 28.49 meters, 10.53 mc., at Tiawan, Japan, tests nearly every night around Midnight and irregularly around 5:30 P.M. according to W. D. Martin, Honolulu, Hawaii. He also reports it at 3:30 P.M. and 8:30 P.M. JIC, same place, on 50.93 meters, 5.89 mc., is reported one Sunday morning at 5:30 A.M. by those two radio twins, Barrows and Herriot, Delaware, Ohio.

JVT, Nazaki, Japan, on 44.44 meters, 6.75 mc., is again relaying JOAK in the early mornings. This station, and all others starting with JV are at Nazaki, and owned by the Kokusai-Denwa, Kaisha, Ltd., Osaka Bldg., Kojimachiku, Tokio. To show how this station is heard in various places, we will mention the time with each report. Carlos Lopez Ona, Havana, Cuba, on 4:00 A.M.; From 7:30 to 7:51 A.M. by Sam Solito, Leetsdale, Pa.; From 5:30 to 7:45 A.M. by Lewis Prettyman, Chicago; W. D. Martin, Honolulu, Hawaii, reports working KWX and KWY from 12:30 to 12:45 A.M. and up till 7:40 A.M.; Herriot and Barrows, Delaware, Ohio, say at 5:35 A.M.; George Van Honk, Erie, Pa., says at 7:00 A.M.; G. C. Gallager, San Francisco, says from Midnight to 7:00 A.M.; G. E. Gray, San Francisco, says from 1:00 to 7:40 A.M.; Thomas Van Auken, Livingston, Texas, says from 5:30 to 7:40 A.M.; James Keith, Northport, Washington, says at 6:00 A.M.; Stan Smith, Los Angeles, says at 7:00 A.M.; Charles Hoffman, Terre Haute, Indiana, says 3:45 to 7:45 A.M.; and W. Jasiorkowski, Milwaukee, Wisconsin, says from 2:00 to 7:45 A.M.

JVN on 28.14 meters, 10.66 mc. is heard nearly every day at 6:00 P.M. and 10:45 P.M. by W. D. Martin, Hawaii, at 3:10 A.M. by James Alexander of Auckland, New Zealand, and at 6:30 P.M. by James Keith, Northport, Washington.

JVM on 27.93 meters, 10.74 mc., with music one Saturday at 5:30 to 6:00 P.M. is reported by George Van Honk, Erie, Pa.; At 6:00 P.M. phoning by H. S. Bradley, Hamilton, N. Y.; Working DFD and DFL, Germany, at 4:15 P.M. by R. Lawton, Whitefield, England, and at 3:45 P.M. working KWV, California, by W. D. Martin, Hawaii.

JVP on 39.95 meters, 7.51 mc., testing at 8:00 to 10:00 A.M. with IRM, Italy, one Wednesday is reported by E. A. Burleson, Urbana, Illinois. JVF on 19.20 meters, 15.61 mc., working KWU at 4:45 P.M. and working KWE between 4:00 and 5:00 P.M. is reported by Thomas Grey, Lyons, Illinois, and Carroll Foltz, North Baltimore, Ohio. JVQ on 40.16 meters, 7.47 mc., at 7:45 A.M. is reported by the twins Barrows and Herriot. JVH on 20.54 meters, 14.60 mc., testing with DFB, Germany, at 3:50 A.M. is reported by James Alexander, Auckland, N. Z. JVV on 5.79 mc. is heard along with JVT around 1:40 A.M. relaying JOAK and JVO on 10.37 mc. at the same time is reported by H. S. Campbell, Upland, California. JYR, Kemikawa-Cho, Japan, on 38.07 meters, 7.88 mc., is reported at 4:00 A.M. by Carlos Lopez Ona, Havana, Cuba.

The Philippines. Some reports on these stations are given here.

A station used the Call KPO, Manila, on 13.24 mc., when calling Tokyo, Japan, and changed to KPJ later on when working California. This comes from W. D. Martin, Honolulu, Hawaii, while James Alexander, Auckland, New Zealand, reports it at 3:15 A.M. once. Mr. Martin heard it from 2:10 to 2:35 A.M. A KTR on 26.45 meters calling Berlin at 6:15 A.M. is reported by Mr. Alexander also. KAY on 20.07 meters from 6:00 to 6:30 A.M. working Berlin is reported by Alf. Mann, Middlesborough, England, and at 5:10 A.M. by T. W. Moss, Exeter, England. KTO on 18.58 meters, 16.14 mc., is used often around 5:00 P.M. and is on 16.24 mc., and not 16.14 according to Orion Myrup, Oakley, Utah. It was heard calling Tokyo at 6:30 P.M. until 8:00 P.M. one Thursday and usually is heard around 6:30 P.M. by F. V. Richards, Vanadium, New Mexico. KAZ on 30.09 meters, 9.97 mc., sent a special New Years program at 11:00 A.M., New Year's day according to Fred Karpen, Johnstown, Pa. KTP on 8.12 mc., often works KKY and KWX, California, around 10:00 to 10:30 A.M. according to Robert Woods, Sand Springs, Oklahoma.

PNI on 34.19 meters, 8.77 mc., Makasser, D. E. I., was reported working Java from 6:30 to 9:30 A.M. one Saturday by Fred Karpen. It is usually on at 5:00 A.M. XGW on 28.79 meters, 10.42 mc., China, was heard at 4:50 A.M. phoning by Ed. Lips, Pittsburg, Pa. ZLT, Wellington, New Zealand, on 30.74 meters, 9.76 mc., is reported working VLZ, Australia, from 11:00 P.M. to 1:00 A.M. by James Alexander, Auckland, N. Z., and at 4:00 A.M. working VLK by W. D. Martin, Hawaii. A Russian on 101 meters and a station on 4.60 mc. calling RKLK at 4:45 A.M. are reported.

THE EUROPEANS

2RO on 49.20 meters, 6.09 mc., and 30.67 meters, 9.78 mc., Rome, Italy. A letter direct from the E. I. A. R., Montello 5, Roma, Italy, tells us that this station is on 30.67 or 9.78 mc. daily from 2:30 to 5:00 P.M. and on Mondays, Wednesdays and Fridays from 7:45 to 9:15 P.M. On 49.30 (they say this but the station is on 49.20) on Mondays, Wednesdays and Fridays from 6:00 to 7:30 P.M. The call IRA is not used any more. Fred Karpen of Johnstown, Pa., also reports this station back on 25.40 meters one Sunday from 7:00 to 8:15 A.M. Others who sent us this schedule are John Shanks, F. C. Herriot, Charles Miller, Wilfred Siddle, W. A. Dean, Arthur Gibson, John Furneaux, G. S. Richardson, Francis Worrel, H. S. Bradley, Charles Hoffman, Theodore Gohres, Lester Smith, Carl Forrester, Albert Emerson, J. F. Armstrong, Angelo Centanino, George Zehner, U. Darwin Webber, Emmett Riggle, W. P. Jennings, C. D. Hall, Harold Goodhue. The American hour comes over the 49.20 meters, 6.09 mc., wave each Monday, Wednesday and Friday from 6:00 to 7:30 P.M. The announcements are in English.

The Italian phones are reported here. IRM on 30.52 meters, 9.83 mc., was heard with music between 2:00 and 5:30 P.M. by John Kovatch, Escorse, Michigan, and worked JVP, Japan, (39.95 meters) at 8:00 A.M. one Wednesday according to Fred Karpen, Johnstown, Pa. IRW on 15.37 meters, 19.52 mc., is heard around 9:00 A.M. often with music

according to H. S. Bradley, Hamilton, N. Y. They also sent a special program one Sunday morning from 9:45 A.M. to 11:00 A.M. according to Hugo Maugerl, Brooklyn. IAC, the Coltana phone, at Piza uses English often and roams around between 12.80 and 12.84 mc. in the mornings according to Carroll Foltz, North Baltimore, Ohio, and was heard on 45.10 meters, 6.65 mc., at 2:30 P.M. by John Kirby, New York City.

HAS on 19.52 meters, 15.37 mc., broadcasts each Sunday now from 8:00 to 9:00 A.M. and HAT on 55.56 meters, 5.40 mc., broadcasts from 8:00 to 9:00 P.M. Sundays also. These are at Budapest, Hungary. And no matter if a certain paper said it was Mondays, it makes no difference, for it is heard Sundays. The 19.52 station is reported heard by Howard Dwyer, Mt. Vernon, N. Y.; R. Braunholdt, Evanston, Illinois; H. S. Bradley, Hamilton, New York; Charles Miller, Covington, Ky.; Nick Gaug, New York City; Fred Karpen, Johnstown, Pa.; Prof. C. W. Bhosys, Brooklyn; Myron D. Reamy, Yonkers, N. Y.; F. A. Beane, Ridgewell, England; Gerald Taylor, Stadhampton, England; Mario Cassino, Corona, N. Y.; and Harold Lamont, Elmhurst, N. Y. The 5.40 mc. station was heard by Barrows and Herriot of Delaware, Ohio; H. S. Bradley; Fred Karpen, and W. A. Dean, Hartford, Conn., and a XDX, Philadelphia, Pa.

LKJ1 at Jeloy, Norway. Letters from this station, from the La Directeur General Divisonde Radiotelegraphie, Oslo, Norway, says this station is on 31.45 meters, 9.55 mc., from 5:00 to 8:00 A.M. and on 48.94 meters, 6.13 mc., from 11:00 A.M. to 6:00 P.M. daily. R. Braunholdt, Evanston, Illinois; H. S. Bradley, Hamilton, N. Y.; Adolph Dick, Brooklyn, N. Y.; and W. A. Dean, Hartford Conn., has these letters.

