OFFICIAL

Short Wave Listener

HUGO GERNSBACK
EDITOR

MAGAZINE

Now 15¢

Canada 20c

4,600 SHORT-WAVE STATIONS LISTED IN THIS ISSUE

January

LARGEST AND BEST SHORT-WAVE STATION LIST IN PRINT • PHOTOS OF S-W ARTISTS
WHERE TO FIND S-W STATIONS ON YOUR DIAL • WORLD SHORT-WAVE STATION MAP

Best and lowest priced WORLD GLOBES FOR SHORT WAVE LISTENERS

WORLD GLOBE
No. P-100

THESE remarkable, crack-proof globes, printed in popular non-fading colors, are indispensable to short-wave fans. Notable among the many features of these world globes, is that they give life-time service.

Short-wave fans are enabled to determine correct time in various centers of the world with the aid of these globes.

There is a graduated "Meridian" scale on many of the globes. Another feature is the moveable hour scale found at the north pole—this facilitates determining the hour in any part of the world.

You will be thrilled when you put the globe to actual use—measuring distances from New York to Moscow; from Cape Town to Tokio; etc. A flat map is deceptive for measuring, but take a small string and stretch it across the globe, from city to city, and you have the correct distances.

Each globe contains a listing of several thousand cities in nations all over the world—spellings conform to international geographic standards. They contain such important features as—traces of Admiral Byrd's recent voyage to Little America; Lindbergh's Paris flight; the new Japanese Empire; principal railroads; **principal international short-wave radio stations** and call letters; steamship routes; and other equally important data.

The colors on our fine handmade or Library globe maps are refined and delicate—their rich color harmony blends into a harmonious color unit.

The map surface of all models is protected by a high, glazed, water and scratch proof finish which can easily be kept fresh and new with a damp cloth.

World Globe No. P-100

This beautiful floor model globe fills the demand for a globe of this type at a popular price. The 12" standard ball shows 67 prominent international short-wave stations—steamship routes, ocean currents, mountain peaks with heights, principal railroads, Lindbergh's flight and other important data will be found clearly printed on the globe.

The ball is mounted in a fully graduated, semi-meridian. The solid walnut base has been gracefully patterned to harmonize with the interior of home or office. The base is sturdily constructed.

A beautifully illustrated, 32-page book, "The Story of the Globe" is included with this model. It is full of interesting facts, including the question and answer globe-game. Height of stand, including 12" globe—34". Shipping weight—12 lbs.

PRICE **$3.95**

World Globe No. P-212

The 12" standard globe was the first to list principal international short-wave stations and call letters. On this map are printed 67 prominent short-wave stations — quickly recognized since they are printed in red. They are accurate and up-to-date.

Such data as: steamship routes, ocean currents, mountain peaks, principal railroads, Lindbergh's flight, and other useful information will be found on the globe. There are over 5,000 place names shown.

This attractive globe is highly suitable for home, studio, school or office. It is extremely low in price when compared to its beauty and utility value.

A 32-page booklet, well illustrated, entitled "The Story of the Globe" is included with this world globe. Height—16¼". Shipping weight—6¾ lbs.

PRICE **$2.95**

World Globe-Atlas No. P-8

This combination world globe and atlas holder adds appearance and dignity to any room—it is very attractive. The globe measures 8" in diameter. It has a full, graduated, movable meridian, finished in statuary bronze and gold. Its stand is richly decorated in a walnut finish. With this world globe is included **at no additional cost**, a new 221-page world atlas. Height—13¾". Shipping weight—5 lbs.

PRICE **$4.25**

ORDER YOUR GLOBE TODAY!

SHORT WAVE CRAFT SL-1-36
99 Hudson St., New York, N. Y.

Gentlemen: Enclosed you will find my remittance of $_____ for which please ship me the following World Globe.

[ ] World Globe-Atlas No. P-8 @ $4.25
[ ] World Globe No. P-100 @ 3.95
[ ] World Globe No. P-212 @ 2.95

Name _____

Address _____

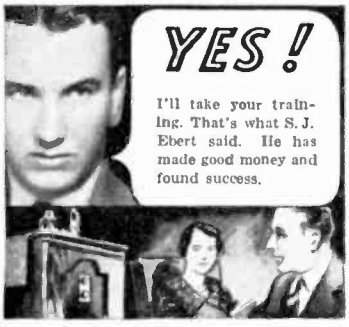
City _____ State _____

Send remittance in check or money order—register letter if it contains cash, stamps or currency. GLOBES ARE SHIPPED FROM OUR WAREHOUSE IN CHICAGO. F.O.B. FROM THAT CITY.

All globes are carefully packed in original, corrugated protected, cartons, assuring safe delivery. ORDER BY NUMBER. Send check or money order, plus sufficient postage for delivery by parcel post. Globes are shipped from our Chicago warehouse. Register letter if it contains cash, currency or stamps. Specify if shipment is to be sent express collect. ALL ORDERS ARE FILLED PROMPTLY.

SHORT WAVE CRAFT 99 HUDSON STREET, NEW YORK, N. Y.

Read what happened to these two men when I said:



I will Train You at Home in Spare Time for a GOOD JOB IN RADIO

These two fellows had the same chance. They each clipped and sent me a coupon, like the one in this ad. They got my book on Radio's opportunities.

S. J. Ebert, 104-B Quadrangle, University of Iowa, Iowa City, Iowa, saw that Radio offered him a real chance. He enrolled. The other fellow, whom we will call John Doe, wrote that he wasn't interested. He was just one of those fellows who wants a better job, better pay, but never does anything about it. One of the many who spend their lives in a low-pay, no-future job, because they haven't the ambition, the determination, the action it takes to succeed.

But read what S. J. Ebert wrote me and remember that John Doe had the same chance: "Upon graduation I accepted a job as serviceman, and within three weeks was made Service Manager. This job paid me $40 to $50 a week compared with $18 I earned in a shoe factory before. Eight months later I went with station KWCR as operator. From there I went to KTNT. Now I am Radio Engineer with WSUI. I certainly recommend the N.R.I. to all interested in the greatest field of all, Radio."

Get ready for Jobs like these. Many Radio Experts make $30, $50, $75 a week

Spare time and full time set servicing; installing, operating, maintaining broadcast, aviation, commercial, police, ship, and television stations. Opportunities with Radio dealers and jobbers. A service shop or retail Radio business of your own. I'll train you for these and other good jobs in connection with the manufacture, sale and service of Radio sending and receiving sets, auto Radios, loud speaker systems, short wave sets, etc.

"I want to help you. If you are earning less than $35 a week I believe I can raise your pay. However, I will let you decide that. Let me show you what I have done for others, what I am prepared to do for you. Get my book, read it over, and decide one way or another." *J. E. Smith.*

Get My FREE LESSON on Radio Servicing Tips

I'll prove that my Training gives practical, money making information, that it is easy to understand—that it is just what you need to master Radio. My sample lesson test, "Radio Receiving Trouble—the Cause and Remedy" covers a long list of Radio receiver troubles in A.C., D.C., battery, universal, auto, T.R.F., super-heterodyne, all-wave, and other types of sets, and a cross reference system gives you the probable cause and a quick way to locate and remedy these set troubles. A special section is devoted to receiver check-up, alignment, balancing, neutralizing and testing. Get this lesson Free. No obligation. Just mail coupon.

Save Money — Learn at Home. Money Back Agreement Protects You

Hold your job. I'll train you quickly and inexpensively right at home in your spare time to be a Radio Expert. You don't need a high school or college education. My 50-50 method of training—half with lessons, half with Radio equipment—gives you broad practical experience—makes learning at home easy, fascinating, practical. I will agree in writing to refund your money if you are not satisfied with my Lesson and Instruction Service when you graduate.

Many Earn $5, $10, $15 a Week in Spare Time While Learning

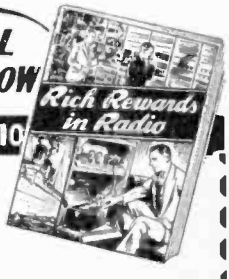
That's what many of my students earn in spare time while taking my Course. I send you Extra Money Job Sheets containing tested plans and ideas to help you do it. Many students have made $200 to $1,000 in spare time while learning. Nearly every neighborhood offers a spare time serviceman an opportunity to make good money. I'll show you how to "cash in"—show you why my Course is Famous as "the Course that pays for itself."

Find Out What Radio Offers You

Mail the coupon. My book is free to any ambitious fellow over fifteen years of age. It tells you about Radio's spare time and full time opportunities—about my Course, what I give you, what my students and graduates do and earn. There is no obligation. Act today. Mail coupon in an envelope or paste on a 1c postal card. Do it right now.

J. E. SMITH, President
National Radio Institute,
Dept. 6AH1, Washington, D. C.

MAIL THIS NOW



FOR FREE BOOK OF FACTS ABOUT RADIO

J. E. SMITH, President
National Radio Institute, Dept. 6AH1, Washington, D.C.

Dear Mr. Smith: Without obligation, send me the sample lesson and your free book about spare time and full time Radio opportunities and how I can train for them at home in spare time. (Please write plainly.)

Name _____ Age _____

Address _____

City _____ State _____

The DOERLE 5-TUBE *DELUXE* A.C. SHORT-WAVE RECEIVER

features CONTINUOUS BANDSPREAD *on All Bands!*

★ USES DOUBLET OR STANDARD ANTENNA
★ 8 LOW-LOSS PLUG-IN COILS
★ RANGE 15 to 550 METERS
★ MICROMASTER BANDSPREAD DIAL
★ MAGNAVOX DYNAMIC SPEAKER
★ BEAUTIFUL CRACKLE CABINET
★ HEADPHONE RECEPTION IF DESIRED
★ SENSITIVE REGENERATIVE CIRCUIT

$27.53 READY TO OPERATE

2 Broadcast Coils, 200 to 550 Meters $1.75 extra

RESULTS! are what COUNT

Dear Sirs:

Just a line or so to give you an idea of what my Doerle A.C. 5 hauled in during a 2 weeks listening test. All of the G and D stations were received also TIEP, W9SF, PRADO, HJ4ABE, W2XE, CJRO, YU2RC, CJRX, COC, HJ4ABB, HJ1ABB, UY5-RMO, YP3RC, CT1AA, W1XAZ, EAQ, HC2RL, HJ3ABD, KEJ, HJB, HP5B, HJ1ABD, WNB, YUIRC, HJZ, JYK, FYA, YU4RC, OA4AD, RNE, PHL, WNC, YBA, COH, PRF5, WON, XEBT, LSL, 12RO, IRM, JYS, UK3LR. All stations come in with strong carriers with a QSA4-5—R9 plus.

FRANCES KMTEZ,
213 Linden St.,
Allentown, Pa.

Gentlemen:

Here is a list of Short-Wave stations I have received in a short time with my "Doerle AC5," with a very poor aerial for short-wave work. EAQ—MADRID, COH—Havana, Cuba; VE9-GW—Bowmanville, Ontario, CT1AA—Lisbon, Portugal; PRF5—Rio De Janeoro, Brazil; HJ1ABB — Barranquilla; PRADO — Ecuador, S.A.; DJC—Berlin; XEBT —Mexico; YV5RMO—Venezuela, S.A.; CRJO—Winnipeg; W2XF—New York; HP5B — Panama; FYA — Paris; GSC-GSL — Daventry, England.

This is the third and best receiver I have owned in the short time I have been interested in S-W.

EMERAL H. DELBRUGGE
Rose-Mary Dahlia Gardens,
Martins Ferry, Ohio.

Original Letters Plus Others May Be Seen At Our Office

Everybody's talking about the new 5-Tube **Doerle DeLuxe Short-Wave Receiver.** If you are interested in short-waves, avail yourself of this opportunity to listen to this remarkable set with no obligation to buy it unless you are absolutely satisfied with its performance. Use the coupon below for fast service.

USES ANY TYPE AERIAL

Regardless of what type aerial you have, this receiver makes provisions for using it. Either the standard inverted-L type or noise-free doublet type may be utilized. This means that this receiver can be used in ALL localities regardless of noise disturbances.

SENSITIVE REGENERATIVE CIRCUIT

Two tuned stages, regenerative detector, three A.F. stages with powerful '41 pentode output and perfectly matched dynamic speaker—all these features contribute to the great power and fine performance of this receiver. A special antenna-trimming scheme permits perfect alignment of both antenna and detector tuning circuits without affecting the setting of the tuning dial.

CONTINUOUS BAND-SPREAD

Continuous bandspread on the entire range from 15 to 200 meters is obtained through the use of a very ingenius dial having a ratio of 125 to 1 and two pointers. Furthermore, two knobs are provided, making possible fast and slow tuning. Foreign stations are spread out over a goodly portion of the dial thereby.

8-LOW-LOSS PLUG-IN COILS

Covers the range of from 15 to 200 meters in 4 bands, viz: 20, 40, 80 and 160 meter bands. These coils are of the 3-winding 6-prong type and are used 2 at a time. Wound on ribbed bakelite forms and designed especially for the Doerle receiver, they are highly efficient.

EXQUISITE WORKMANSHIP

All parts are mounted on a single, cadmium-plated chassis and contained in a large, handsomely-finished black crackle cabinet. **Provisions are made for using headphones with switch to cut out the dynamic speaker.** A tone control is provided which not only varies the tone but helps materially to reduce back ground hiss.

FAMOUS FOR DX RECEPTION

Hundreds of testimonials in our files attest to the superlative performance of this world-famous receiver. Several of these testimonials are printed on this page. Set measures 17¼" x8"x8¾" high. Net weight 23 lbs., shipping weight 35 lbs. Designed for 110-120 volt, 50-60 cycle, A.C. operation.

Set of 2 broadcast coils $1.75 additional. Add $2.50 for 110 volt 25 cycle model or 220 volt 60 cycle model.

Send COUPON TODAY

5-DAY FREE TRIAL

FREE!

64-page Buying Guide. Contains thousands of well illustrated items, viz. — public address equipment, short-wave receivers. Automobile sets, radio parts, etc., etc.

DO NOT DELAY
Write Today!
Send post card or letter. Buying Guide by return mail.

RADIO TRADING CO., 103 A Hudson St., New York SL-136

Gentlemen:

I enclose ..... dollars ..... cents, for your new Doerle 5-tube DeLuxe Short-Wave receiver on a five day free trial basis. If, at the end of five days I am not satisfied, I will write you for return shipping instructions. Upon receipt of the radio, you will refund me the full purchase price. I agree to pay express charges one way, and you the other.

PRINT Name .....