OXY at Skamleback, Denmark. A letter from Harold J. Rud, Press Sect, Danish State Broadcast, Copenhagen, Denmark, to Shokichi Yoshimura, Mojl, Japan, says this station is on 49.50 meters, 6.06 mc., weekdays from 1:00 to 6:00 P.M. and Sundays from 11:00 A.M. to 6:00 P.M. and they sign off with the chimes from the Town Hall Clock. However, members say it is on 49.4 meters, 6.08 mc., and they are heard until 6:30 P.M.

HVJ, Vatican City. This station has changed its schedule. Mario Bruscio of Brooklyn, N. Y., tells us that HVJ say they will be on 19.84 meters, 15.11 mc., daily now from 10:30 to 10:45 A.M. instead of 5:00 to 5:15 A.M. The schedule calls for Italian on Mondays, English on Tuesdays, Spanish on Wednesdays, French on Thursdays, German on Fridays and Dutch on Saturdays. They also are on 50.26 meters, 6.97 mc., daily from 2:00 to 2:15 P.M. This station must have made this change, as reports indicate. Fred Karpen, Johnstown, Pa., heard them one Tuesday using English at 10:45 A.M., while W. Jasiorkowski, Milwaukee, Wisconsin, reports it one Saturday.

EAQ on 30.40 meters, 9.87 mc., Madrid, Spain. Our own book from this station shows the programs scheduled for daily broadcasts from 5:00 to 7:00 P.M., with programs on Tuesdays, Thursdays and Saturdays until 7:30 P.M. and on Saturdays only from 1:00 to 3:00 P.M. C. Lawntson, Waterloo, Iowa, tells us they announced they would use the song "La Paloma" as a signature song. A phone station at Madrid, owned by

the same people as EHY is on 7.31 mc. from 5:00 to 7:00 A.M. according to H. S. Bradley, Hamilton, N. Y. EHY is used nearly every day now on 29.79 meters, 10.07 mc. to phone.

ORK on 29.04 meters, 10.33 mc., Brussels, Belgium. A member, who signs his letters XDX, Philadelphia, says this station is on a new schedule which is from 1:30 to 3:00 P.M. but we do not believe this is correct. It has been from 2:45 to 4:15 P.M. for some time.

Pontoise, France. These stations remain on the same schedule given last month. John Shanks, Russellville, Tenn., says that they want reports sent to "le Chef de la station de Radiodiffusion Coloniale, 98 Bis Blvd. Haussmann, Paris, France. Hugo Maugeri, Brooklyn, tells us about the schedule.

Iceland. A letter from the Director General of Telegraphs of Iceland to A. F. Larkman, London, England, says there are no licensed amateurs there and no short wave broadcast or phone stations.

HPB on 38.47 meters, 7.80 mc., Geneva, Switzerland, and a HBQ, believed to be on 44.98 meters, 6.67 mc., sent a special program to the U.S.A. on January 5th from 6:00 P.M. to 6:30 P.M. This news is from Fred Karpen, Johnstown, Pa.; Norman Kreibel, Ambler, Pa.; John Kirby, New York City, and F. A. Beane, Ridgewell, England. HBJ on 20.60 meters, 14.56 mc.. broadcast the results of the Saar election on January 15th from 9:00 to 9:45 A.M. according to Fred Karpen and Dean H. Seeger, Jackson, Michigan. HBJ and HBL on 31.27 meters, 9.59 mc., continues to broadcast Saturdays from 5:30 to 6:15 P.M.

HP9B on 42.14 meters, 7.12 mc., Radio Club Basle, Box 1, Basle, Switzerland, will broadcast each Thursday from 4:00 to 4:30 P.M. They were also heard on 79.5 meters from 4:30 to 5:00 P.M. by F. A. Beane, Ridgewell, England. This wave may be heard in Europe, but perhaps not in America. R. Lawton, Whitefield, England, also reports this station. Do not forget the special program from this station February 13 from 5:00 to 6:00 P.M.

Russia. The English broadcasts from Moscow for February will be as follows: Sundays, Mondays, Wednesdays and Fridays from 4:00 to 5:00 P.M. on 50.00 meters, 6.00 mc.; Saturdays from 10:00 to 11:00 P.M.; Sundays from 5:00 to 6:00 A.M.; Sundays from 10:00 to 11:00 A.M., and Wednesdays from 5:00 to 6:00 A.M. on 25.00 meters, 12.00 mc. Broadcasts in other languages will be sent on 50.00 meters, 6.00 mc., daily from 3:00 to 5:00 and sometimes until 6:00 P.M. This comes from letters to headquarters and to F. L. Stitzinger, Erie, Pa. RV59 is reported by Dixon Russell, Baltimore, Md., at 6:00 P.M. with German once. RNE on 25.00 meters still broadcasts irregular tests with New York on Saturdays around 8:00 to 10:00 P.M. RKI on 19.94 meters, 15.04 mc., is also used. Gordon Schumann, Appleton, Wisconsin, says they sent a special program to the U.S.A. on January 11 from 9:00 to 9:30 P.M., and W. C. Motz, Amherst, Va., says they sent a special January 13 from 8:00 to 9:00 A.M. RIM on 19.68 meters, and RKI at 7:00 A.M. are reported by Robert Hughes, Trowbridge, England. RIM on 39.34 meters, 7.63 mc., at Tashkent, and RKI on 39.97 meters, 7.50 mc., between 6:00 and 8:00 A.M.

are reported by Fred Karpen, Johnstown, Pa. An RIO at a place called Bakou on 29.50 meters, 10.17 mc., is reported phoning RNE between 7:00 and 9:00 A.M. by Mario Cassina, Corona, New York, and between 6:00 and 8:00 A.M. by Arthur Lunn, Jr., Maplewood, N. J., and Fred Karpen.

The British Broadcasting Corporation stations at Daventry will broadcast as follows during February unless they make some announcements over the air:

3:30 A.M. to 4:30 A.M.—GSD on 25.53 (11.75) and GSB on 31.55 (9.51)
 4:30 A.M. to 5:30 A.M.—GSF on 19.82 (15.14) and GSD on 25.53 (11.75)
 6:00 A.M. to 9:00 A.M.—GSF on 19.82 (15.14) and GSE on 25.29 (11.86)
 9:15 A.M. to 10:45 A.M., GSE on 25.29 (11.86) and GSB on 31.55 (9.51).
 10:45 A.M. to 12:00 Noon, GSB on 31.55 (9.51) and GSA on 49.59 (6.05).
 12:00 Noon to 12:45 P.M., GSD on 25.53 (11.75) and GSA on 49.59 (6.05).
 1:00 P.M. to 4:30 P.M., GSD on 25.53 (11.75) and GSB on 31.55 (9.51).
 4:30 P.M. to 5:45 P.M., GSB on 31.55 (9.51) and GSA on 49.59 (6.05).
 6:00 P.M. to 8:00 P.M., GSC on 31.30 (9.58) and GSA on 49.59 (6.05),

The schedule for the German stations for February follows:

12:30 A.M. to 2:00 A.M.—DJB on 19.74 (15.20) and DJQ on 19.63 (15.28)
 3:45 A.M. to 7:15 A.M.—DJB on 19.74 (15.20) and DJN on 31.45 (9.54)
 8:00 A.M. to 11:30 A.M.—DJA on 31.38 (9.57) and DJN on 31.45 (9.54)
 12:00 Noon to 4:30 A.M.—DJJ on 25.49 (11.77) and DJC on 49.83 (6.02)
 5:15 P.M. to 9:15 P.M.—DJA on 31.38 (9.57)
 5:30 P.M. to 10:30 P.M.—DJC on 49.83 (6.02) and DJN on 31.45 (9.54)

The German phones are reported as follows: DIQ on 29.15 meters, 10.29 mc., and DFE on 30.58 meters, 9.81 mc., broadcast a special program to the U. S. A. from Vienna, Austria, one Sunday, and WCG, New York (28.91 meters) sent it back to them. This comes from George M. Sim, Cicero, Illinois; Charles Miller, Covington, Ky.; XFX, Philadelphia, Pa.; John Tinnon, Larchmont, Va.; R. Lawton, Whitefield, England, and Hugc Maugeri, Brooklyn, N. Y. DIQ also sent a special program to Borneo, 7:30 to 10:30 A. M. one Saturday, says Geo. Van Honk, Erie, Pa. DFA, 27.6 meters, DFD, 20.46 meters and DFL, 27.65 meters, work JVH, Japan (20.54 meters) near 5:00 P.M., and a DGX near 28.70 meters is reported by James Alexander, Auckland, New Zealand. DGU, 31.00 meters, 9.57 mc., working Egypt (SUV) 2:45 to 3:30 P. H. is reported by Sam Solito. Quite a few reported them from 5:00 A. M. to 5:00 P. M. last month. DJE, 16.89 meters, 17.75 mc., oftentimes broadcasts programs around 10:00 A. M. according to H. S. Bradley, Hamilton, N. Y., who adds that DFE and DIQ were testing with New York several afternoons. H. J. Davison of Bayamon, P. R., reports DJE broadcasting between 7:00 A. M. and 3:00 P. M., while Mario Cassino, Brooklyn, N. Y., reports them between 7:00 and 10:00 A. M.

Holland. PDV, 24.88 meters, 12:06 mc., sent a musical program from Kootwijk, Holland one Friday, 6:20 to 7:00 A. M., according to H. J. Davison. Bayamon, P. R. PDK, 28.80 meters, 10.42 mc. at Kootwijk broadcast music one Friday, 7:00 to 10:30 A. M. and one Saturday, 7:00 to 8:30 A. M. according to Fred Karpen, Johnstown, Pa. XDX, Philadelphia, Pa., heard them on Saturday also, while R. Lawton, Whitefield, England, reports them from 9:50 to 10:30 P. M. once.

CSL, Lisbon, Portugal. This is a new station known as Emissora Nacional, and it broadcasts daily from 1:30 P.M. to 7:00 P.M. on 48.78 meters or 6.14 mc. according to F. A. Beane, Ridgewell, England. It was heard in the United States by several members who say it was on 48.82 meters. It was heard between 6:00 and 7:00 P.M. and the persons who heard it are, A. D. Jordan, Jr., Philadelphia, Pa.; Carl Weber, Camden, N. J.; David McIntosh, Alva Scotland and Gerald Taylor, Stadhampton, England, also report it. They have a lady announcer and use French, English and Portugese. Others may have heard this and mistook it for CT1GO.

CT1GO, 48.40 meters, 6.20 mc., and 24.20 meters, 12.40 mc., Parede, Portugal, owned by the Portugese Radio Club, is on the following schedule, we are told: On 24.20 meters Tuesdays, Thursdays and Fridays, 1:00 to 2:15 P.M. and Sundays 10:00 A.M. to 11:30 A.M. And on 48.40 meters Sundays, Tuesdays, Wednesdays, Thursdays and Fridays, 7:20 to 8:30 P.M., and Sundays 11:30 A.M. to 1:00 P.M. This schedule comes from Robert Hughes, Trowbridge, England; I. L. Stanbridge, London, England; Winston Johnson, Warrop. Notts, England; P. N. Pullen, Kent, England; D. L. Flowers, Shipton-on-Tour, England; Gerald Taylor, Stadhampton, England; F. A. Beane, Ridgewell, England; David McIntosh, Alva, Scotland. It was reported heard in the U. S. A. at these places and times: 9:00 to 9:20 A. M. on 24.2 by W. C. Motz, Amherst, Va., from 10:00 A. M. to 11:00 A. M. Sunday, by Dr. R. C. Kash, Sevierville, Tenn., and 7:00 to 7:30 P. M. Sunday, on 48.4, by W. Jasiorkowski, Milwaukee, Wis. Thos. Van Auken said it was heard but did not give any details.

CT1AA, Lisbon, Portugal, 31.25 meters, 9.60 mc. We believe everyone knows their schedule, which is Tuesdays, Thursdays and Saturdays, 4:30 to 7:00 P.M. They use three cuckoo calls to identify itself has 2 kw. power and give their address as Antonio Augusto de Aguiar 144, Lisbon, according to a card they sent to L. F. Barrows and F. C. Herriot, Delaware, Ohio, and say Thursdays, but do not mention Tuesdays and Saturdays. Norman Kreibel, Ambler, Pa., tells of hearing them one Sunday at 3:45 P.M.

CT1CT, Lisbon, Portugal. We are told that this station has made some changes. They broadcast Sundays from 9:00 to 11:00 A.M. on 24.83 meters, (not 24.53) and Thursdays from 4:00 to 6:00 P.M. on 31.00 meters, 9.68 mc., and Sundays from 7:00 to 9:00 A.M. I. L. Stanbridge, London, England, sends this news. Carlod Lopez Ona, Havana, Cuba, reports them on 24.83 meters on Thursday at 5:40 to 6:15 P.M. We wonder if there is not some mistake about the 31 meter wave, as this may be CT1AA.

THE EXPERIMENTAL STATIONS

KFZ, Little America, South Polar Region, continues to broadcast a program each Wednesday, starting to test with LSX, Argentina, around 8:00 P.M. They have been on 33.94 meters, (8.84 mc.) and 25.36 meters, (11.83 mc.) nearly all the past month, but may use some other wave at any time. Here is the latest list of waves they can use:

No. 1—52.26 meters, 5.74 mc; No. 2—45.11 meters, 6.65 mc; No. 3—45.05,

6.60 mc; No. 4—44.98 meters, 6.68 mc; No. 5—34.01 meters, 8.82 mc; No. 6—33.94 meters, 8.84 mc; No. 7—32.22 meters, 9.31 mc; No. 8—31.57 meters, 9.52 mc; No. 9—25.36 meters, 11.83 mc; No. 10—22.76 meters, 13.18 mc; No. 11—22.73 meters, 13.20 mc; No. 12—22.68 meters, 13.28 mc; No. 13—22.66 meters, 13.24 mc; No. 14—22.62 meters, 13.26 mc; No. 15—19.64 meters, 15.27 mc; No. 16—17.04 meters, 17.60 mc; No. 17—17.03 meters, 17.62 mc; No. 18—13.94 meters, 21.52 mc; No. 19—13.89 meters, 21.60 mc; No. 20—13.87 meters, 21.63 mc. KFZ is reported by James Alexander, Auckland, N. Z.; Ralph Williams, Garden City, N. Y.; Orion Myrup, Oakley, Ctah; H. J. Davison, Bayamon. P. R., on 25.36 meters, and on 33.94 meters by Thomas Van Auken.

KNRA, on the Seth Parker, is now way off almost to nowhere. The last heard it was somewhere near the Fiji Islands. They are not broadcasting regular Monday programs now, but are heard on Tuesdays near 11:00 P.M. They have been using 33.94 meters, 8.84 mc., most of the time, testing with station KKH, Hawaii. A great many members reported KKH for KNRA. They test on Mondays, as a rule, with KKH (7.52 mc.); KEE (7.71 mc.); KEQ (7.37 mc.); WET (9.47 mc.); and WCG (10.38 mc.) taking part in the tests. Reports have come from L. R. Prettyman, Chicago, Illinois; Orion Myrup, Oakley, Utah; George Van Honk, Erie, Pa.; C. E. Wilks, Huntington, W. Va.; E. A. Burleson, Urbana, Illinois; W. D. Martin, Honolulu, Hawaii; Max Horlick, Youngstown, Ohio; H. J. Davison, Bayamon, P. R.; Hal Thompson, San Francisco; R. D. Cox, Long Beach, Calif.; W. Jasiorkowski, Milwaukee, Wisconsin. A last minute flash from Hal Thompson says they will test Wednesdays from 10:30 to 11:45 P.M. and broadcast Thursdays from 11:15 to 11:30 P.M.

THE NORTH AMERICANS

W3XAL, Bound Brook, New Jersey, has a new schedule. On 16.87 meters, 17.78 mc., they broadcast daily except Sunday from 9:00 to 10:00 A.M. and on Tuesdays, Thursdays and Fridays from 3:00 to 4:00 P.M. On 49.18 meters, 6.10 mc., they broadcast on Mondays, Wednesdays and Saturdays from 5:00 to 6:00 P.M. This comes from H. J. Davison, Bayamon, P. R.; Gerald Taylor, Stadhampton, England; W. Jasiorkowski, Milwaukee, Wisconsin, and W. D. Martin, Honolulu, Hawaii.

KHABQ on the plane used by Amelia Earhardt Putnam on her flight from Hawaii to California was heard on voice, as her messages were re-broadcast in the United States. This station operated on 6.21 mc. and 3.10 mc. and was heard at 2:30 A.M. on 3.10 by W. D. Martin, Honolulu, and on 51.26 meters, 5.85 mc., by Stan Smith, Los Angeles, and on 3.10 mc., 96.8 meters, by George S. Gilbert, Hollywood, California.

W2XAD on 19.56 meters, 15.34 mc., Schenectady, New York. When a mail plane was lost near Schenectady early last month, General Electric sent a mobile transmitter using the call GE-1000 to the location of the plane and W2XAD worked with them in helping to locate the flyers. Thomas Grey, Lyons, Illinois; James Spalding, Louisville, Ky.; Thomas Van Auken, Livingston, Texas; and Robert Woods, Sand Springs, Okla.;

report this. They are also heard now broadcasting the Metropolitan Opera each Saturday afternoon according to Wm. Neal, Southington, Conn.

W2XAF, on 31.48 meters, 9.53 mc., also broadcasts the opera each Saturday now. This starts around 1:30 P.M. and lasts until about 4:30 P.M. This station also has a new unique identification signal, a crashing sound made by 10 million volts of electricity which makes an artificial lightning. Their new QSL card shows this lightning. This station tested with HJ1ABB, Colombia, just about every Monday last month from 6:00 to 6:30 P.M. and with LSX, Argentina, from 6:30 to 7:00 P.M. They also tested with VK2ME around 6:00 A.M. several times and once exchanged a program with them around 4:00 A.M. We thank the following for their help on this: Wm. Neal, H. J. Davison, Max Horlick, W. Jasiorkowski, Robert Zechner, W. D. Martin. A. Williams, Lewis Greenman, Charles Nabours, James Wooten and C. D. Wagoner of W2XAF.

W1XAL on 49.67 meters, 6.04 mc., Boston, Mass. The schedule for this station is now Tuesdays and Thursdays from 7:30 to 9:30 P.M. and Sundays from 5:00 to 6:30 P.M. We warn all readers that the International Short Wave Club is in no way associated with the International Short Wave Culture Club which is asking for money to maintain this station. Don't expect money sent to Boston to pay for subscriptions to this magazine, as we are in no way related to this other organization. For the schedule we thank Carl Foresteiri, C. Lidstrom, W. Jasiorkowski, and W. D. Martin.