Address .....

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

RADIO TRADING CO., 103A HUDSON ST., NEW YORK CITY

HUGO GERNSBACK.....President
H. W. SECOR.....Vice-President
EMIL GROSSMAN Director of Advertising
London Agent: GORRINGE'S AMERICAN NEWS AGENCY, 9A Green St., Leicester Square, London, W.C. 2
Paris Agent: BRENTANO'S, 37 Ave. De L'Opera, Paris, 2E, France
Australian Agency: McGILL'S AGENCY, 179 Elizabeth St., Melbourne

OFFICIAL
SHORT-WAVE
LISTENER
MAGAZINE
Combined with
OFFICIAL SHORT-WAVE
LOG AND CALL MAGAZINE

December '35—January 1936

VOLUME II, No. 3

Editor
HUGO GERNSBACK

Managing Editor
H. WINFIELD SECOR

Associate Editor
G. W. SHUART, W2AMN

Contents...

This magazine is published every other month. The next issue will be out February 15th.

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Make all subscription checks payable to Popular Book Corporation.

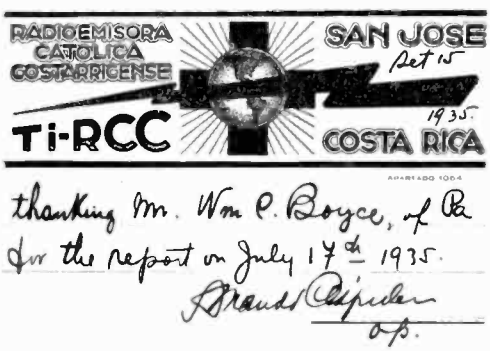
She Listens to the S-W's in Porto Rico

Andreita O. Cloquell of Arecibo, Porto Rico, is the fair lady appearing in the photo above with her "all-wave" receiver. She has heard and verified 30 different countries, the verification cards being neatly arranged on panels, as shown. A G. E. "V" doublet antenna is used.

More About "VERIS" And How to Get Them

Including Requests In 3 Languages

HUNDREDS of our readers have besieged the editor with request for more information concerning verification cards and how to get them from the short wave broadcast stations. We have received quite a number of letters stating that requests mailed to foreign short-wave stations had apparently been ignored and that no verification cards



This is the card sent out by Ti-RCC, the station operated by Senor Marin, formerly the operator of the world-famous Ti-3NRH.

had been received, although an International postal reply coupon had been sent with the request. Other complaints to the editor have recited the fact that some of the foreign station announcers failed to mention the call letter of the station for periods exceeding half an hour or more, and, furthermore, as the announcements made regarding the musical or vocal selections were given in a foreign language, the hopeful "veri" collector was at a loss to know what to include in the program "log" to be sent with his request for a veri.

In such a case you can simply give a time "log" with the kind of music or singing for each time period, or possibly a speaker was on at a certain time. If so simply state this fact, thus: 10:00 p.m.—speaker (in German); 10:15 p.m. singing—soprano; 10:30 orchestra; 10:45 bass solo, etc. State if singing was in English or foreign language.

It has been our experience that most of the foreign stations usually have the courtesy to send a verification card, especially when a postal reply coupon is sent, (These cost you nine cents at your local post office.) providing of course that the station engineer or program director is satisfied that you are entitled to a verification card, after reading your letter and checking the time and selections heard, etc.

Another point which will help you a great deal in writing for veris is to write the letter either on a typewriter, or else in running script, with ink, never pencil, and in the language used in the country where the station is located, if possible.

We give below a general form of "veri" request letters in three languages, German, French and Spanish. In filling out the "log" submitted to the station with your letter, a few of the ordinary words and their foreign language equivalents will be useful. Organ is orgel in German, órgano in Spanish and orgue in French. Orchestra is spelled the same in German, is spelled orquestra in Spanish and is orchestre in French.

Many people write for veris and do not place the correct postage on the letter in which the request for verification is mailed. The postage to foreign countries is five cents; Cuba five cents and Canada three cents.

Be sure to write plainly, above everything else, and it is best to use a plain piece of stationery and not one containing a company name or other irrevalent matter on it, unless your connection with the company is very clearly evident.

There are a few foreign short-wave broadcast stations who do not give specific verification, one of the most important of these being the British Broadcasting Stations. They have a good reason why they do not choose to send specific veris it seems, and

An interesting card is that of the station at Budapest, Hungary, illustrated above. A small photo is pasted over the lines "Justice for Hungary." Several different photos are found on various specimens of this card.

we are pleased to give below their views in the matter.

August 21, 1935

To the Radio Editor:
Dear Sir,

In view of certain criticisms which have appeared in the correspondence columns of the overseas press, we should like to take this opportunity of outlining the reasons why the BBC is unable to give specific verification of the reception of its programmes from the Empire Station in correspondence with overseas listeners. We would first of all, like to assure our listener that this policy is not dictated by any lack of courtesy to those who have shown their interest in our Empire Broadcasting Service by writing to us.

The card of HJ1ABE has sketched on it a typical South American scene with the call letters HJ1ABE prominently printed over the sketch.

In many parts of the world certain competitions have been inaugurated by newspapers, radio clubs, or other organizations in which a prize (often monetary) is offered to the listener who reports the reception of the greatest number of stations over long distances during a certain period. In order to qualify for these competitions it is necessary for each listener to write to the operators of each station, giving details of one programme, so that his reception can be verified.

In the case of stations which do not publish their programmes in advance such verification may often be reliable, but the most that can be done by the broadcaster is to state that such and such a programme was broadcast at such and such a time, leaving the listener in a position to confirm "his own" verification of reception. In the case of the BBC transmitters, however, the Empire programmes are published in advance, not only in the columns of the overseas press, but also in a pamphlet which can be obtained by any listener direct from the BBC on payment of a small annual subscription. The fact therefore that a listener reports to us the items broadcast in an Empire programme does not enable us to verify definitely that he has heard this programme from one of our own transmitters. It is quite common, for instance, for listeners not necessarily taking part in one of these competitions to write to the BBC and report reception of the Empire Station on a receiver which is not designed for the reception of transmissions on short-waves. Upon investigation we usually find that he has heard our programme relayed from a local broadcasting station.

Again, our Empire programmes are broadcast simultaneously on two or more wavelengths, and it is quite impossible for us to confirm from which actual transmitter the listener has heard our programme.

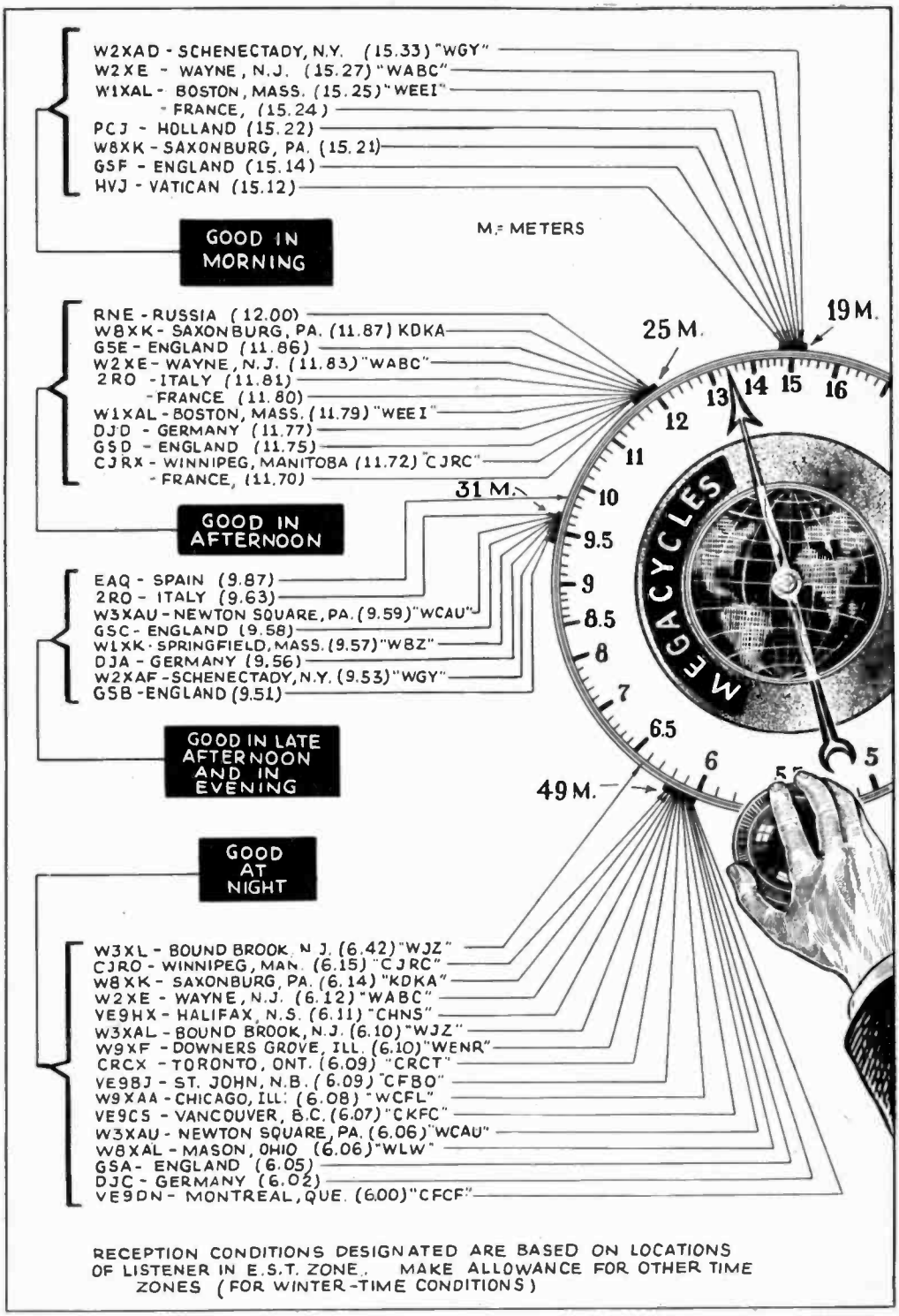
Furthermore the Empire transmitters are now so widely received that our programmes are heard daily by many thousands of listeners in all parts of the world. In view of this fact we feel that the so-called "verification" of reception, apart from the other reasons which we have outlined above, would involve us in a great deal of labour and expense, which might better be directed towards other channels.

The object of our Empire transmissions is mainly to provide a service of news and entertainment to listeners in all parts o the Empire, and we feel that the lasting success of our Empire Service will depend on the matter received, rather than the method of its reception. For this reason we are not in favor of such competitions a are outlined above, although we should welcome news of a competition which would provide constructive criticism of a technical or programme nature, and would make some positive contribution to the art of short-wave broadcasting. In order to avoid any misunderstanding we should say that we receive each year many thousands of letters from listeners in all parts of the world with regard to the reception of our Empire programmes. The contents of each communication are carefully analyzed, and a reply addressed according to circumstances to every correspondent. Correspondence of a constructive nature relative to programmes, or of a technical nature, will, we can

(Continued on page 282)

PHI, the Dutch station at Hulzen, sends out a very attractive card done in the modernistic manner, and brightly colored. The station officials generally include a note in long hand on the back of this card.

Where the Stations Appear on Your Dial



RECEPTION CONDITIONS DESIGNATED ARE BASED ON LOCATIONS OF LISTENER IN E.S.T. ZONE. MAKE ALLOWANCE FOR OTHER TIME ZONES (FOR WINTER-TIME CONDITIONS)

Station ZP-10 and ZP3AC, Asuncion, Paraguay. This station has two call-signs, one being ZP3AC, for operation within the amateur bands, and the second, ZP10, for use when the equipment is used for broadcasting purposes. ZP10 is used to carry the program of ZP9, the leading long-wave station of Asuncion; several of these broadcasts were "logged" quite satisfactorily, in North America, during the past season, and listeners will do well to watch the frequencies around 8000 kc. from 7-9 p.m. Broadcasts have in the past, been opened and concluded with the playing of the bugle call of the "Rueda del Ceste", a leading Latin-American radio organization of which ZP10-ZP3AC is a member.

NEW STATIONS In Latin America

By H. S. BRADLEY

● THE republic of Mexico offers us several new catches this month, a deluge of new "X" broadcasters having begun operation on varying high frequencies. The most widely-heard of the group, XBJQ, may be heard testing during the afternoon and evening hours, relaying programs from different long-wave stations of Mexico City, on a frequency varying between 11,000 and 12,200 kc. The station seems to have considerable power for it is heard with good strength at times. A postal address of Box 2825 in Mexico City, is announced by this station, which is said to be operated by Sr. Bravo, the famous operator of amateur station X1Q, and the former short-wave broadcast station XETE.

* * *

From Vera Cruz, "the first seaport of Mexico," a city of some 85,000 inhabitants, comes a second new signal, which may be heard on 6120 kc. in the evening. Quality of the station is very clear, but signal strength not particularly powerful, especially when compared with that of its neighbor COCD! Reception, therefore, is best after the latter leaves the air, or between 11 p.m. and midnight. The Vera Cruz station announces as "long and short wave," with the calls XETF and XEFT, respectively.

* * *

A third Mexican station that is to be heard testing from 11 p.m. to midnight, E.S.T. almost daily is what the writer has identified as being XEBI of Mexico City. The frequency used varies from 5,970-5,980 kc. which corresponds to that formerly used by station XECW, which has not been "logged" for some time. It is entirely possible that there is some connection between these two stations!

* * *

A QSL received from the government radio station in Guatemala City, confirms

that their transmitter works on short-waves, on "50 meters." The station was logged on special Sunday morning tests, between the hours of 3 and 5 a.m., E.S.T. The announcer was heard to praise the fine points of the climate of the country, with an invitation for listeners to pay Guatemala a visit; TGW's "QSL" bears the boast, "The Land of Eternal Spring."

* * *

A new Guatemalan, announcing as "La Voz de Policia Nacional," may be heard on about 5,940 kc. slightly below the powerful signal of HJ4ABE, each night, from 8-10 p.m., or thereabouts. The call is TG2X, and may be confused with the older station TGX, but the two seem in no way connected, as the latter station was broadcasting on approximately 5,740 kc. when last heard. TG2X's station call, and title should be sufficient address to direct all reports to their proper destination.

* * *

Readers will likely be familiar with the fine transmissions sent out by the new Honduras station, HRN of Tegucigalpa. This station working on an announced frequency of 5,875 kc. is heard with fine strength and quality each night, often until 1 a.m., E.S.T., on special tests.