W3XAU of Philadelphia, Pa. They are on a new schedule. It is on 31.28 meters, 9.59 mc., from 12:00 Noon to 7:50 P.M. and on 49.50 meters, 6.06 mc., from 8:00 to 11:00 P.M. This comes from Luther Henderson, Fort Worth, Texas; Dr. J. S. Pugh, Dallas, Texas; A. L. Williams, Kingston, N. Y.; George S. Gilbert, Hollywood, California; George Zehner, Jr.; Philadelphia, Pa.; H. J. Davison, Bayamon, P. R.; John Kirby, New York City, and W. Jasiorkowski, Milwaukee, Wisconsin.

Newfoundland. R. Bartlett of St. Pierre Island tells us to watch out for a new country and a new station. Stations VONF and VOGY at St. John, Newfoundland, have decided to consolidate, and one of these stations will go on short waves soon. Just as soon as changes can be made, VONF will go on a wavelength near 32 meters, and will be heard relaying VOGY and also programs from Daventry, England.

VE9GW on 49.22 meters, 6.09 mc. This station has moved from 6.095 mc. to 6.090 mc., which isn't a very important change. About fifty members report this.

VE9CS on 49.40 meters, 6.07 mc., Vancouver, B. C., Canada. A letter from Bob Morrison, of Vancouver, says that this station has 2 watts power (making it the world's smallest regular station) and they broadcast Sundays from 1:45 P.M. to 1:00 A.M. Monday. They also broadcast daily 6:00 to 7:30 P.M. and Thursdays from 6:00 P.M. to 1:00 A.M. The address is 734 Davie Street, Vancouver.

The Army Stations. A letter to Dr. G. W. Twomey, Fort Snelling, Minneapolis, from Bolling Field, Washington, D. C., helps a lot on these stations. The letter lists most of the phone stations heard. They are

IS3, Bolling Field, on 6.42 mc., 5.05 mc., and 3.30 mc.; WO9, Mitchell Field, Ohio, on 6.38 mc.; VK1, Selfridge Field, Michigan, on 6.42 mc.; PE2, Wright Field, Ohio, on 6.64 mc.; PD1, Maxwell Field, Alabama, on 6.42 mc.; FG7, Langley Field, Va., on 6.64 mc., and IS2 on 6.42 mc. IS3 put on a special test January 21st from 10:00 to 11:30 P.M., a half-hour on each of the first three waves mentioned. A WYX at Wheeler Field, Oahu, Hawaii, on 6.34 mc., is reported by W. D. Martin, Honolulu, Hawaii. WTES, KZA and a KZD all near 73 meters, and at San Diego, California, at 7:00 P.M. is reported by Stan Smith, Los Angeles, California. A plane RS3 and an MO1 at Maxwell Field, Alabama, at 2:30 P.M. is reported by Jack Jones, Jr., Tupelo, Mississippi. An IF6 and RV5 on 3.5 mc. at 3:30 P.M. is reported by R. Palmer, Valpariso, Indiana; C. D. Hall, Chillicothe, Ohio, reports PE2, WO9, IS3, VK1 near 48 meters, 6.25 mc., at various times of the day. Max Horlick, Youngstown, Ohio, reports VK1, IS3 and someone reports a WK1, 2BQ and WWN.

Lighthouses and others. The following stations are reported: Near 10:00 A.M., 1:00 P.M., 4:00 P.M. and 8:00 P.M. near 88.00 meters, 3.441 mc., WWDI, Edgemoor; WWDC, Delaware Breakwater; WWDW, Fourteen Foot Shoals; WWHK, Buffalo; WWBX, location unknown; and a station at Key West. This comes from Mr. Putman in Connecticut. The Great Lakes Stations WWE, WWAJ and WWHJ on the same wave are reported between 8:00 and 8:30 P.M. by Max Horlick. A WVEC, Delaware Breakwater; WWDU, Fourteen Foot Shoals; and WWHJ on the Tender Lilac are reported on 3.41 mc. at 8:17 P.M. by V. J. Fitzsimmons, Jersey City. KNLO, Death Valley National Monument, on 10.28 mc., at 11:50 A.M. to 12:50 P.M. is reported by Orion Myrup, Oakley, Utah. A KIIY, Los Angeles, and another station near the same wave on 110.1 meters, 2.72 mc., was heard reporting flood conditions at 11:30 P.M. several times by C. Lidstrom, Salt Lake City, Utah. WOU, Green Harbor, Mass., on 2.51 mc., is active now phoning fishing boats between 5:00 and 11:00 P.M. according to H. H. Wainwright, Flushing, New York, who says the ships are usually on 2.15 mc.

KKH, Hawaii, on 39.89 meters, 7.52 mc., sent a special program New Years from 3:30 to 4:00 A.M. They also relay KNRA now each Tuesday. This comes from F. L. Stitzinger, Mills Van Bergen, Fred Karpen, Norman Kreibel and C. Lidstrom.

Plane SOS. Members of this club in the United States are requested to listen-in on 96.5 meters, 3.10 mc., during severe weather, as the government has set this band aside for distress calls from airplanes.

WREO on 45.35 meters, Washington, D. C. This station was reported at 12:25 Noon saying they were the Goodyear Airship Base at Washington. Eugene Buser, Union City, New Jersey, reports this. They were also heard at 5:10 P.M. by Robert Zecher, Norfolk, Conn., and at 3:00 P.M. by Art Williams, Kingston, N. Y.

W9XAA on 49.34 meters, 6.08 mc, Chicago. This station is announcing several different schedules and keeping none of them, so it seems. They are heard most every Sunday from 9:00 A.M. to 7:00 P.M. and can be heard at other times irregularly. We thank the following for their help:

Cyrus Will, Glencoe, Illinois; Max Horlick, Youngstown, Ohio; F. L. Stitzinger, Erie, Pa.; Thomas Grey, Lyons, Illinois. Mr. Grey says they read reception reports from 3:00 to 4:30 P.M. on Sundays.

W9XF on 49.18 me4ters, 6.10 mc., Chicago, Illinois. We are told that they have a new schedule, but two different reports differ on the schedule. They are supposed to broadcast daily from 9:00 P.M. to 2:00 A.M. according to W. Jasiorkowski, Milwaukee, and on Tuesdays, Thursdays, Fridays and Sundays from 4:00 to 9:30 P.M. and 11:00 P.M. to 2:00 A.M. according to Max Horlick, Youngstown, Ohio.

CJRX on 25.60 meters, 11.72 mc., and CJRO on 48.85 meters, 6.15 mc., are not keeping their announced schedule it seems. J. A. Centanino, Freeport, Pa., says they can be heard from 3:00 to 6:00 P.M. and 8:00 to Midnight now. W. Jasiorkowski, Milwaukee, Wisconsin, tells us they are heard daily from 7:00 P.M. to Midnight and Sundays from 3:00 P.M. to Midnight.

THE AFRICANS

ZTJ, Johannesburg, on 49.20 meters, 6.10 mc. The schedule for this station is 3:30 A.M. to 4:00 P.M. now according to G. K. Mallory, King Williamstown, South Africa. It is heard on 49.2 meters, too, by W. D. Martin, Honolulu, Hawaii, from 12:00 Noon to 2:00 P.M. So they must be there instead of 49.00 meters.

SUZ, Cairo, on 21.7 meters, 13.83 mc., is reported by W. A. Dean, Hartford, Conn., and Robert Hughes, Trowbridge, England. SUV on 29.83 meters, 10.05 mc., working DGU, Germany, and GBB, England, between 5:00 A.M. and 5:00 P.M. is reported by these same members, and also by H. S. Bradley, Hamilton, N. Y. SUX on 38.06 meters, 7.86 mc., works Germany and England between 2:00 and 4:00 P.M. now according to Mr. Bradley. L. F. Barrows and F. C. Herriot, Delaware, Ohio, reports SUV at 7:00 A.M. and also say they have a card giving the address of these stations as P. O. Box 795, Cairo, Egypt.

FOR SALE—Sixteen Tube DeLuxe Midwest All-wave receiver and late standard model air-tuned Hammarlund-Pro. Sol Perlman station finder. Want late model Silver Masterpiece, test equipment, meters, pre-selector (prefer Peak or Postal). Glenn Watt, Chanute, Kansas.

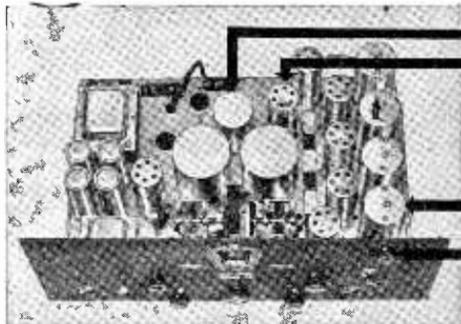
FOR SALE—Scott Custom Built all-wave fifteen, in Waverly console. Set of 15 extra tubes. Guaranteed to bring in the world. \$125.00. Owner moving to district where there is DC power only. K. M. Murphy, 3201 Pillsbury Avenue, Minneapolis, Minn.

FOR SALE—Silver Masterpiece III, twelve tube all-wave chassis, with giant speaker and cabinet in excellent condition. What will you give? Robert O. Lane 3238 Bishop St., Cincinnati, Ohio.