* * *

Costa Rica, as usual, comes forth with at least one new broadcaster in the short-wave field. A new station, the call-letters of which are, at the moment, in doubt, situated in the city of Punta Arenas, is now operating near 7,500 kc. or 39.6 meters, between 8 and 10 p.m. daily. Signal strength is generally very good, but a bad "hum" mars the speech quality, and makes identification difficult. Many American fox-trots are played, and it should not be hard for one to compile a "log" that is readily verifiable. Identification may be made by the title "Ecos del Pacifico."

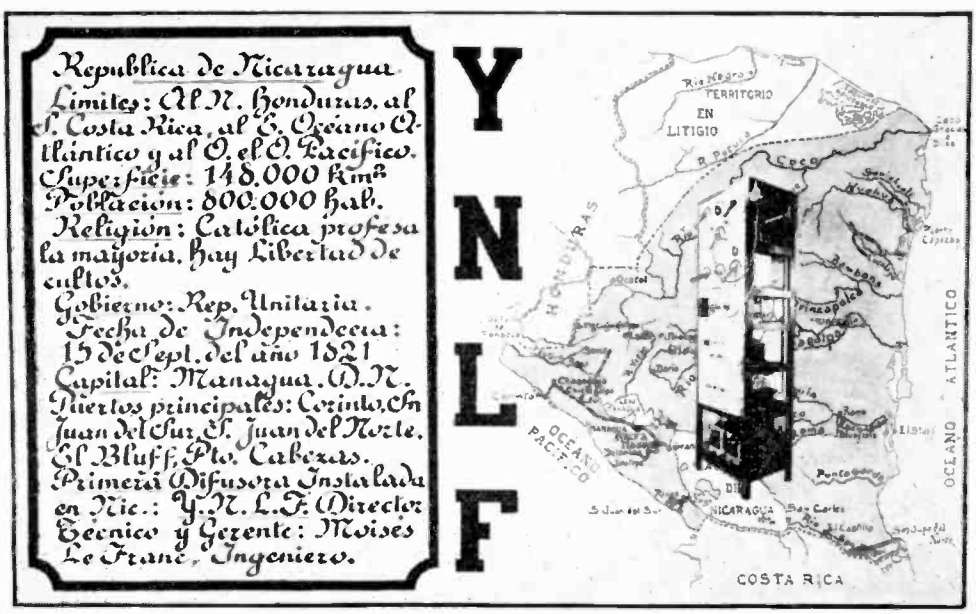
* * *

The frequencies around 51 meters seem to be well occupied at the present writing; HI1J of San Pedro de Macoris, seems to have remedied crystal drift, and now remains very close to an announced frequency of 5,865 kc.; HRN, mentioned above, occupies 5,875; YV8RB of Barquisemeto, 5,880; and HCK of Quito, 5,870-5,890 kc. Broadcasts from these latter two stations are becoming more frequent, often resulting in non-reception of anything, as a result of an attempt on the part of several stations to use the same frequency simultaneously.

* * *

An exodus from the 49 meter band seems to have been launched, with

(*Continued on page* 286)



YNLF. "LA VOZ DE NICARAGUA." Above is shown a view of the transmitter of YNLF, placed upon a background of a map of the country of Nicaragua. At the left, several interesting facts concerning the station and the country are included. The reverse side contains information as to power location, title, etc. YNLF works with a power rating of 1000 watts, on a frequency of 6000 kc., according to Moises LeFranc, the stations "constructor-owner." Actual operating frequencymay generally be found to be 5970 kc. however.

The LISTENER SPEAKS

Wants Dope on Commercial Sets

Editor, SHORT WAVE LISTENER:

I have read the last three issues of your magazine and have gleaned many helpful hints from it.

Like most short-wave "fans", I am always seeking to get better equipment in order to "log" more and more distant stations.

Now I think a very helpful addition to your magazine would be to conduct a column in each issue discussing the merits and faults of all the better standard receiving sets on the market.

If these sets could be impartially discussed in each issue, I am sure it would help the readers in the selection of their receivers. I read so many convincing "ads" relative to the merits of so many different sets, that I am rather "in a fog" as to what set to buy or use.

The average layman doesn't understand the technical workings of these machines, and it is impossible to make a comparison. Then there is the durability of the receiver to be taken into consideration. A new set may sound perfect today, but what will it be like six months or a year from today?

I am sure your listeners would appreciate having your experts help them save time and money by such an addition to your magazine.

Of course I realize a magazine's "life-blood" is its advertising, and you can't afford to offend any of the set manufacturers, but I firmly believe such a column could be conducted, including practically all the better sets over a few months period, without offending any one.

I hope you'll give this idea some consideration.

Success to your magazine,

PHILIP GERLACH,
326 Lakeview Ave.,
West Palm Beach,
Florida.

(We've thought about it, quite often, Philip, and maybe we'll get around to it directly, but this "impartial low-down" on commercial sets is pretty difficult data, to handle. If we gave an opinion on how long a certain set would last, how much advertising do you think the manufacturer of that set would take in this publication. Moreover, no editor could truthfully foretell how long a certain set would last. Anyway, "comparisons are odious," you know and features which one person might like in a set wouldn't appeal to another.—Editor.

Thanks for the "Brick Bats"!

Editor, SHORT WAVE LISTENER:

I have just purchased and read carefully the second issue of *Short Wave Listener*. When I first read of the publication in *Short Wave Craft*, I applauded the idea. However, I was terribly disappointed with the first issue. I now find that there has been little improvement.

I am one of the increasing number of "listeners" who were never very much interested in the *technical side* of radio, though I built my *first* set back in 1923 and have kept pace with improvements since and can still "follow a diagram." But, I have been a "DX" (distance) hound first, last and always! First on the broadcast band, and now on short waves. I therefore, take this opportunity to present my views.

For the guidance of other readers, may we ask you, when you write to us, to bear this in mind:

1—If you get many foreign or distant stations, tell us so.

2—What set do you use? How many tubes?

3—What type of aerial do you find works best? (If necessary, make a rough sketch.)

This information in your letter to us makes it more valuable, and will help to get it printed.—Editor.

In my opinion, there are a great number with receiving equipment similar to mine. I possess a 10-tube all-wave superheterodyne. I use the short waves, first for the thrill I get in hearing "far-away" stations, and secondly—as a supplement to the regular broadcast band. In addition to the first reason, I also collect QSL cards.

Now, how does your magazine help me and how may it be improved to help me further?

The best feature you have is the *Short Wave Time Graph*. One criticism I have of this is, that it does not indicate what stations are being received. Also, I would recommend exhaustive reports from listeners indicating what is being received. I find that comparison of the results on my set with that of others is very helpful.

Every short-wave listener sooner or later is bit by the QSL "bug". I find the following necessary in writing for QSL cards:

Identification of stations, address, local time and type of program. As to identification, you have made a half-hearted attempt by giving musical signatures of some stations. These are the better-known stations and a good number of them announce in English. Your time conversion chart is invaluable. As to addresses of stations, I find you do not give any. I would suggest that the publication of a rather comprehensive list of stations with their addresses, I have taken the trouble to compile one from various sources, and it is at your disposal.

In addition to the afore-mentioned, as stated before, I use short waves as a supplement to the regular broadcast band. I find many hours during the day when the broadcast band provides slim pickings by way of entertainment, and there are many excellent features on the short waves.

The morning is notorious for the poor entertainment offered on the regular broadcast band. In Europe, it is then *afternoon* and many excellent musical programs and features are offered. Daventry almost always has an excellent musical program; France is another stand-by. At this time of year, perhaps the best of all is PHI, which comes on the air at 8:00 A. M., E.S.T., with its characteristic musical note and after ten minutes devoted to recordings of marches, broadcasts an excellent concert. In the afternoon there is ORK with a symphony concert, beginning at 2:30. E.S.T., and there is the opera from Rome beginning at 2:30 E.S.T.

In the evening there is the Empire Orchestra Concerts from Daventry at 6:00 and the excellent concerts from the (German) station at 6:15 E.S.T.

You might very well devote a few pages to the entertaining features on the short waves. Many of the better known stations announce their programs well in advance. I am sure these are at your disposal.

I have spent many delightful hours listening to *short-wave* stations and I am sure there are others who would do likewise, if they had some idea of what was going on.

One further thought, I wonder how many people listen to the excellent programs from W2XR. Here is an opportunity to get away from "blatent advertising", and listen to a station that broadcasts in good taste with a better-than-average tone quality.

I have been rather lengthy, but I've had some of these things on my chest and I see in your magazine one that is devoted to "listeners" like myself and I trust that these recommendations will be well judged.

LEO ALSTER,
808 Adie Avenue,
New York City.

(*Thanks, Leo, for the many suggestions. Will try to adopt some of them in future issues of the "Listener."—Editor.*)

Thanks for the Orchids, Arnold

Editor, SHORT WAVE LISTENER:

Here's an attempt to place credit where credit is due, and also, if necessary, a few "brickbats."

First—your articles on the various broadcasting stations, their studios, transmitting equipment, personnel, etc., are extremely interesting and make reception from such stations far more enjoyable, inasmuch as the "listener" feels that he knows the people on the program he (or she) is listening to—so for that part of your magazine, I say, "It's the top."

Your article on "*Spot Waves*" in the April-May number is very, very interesting; as also is your page of "News Pick-up" Mobile Station pictures. Any and all articles dealing with the manner in which programs are garnered for our entertainment, are sure to please most readers.

Our Readers Ideas

I think the article on "Short Waves" by Dorothy Hagerty is also good because, again, I am made to feel that I know these very interesting (to me) people who make radio what it is. I hope you confine your articles to the "Listener" side and live up to the title of your magazine.

Your articles on fixing up a "*S.W. Listening Den*" is "All Wool and a Yard Wide" and more so, your best "Listening Post Photo" trophy section. I believe I shall get lots of good ideas for my den—which, by the way, is still undergoing changes daily —from the photos you publish from time to time, and the good points of several listening "Posts" combined into one post, should really prove to be "The Post."

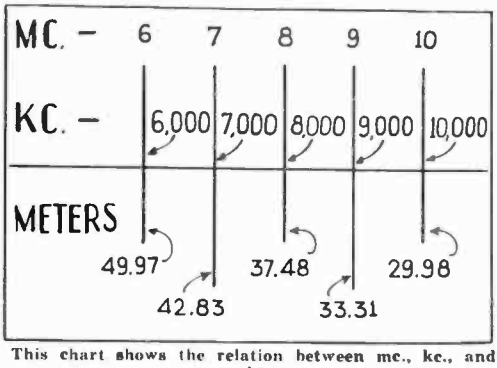
But why should I continue to rave over the good qualities of your fine magazine, when almost every thing in it is of vast interest—notice that I said *almost* everything. For instance, your article "*Odd Aerials I Have Used*" by H. Townsend, seems to me to be related to "Red Riding Hood's *wolf*, inasmuch as it appears to be rather on the technical side (although it is decorated with non-technical drawings). Your "S.W. Hints" could be very well left out and readers desiring hints referred to

(*Continued on page* 282)

THE LISTENER

Mc., Kc., or Meters?

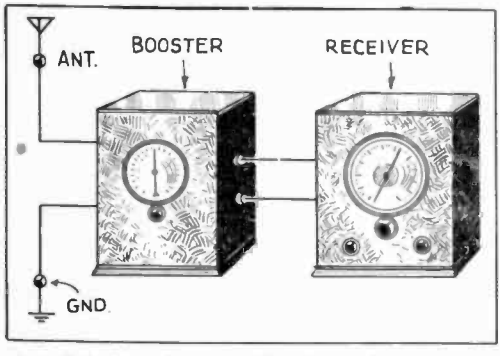
Stanley Ranger, Tarrytown, N. Y.



This chart shows the relation between mc., kc., and meters.

(Q. Would you please enlighten me as to the meaning of and connection between mc., kc., and meters?

(A) One kilocycle is 1,000 cycles; one megacycle is 1,000,000 cycles. Therefore, 6,000 kc. would be the same as 6 mc. We have endeavored to show this in the drawing. The term "meters" was connected with radio in its early days. This was based upon the theory that radio waves travel at the same speed as light. To convert meters into kilocycles, you divide 300,000 by the wavelength in meters. For instance, 10 meters would be 300,000 divided by 10, or 30,000 kc. Converting this into megacycles, we have 30 mc. To change kilocycles to meters, we divide 300,000 by the frequency in kilocycles. For instance, 6,000 kc. would be 300,000 divided by 6,000, or 50 meters.



A well-designed booster will aid considerably in receiving DX stations.

Value of Booster

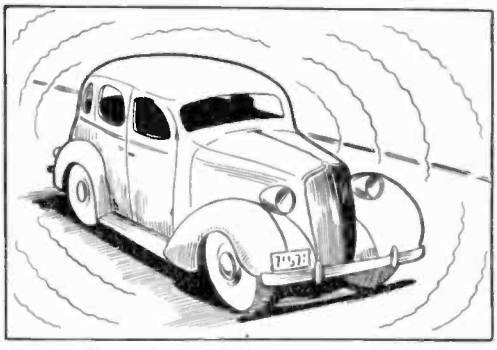
Lawrence Crane, Oklahoma City, Okla.

(Q) I have a superheterodyne receiver, and although it works very nicely, I am trouble with "image" interference, i. e., one station appears at two different settings on the dial. I would also like to obtain a little more sensitivity. I have been informed that a booster can be used to an advantage on my receiver. Is this true?

(A) A good R. F. (radio frequency) booster, having one stage with regeneration. or two stages without regeneration, will practically eliminate image interference, and will also bring up those weak signals tremendously. We believe a good booster is an asset to any receiver not already having amplification ahead of the first detector.

Auto Ignition Interference

George Meskins, Philadelphia, Pa.



Auto ignition interference is one of the worst offenders on short waves.

(Q) I am located at an intersection of two very busy thoroughfares and am troubled with automobile and bus ignition systems. I would like to know if there is any type of antenna which I can erect that will overcome this trouble.

(A) Unless your dwelling is situated on a fairly large plot of ground, enabling you to locate the antenna proper quite a distance from the thoroughfare, you are destined to put up with this noise. The lead-in, of course, should be either twisted pair or transposed when the antenna is located at quite a distance from the receiver and highway.

If you are located some three or four hundred feet from the source of noise, then it is almost impossible to eliminate it. Your best bet would be to use some antenna tuning device.

ASKS

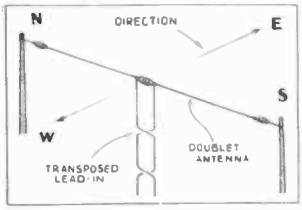
Only questions of general "Listener" interest will be answered here. No queries can be answered by mail. No diagrams of a technical or involved nature will be given here — only those which the Editors feel will be of value to the non-technical "Short-Wave Listener."

Directivity to Doublet

John H. Lawton, Oakland, Calif.

(Q) I am using a doublet antenna, consisting of twenty feet each side of the lead-in. The lead-in is transposed every three feet. In the August "*Listener*," you show the directional effect of the doublet antenna. However, it does not hold true in my case, because I receive signals better in another direction. What I would like to know, is should I change the position of my antenna?

(A) It will be almost impossible for you to tell from which direction your antenna receives best. The peculiar experience you have encountered, may be due to the fact that signals from certain directions come from more powerful transmitters, or you may be somewhat shielded in certain directions. Turning the antenna would not help very much.



Directional effects of doublet antenna.

A great number of Fans hold their antenna system responsible for good reception in some directions and poor reception in other directions. This, of course, could be the fault of the antenna, but in the majority of cases is due to the transmitting station's location or the particular location of the receiving station.

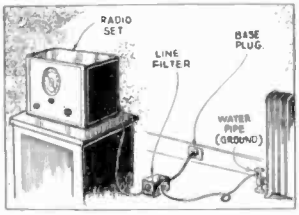
Line Noise Filter

Oscar Nelson, Buffalo, N. Y.

(G) I experience considerable noise on my receiver, and I have been informed that this can be eliminated through the use of a line filter. Is this true?

(A) If your noise is really coming through the power line, a good noise filter will aid considerably in reducing this noise. In the diagram we show just how this filter should be connected. However, if the noise is being picked up directly by the antenna, this line filter will not aid in the least.

When purchasing a line filter, it is best to buy one that is guaranteed because we have had some very sad experiences with some of the cheaper makes. One particular instrument, believe it or not, actually gave more noise. With a good filter, you should



How a line-noise filter should be connected.

not be able to hear the click of the electric light switch when snapped on and off.

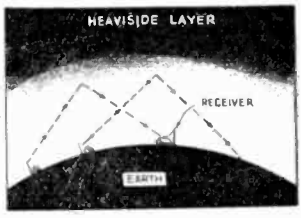
Gets "Foreigners" Better than "Locals"

Nick Pasini, Chicago, Ill.

(Q) I have had a short-wave receiver for about a year, and have noticed that I cannot receive the *nearby* stations as well as the *foreign* stations! In fact, a good many *locals* cannot be heard. I would like to know just why this occurs, and look forward to seeing the answer in the coming issue of the *Short Wave Listener*.

(A) In one of the drawings, we have endeavored to illustrate just what happens to the nearby signals. You will notice that signals from the nearby stations are reflected from the Heaviside layer back to the earth, at a point quite distant from your receiver, while the wave from a distant station is reflected back to the earth in the neighborhood of your receiver.

It does seem rather peculiar that one should receive the distant stations much better than locals, but such is the case.



Why "distant" stations come in better than "locals."

During certain freak conditions, and usually during violent sunspot periods, a reverse condition may come about, and the locals come in much stronger than the more distant stations. Although this happens very infrequently, we mention it so that the reader will be on guard.

Win This Silver Trophy

Fifth Trophy Award to Carlos Yrizarry, Brooklyn, N. Y.

The handsome Silver Trophy, illustrated, standing 19½ inches high, will be awarded to the person sending in what appears to be to the judges the most interesting photograph of their short-wave listening post. The rules for this contest provide that the Trophy shall be awarded only for the BEST photo of listening post apparatus or set-up, and is not concerned with amateur TRANSMITTING stations.

Rules For Short Wave "Listening Post" Trophy Contest

● THE editors of the OFFICIAL SHORT WAVE LISTENER magazine feel sure that our readers will be greatly pleased with this "Trophy Cup" Contest, in which the handsome silver trophy here illustrated, will be awarded to that Short Wave Listener who submits the best "Listening Post" photo.

Here are some of the points on which the "Listening Post" photos will be judged by the editorial staff: The photo must be clear and preferably not smaller than 5 x 7 inches, although 4 x 5 inches will do if the photo is particularly clear.

If possibly try to have the photo show the owner or operator of the "Listening Post" appear in the same picture with the receiving apparatus, although a separate photo of yourself will do, of course.

Not only will the photo be judged for the quality of the photograph itself, but also for the ingenuity shown by the owner of the station in a neat and orderly arrangement of the receiving apparatus.

Do not write descriptions on the back of the photo, but simply place your name and address on the back of it or on the photo mounting.

All descriptions of Short-Wave "Listening Posts" should be typewritten or else written in Ink, well spaced so that the editors can read them quickly.

Here is the new design of Silver Trophy which the Editors will award for the best "Listening Post" photo. Isn't it a beauty! This new contest will cost you practically nothing to enter and you have a very fine chance of winning this handsome Silver Trophy. The editors will award one of these Silver Trophies for the best "Listening Post" photo submitted.

For the Best "Listening Post Photo"

Do not send "pencil-written" descriptions and moreover keep the description of the station and the results you have obtained as brief as possible; usually 300 words is plenty.

Describe your aerial briefly with its dimensions, and particularly tell in what geographic direction it points, north, south, etc. Also mention where it is located such as above any roofs, trees, or other objects, and what form of lead-in you employ.

The announcement of the fourth Trophy Award for the best Short-Wave "Listening Post" photo appears on the opposite page. Entries for the next contest will be accepted up until January 15th, 1936.

The editors will not be responsible for any photographs or descriptions of "Listening Posts" which may be lost in the mail or otherwise, and return postage should be included with the photos if they are to be returned.

All members of the OFFICIAL SHORT WAVE LISTENER MAGAZINE'S editorial and business staff are excluded from this contest, as well as any members of their families.

In the event of a "tie" between two or more contestants, the judges will award a similar trophy to each contestant so tying. Please remember that this contest for the best Short-Wave "Listening Post" photo is purely an amateur or experimenter's proposition, and all commercial short-wave receiving stations are excluded.

The best "Listening Post" photo will also be judged not because of the fact that a handsome array of expensive short-wave receiving apparatus has been assembled for the picture, but the "pedigree" or "DX" reception results will also be carefully scrutinized by the judges. The board of judges for this contest will be the Editors of the Official SHORT WAVE LISTENER magazine.

Address all entries to this contest to LISTENING POST CONTEST, care of OFFICIAL SHORT WAVE LISTENER MAGAZINE, 99-101 Hudson St., New York.

Fifth Trophy Goes to C. Yrizarry

Hats Off to Carlos Yrizarry, of Brooklyn, N. Y.—Winner of the Fifth Trophy

Editor, SHORT WAVE LISTENER:

It is a pleasure to submit herewith a picture of my "Listening Post" for your "Best Listening Post Photo" contest.

My receiver is an RCA-Victor, Model 121, six tubes, 1934 model. I have had excellent results with it.

The first week in my possession, I brought in about twenty-three foreign stations, among which I logged YV3RC, LSX, PSK, VK2ME, DJD, GSA and many others.

(*Continued on page* 288)

Prize-Winner Carlos Yrizarry and his short-wave "Listening Post." He has heard stations all over the world and has received over 100 "veris" from 32 countries. We salute you, Carlos.

He Won the "Scout" Trophy

Editor, SHORT WAVE LISTENER:

Herewith a photo of my Listening Post for entrance in your next "Listening Post Trophy Contest.

The receiver is a General Electric K-664—which tunes 15 to 55 meters. The antenna an all-wave double-doublet, 50 feet high, running north and south. Also in the photo is the 20th SHORT WAVE SCOUT Trophy—a Globe—electric clock and my typewriter.

The cards and letters are mounted on show-card boards, which give a nice background. A. B. Rice, 3432 Hanover Ave., Richmond, Va.

A. B. Rice, of Richmond, Va., has won high honors—he is the proud winner of the "Short Wave Scout" Trophy awarded for the best "log" of short-wave stations.

A. B. Steinmetz Rolls 'em In

A Philadelphia S-W Listener—A. B. Steinmetz. He has "logged" 72 S-W "broadcasting" stations.

Editor, SHORT WAVE LISTENER:

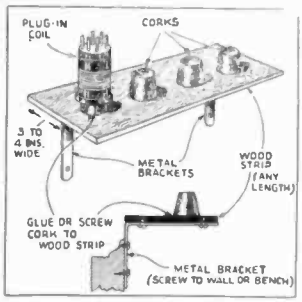
Here is a picture that is a different type of "Listening Post" from all the others, that were prize winners in your unique contest.

The background was designed and drawn by myself, I have taken the motto "*Justice for Hungary*," from the Hungarian Stations' Q.S.L. cards. — Over the motto is the

(*Continued on page* 288)

$3.00 for Best S-W Hint

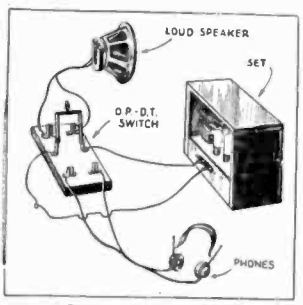
Each month we are awarding $3.00 for the best short-wave hint. Those presented on this page will give the reader an idea of the type of material that we are looking for. All hints printed other than the prize winner will be awarded a six months' subscription to this magazine.



Unused coil rack (Prize Winner)

Coil Rack

● This coil rack is made by gluing, or fastening by other means, corks of desirable size (ones that fit into the tops of the forms of the coils to be racked) to a strip of wood about three or four inches in width and sufficient length to mount all of the corks to be used. This rack may be placed on the table near the receiver; it may also be mounted on the wall or back of the work bench.—John A. Marks.



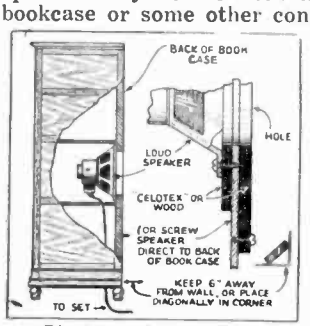
Change-over switch

Speaker Earphone Switch

Many times I have desired to switch from speaker to earphones on my receiver, especially in the wee hours of the morning when the folks are asleep. This simple double pole double-throw switch serves to make the change and eliminates the necessity of undoing the phone tips each time.—Chas. K. Warriner.

Loud Speaker Baffles

The drawing clearly shows how a loudspeaker may be mounted in the rear of a bookcase or some other convenient piece of furniture. For those who have no room for a speaker, this should provide an excellent alternative. Through use of celotex, a very pleasing tone response can be obtained. The speaker should be placed at least 6" from the wall, and preferably in a corner. —Courtesy World Radio.



Placing a loudspeaker.

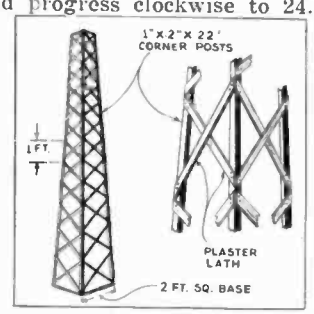
24-hour clock used in Europe.

24 Hour Clock

For those who have trouble in remembering G.M.T., the following idea is presented: Remove the protecting glass from an ordinary clock, and paint in numbers as shown in the diagram. Starting with 1, progressing clockwise to 12, in the usual manner, we have from 1 A.M. to 12 noon. Then we drop down to 13, and progress clockwise to 24. This is from 1 P.M. to 12 midnight.

Homemade Antenna Mast

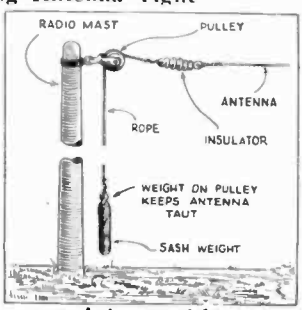
Antenna masts are often quite a problem to the short-wave fan. However, a very sturdy and inexpensive mast can be constructed by anyone who can use a saw and a hammer. The four corner posts, as shown in the drawing, consist of one by two inch spruce, 22 feet long, and the cross-members are rough plaster lath. For a 22 foot mast, four guy wires should be used. These should be attached to the mast at least 10 feet above the base—.Joe Evers.



A good mast.

Keeping Antenna Tight

New use for sash weight: When antenna is of considerable length, and fastened to a tree or mast which swings, one or more sash weights may be conveniently used to hold it tight. E. Bloomfield.



Antenna weight.

Best Short Wave Stations

This list of short-wave relay broadcasting, commercial and experimental stations is the result of several years of work. Names and addresses of the stations have been included wherever possible, so that the Listener may know where to write. The blank spaces are for recording the dial settings of your own set.

★ Stars designate the most active and best heard stations. Times are Eastern Standard

C—Commercial phone. B—Broadcast service. X—Experimental service.

Station	Dial
21540 kc. W8XK -B- 13.93 meters WESTINGHOUSE ELECTRIC PITTSBURGH, PA. 7-9 a.m.; relays KDKA	
20700 kc. LSY -C- 14.49 meters MONTE GRANDE ARGENTNIA Test irregularly	
20380 kc. GAA -C- 14.72 meters RUGBY, ENGLAND Calls Argentina, Brazil, mornings	
19900 kc. LSG -C- 15.08 meters MONTE GRANDE, ARGENTINA Tests irregularly, daytime	
19345 kc. ★PMA -B,C- 15.51 meters BANDOENG, JAVA Calls Holland early a.m. Broadcasts Tues., Thur., Sat., 10:00-10:30 a.m.	
18620 kc. GAU -C- 16.11 meters RUGBY, ENGLAND Calls N. Y., daytime	
18345 kc. FZS -C- 16.35 meters SAIGON, INDO-CHINA Phones Paris, early morning	
18340 kc. WLA -C- 16.36 meters LAWRENCEVILLE, N. J. Calls England, daytime	
17810 kc. PCV -C- 16.84 meters KOOTWIJK, HOLLAND Calls Java, 6-9 a.m.	
17790 kc. GSG -B- 16.86 meters DAVENTRY, B.B.C., BROADCASTING HOUSE, LONDON, ENGLAND 6-8:45 a.m.	
17780 kc. ★W3XAL -B- 16.87 meters NATIONAL BROAD. CO. BOUND BROOK, N. J. Relays WJZ, Daily exc. Sun. 9 a.m.-1 p.m.	
17775 kc. PHI -B- 16.88 meters HUIZEN, HOLLAND Used irregularly	
17760 kc. DJE -B- 16.89 meters BROADCASTING HOUSE BERLIN, GERMANY Irregular 8-11:30 a.m.	