FOR SALE—Lincoln R9 receiver complete with Jensen speaker. J. W. Collamer, 277 State Street, Schenectady, New York.

FOR SALE—to highest bidder. Hammarlund AVC Comet-Pro. Complete with tubes, permanent magnet dynamic speaker and coils from 15 to 250 meters. Delmar Hamilton, Parker, Indiana.

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"ON-THE-AIR"

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

Meter	Meg.	STATION	TIME
B-13.92	21.54	W8XK, Pittsburgh, Pa.	Relays KDKA, 7:00 A.M. to 2:00 P.M. daily.
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	FSA, 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	20.87	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, Leopoldsville, Belgian Congo.	Phones ORG mornings.
T-14.99	20.02	DHO, Nauen, Germany.	Phones PPU and LSM mornings.
T-15.14	19.81	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-15.31	19.60	LSF, Buenos Aires, Argentina.	Testing 7 to 9 A.M. irregularly.
T-15.37	19.52	IRW, Rome, Italy.	Phones Argentina mornings.
T-15.39	19.50	LSQ, Buenos Aires, Argentina.	Heard testing near 2:00 P.M.
T-15.50	19.35	FTM, St. 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-15.68	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. KWX irregularly.
T-16.06	18.68	OCI, Lima, Peru.	Testing with HJY near 2:00 P.M.
T-16.11	18.62	GAU, Rugby, England.	Phones New York mornings.
T-16.25	18.46	HJY, Bogoto, Columbia.	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.
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.	Irregularly.
T-16.63	18.04	GAA, Ruby, 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	SGS, Daventry, England.	6:00 A.M. to 7:30 A.M.
B-16.87	17.78	W3XAL, Bound Brook, N.J.	Daily 9-10 A.M., Tues., Th., Fri, 3-4 P.M.
T-16.89	17.76	IAC, Piza, Italy.	Phones ships early mornings.
E-16.89	17.76	DJE, Nauen, Germany.	Heard irregularly in the mornings.
T-16.85	18.27	17.80	to 16.42—ships. Heard in daytime.
T-16.92	17.75	HSP, Bangkok, Siam.	Works Germany, 4:30 to 6:30 A.M.
T-17.10	17.54	VVY, 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-17.34	17.30	Italian ships.	Phone WOO and IAC, daytime.

Meter	Meg.	STATION	TIME
T-17.37	17.27	DAF, Norden, Germany.	Phones ships irregularly.
T-17.52	17.12	WOO, Ocean Gate, New Jersey.	Phones ships irregularly.
T-18.44	16.30	WLK, Lawrenceville, N. J.	Phones England.
T-18.71	16.04	KKP, Kahuku, 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-19.03	15.76	JYT, Kemikawa-Cho, Japan.	Irregular.
T-19.15	15.6	JVE, Nazaki, Japan.	Phones Java 3:00 to 5:00 A.M.
T-19.19	15.62	OCJ2, Lima, Peru.	Phones CEC, HKB, HJY, daytime.
T-19.20	15.61	JVF, Nasaki, 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.
T-19.54	15.35	KWU, Dixon, California.	Phones Hawaii 2:00 to 7:00 P.M.
B-19.52	15.37	HAS, Budapest, Hungary.	Sundays from 8 to 9 A.M.
B-19.56	15.34	W2XAD, Schenectady, New York.	2:30 to 3:30 P.M. daily.
B-19.63	15.28	DJQ, Zeesen, Germany.	12:30 to 2:00 A.M.
B-19.64	15.27	W2XE, Wayne, N. J.	Relays WABC 11:00 A.M. to 1:00 P.M.
T-19.68	15.25	RIM, Tashkent, U.S.S.R.	Phones RKI near 7:00 A.M.
B-19.68	15.25	Pontoise, France.	7:00 A.M. to 11:00 A.M. daily.
B-19.71	15.22	PCJ, Eindhoven, Holland.	Sundays, 8:00 A.M. to 11:30 A.M.
B-19.82	15.21	W8XK, Pittsburg, Pa.	7:00 A.M. to 4:00 P.M. daily.
B-19.73	15.20	DJB, Zeesen, Germany.	3:45 A.M. to 7:15 A.M. daily.
B-19.82	15.13	GSF, Daventry, England.	4:30 to 9:00 A.M.
B-19.84	15.11	HVJ, Vatican City.	10:30 to 10:45 A.M. daily.
T-19.91	15.07	WNC, Hialeah, Florida.	Phones HJB, RXC and YVQ, 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-20.06	14.96	HJB, Bogota, Colombia.	Phones Hialeah daytime.
T-20.42	14.69	PSF, Rio de Janeiro, Brazil.	7 A.M. to 6 P.M. LSL, WLK, WOK.
T-20.55	14.60	JVH, Nazaki, Japan.	Phones Europe 4:00 to 8:00 A.M.
T-20.56	14.59	WMN, Lawrenceville, N. J.	Phones England daylight.
E-20.60	14.56	HBJ, Geneva, Switzerland.	Experimenting.
T-20.65	14.53	LSN, Buenos Aires, Argentina.	Phones New York daytime.
T-20.69	14.50	TIR and TIU, Cartago, Costa Rica.	Phones many stations daytime.
T-20.69	14.50	YNA, Managua, Nicaragua.	Phones Hialeah daytime.
T-20.69	14.50	HPE, Panama City.	Phones Florida daytime.
B-20.71	14.48	HRM, Tela, Honduras.	Phones WNC irregularly in daytime.
T-20.71	14.48	TGF, Guatemala City.	Phones Florida daytime irregularly.
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.
E-20.97	to 21.26	14.30 to 14.11	Amateur phones heard in daytime.
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.
T-21.98	13.65	HJY, Bogota, Colombia.	Phones irregularly.
T-22.06	13.60	JYK, Kemikawa-Cho, Japan.	Irregular.
T-22.09	13.58	GBB, Rugby, England.	Phones Canada and Egypt daytime.
T-22.35	13.42	G CJ, Rugby, England.	Phones JVH 3:00 to 8:00 A.M.
B-22.35	13.42	TIEP, San Jose, Costa Rica.	Sunday afternoons.
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.
E-22.68	13.23	KFZ, Little America and KNRA,	"Seth Parker."
E-22.76	13.18	DGG, Nauen, Germany.	Phones Asia mornings irregularly.
E-22.95	13.07	VPIA, Suva, Fiji Islands.	Daily except Sat and Sun., 12:30-1:30 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	HJA3, Barranquilla, Colombia.	Phones U.S.A. daytime.
T-23.38	12.83	CNR, Rabat, Morocco.	Phones St. Assise 5:00 to 8:00 A.M.
B-23.38	12.83	RABAT, Morocco.	Broadcasts Sunday 7:30 to 9:00 A.M.
T-23.45	12.80	IAC, Piza, Italy.	Works ships mornings.

Meter	Meg.	STATION	TIME
T-23.47	-12.78	GBC, Rugby, England.	Phones ships irregularly.
T-23.70	-13.22	KPJ, Manila, P. I.	Heard 3:00 to 8:00 A.M. with Java.
B-24.20	-12.40	CTIGO, Parade, Portugal.	Tu., Th., Fri., 1-2:15 PM, Sun. 10-11:30 AM
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.
B-24.53	-12.23	CTICT, Lisbon, Portugal.	Sun., 7 to 9 A.M.; Thurs., 4 to 6 P.M.
T-24.69	-12.15	GBS, Rugby, England.	Phones New York.
T-24.88	-12.06	PDV, Kootwijk, Holland.	Tests near 7:30 A.M.
B-25.00	-12.00	RNE, Moscow, U.S.S.R.	Sat. 10-11 P.M., Sun. 6-7 and 10-11 A.M.
T-25.02	-11.99	FZS, Saigon, Indo-China.	Phones Paris mornings.
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.	11:15 A.M.-2:15 P.M. and 3:00 to 6:00 P.M.
B-25.27	-11.87	W8XK, Pittsburgh, Pa.	Relays KDKA 4:30 to 10:00 P.M. daily.
B-25.28	-11.86	GSE, Daventry, England.	6:00 to 10:45 A.M.
B-25.36	-11.83	W2XE, Wayne, N. J.	Relays WABC 3:00 to 5:00 P.M.
B-25.49	-11.77	DJD, Zeesen, Germany.	Noon to 4:30 P.M.
B-25.53	-11.75	GSD, Daventry, England.	3:00 to 5:00 A.M. and Noon to 4:30 P.M.
B-25.57	-11.73	PHI, Huizen, Holland.	8:30 to 11:00 A.M., except Tues. and Wed.
B-25.60	-11.71	Pontoise, France.	7:00 P.M. to 10:00 P.M. and 11 P.M. to Midnight.
B-25.60	-11.72	CJRX, Winnipeg, Canada.	8:00 to 11:00 P.M., 11:30 to Midnight.
E-25.63	-11.71	KIO, Kauhuku, Hawaii.	Heard in the evenings testing.
E-25.73	-11.66	PPQ, Rio de Janeiro, Brazil.	Used irregularly in evenings.
E-26.09	-11.50	XAM, Merida, Yucatan.	Irregularly 1:00, 6:00 and 7:00 P.M.
T-27.26	-11.00	PLP, Bandoeng, Java.	Phones PNI from 5:00 to 7:00 A.M.
T-27.30	-10.99	ZLT, Wellington, New Zealand.	5 to 7 A.M. irregularly. VLJ.
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-27.93	-10.74	JVM, Nazaki, Japan.	Heard 1:30 to 7:00 A.M. and 7 to 11 P.M.
T-28.04	-10.77	GBP, Rugby, England.	Midnight to 8:00 A.M. VLK.
T-28.09	-10.68	WNB, Lawrenceville, N. J.	Phones Bermuda daytime.
T-28.12	-10.67	CEC, Santiago, Chile.	Testing with HJY irregularly evenings.
T-28.14	-10.66	JVN, Nazaki, Japan.	Phones Europe 3:00 to 8:00 A.M.
E-28.28	-10.61	WEA, Rocky Point, N. Y.	Tests irregularly with Europe.
T-28.44	-10.55	WOK, Lawrenceville, N. J.	Phones Brazil and Argentine 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	PKD, 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.	6:15 to 7:15 P.M. daily. Wed., 10 P.M.
E-29.03	-10.33	ZFD, St. Georges, Bermuda.	Heard afternoons irregularly.
B-29.04	-10.33	ORK, Brussels, Belgium.	2:45 to 4:15 P.M. daily.
E-29.06	-10.32	PPM, Rio de Janeiro, Brazil.	Testing 6:00 to 11:00 P.M. irregularly.
E-29.15	-10.29	DIQ, Nauen, Germany.	Used irregularly.
T-29.25	-10.26	PMN, Bandoeng, Java.	Near 5:30 A.M. daily. VLK.
T-29.45	-10.22	PSH, Rio de Janeiro, Brazil.	Sending music evenings.
T-29.50	-10.17	RIO, Bakou, U.S.S.R.	Phones Moscow 8:00 to 10:00 A.M.
T-29.58	-10.14	OPM, Leopoldville, Belgian Congo.	Phones ORK 9-11 A.M., 3-6 P.M.
T-29.79	-10.07	EHY, Madrid, Spain.	Phones YVR near 4:00 P.M. irregularly.
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.
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 7:00 P.M., Sat. 1 to 3 P.M.