Station	Dial
17760 kc. IAC -C- 16.89 meters PISA, ITALY Calls ships, 6:30-7:30 a.m.	
17310 kc. W3XL -X- 17.33 meters NATIONAL BROAD. CO. BOUND BROOK, N. J. Tests irregularly	
17080 kc. GBC -C- 17.56 meters RUGBY, ENGLAND Calls ships	
16233 kc. FZR3 C- 18.48 meters SAIGON, INDO-CHINA Calls Paris and Pacific Isles	
15660 kc. JVE -C- 19.16 meters NAZAKI, JAPAN Phones Java 3-5 a.m.	
15620 kc. JVF -C- 19.2 meters NAZAKI, JAPAN Phones U. S., 5 a.m. & 4 p.m.	
15415 kc. KWO -C- 19.46 meters DIXON, CAL. Phones Hawaii 2-7 p.m.	
15370 kc. ★HAS3 -B- 19.52 meters BUDAPEST, HUNGARY Broadcasts Sundays, 9-10 a.m.	
15355 kc. KWU -C- 19.53 meters DIXON, CAL. Phones Pacific Isles and Japan	
15330 kc. ★W2XAD -B- 19.56 meters GENERAL ELECTRIC CO. SCHENECTADY, N. Y. Relays WGY daily, 2-3 p.m. Sun. 10:30 a.m.-4 p.m.	
15280 kc. DJQ -B- 19.63 meters BROADCASTING HOUSE BERLIN, GERMANY 12:30-2 a.m.	
15270 kc. ★W2XE -B- 19.65 meters ATLANTIC BROADCASTING CORP. 486 Madison Av., N.Y.C. Relays WABC daily, 11 a.m.-6 p.m.	
15260 kc. GSI -B- 19.66 meters DAVENTRY, ENGLAND B.B.C., BROADCASTING HOUSE, LONDON, ENGLAND 12:15-2:15 p.m.	

Station	Dial
15250 kc. W1XAL -B- 19.67 meters BOSTON, MASS. Irregular, in morning	
15245 kc. ★ -B- 19.68 meters "RADIO COLONIAL" PARIS, FRANCE Service de la Radiodiffusion 103 Rue de Grenelle, Paris 7-11 a.m.	
15220 kc. ★PCJ -B- 19.71 meters N.V. PHILIPS' RADIO EINDHOVEN, HOLLAND Sun. 8-11 a.m. Also Tues. 3-6 a.m., Wed. 7-11 a.m.	
15210 kc. ★W8XK B- 19.72 meters WESTINGHOUSE ELECTRIC & MFG. CO. PITTSBURGH, PA. 9 a.m. - 7 p.m. Relays KDKA	
15200 kc. ★DJB -B- 19.74 meters BROADCASTING HOUSE BERLIN, GERMANY 3:45-7:15 a.m., 8-11:30 a.m.	
15140 kc. ★GSF -B- 19.82 meters DAVENTRY, B.B.C., BROADCASTING HOUSE, LONDON, ENGLAND 3:30-5:30, 6-8:45 a.m.	
15120 kc. ★HVJ -B- 19.83 meters VATICAN CITY ROME, ITALY 10:30 to 10:45 a.m., except Sunday Sat. 10-10:45 a.m.	
15090 kc. RKI -C- 19.88 meters MOSCOW, U.S.S.R. Phones Tashkent near 7 a.m. and relays RNE on Sundays irregularly	
15070 kc. PSD -C- 19.91 meters RIO DE JANEIRO, BRAZIL Calls N.Y., Buenos Aires and Europe, daytime	
15055 kc. WNC -C- 19.92 meters HIALEAH, FLORIDA Calls Central America, daytime	
14980 kc. KAY -C- 20.03 meters MANILA, P. I. Phones Pacific Isles	
14950 kc. HJB -C- 20.07 meters BOGOTA, COL. Calls WNC, daytime	

Station	Dial
14600 kc. JVH -B,C- 20.55 meters NAZAKI, JAPAN Broadcasts Mon. and Thurs. 4-5 p.m. Phones Europe 4-8 a.m.	
14590 kc. WMN -C- 20.56 meters LAWRENCEVILLE, N. J. Phones England morning and afternoon	
14530 kc. LSN -C- 20.65 meters HURLINGHAM, ARGENTINA Calls N.Y.C. afternoons	
14485 kc. TIR -C- 20.71 meters CARTAGO, COSTA RICA Phones Cen. Amer. & U.S.A. Daytime	
14485 kc. HPF -C- 20.71 meters PANAMA CITY, PAN. Phones WNC daytime	
14485 kc. TGF -C- 20.71 meters GUATEMALA CITY, GUAT. Phones WNC daytime	
14485 kc. YNA -C- 20.71 meters MANAGUA, NICARAGUA Phones WNC daytime	
13635 kc. SPW -X- 22 meters WARSAW, POLAND Testing 11:30 a.m.-12:30 p.m.	
13610 kc. JYK -C- 22.04 meters KEMIKAWA-CHO, CHIBA-KEN, JAPAN Phones California till 11 p. m.	
13585 kc. GBB -C- 22.08 meters RUGBY, ENGLAND Calls Egypt & Canada, afternoons	
13075 kc. VPD -X- 22.94 meters SUVA, FIJI ISLANDS Daily exc. Sun. 12:30-1:30 a.m.	
12840 kc. WOO -C- 23.36 meters OCEAN GATE, N. J. Calls ships	
12825 kc. CNR -B, C- 23.39 meters DIRECTOR GENERAL Telegraph and Telephone Stations, Rabat, Morocco Broadcasts, Sunday, 7:30-9 a.m.	
12800 kc. IAC -C- 23.45 meters PISA, ITALY Calls Italian ships, mornings	
12396 kc. CT1GO -B- 24.2 meters PAREDE, PORTUGAL Sun. 10-11:30 a.m., Tues., Thur., Fri. 1:00-2:15 p.m.	

Station	Dial
12235 kc. TFJ -C- 24.52 meters REYKJAVIK, ICELAND Phones England mornings. Broadcasts Sun. 12.40-1 p.m.	
12150 kc. GBS -C- 24.69 meters RUGBY, ENGLAND Calls N.Y.C., afternoon	
12000 kc. *RNE -B- 25 meters MOSCOW, U. S. S. R. Sun. 6-9, 10-11 a.m.; Daily 12.30-2 p.m.; Wed. 5-6 a.m.	
11991 kc. FZS2 -C- 25.02 meters SAIGON, INDO-CHINA Phones Paris, morning	
11950 kc. KKQ -X- 25.10 meters BOLINAS, CALIF. Tests, irregularly, evenings	
11940 kc. FTA -C- 25.13 meters STE. ASSISE, FRANCE Phones CNR morning Hurlingham, Arge., nights	
11890 kc. -B- 25.23 meters "RADIO COLONIAL" PARIS, FRANCE 11:50 a.m. - 6 p.m. 3-4 a.m.	
11870 kc. *W8XK -B- 25.26 meters WESTINGHOUSE ELECTRIC & MFG. CO. PITTSBURGH, PA. 5-9 p.m. Fri. till 12 m. Relays KDKA	
11860 kc. GSE -B- 25.29 meters DAVENTRY, B.B.C., BROADCASTING HOUSE, LONDON, ENGLAND 9 a.m. - 12 n.	
11830 kc W2XE -B- 25.36 meters ATLANTIC BRDADCASTING CORP. 485 MADISON AVE., N. Y. C. Relays WABC 6-8 p.m.	
11810 kc. *2RO -B- 25.4 meters E.I.A.R. Via Montello 5 ROME, ITALY 8:15-9 a.m., 9:15-10:15 a.m., 12 n.-1 p.m.	
11800 kc. CO9WR -X- 25.42 meters P. O. Box 85 SANCTI SPIRITUS, CUBA Testing in early evening and 9 a.m.-12 n.	
11790 kc. W1XAL -B- 25.45 meters BOSTON, MASS. Sun. 5-7 p.m.	
11770 kc. DJD -B- 25.49 meters BROADCASTING HOUSE, BERLIN, GERMANY 12 n. - 4.30 p.m.	

Station	Dial
11750 kc. *GSD -B- 25.53 meters BRITISH BROAD. CORP. DAVENTRY, ENGLAND 3:30-5:30 a.m. 12:15-4 p.m.	
11730 kc. PHI -B- 25.57 meters HUIZEN, HOLLAND Daily exc. Tues. and Wed. 8-10 a.m., Sat., Sun. 8-11 a.m.	
11720 kc. *CJRX -B- 25.6 meters WINNIPEG, CANADA Daily, 8 p.m.-12 m.	
11715 kc. -B- 25.61 meters "RADIO COLONIAL" PARIS, FRANCE 7-10 p.m. 11 p.m.-1 a.m.	
11710 kc. *HJ4ABA -B- 25.63 meters P. O. BOX 50, MEDELLIN, COLOMBIA 11:30 a.m.-1 p.m., 6:30-10:30 p.m.	
11680 kc. KIO -X- 25.68 meters KAHUKU, HAWAII Tests in the evening	
11560 kc. VIZ3 -X- 25.95 meters AMALGAMATED WIRELESS OF AUSTRALASIA MELBOURNE, AUSTRALIA Calls Canada evening and early a.m.	
11200 kc. XDJQ -B- 26.79 meters BOX 2825, MEXICO CITY, MEX. Daily 5:30-6:30 p.m., 10 p.m.-12 m. Relays XEW	
11050 kc. ZLT4 -C- 27.15 meters WELLINGTON, N. ZEALAND Phones Australia and England early a.m. Also broadcasts irregularly on Sunday.	
11000 kc. PLP -B-C- 27.27 meters BANDDOENG, JAVA Relays NIROM programs 5:30-11 a.m. irregular on Sundays	
10740 kc. *JVM -C- 27.93 meters NAZAKI, JAPAN Daily 12 m.-1 a.m., 4-8 a.m. Tues. and Fri. 2-3 p.m. Mon. and Thurs. 4-5 p.m.	
10675 kc. WNB -C- 28.1 meters LAWRENCEVILLE, N. J. Calls Bermuda, daytime	
10670 kc. *CEC -C- 28.12 meters SANTIAGO, CHILE Broadcasts Tues., Thurs., Sun. 8:05-8:30 p.m.	

Station	Dial
10660 kc. JVN -C- 28.14 meters NAZAKI, JAPAN Phones Europe 3-8 a.m.	
10520 kc. VLK -C- 28.51 meters SYONEY, AUSTRALIA Calls Rugby, early a.m.	
10430 kc. YBG -C- 28.76 meters MEOAN, SUMATRA 5:30-6:30 a.m., 7:30-8:30 p.m.	
10410 kc. PDK -C- 28.80 meters KOOTWIJK, HOLLANO Calls Java 7:30-9:40 a.m.	
10410 kc. KES -X- 28.80 meters BOLINAS, CALIF. Tests evenings	
10350 kc. LSX -C- 28.98 meters MONTE GRANOE, ARGENTINA Tests irregularly 8 p.m.-12 midnight	
10330 kc. *ORK -B. C- 29.04 meters RUYSSELEOE, BELGIUM Broadcasts 2:30-4 p.m.	
10290 kc. DIQ -X- 29.16 meters KONIGSWUSTERHAUSEN, GERMANY Broadcasts Irregularly	
10260 kc. PMN -C- 29.24 meters BANDOENG, JAVA Calls Australia 5 a.m.	
10250 kc. LSK3 -C- 29.27 meters HURLINGHAM, ARGENTINA Calls Europe and U. S., afternoon and evening	
10140 kc. OPM -C- 29.59 meters LEOPOLOVILLE, BELGIAN CONGO Phones around 3 a.m.	
10055 kc. ZFB -C- 29.84 meters HAMILTON, BERMUDA Phones N. Y. C. daytime	
9860 kc. *EAQ -B- 30.43 meters P. O. Box 951 MADRID, SPAIN Daily 5:15-9:30 p.m.; Saturday also 12 n.-2 p.m.	
9800 kc. LSE -C- 30.61 meters MONTE GRANOE, ARGENTINA Tests Irregularly	
9790 kc. GCW -C- 30.64 meters RUGBY, ENGLANO Calls N.Y.C., evening	

Station	Dial
9760 kc. VLJ-VLZ2 -C- 30.74 meters AMALGAMATEO WIRELESS OF AUSTRALIA SYONEY, AUSTRALIA Phones Java and N. Zealand early a.m.	
9750 kc. WOF -C- 30.77 meters LAWRENCEVILLE, N. J. Phones England, evening	
9635 kc. *2RO -B- 31.13 meters E.I.A.R., ROME, ITALY M., W., F. 7:45-9 p.m. Daily 2:30-5 p.m.	
9625 kc. *CT1AA -B- 31.17 meters LISBON, PORTUGAL Tues., Thurs., Sat., 4:30-7 p.m.	
9600 kc. XEFT -B- 31.25 meters AVE. INOEPENOENCIA, 28. VERA CRUZ, MEXICO Daily 11 a.m.-4 p.m., 7:30 p.m.-12 m., Sat. 11 a.m.-4 p.m., 6:30 p.m.-12 m., Sun. 11 a.m.-4 p.m., 9 p.m.-12 m. Relays XETF	
9595 kc. *HBL -B- 31.27 meters LEAGUE OF NATIONS GENEVA, SWITZERLAND Saturdays, 5:30-6:15 p.m. Mon. at 1.45 a.m.	
9590 kc. *VK2ME -B- 31.28 meters AMALGAMATEO WIRELESS LTO., 47 YORK ST. SYONEY, AUSTRALIA 1-3, 4:30-8:30, 9-11 a.m. Sun. 1-3, 5-11 a.m.	
9590 kc. HP5J -B- 31.28 meters Apartado 867 PANAMA CITY, PANAMA 11:45 a.m.-1 p.m., 7:30-10 p.m.	
9590 kc. W3XAU -B- 31.28 meters NEWTOWN SQUARE, PA. Relays WCAU 12 n.-7:50 p.m.	
9580 kc. *GSC -B- 31.32 meters DAVENTRY, B.B.C., BROAOCASTING HOUSE, LONOON, ENGLANO 6-8, 10-11 p.m.	
9580 kc. *VK3LR -B- 31.32 meters Research Section Postmaster Gen'ls. Dept. 61 Little Collins St., MELBOURNE, AUSTRALIA 3-7:30 a.m., except Sun. Also Fri., 10:30 p.m.-2 a.m.	
9570 kc. *W1XK -B- 31.35 meters WESTINGHOUSE ELECTRIC & MFG. CO. SPRINGFIELO, MASS. Relays WBZ, 7 a.m.-1 a.m. Sun. 8 a.m.-1 a.m.	
9565 kc. VUB -B- 31.36 meters BOMBAY, INOIA 11 a.m.-12:30 p.m., Wed., Thurs., Sat.	

Station	Dial
9560 kc. *DJA -B- 31.38 meters BROADCASTING HOUSE, BERLIN 5:05-9:15 p.m. 12:30-2 a.m. 8-11:30 a.m.	
9540 kc. *DJN -B- 31.45 meters BROAOCASTING HOUSE BERLIN, GERMANY 12:30-2 a.m. 8-11:30 a.m. 5:05-10:45 p.m.	
9530 kc. *W2XAF -B- 31.48 meters GENERAL ELECTRIC CO. SCHENECTAOY, N. Y. Relays WGY 4 p.m.-12 m. Sun. 4:15 p.m.-12 m.	
9525 kc. LKJ1 -B- 31.5 meters JELOY, NRWAY 5-8 a.m., 11 a.m.-6 p.m.	
9518 kc. *VK3ME -B- 31.54 meters AMALGAMATEO WIRELESS, Ltd. G. P. O. Box 1272L, MELBOURNE, AUSTRALIA Daily exc. Sun. 5:00-7:00 a.m.	
9510 kc. *GSB -B- 31.55 meters DAVENTRY, B.B.C., BROAOCASTING HOUSE, LONOON, ENGLANO 9 a.m.-12 n. 12:15-4, 4:15-5:45 p.m.	
9501 kc. *PRF5 -B- 31.58 meters RIO OE JANEIRO, BRAZIL Irregularly 4:45-5:45 p.m.	
9428 kc. *COCH -B- 31.8 meters 2 B ST., VEOAOO, HAVANA, CUBA 10 a.m.-12 n., 4-6:30, 8-10 p.m. also 11 a.m.-12 n. Thurs.	
9415 kc. *PLV -C- 31.87 meters BANDOENG, JAVA Phones Holland around 9:45 a.m. Broadcasts Tues. and Thurs., Sat. 10-10:30 a.m.	
9125 kc. HAT4 -B- 32.88 meters "RADIOLABOR" GYALI.uT. 22 BUDAPEST, HUNGARY Sunday 6-7 p.m.	
9060 kc. TFK -C- 33.11 meters REYJAVIK, ICELAND Phones London afternoons. Broadcasts irregularly.	
9010 kc. KEJ -C- 33.3 meters BOLINAS, CAL. Relays NBC & CBS Programs in evening irregularly	
8795 kc. HKV -B- 34.09 meters BOGOTA, COLOMBIA Irregular; 6:30 p.m.-12 m.	

Station	Dial
8750 kc. ZEK -B- 34.29 meters HONGKONG, CHINA Relays ZBW Daily 11:30 p.m.-1:15 a.m. Mon. and Thurs. 3-7 a.m. Tues., Wed., Fri. 6-10 a.m. Sat. 6-11 a.m.	
8220 kc. ZP1C -B- 36.4 meters ASUNCION, PARAGUAY 7-9 p.m.	
8214 kc. HCJB -B- 36.5 meters QUITO, ECUADOR 7-11 p.m., except Monday Sun. 11 a.m.-12 n.; 4-10 p.m.	
8185 kc. PSK -C- 36.65 meters RIO DE JANEIRO, BRAZIL Irregularly	
8170 kc. CO9JQ -X- 36.72 meters CAMAGUEY, CUBA Broadcast 8-9 p.m., daily except Sat. and Sun.	
8036 kc. CNR -B- 37.33 meters RABAT, MOROCCO Sunday, 2:30-5 p.m.	
7860 kc. HC2JSB -B- 38.17 meters GUAYAQUIL, ECUADOR 8:15 p.m.-11:15 p.m.	
7799 kc. *HBP -B- 38.47 meters LEAGUE OF NATIONS, GENEVA, SWITZERLAND 5:30-8:15 p.m., Saturday	
7715 kc. ZHJ -C- 38.89 meters BOLINAS, CAL. Relays NBC & CBS Programs in evening irregularly	
7630 kc. ZHJ -B- 39.32 meters PENANG, MALAYA Daily 7-9 a.m. also Sat. 11 p.m.-1 a.m. (Sun.)	
7510 kc. JVP -C- 39.95 meters NAZAKI, JAPAN Heard irregularly	
7400 kc. HJ3ABD -B- 40.54 meters P. O. Box 509 BOGOTA, COLOMBIA Daily 12-2 p. m.; 7-11p.m. Sunday, 5-9 p.m.	
7380 kc. XECR -B- 40.65 meters FOREIGN OFFICE. MEXICO CITY, MEX. Sun. 6-7 p.m.	
7281 kc. HJ1ABD -B- 41.04 meters CARTAGENA, COLO. Irregularly, evenings	
7100 kc. HKE -B- 42.25 meters BOGOTA, COL., S. A. Tue. and Sat. 8-9 p.m.; Mon. & Thurs. 6:30-7 p.m.	

Station	Dial
7080 kc. VP3MR -B- 42.68 meters GEORGETOWN, BRI. GUIANA, S.A. Sun. 7:45-10:15 a.m. Mon. 3:45-4:45, 6:45-7:45 p.m. Wed. 6:45-7:45 p.m. Thur. 5-6:45 p.m. Sat. 6:45-7:45 p.m.	
7030 kc. HRP1 -B- 42.67 meters SAN PEDRO SULA, HONDURAS Reported on this and other waves irregular in evening	
7000 kc. HJ1ABK -B- 42 meters CALLE, BOLIVIA, PROGROSO-IGUALDAD BARRANQUILLA, COLOMBIA Testing in evening	
6996 kc. PZH -B- 42.88 meters P. O. BOX 18, PARAMIRABO, DUTCH GUIANA Sun. 9:36-11:36 a.m. Mon. and Fri. 5:36-9:36 p.m. Tues. and Thur. 8:36-10:36 a.m., 2:36-4:36 p.m. Wed. 3:36-4:36, 5:36-9:35 p.m. Sat. 2:36-4:36 p.m.	
6905 kc. GDS -C- 43.45 meters RUGBY, ENGLAND Calls N.Y.C. evening	
6814 kc. HIH -B- 44.03 meters SAN PEDRO de MACORIS DOMINICAN REP. 12:10-1:40 p.m., 7:40-9 p.m., Sun. 3-4 a.m., 4:15-6 p.m.	
6750 kc. *JVT -X- 44.44 meters NAZAKI, JAPAN KOKUSAI-DENWA KAISHA, LTD., TOKIO Broadcasts 4-7:45 a.m.	
6710 kc. *TIEP -B- 44.71 meters LA-VOZ DEL TROPICO SAN JOSE, COSTA RICA APARTADO 257, Daily 7-10 p.m.	
6672 kc. YVQ -C- 44.95 meters MARACAY, VENEZUELA Broadcasts Sat. 8-9 p.m.	
6660 kc. *HC2RL -B- 45.05 meters P. O. BOX 759, GUAYAQUIL, ECUADOR, S. A. Sunday, 5:45-7:45 p. m. Tues., 9:15-11:15 p. m.	
6620 kc. *PRADO -B- 45.30 meters RIOBAMBA, ECUADOR Thurs. 9-11:45 p.m.	
6611 kc. RV72 -B- 45.38 meters MOSCOW, U. S. S. R. 1-6 p. m.	
6600 kc. YV5AM -B- 45.45 meters "ECOS de LLANO" SAN JUAN de LOS MORROS, VENEZUELA Testing in evening	

Station	Dial
6550 kc. TIRCC -B- 45.77 meters RADIOEMISORA CATOLICA COSTARRICENSE SAN JOSE, COSTA RICA Sun. 12:45-2:30, 6-7, 8-9 p.m.	
6528 kc. HIL -B- 45.95 meters SANTO DOMINGO, D. R. Sat., 8-10 p.m.	
6520 kc. *YV6RV -B- 46.01 meters VALENCIA, VENEZUELA 12 n.-1 p.m., 6-10 p.m.	
6500 kc. HJ5ABD -B- 46.15 meters MANIZALES, COL. 12-1:30 p.m., 7-10 p.m.	
6482-kc. H14D -B- 46.28 meters SANTO DOMINGO, DOMINICAN REPUBLIC Except Sun. 11:55 a.m.-1:40 p.m.; 4:40-7:40 p.m.	
6450 kc. HJ4ABJ -B- 46.51 meters "LA VOZ de CAMBEBE," IBAQUE, COLOMBIA 6-9 p.m.	
6447 kc. HJ1ABB -B- 46.53 meters BARRANQUILLA, COL., S. A. P. O. BOX 715, 11:30 a.m.-1 p.m.; 5-10 p.m.	
6425 kc. W9XBS -X- 46.7 meters Daily News Building, Chicago, Ill. Operates irregularly in afternoon	
6410 kc. TIPG -B- 46.8 meters APARTADO 225, SAN JOSE, COSTA RICA "Costa Rica Broadcasting" 12 n.-2 p.m., 6-10 p.m.	
6375 kc. YV4RC -B- 47.06 meters CARACAS, VENEZUELA 4:30-10:30 p.m.	
6316 kc. HIZ -B- 47.5 meters SANTO DOMINGO DOMINICAN REPUBLIC Daily except Sat. and Sun. 4:40-5:40 p.m.; Sat., 9:40-11:40 p.m.; Sun., 11:40 a.m.-1:40 p.m.	
6250 kc. HJ4ABC -B- 48 meters PERIERA, COL. 9:30-11:30 a.m., 7-8 or 9 p.m.	
6230 kc. OAX4G -B- 48 meters Apartado 1242 LIMA, PERU Wed. 7-11:30 p.m.	
6198 kc. CT1GO -B- 48.4 meters Portuguese Radio Club, PAREDE, PORTUGAL Sun. 11:30 a.m.-1 p.m. Daily exc. Tues. 7:20-8:30 p.m.	

Station	Dial
6185 kc. HI1A -B- 48.5 meters P. O. BOX 423, SANTIAGO, DOMINICAN REP. 11:40 a.m.-1:40 p.m. 7:40-9:40 p.m.	
6175 kc. HJ2ABA -B- 48.58 meters TUNJA, COLOMBIA 1-2; 7:30-9:30 p.m.	
6170 kc. HJ3ABF -B- 48.62 meters BOGOTA, COLOMBIA 6-11 p.m.	
6160 kc. *YV3RC -B- 48.7 meters CARACAS, VENEZUELA 11 a.m.-2 p.m., 4-10:30 p.m.	
6155 kc. CO9GC -B- 48.74 meters GRAU & CAMENEROS LABS. BOX 137, SANTIAGO, CUBA 9-10 a.m., 11:30 a.m.-1:30 p.m., 3-4:30 p.m. and 10-11 p.m., 12 m. - 2 a.m.	
6150 kc. CSL -B- 48.78 meters LISBON, PORTUGAL 7-8:30 a.m., 2-7 p.m.	
6150 kc. *CJRO -B- 48.78 meters WINNIPEG, MAN., CANADA 8 p.m.-12 m. Sun. 3-10:30 p.m.	
6150 kc. HJ5ABC -B- 48.78 meters CALI, COLOMBIA M., W., F., 7-10 p.m.	
6140 kc. *W8XK -B- 48.86 meters WESTINGHOUSE ELECTRIC & MFG. CO. PITTSBURGH, PA. Relays KDKA 9 p.m.-1 a.m.	
6130 kc. COCD -B- 48.92 meters "La Voz del Aire" CALLE G y 25, VEDADO, HAVANA, CUBA Relays CMLD 8 p.m.-12 m.	
6130 kc. HJ1ABE -B- 48.92 meters CARTAGENA, COL. P. O. BOX 31 Daily 11:15 a.m.-1 p.m.; Sun. 9-11 a.m.; Mon. 10 p.m.-12 m. Wed. 8-11 p.m.	
6130 kc. ZGE -B- 48.92 meters KUALA LUMPUR, FED. MALAY STATES Sun., Tue., and Fri., 6:40-8:40 a.m.	
6120 kc. *W2XE -B- 49.02 meters ATLANTIC BROADCASTING CORP. 485 MADISON AVE., N. Y. C. Relays WABC, 5-10 p.m.	

Station	Dial
6120 kc. XEFT -B- 49.02 meters VERA CRUZ, MEX. 11 a.m.-4 p.m.; 7:30 p.m.-12 m. Sat. also 6:30-7:30 p.m. Sun. 11 a.m.-4 p.m., 9 p.m.-12 m. Relays XETF	
6110 kc. *GSL -B- 49.10 meters DAVENTRY, B.B.C., BROADCASTING HOUSE, LONDON, ENGLAND 2:15-4, 10-11 p.m.	
6110 kc. VUC -B- 49.1 meters CALCUTTA, INDIA Daily except Sat., 3-5:30 a.m., 9:30 a.m.-noon; Sat. 11:45 a.m.-3 p.m.	
6105 kc. HJ4ABB -B- 49.14 meters MANIZALES, COL., S. A. P. O. Box 175 Mon. to Fri. 12:15-1 p.m.; Tues. & Fri. 7:30-10 p.m.; Sun. 2:30-5 p.m.	
6100 kc. *W3XAL -B- 49.18 meters NATIONAL BROADCASTING CO. BOUND BROOK, N. J. Relays WJZ Monday, Wednesday, Saturday, 5-6 p.m., Sun. 12 m.-1 a.m.	
6100 kc. *W9XF -B- 49.18 meters DOWNERS GROVE, ILL. Relays WENR, Chicago	
6097 kc. JB -B- 49.2 meters AFRICAN BROADCASTING CO. JOHANNESBURG, SOUTH AFRICA Sun.-Fri. 11:45 p.m.-12:30 a.m. (next day) Mon.-Sat. 3:30-7 a.m. 9 a.m.-4 p.m. Sun. 8-10:15 a.m.; 12:30-3 p.m.	
6090 kc. CRCX -B- 49.26 meters TORONTO, ONTARIO CANADA Daily 6 p.m.-12 m. Sunday, 12 n.-12 m.	
6090 kc. VE9BJ -B- 49.26 meters SAINT JOHN, N. B., CAN. 7-8:30 p.m.	
6085 kc. 2RO -B- 49.3 meters E.I.A.R. ROME, ITALY Mon., Wed., Fri. 6:00-7:30 p.m. Daily 6-6:15 p.m.	
6083 kc. VQ7LO -B- 49.31 meters NAIROBI, KENYA, AFRICA Mon.-Fri. 5:45-6:15 a.m., 11:30 a.m.-2:30 p.m. Also 8:30-9:30 a.m. on Tues. and Thurs. Sat. 11:30 a.m.-3:30 pm. Sun. 11 a.m.-2 p.m.	
6080 kc. CP5 -B- 49.34 meters LAPAZ, BOLIVIA 7-10:30 p.m.	