Meter	Meg.	STATION	TIME
E-30.49	9.84	JYS, JIAA, Chiba-Ken, Japan.	Near 4:00 to 8:00 A.M. irregularly.
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.
B-30.67	9.78	2RO, Rome, Italy.	Daily 2:30-5 PM; Mon., Wed., Fri., 7:45-9:15 PM
T-30.75	9.76	VK2ME-VLK, Sydney, Australia.	Phones Java 4:00 to 8:00 A.M.
T-30.77	9.75	WOF, Lawrenceville, N. J.	Phones England evenings.
T-30.90	9.71	GCA, Rugby, England.	Phones Argentina around 6:00 P.M.
T-31.08	9.67	DGU, Nauen, Germany.	Phones Egypt daily from 5 A.M. to 5 P.M.
B-31.25	9.59	CT1AA, Lisbon, Portugal.	Tues., Thurs., and Sat., 4:30 to 7:00 P.M.
B-31.27	9.59	HBL, Geneva, Switzerland.	5:30 to 6:15 P.M.
B-31.28	9.59	VK2ME, Sydney, Australia.	Sun., 12-2; 4:30-8:30; 9:30-11:30 A.M.
B-31.28	9.59	W3XAU, Philadelphia, Pa.	Noon to 7:50 P.M.
B-31.30	9.58	GSC, Deventry, England.	6:00 P.M. to 8:00 P.M. daily.
B-31.31	9.58	VK3LR, Melbourne, Australia.	3:00 to 8:00 A.M. except Sundays.
B-31.36	9.57	W1XAZ, Boston, Mass.	7:00 A.M. to 1:00 A.M.
B-31.36	9.57	VUY-VUB, Bombay, India.	Wed. and Sat., 11:00 A.M. to 12:30 Noon.
B-31.38	9.57	DJA, Zeesen, Germany.	8:00-11:30 A.M. and 5:15 to 9:15 P.M.
B-31.41	9.55	LKJ1, Jely, Norway.	5:00 to 8:00 A.M.
B-31.45	9.34	DJN, Zeesen, Germany.	3:45 to 11:30 A.M. and 5:15 to 10:30 P.M.
B-31.48	9.53	W2XAF, Schenectady, N. Y.	6:30 to 11:00 P.M. daily.
B-31.55	9.51	VK3ME, Melbourne, Australia.	Wed. 5:00 to 6:30; Sat. 5 to 7 A.M.
B-31.55	9.51	GSB, Daventry, England.	3:30-4:30 A.M.; 9:15-12:00; 1:45-4:45 P.M.
B-31.56	9.50	PRF5, Rio de Janeiro, Brazil.	Daily 5:30 to 6:15 P.M.
T-31.63	9.48	PLW, Bandoeng, Java.	Phones Australia 3:00 to 8:00 A.M. irregularly.
E-31.67	9.47	WET, Rocky Point, N. Y.	Irregular.
B-31.80	9.43	COH, Havana, Cuba.	11-12 Noon, 5-6, 8-9 P.M.
T-31.86	9.42	PLV, Bandoeng, Java.	Phones 7:40 to 9:40 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.
T-33.26	9.02	GCS, Rugby, England.	Phones New York evenings.
E-33.29	9.01	KEJ, Bolinas, California.	Tests irregularly.
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-33.94	8.84	KFZ, Little America and KNRA, "Seth Parker."	
T-34.19	8.77	PNI, Makasser, D. E. I.	Phones Java near 4:00 to 5:00 A.M.
T-34.56	8.68	GBC, Rugby, England.	Phones ships 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.
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-37.33	8.05	CNR, Rabat, Morocco, Africa.	Sunday 2:30 to 5:00 P.M.
B-37.41	8.02	IRS, Rome, Italy.	Mon., Wed. and Fri., 2:30 to 8:00 P.M., irreg.
T-37.60	7.98	HSJ, Bangkok, Siam.	Phones Germany 4:30 to 6:00 A.M. irregularly.
E-37.97	7.	LSL, Buenos Aires, Argentina.	Heard afternoons and Evenings.
E-38.02	7.89	DFT, Nauen, Germany.	Heard near 2:00 P.M. irregularly.
T-38.06	7.86	SUX, Cairo, Egypt.	Phones Rome and London afternoons.
B-38.07	7.88	JYR, JIAA, Chiben-Ken, Japan.	Heard 4:50-7:50 A.M. relaying JOAK.
B-38.36	7.82	OA4AC, Lima, Peru.	Heard 9:00 to 11:30 P.M.
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.
f-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.
E-39.68	7.56	KWY, Dixon, California.	Phones Japan irregularly.
T-39.89	7.52	KKH, Kauhuku, Hawaii.	Phones KWO evenings.
T-39.97	7.50	RKI, Russia.	Phones RIM 6:00 to 8:15 A.M.
B-40.55	7.40	HJABD, Bogota, Colombia.	7:30 to 11:00 P.M.