Station	Dial
6080 kc. W9XAA -B- 49.34 meters CHICAGO FEDERATION OF LABOR CHICAGO, ILL. Relays WCFL Sunday 11:30 a.m.-9 p.m. and Tues., Thurs., Sat., 4 p.m.-12 m.	
6072 kc. OER2 -B- 49.41 meters VIENNA, AUSTRIA 9 a.m.-5 p.m.	
6070 kc. HP5H -B- 49.42 meters COLON, PANAMA Testing in evening.	
6070 kc. HJ4ABC -B- 49.42 meters PERIERA, COL. 9:30-11:30 a.m., 7-8 or 9 p.m.	
6070 kc. VE9CS -B- 49.42 meters VANCOUVER, B. C., CANADA Sun. 1:45-9 p.m., 10:30 p.m.-1 a.m.; Tues. 6-7:30 p.m., 11:30 p.m.-1:30 a.m. Daily 6-7:30 p.m.	
6065 kc. HJ4ABL -B- 49.46 meters MANIZALES, COL. Daily 11 a.m.-12 n., 5:30-7:30 p.m. Sat. 10:30-11:30 p.m.	
6060 kc. OXY -B- 49.50 meters SKAMLEBOAEK, DENMARK 1-6:30 p.m.; also 11 a.m.-12 n. Sunday	
6060 kc. *W8XAL -B- 49.50 meters CROSLEY RADIO CORP. CINCINNATI, OHIO 6:30 a.m.-8 p.m.; 11 p.m.-1 a.m. Relays WLW	
6060 kc. W3XAU -B- 49.50 meters NEWTON SQUARE, PA. Relays WCAU, Philadelphia 8 p.m.-11 p.m.	
6050 kc. *GSA -B- 49.59 meters DAVENTRY, B.B.C., BROADCASTING HOUSE, LONDON, ENGLAND 10:45 a.m.-12 n, 4-5:45 p.m., 6-8 p.m.	
6045 kc. HJ3ABI -B- 49.63 meters BOGOTA, COLO. Irregular in evening	
6042 kc. HJ1ABG -B- 49.65 meters BARRANQUILLA, COLO. 12 n.-1 p.m., 6-10 p.m. Sun. 1-6 p.m.	
6040 kc. W4XB -B- 49.67 meters MIAMI, FLORIDA Relays WIOD 12 n.-2 p.m., 5:30 p.m.-12 m.	
6040 kc. PRA8 -B- 49.67 meters RADIO CLUB OF PERNAMBUCO 1-3, 4-7:30 p.m.	

(*Continued on page* 287)

Police Radio Alarm Stations

CGZ	Vancouver, B.C.	2342 kc.
CJW	St. Johns N.B.	2390 kc.
CJZ	Verdeen, Que.	2390 kc.
KGHA	Portable-Mobile	
KGHB	In State of Wash.	2490 kc.
KGHC		
KGHG	Las Vegas, Nev.	2474 kc.
KGHK	Palo Alto, Cal.	1674 kc.
KGHM	Reno, Nev.	2474 kc.
KGHN	Hutchinson, Kans.	2450 kc.
KGHO	Des Moines, Iowa	1682 kc.
KGHP	Lawton, Okla.	2466 kc.
KGHQ	Chinook Pass, W.	2490 kc.
KGHR	(Mobile) in Wash.	2490 kc.
KGHS	Spokane, Wash.	2414 kc.
KGHT	Brownsville, Tex.	2382 kc.
KGHU	Austin, Tex.	2442 kc.
KGHV	Corpus Christi, Tex.	2382 kc.
KGHW	Centralia, Wash.	2414 kc.
KGHX	Santa Ana, Cal.	2490 kc.
KGHY	Whittier, Cal.	1712 kc.
KGHZ	Little Rock, Ark.	2406 kc.
KGJX	Pasadena, Cal.	1712 kc.
KGLX	Albuquerque, N. M.	2414 kc.
KGOZ	Cedar Rapids, Iowa	2466 kc.
KGPA	Seattle, Wash.	2414 kc.
KGPB	Minneapolis, Minn.	2430 kc.
KGPC	St. Louis, Mo.	1706 kc.
KGPD	San Francisco, Cal.	2466 kc.
KGPE	Kansas City, Mo.	2422 kc.
KGPF	Santa Fe, N. Mex.	2414 kc.
KGPG	Vallejo, Cal.	2422 kc.
KGPH	Oklahoma City, Okla.	2450 kc.
KGPI	Omaha, Neb.	2466 kc.
KGPJ	Beaumont, Tex.	1712 kc.
KGPK	Sioux City, Iowa	2466 kc.
KGPL	Los Angeles, Cal.	1712 kc.
KGPM	San Jose, Cal.	2466 kc.
KGPN	Davenport, Iowa	2466 kc.
KGPO	Tulsa, Okla.	2450 kc.
KGPP	Portland, Ore.	2442 kc.
KGPQ	Honolulu, T.H.	1712 kc.
KGPR	Minneapolis, Minn.	2430 kc.
KGPS	Bakersfield, Cal.	2414 kc.
KGPW	Salt Lake City, Utah	2406 kc.
KGPX	Denver, Colo.	2442 kc.
KGPZ	Wichita, Kans.	2450 kc.
KGZA	Fresno, Cal.	2414 kc.
KGZB	Houston, Tex.	1712 kc.
KGZC	Topeka, Kans.	2422 kc.
KGZD	San Diego, Cal.	2490 kc.
KGZE	San Antonio, Tex.	2482 kc.
KGZF	Chanute, Kans.	2450 kc.
KGZG	Des Moines, Iowa	2466 kc.
KGZH	Klamath Falls, Ore.	2422 kc.
KGZI	Wichita Falls, Tex.	2458 kc.
KGZJ	Phoenix, Ariz.	2430 kc.
KGZM	El Paso, Tex.	2414 kc.
KGZN	Tacoma, Wash.	2414 kc.
KGZO	Santa Barbara, Cal.	2414 kc.
KGZP	Coffeyville, Kans.	2450 kc.
KGZQ	Waco, Tex.	1712 kc.
KGZR	Salem, Ore.	2442 kc.
KGZT	Santa Cruz, Cal.	1674 kc.
KGZU	Lincoln, Neb.	2490 kc.
KGZV	Aberdeen, Wash.	2414 kc.
KGZW	Lubbock, Tex.	2458 kc.
KGZX	Albuquerque, N. Mex.	2414 kc.
KGZY	San Bernardino, Cal.	1712 kc.
KIUK	Jefferson City, Mo.	1674 kc.
KNFA	Clovis, N. Mex.	2414 kc.
KNFB	Idaho Falls, Idaho	2458 kc.
KNFC	SS Gov. Stevens, (Wash.)	2490 kc.
KNFD	SS Gov. J. Rogers, (Wash.)	2490 kc.
KNFE	Duluth, Minn.	2382 kc.
KNFF	Leavenworth, Kans.	2422 kc.
KNFG	Olympia, Wash.	2490 kc.
KNFH	Garden City, Kans.	2474 kc.
KNFI	Mt. Vernon, Wash.	2414 kc.
KNFJ	Pomona, Cal.	1712 kc.
KNFK	Bellingham, Wash.	2490 kc.
KNFL	Shuksan, Wash.	2490 kc.
KNFM	Compton, Cal.	2490 kc.
KNFN	Waterloo, Iowa	1682 kc.
KNFO	Storm Lake, Iowa	1682 kc.
KNFP	Everett, Wash.	2414 kc.
KNFQ	Skykomish, Wash.	2490 kc.
KNFR		
KNFS		
KNFT	Mobile in State of Wash.	2490 kc.
KNFU		
KNFV		
KNFW		
KNFX	Alpowa Camp, Wash.	2490 kc.
KNFY	Ilwaco, Wash.	2490 kc.
KNFZ	Hells Crossing Camp, Wash.	2490 kc.
KNGA	Satus Pass Camp, Wash.	2490 kc.
KNGB	Yakima, Wash.	2490 kc.
KNGC	Vancouver, Wash.	2490 kc.
KNGD	Walla Walla, Wash.	2490 kc.
KNGE	Cleburne, Tex.	1712 kc.
KNGF	Sacramento, Cal.	2422 kc.
KNGH	Dodge City, Kans.	2474 kc.
KNGJ	El Centro, Cal.	2490 kc.
KNGK	Duncan, Okla.	2450 kc.
KNGM	Rapid City, S. Dak.	2450 kc.
KNGN	Norfolk, Nebr.	2490 kc.
KNGO	Portable, Okla.	2450 kc.
KNGP	Shreveport, Pa.	2430 kc.
KNGQ	Wenatchee, Wash.	2490 kc.
KNGR	Spokane, Wash.	2490 kc.
KNGT	Muskogee, Okla.	2450 kc.
KNGU	Yakima, Wash.	2414 kc.
KNGV	Salina, Kans.	2422 kc.
KNGW	Brownwood, Tex.	2458 kc.
KNGX	Portable, Los Angeles	1712 kc.
KNGY	Lodi, Calif.	2414 kc.
KNGZ	Ephrata, Wash.	2490 kc.
KNHA	Mobile, Wash.	2490 kc.
KNHB	Green Bay, Wis.	2382 kc.
KNHC	Ada, Okla.	2450 kc.
KNHD	Redwood Falls, Minn.	1658 kc.
KNHE	Fort Smith, Ark.	2406 kc.
KNHF	Denton, Tex.	1712 kc.
KNHG	Prescott, Ark.	2430 kc.
KNHM	Fargo, N. Dak.	2442 kc.
KSW	Beskeley, Cal.	1658 kc.
KVP	Dallas, Tex.	1712 kc.
VDM	Halifax, N.S.	1690 kc.
VYR	Montneal, Can.	1706 kc.
VYW	Winnipeg. Man.	2396 kc.
WCK	Belle Island, Mich.	2414 kc.
WEY	Boston, Mass.	1630 kc.
WKDT	Detroit, Mich.	1630 kc.
WKDU	Cincinnati, Ohio	1706 kc.
WMDZ	Indianapolis, Ind.	2442 kc.
WMJ	Buffalo, N. Y.	2422 kc.
WMO	Highland Park, Mich.	2414 kc.
WMP	Framingham, Mass.	1666 kc.
WNFP	Niagara Falls, N. Y.	2422 kc.
WPDA	Tulare, Cal.	2414 kc.
WPDB	Chicago, Ill.	1712 kc.
WPDC	Chicago, Ill.	1712 kc.
WPDD	Chicago, Ill.	1712 kc.
WPDE	Louisville, Ky.	2442 kc.
WPDF	Flint, Mich.	2466 kc.
WPDG	Youngstown, Ohio	2458 kc.
WPDH	Richmond, Ind.	2442 kc.
WPDI	Columbus, Ohio	2430 kc.
WPDK	Milwaukee, Wis.	2450 kc.
WPDL	Lansing, Mich.	2442 kc.
WPDM	Dayton Ohio	2430 kc.
WPDN	Auburn, N. Y.	2382 kc.
WPDO	Akron, Ohio	2458 kc.
WPDP	Philadelphia, Pa.	2474 kc.
WPDR	Rochester, N. Y.	2422 kc.
WPDS	St. Paol, Minn	2430 kc.
WPDT	Kokomo, Ind.	2490 kc.
WPDU	Pittsburgh, Pa.	1712 kc.
WPDV	Charlotte, N.C.	2458 kc.
WPDW	Washington, D.C.	2422 kc.
WPDX	Detroit, Mich.	2414 kc.
WPDY	Atlanta, Ga.	2414 kc.
WPDZ	Fort Wayne, Ind.	2490 kc.
WPEA	Syracuse, N.Y.	2382 kc.
WPEB	Grand Rapids, Mich.	2442 kc.
WPEC	Memnhis, Tenn.	2466 kc.
WPED	Arlington, Mass.	1712 kc.
WPEE	New York, N.Y.	2450 kc.
WPEF	New York, N.Y.	2450 kc.
WPEG	New York, N.Y.	2450 kc.
WPEH	Somerville, Mass.	1712 kc.
WPEI	E. Providence, R.I.	1712 kc.
WPEK	New Orleans, La.	2430 kc.
WPEL	W. Bridgewater, Mass.	1666 kc.