Meter	Meg.	STATION	TIME
T-40.60	7.39	ZLR, Wellington, N. Z.	Phones Sydney from 3 to 5 A.M. irregularly.
T-40.71	7.37	KEQ, Kauhuku, Hawaii.	Phones Dixon nights.
R-41.55	7.22	HKE, Bogota, Colombia.	Mon. 6 to 7 P.M.; Tues., Fri. 8 to 9 P.M.
B-42.00	7.14	HJ4ABB, Manizales, Colombia.	4:00 to 7:00 P.M. irregularly.
B-42.14	7.12	HB9B, Basle, Switzerland.	Thursdays from 4:00 to 4:30 P.M.
E-42.52	7.07	VP6YB, Bridgetown, Barbados.	4:45 to 5:15 P.M. irregularly.
E-42.86	7.00	HJ5ABE, Cali, Colombia.	Irregularly evenings.
T-43.45	6.90	GDS, Rugby, England.	Phones New York nights.
B-44.12	6.80	HIH, San Pedro de Macoris, R. D.	4:00 to 7:00 P.M., irregular.
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., oitimes with music.
E-44.54	6.74	WEJ-W2XBJ, Rocky Point, N. Y.	Testing irregularly evnngs.
E-44.67	6.73	WQO, Rocky Point, N. Y.	Used irregularly.
B-44.71	6.71	TIEP, San Jose, Costa Rica.	5:00 to 10:00 P.M. irregularly.
T-44.96	6.67	YVQ, Maracay, Venezuela.	Testing near 10:00 P.M. irregularly.
B-45.00	6.67	HC2RL, Guayaquil, Ecuador.	Sun., 5:45-8:00; Tues., 9:15-11:45 P.M.
T-45.10	6.65	IAC, Piza, Italy.	Phones ships evenings.
E-45.11	6.65	KFZ, Little America and KNRA,	"Seth Parker."
B-45.31	6.62	PRADO, Riobamba, Ecuador.	Thursdays 9:00 to 11:30 P.M.
B-45.38	6.61	REN, Moscow, U.S.S.R.	1.00 to 6:00 P.M.
B-55.95	6.53	HIL, Santo Domingo, R. D.	Saturdays 8:00 to 10:00 P.M.
B-46.25	6.48	HI4D, Santo Domingo, D. R.	11:55-1:40 P. M., 4:40-7:40 P. M.
B-46.30	6.48	HJ5ABD, Cali, Colombia.	7:00 to 10:00 P.M.
B-46.51	6.45	HJ1ABB, Barranquilla, Colombia.	4:30 to 10:00 P.M. daily.
B-46.69	6.43	W3XL, Boundbrook, N. J.	
E-46.77	6.42	HJA3, Barranquilla, Colombia.	Phones HJA2, irregular.
B-47.10	6.37	YV4RC, Caracas, Venezuela.	4:30 P.M. to 10:30 P.M.
E-47.39	6.35	JZG, heard relaying JVT, JOAK	from 5:00 to 7:30 A.M. irregularly.
B-47.50	6.32	HIZ, Santo Domingo, R. D.	Daily 4:40-5:40; Sat. 11:00-12:40 P.M.
B-47.80	6.23	HI1A, Dominican Republic.	12:10 to 1:40 and 7:40 to 9:40 P.M. daily.
E-48.00	6.25	Army aircraft heard in daytime.	
B-48.00	6.25	HJ4ABC, Periera, Colombia.	Daily 9:30-11:00 A. M.; 7:00-8:00 P. M.
B-48.00	6.25	OAX4B, Lima, Peru.	Wednesdays and Sundays 7:00 to 9:30 P.M.
B-48.40	6.20	CTIGO, Parede, Portugal.	Daily except Sat. and Mon.. 7-20 to 8:30 P. M. and Sundays from 11:40 A. M. to 1:00 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.	Daily from 6:00 to 11:00 P.M.
B-48.78	6.15	YV3RC, Caracas, Venezuela.	10:30 to 1:30 and 4:30 to 9:30 P.M.
B-48.79	6.16	CO9??, Santiago, Cuba.	Testing 5:30 to 11:30 P.M. irregularly.
B-48.82	6.14	CSL, Lisbon, Portugal.	1:30 to 7:00 P.M. irregularly.
B-48.85	6.15	CJRO, Winnipeg, Canada.	8:00 to 11:00 P.M.; 11:30 to Midnight.
B-48.86	6.14	W8XK, Pittsburgh, Pa.	Relays KDKA 4:30 P.M. to about 2:00 A.M.
B-48.92	6.13	ZGE, Kuala Lumpur, Malaya States.	Sun., Tues., Fri., 6:40-8:40 A.M.
B-48.94	6.13	LKJ1, Jeloy, Norway.	Daily 11:00 A.M. to 6:00 P.M.
B-49.02	6.12	YDA, Bandoeng, Java.	Heard between 5:00 and 11:00 A.M.
B-49.02	6.12	W2XE, Wayne, N. J.	Relays WABC 6:00 to 11:00 P.M.
B-49.05	6.12	HJ1ABE, Cartagena, Colombia.	Mon., 10-12; Wed., 8-11 P.M.
B-49.08	6.11	YV2RC, Caracas, Venezuela.	10:30 to 1:00; 5:15 to 10:00 P.M.
B-49.10	6.11	VE9HX, Halifax, N. S.	8:30 to 11:30 A.M. and 5:00 to 10:00 P.M.
B-49.10	6.11	VUC, Calcutta, India.	9:30 A.M. to Noon, Sat., 11:45 P.M. to 3 A.M.
B-49.15	6.10	HJ4ABL, Manizales, Colombia.	Daily 6-00 to 7:30 P.M.
B-49.18	6.10	W3XAL, Bound Brook, N. J.	Mon., Wed., Sat. 5 P.M. to 1 A.M.
B-49.18	6.10	W9XF, Chicago, Illinois.	Tu., Th., Fri., Sun., 4-9:30; 11 PM -2 AM
B-49.18	6.10	W3XAL, Bound Brook, N. J.	Mon., Wed., Fri., 5:00-6:00 P.M.
B-49.20	6.09	HJ1ABD, Cartagena, Colombia.	Week days 7:30-9; Sun. 11:30-1 P.M.
B-49.20	6.09	2RO, Rome, Italy.	Mon., Wed., Fri., 6:00 to 7:30 P.M.
B-49.20	6.10	ZTJ, Johannesburg, South Africa.	3:30 A.M. to 4:00 P.M.
B-49.22	6.09	VE9GW, Bowmanville, Canada.	Mon., Tues., Wed., 3 to 12 P.M.; Thurs., Fri., Sat., 7:00 A.M. to 12:00 P.M.; Sun., 1 to 9 P.M.
B-49.29	6.09	VE9BJ, St. John's, N. B., Canada.	Near 5:00 and 11:00 P.M.
B-49.34	6.08	CP5, La Paz, Bolivia.	8:00 to 9:00 P.M. daily.
B-49.34	6.08	W9XAA, Chicago, Illinois.	Sun., 11:30 A.M. to 9:00 P.M. and irreg.

Meter	Meg.	STATION	TIME
B-49.34	6.08	ZHJ, Penang, S. S. Mon., Wed., Sat.,	8:00 to 10:00 A.M.
B-49.40	6.07	VE9CS, Vancouver, B. C.	Daily 6-7; Sun., 1:45 P.M. to 1:00 A.M.
B-49.40	6.07	HJN, Bogota, Colombia.	6:00 to 11:00 P.M. irregularly.
B-49.42	60.7	OER2, Vienna, Austria.	9:00 A.M. to 5:30 P.M.
B-49.50	6.06	W8XAL, Cincinnati, Ohio.	6:30 A.M. to 7:00 P.M.; 10 P.M. to 2 A.M.
B-49.50	6.06	OXY, Skamlebaek, Denmark.	Daily 1:00 to 6:00 P.M.
B-49.50	6.06	VQ7LO, Nairobi, Kenya Colony.	11 A.M. to 2 P.M. daily.
B-49.59	6.05	GSA, Davenport, England.	10:45 A.M.-12:45 P.M. and 4:30-8:00 P.M.
B-49.60	6.05	HJ3ABI, Bogota, Colombia.	8:00 to 10:00 P.M. irregularly.
B-49.65	6.04	HJ1ABG, Barranquilla, Colombia.	6:00 to 10:00 P.M.
B-49.67	6.04	W1XAL, Boston, Mass.	Sun., 5:00-6:30; Tues., Thurs., 7:30-8:45 PM
B-49.75	6.03	YV6RV, Valencia, Venezuela.	5 to 7; 9 to 10 P.M. irregularly.
B-49.75	6.03	HP5B, Panama City, Panama.	12 to 1; 8 to 10:30 P.M.
B-49.83	6.02	DJC, Zeesen, Germany.	Noon to 4:30 P.M. and 5:30 to 10:45 P.M.
B-49.83	6.02	CQN, Macao, China.	Monday and Friday, 3:00 to 5:00 A.M.
B-49.90	6.01	COC, Havana, Cuba.	9:30 to 12:30; 4 to 6; 8 to 10 P.M. daily and Saturdays 11:30 P.M. to 1:30 A.M.
B-49.92	6.01	ZHI, Singapore.	Mon., Wed., Thurs., 5:40-8:10; Sat., 10:40-1:10 A.M.
B-49.96	6.00	VE9DN, Drummondville, Canada.	Sat., 11:30 P.M. to Sun. 1:00 A.M.
B-50.00	6.00	RV59, Moscow, U.S.S.R.	Daily, 2:00 to 6:00 P.M.
B-50.00	6.00	XEBT, Mexico City.	6:00 P.M. to 3:00 A.M. irregularly.
B-50.17	5.98	H1X, Santo Domingo, R. D.	Tues. and Fri., 8:10 to 10:10 P.M.; Sundays, 8:40 to 10:40 A.M. and 2:40 to 4:40 P.M.
B-50.25	5.97	HJ3ABH, Bogota, Colombia.	12 to 1; 7 to 10 P.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-50.30	5.96	YNLF, Managua, Nicaragua.	6:00 P.M. to 1:00 A.M., irreg.
B-50.42	5.95	HJ4ABE, Medellin, Colombia.	Mon. 7:00 to 11:00 P.M.; Tues., Thurs., Sat. 6:15 to 8:00 P.M.; Wed., Fri. 7:30 to 10:30 P.M.
B-50.50	5.94	TGX, Guatemala City.	11 A.M. to 2:30 and 6 to 10 P.M.
B-50.50	5.94	HJ1ABJ, Santa Marta, Colombia.	7:00 P.M. to Midnight, irregularly.
B-50.93	5.89	HJ2ABC, Cucuta, Colombia.	11 A.M. to Noon; 6 to 9:30 P.M.
T-51.26	5.85	WOB, Lawrenceville, N. J.	Phones Bermuda nights.
B-51.28	5.85	YV5RMO, Maracaibo, Venezuela.	5:15 to 9:00 P.M.
B-51.50	5.82	TIKXP3, San Jose, Costa Rica.	8:00 to 11:30 P.M. Irregularly.
T-51.50	5.82	HJA2, Bogota, Colombia.	Phones HJA3 afternoons and evenings.
T-51.72	5.80	KZGF, Manila, P. I.	Phones from 5:00 to 8:00 A.M.
B-51.90	5.78	HCK, Quito, Ecuador.	7:30 to 10:00 P.M. irregularly.
B-51.90	5.78	OAX4D, Lima, Peru.	Wed. and Sat. from 8:00 to 11:30 P.M.
E-52.97	5.66	CFU, Rossland, Canada.	Works CFO and CFN near 10 P.M. irreg.
B-53.57	5.60	HJ5ABC, Cali, Colombia.	8:00 to 10:00 P.M.
E-55.56	5.40	HJA-7, Cucuta, Colombia.	Mondays 4:30 to 7:30 P.M. irregularly.
B-55.56	5.40	HAT, Budapest, Hungary.	Sundays from 8:00 to 9:00 P.M.
T-58.30	5.15	PMY, Bandoeng, Java.	Phones Australia near 11:00 A.M.
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.	Phones to ships irregularly.
T-61.15	4.90	CGA8, Drummondville, Canada.	Phones ships and England irreg.
T-63.13	4.75	WOO, Ocean Gate, N. J.	Phones ships irregularly.
B-65.22	4.60	HC2EP, Guayaquil, Ecuador.	Wed. and Sat., 9:00 to 11:00 P.M.
T-66.50	4.51	VPN, ZFS, Nassau, Bahamas.	Phones WND and GYD 2 to 10 P.M.
T-67.87 to 73.17	4.42 to 4.10	Ships.	Heard irregularly.
T-69.44	4.32	GDB-G6RX, Ruby, England.	Testing 7:00 to 10:00 P.M.
E-69.60	4.31	WTDV, WTDW, Virgin Islands.	2:00 to 3:00 P.M.; weather reports.
B-70.65	4.25	RV15, Khabarovsk, U.S.S.R.	1:00 to 9:00 A.M.
B-73.00	4.11	HCJB, Quito, Ecuador.	7:30 to 9:45 P.M. daily except Monday.
T-73.21	4.10	WND, Hialeah, Florida.	Phones irregularly with VPN.
E-75 to 75.8	4.00 to 3.96	Amateurs on voice.	

SHIP STATIONS

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

"GET THE LAST MILE" with a →

Simple Explanation Why Our Antenna Systems Reduce Noise and Boost Volume!



Fig. 1—Cage Doublet Antenna (886 or 862), for limited space; lead-in off center.

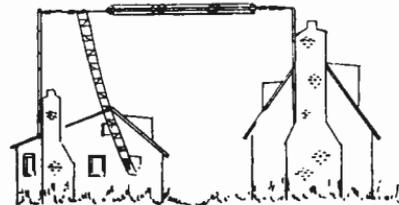


Fig. 2—Inverted L Cage Antenna (887 or 863) for limited space; lead-in off one end.



Fig. 3—Single Wire Flat Top Antenna (896 or 872), for space over 80 feet; lead-in off middle.

GIANT KILLER CABLE

(or Transposed) Lead-in DOES NOT pick up any signal but merely "pipes" the signal from flat top receiver. When the flat top is erected high above the ground, you remove it from the field of man-made interference. Man-made noises lose intensity much faster when traveling upward than when traveling in a horizontal direction. A four wire cage increases signal strength because the four wires act as four paths (instead of one as in a single wire) for the signals to enter your receiver.

To Select the Antenna for Your Location

(See opposite page)

Cage antenna (for greater volume) is used where space available for the flat top (horizontal part of Antenna) is less than 80 feet. Use No. 886 (or 862) if you can take the lead-in off the center; where the lead-in must be taken off at one end, use No. 887 (or 863).

Single wire flat top may be used where space available is more than 80 feet. Use No. 896 (or 872) if lead-in can be taken off in center, or No. 897 (or 873) where lead-in must be taken off one end.

Giant Killer Cable is also used to bring transposed lead-in from window to receiver.

LYNCH ANTENNA SUPPLIES

List Price	Net Price
\$2.75 Kit 10 Cage Spreaders.....	\$1.65
\$2.75 Kit 10 Transposition Blocks.....	1.65
\$2.00 Kit 8 Navy Type Insulators.....	1.20
\$1.25 Double Lightning Arrester.....	.75
\$1.50 New Universal Coupler.....	.90
\$1.00 Light Hi-Mho Wire, 100 feet.....	.60
\$1.50 Heavy Hi-Mho Wire, 100 feet.....	.90
\$3.00 Giant Killer Cable, 50 feet.....	1.80
\$12.50 DeLux Kit, of 10 spreaders, 20 transposition blocks, 8 navy type insulators, 300 ft. Hi-Mho wire double lightning arresters and Universal Coupler	\$7.50

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5 REASONS WHY

We feature GIANT KILLER CABLE LEAD-IN in our ANTENNA SYSTEMS.

(A) Because this cable is transposed every six inches within three special coverings with live rubber on the outside and will withstand all weather conditions.

(B) Because its flexibility permits running the lead-in around corners and at angles.

(C) Because when used with LYNCH HI-FI Couplers, it will reduce noises to same extent as standard transposed lead-in.

(D) Because it may run for hundreds of feet without loss of signal strength.

(E) Because ITS LOW PRICE makes it the MOST ECONOMICAL noise-reducing lead-in to use for ALL WAVE and SHORT WAVE RECEIVERS.

HI-FI COMPLETE SYSTEMS, READY-TO-HANG

No labor on your part necessary but to attach to your masts

FOR SUGGESTIONS ON WHICH ANTENNA TO USE IN YOUR LOCATION
SEE OPPOSITE PAGE.

HI-FI SIMPLEX SYSTEMS



No. 887—Inverted L 41 ft. cage with 35 ft. Giant Killer cable lead-in.
Complete with new Hi-Fi Receiver Coupler and Double Lightning Arrester.
List Price....\$19.50
Your net cost **11.75**

Kit Lynch materials to build 887. List pr. \$13.25.
Your net cost... **\$7.95**

No. 863, with 25 ft. transposed lead-in and 10 ft. Giant Killer Cable, List \$24.25; Net.... **\$14.50**

863 Kit, List \$14.25,
Your net cost... **\$8.45**



No. 897—Inverted L (78 ft. flat top) with 35 ft. Giant Killer cable lead-in.
Complete with new Hi-Fi Receiver Coupler and Double Lightning Arrester.
List Price....\$12.00
Your net cost... **7.20**

Kit Lynch materials to build 897. List pr. \$9.00
Your net cost... **\$5.40**

No. 873, with 25 ft. transposed lead-in and 10 ft. Giant Killer Cable, List \$15.00; Net.... **\$8.95**

873 Kit, List \$11.75.
Your net cost... **\$6.95**

Each additional 5 feet of Giant Killer Cable Lead-in attached, List Price, 40c. Net cost.....25c

Other sizes of Antenna Systems, including 78 ft. cages, Doublet or Inverted L, Transposed or Giant Killer Cable Lead-in built to order. For estimate, send sketch of location, showing space available, heights and sources of interference. Mention make of receiver.

HI-FI DUPLEX SYSTEMS



No. 886—Doublet cage (41 ft.) with 35 ft. Giant Killer cable lead-in.
Complete with new Hi-Fi Duplex Antenna and receiver couplers and Double Lightning Arrester.
List Price....\$23.00,
Your net cost **13.75**

Kit Lynch materials to build 886. List price \$16.75.
Your net cost **\$9.95**

No. 862, with 25 ft. transposed lead-in and 10 ft. Giant Killer cable, List \$24.25; Net..... **\$14.50**

862 Kit, List \$14.25. Net..... **\$8.45**



No. 896—Doublet single wire (78 ft. flat top) with 35 ft. Giant Killer cable lead-in.
Complete with new Hi-Fi Duplex Antenna and receiver couplers and Double Lightning Arrester.
List Price....\$15.50,
Your net cost... **9.25**

Kit Lynch materials to build 896. List price, \$12.50.
Your net cost... **\$7.50**

No. 872, with 25 ft. transposed lead-in and 10 ft. Giant Killer Cable, List \$15.00; Net... **\$8.95**

872 Kit, List \$11.75,
Your net cost... **\$6.95**

New Lynch HI-FI Couplers, Kits and Giant Killer Cable

- \$3.50 HI-FI DUPLEX Antenna Coupler (for doublets using Giant Killer cable lead-in) **\$2.10**
- \$2.50 HI-FI RECEIVER COUPLER (for all systems using Giant Killer cable lead-in) **\$1.50**
- \$6.75 HI-FI DUPLEX ANTENNA COUPLING KIT, of antenna coupler, receiver coupler and 50 feet of Giant Killer cable. **\$4.05**
- \$3.00 GIANT KILLER CABLE, 50 ft. **\$1.80**

- \$7.00 HI-FI SIMPLEX ANTENNA KIT, of receiver coupler, 125 ft. heavy Hi-Mho wire, 45 ft. Giant Killer cable, 3 type insulators, 2 nail-it knobs, 1 stand-off insulator. **\$4.20**
- \$7.90 MARCONI Kit. of No-Stat Antenna Coupler, Hi-Fi Receiver Coupler, 60 ft. heavy Hi-Mho wire, 35 ft. Giant Killer cable, 8 in. insulators, double lightning arrester. **\$4.76**

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Accurate Logging Band-Spread.
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Chassis also available.



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The SKYRIDER Still Leads

NINE months ago, the Hallicrafters startled the amateur field with a new receiver—the performance of which was never before offered even in professional communications receivers costing several times as much. Competition copied the ideas and imitators tried to capitalize on its popularity. But, the Super SKYRIDER rides a'one at the head of the procession because of the superiority of its basic design and the painstaking care with which it is manufactured. So, there's a reason why amateurs all over the country are flocking to it by the hundreds.

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Custom-built to the most rigid standards, the Super SKYRIDER is built throughout like a short wave transmitter. It weighs 40 lbs. in its heavy metal cabinet. The Super SKYRIDER has a measured overall sensitivity greater than any receiver, yet the I. F. transformers are operated at only 50 microvolts—an indication of its tremendous sensitivity in the R. F. stage. It shows an 8 times greater gain in signal strength than offered by previous designs—yet the noise level has been reduced far below that of any other short wave receiver.

Hallicrafters SUPER SKYRIDER, seven tube superheterodyne receiver, complete in metal shielded cabinet with built-in power pack, dynamic speaker and seven tested tubes, NET, ONLY.....

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