WPEM	Woonsocket. R.I.	2466 kc.
WPEP	Kenosha, Wis.	2450 kc.
WPES	Saginaw, Mich.	2442 kc.
WPET	Lexington, Ky.	1706 kc.
WPEV	Portable (in Mass.)	1666 kc.
WPEW	Northampton, Mass.	1666 kc.
WPFA	Newton, Mass.	1712 kc.
WPFC	Muskegon, Mich.	2442 kc.
WPFE	Reading, Pa.	2442 kc.
WPFG	Jacksonville, Fla.	2442 kc.
WPFH	Baltimore, Md.	2414 kc.
WPFI	Columbus, Ga.	2414 kc.
WPFJ	Hammond, Ind.	1712 kc.
WPFK	Hackensack, N. J.	2430 kc.
WPFL	Gary, Ind.	2470 kc.
WPFM	Birmingham, Ala.	2382 kc.
WPFN	New Bedford, Mass.	1712 kc.
WPFO	Knoxville, Tenn.	2474 kc.
WPFP	Clarksburg, W. Va.	2490 kc.
WPFQ	Swarthmore, Pa.	2474 kc.
WPFR	Johnson City, Tenn.	2470 kc.
WPFS	Asheville, N.C.	2474 kc.
WPFT	Lakeland, Fla.	2442 kc.
WPFU	Portland, Me.	2422 kc.
WPFV	Pawtucket, R.I.	2466 kc.
WPFW	Bridgeport, Conn.	2466 kc.
WPFX	Palm Beach, Fla.	2442 kc.
WPFY	Yonkers, N.Y.	2442 kc.
WPFZ	Miami, Fla.	2442 kc.
WPGA	Bay City, Mich.	2466 kc.
WPGB	Port Huron, Mich.	2466 kc.
WPGC	S. Schenectady, N.Y.	1658 kc.
WPGD	Rockford, Ill.	2458 kc.
WPGF	Providence, R.I.	1712 kc.
WPGG	Findlay, Ohio	1596 kc.
WPGH	Albany, N.Y.	2414 kc.
WPGI	Portsmouth, Ohio	2430 kc.
WPGJ	Utica, N.Y.	2414 kc.
WPGK	Cranston, R.I.	2466 kc.
WPGL	Binghamton, N.Y.	2442 kc.
WPGN	South Bend, Ind.	2490 kc.
WPGO	Huntington, N.Y.	2490 kc.
WPGP	Muncie, Ind.	2442 kc.
WPGQ	Columbus, Ohio	1596 kc.
WPGS	Mineola, N.Y.	2490 kc.
WPGT	New Castle, Pa.	2482 kc.
WPGU	Cohasset, Mass.	1712 kc.
WPGV	Boston, Mass	1712 kc.
WPGW	Mobile, Ala.	2382 kc.
WPGX	Worcester, Mass.	2466 kc.
WPGZ	Johnson City, Tenn.	2474 kc.
WPHA	Fitchburg, Mass.	2466 kc.
WPHB	Nashua, N.H.	2422 kc.
WPHC	Massillon, Ohio	1596 kc.
WPHD	Steubenville, Ohio	2458 kc.
WPHE	Culver, Ind.	1634 kc.
WPHF	Richmond, Va.	2450 kc.
WPHG	Medford, Mass.	1712 kc.
WPHI	Charleston, W. Va.	2490 kc.
WPHJ	Fairmont, W. Va.	2490 kc.
WPHK	Wilmington, Ohio	1596 kc.
WPHL	Portable in Ohio	1682 kc.
WPHM	Orlando, Fla.	2442 kc.
WPHN	Tampa, Fla.	2466 kc.
WPHO	Zanesville, Ohio	2430 kc.
WPHP	Jackson, Mich.	2466 kc.
WPHQ	Parkersburg, W. Va.	2490 kc.
WPHS	Culver, Ind.	1634 kc.
WPHT	Cambridge, Ohio	1596 kc.
WPHU	Jasker, Ind.	1634 kc.
WPHV	Bristol, Va.	2450 kc.
WPHY	Elizabethton, Tenn.	2474 kc.
WPHZ	Oil City, Pa.	2482 kc.
WPSP	Harrisburg, Pa.	1674 kc.
WQFA	New Haven, Conn.	2466 kc.
WQFB	Macon, Ga.	2414 kc.
WQFC	Gainesville, Fla.	2466 kc.
WGFD	Columbus City, Ind.	1534 kc.
WQFE	Seymour, Ind.	1634 kc.
WQFF	Monessen, Pa.	2482 kc.
WQFG	Roanoke, Va.	2450 kc.
WQFH	Lynchburg, Va.	2450 kc.
WQFI	Petersburg, Va.	2450 kc.
WQFJ	Oneontee, N.Y.	2414 kc.
WQFK	Clearwater, Fla.	2466 kc.
WQFM	Wilkes-Barre, Pa.	2442 kc.
WQFN	Winter Haven, Fla.	2442 kc.
WQFO	Lancaster, Ohio	2430 kc.
WQFP	Springfield, Ill.	1610 kc.
WQFQ	Lafayette, Ind.	2442 kc.
WQFR	Portable, N.Y.	1658 kc.
WQFS	Hibbing, Minn.	2382 kc.
WQFT	Portable, Ohio	1596 kc.
WQFU	Sharon, Pa.	2482 kc.
WQFV	Augusta, Ga.	2414 kc.
WRBH	Cleveland. Ohio	2458 kc.
WRDQ	Toledo, Ohio	2474 kc.
WRDR	Grosse Pt. Village, Mich.	2414 kc.
WRDS	E. Lansing, Mich.	1642 kc.
W1XAO	Boston, Mass.	1712 kc.

Canadian S-W Reception Notes

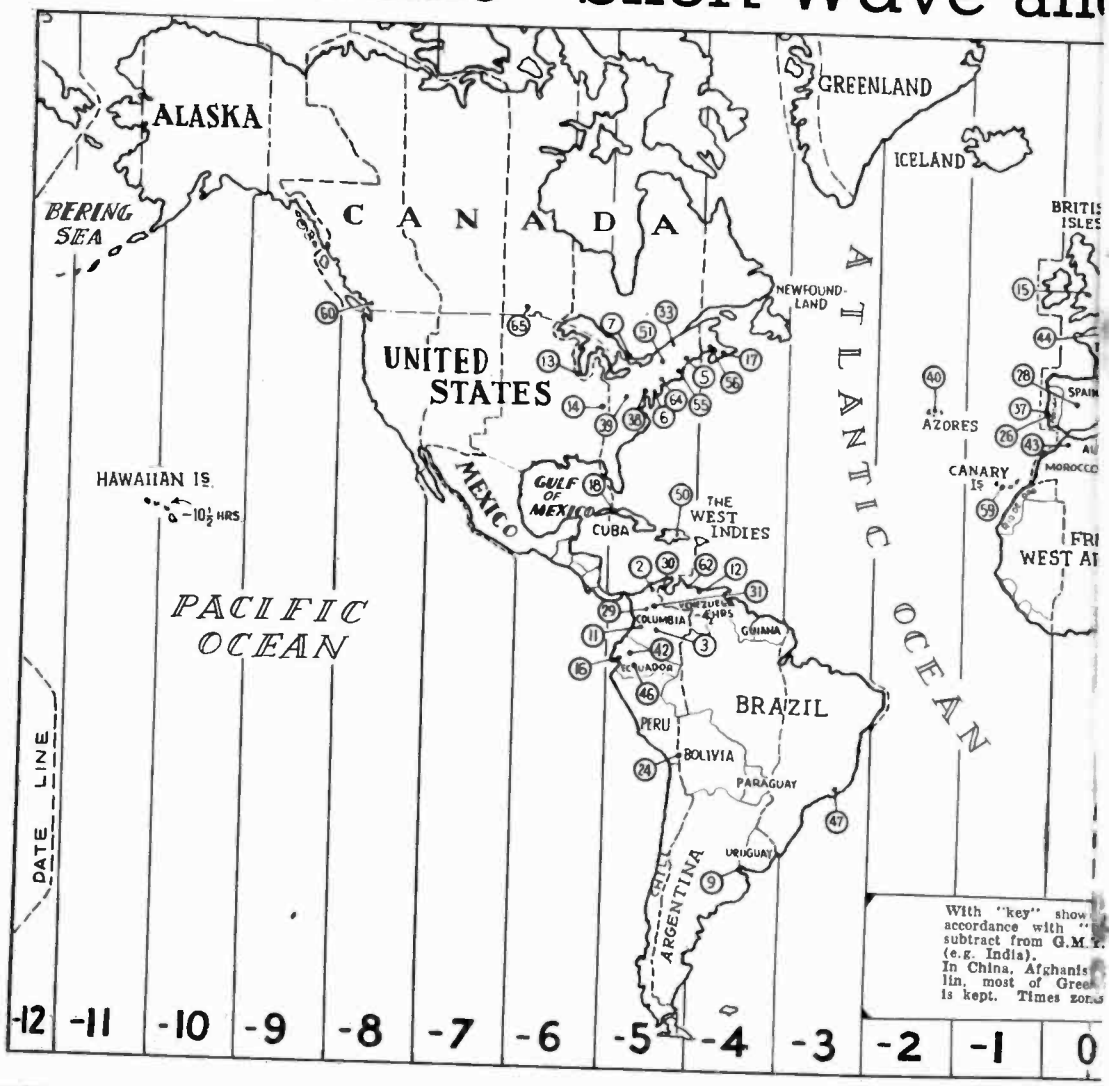
Of the British Empire transmissions, during the past month, we have found remarkably consistent reception of GSB on No. 5 Transmission, and both GSD and GSC on No. 6. The second frequency on No. 5 GSC, rarely gets through here at any useful strength, owing to the fact that the aerial directed East-West is in use for this frequency on No. 5. Carrier strength of both stations on No. 6 has been usually R8 to R9, with varying degree of flutter. GSD on No. 5 has usually come in about R6-7 at start, gaining to R8 or 9 for the later half of period.

We have also had a surprisingly large proportion of really useful reception from Daventry's No. 1 Transmission, in spite of its being directed chiefly towards Australia (E-W aerial used, with GSD and GSB). Usually, this xmission runs about R7-8, on one or both frequencies, for the first half—to one hour of the period, then quickly fading to R4 or less. Some time ago this No. 1 transmission was unusually fine here, running 9R at least, throughout, on GSD, and R8-9 on GSB.

Tuesday and Thursday mornings, PLV, Bandoeng, Java, on 9.415 Mc (announced frequency) gives us a most enjoyable broadcast from 0700 to 0730 PST. The programs are picked up from either the Bandoeng or the Sourabaya studios of the NIROM (Nederlands E. Indies broadcasting organization), and consist of Malay, Javanese, Hawaiian &c. music—most of it very tuneful to our Occidental ears. Program announcements are in Dutch; stations announcements in Dutch and English. This station presumably works on a rather narrow beam, directed on Dixon, California, as they work a commercial phone circuit with KWC &c at that point. In British Columbia, reception of PLV is very consistent, even under really poor general SW reception conditions. It would be interesting to hear from listeners in points farther East, as to their reception of this station—if any. From reports from England, these same programs are received here on PLE, Bandoeng, 18.83 Mc., which station normally works phone with Nederlands.

(*Continued on page* 285)

"World-Radio" Short-Wave an

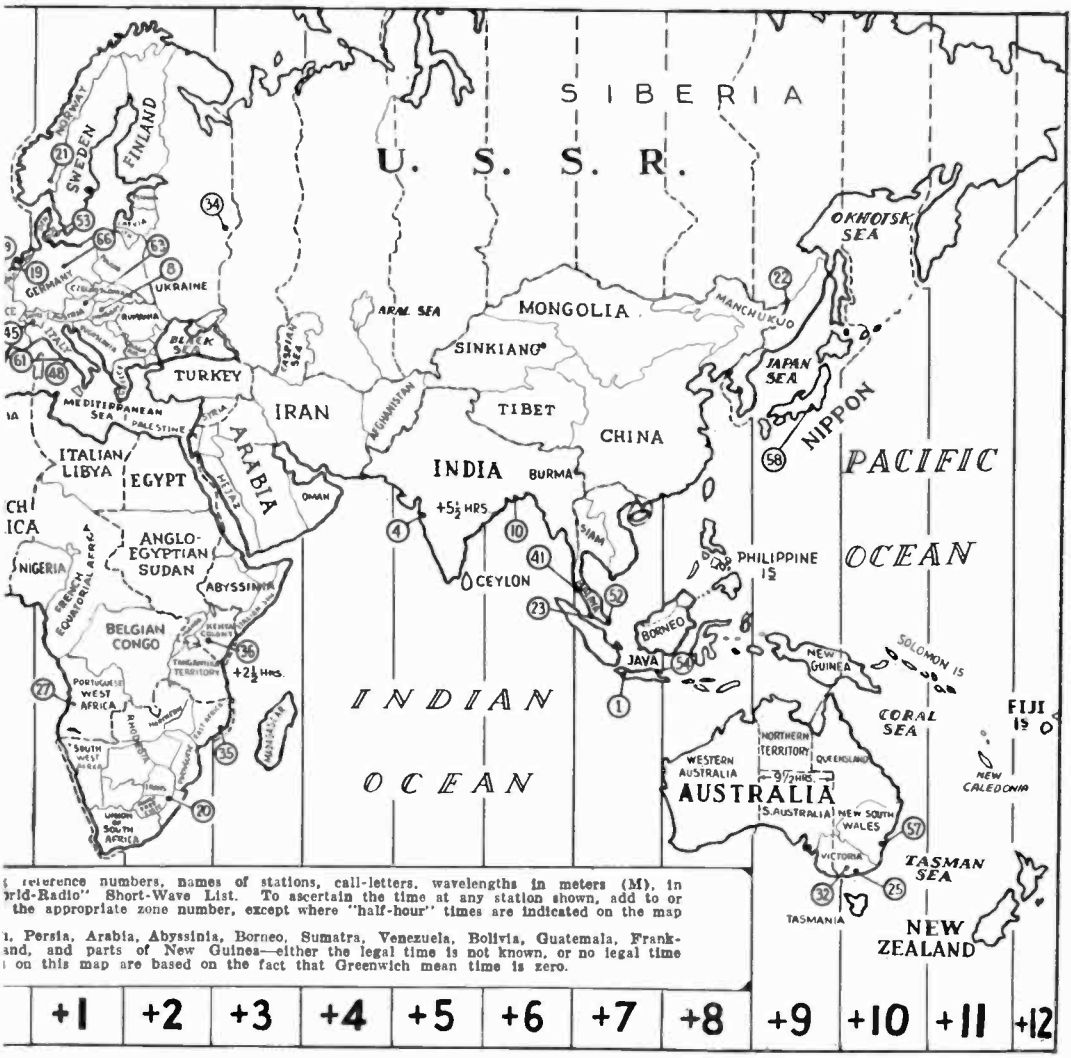


Ref.	Station	Call	m.
1	Bandoeng (Java)	YDA	49.67
2	Barranquilla (Colombia, S. America)	HJ1ABB	48.5
3	Bogota (Colombia, S. America)	HJ3ABH	49.91
4	Bombay (India)	VUB	31.36
5	Boston (Mass.)	W1XAL	49.67 25.45 19.67
6	Bound Brook (New Jersey, U.S.A.)	W3XAL	49.18 16.87
6	Bound Brook (N.J.)	W3XL	46.69 17.33
7	Bowmanville (Canada)	CRCX	49.26
8	Budapest (Hungary)	HAS3	19.52
8	Budapest (Hungary)	HAT4	32.88
9	Buenos Aires (S. America)	LSX	28.08
10	Calcutta (India)	VUC	49.1
11	Cali (Colombia)	HJ5ABD	46.15
12	Caracas (Venezuela)	YV2RC	51.72
12	Caracas (Venezuela)	YV3RC	48.7

Ref.	Station	Call	m.
12	Caracas (Venezuela)	YV4RC	47.06
13	Chicago (Illinois, U.S.A.)	W9XAA	49.34
13	Chicago (Ill., U.S.A.)	W9XF	49.18
14	Cincinnati (U.S.A.)	W8XAL	49.5
15	Daventry	GSA	49.59
15	Daventry	GSB	31.55
15	Daventry	GSC	31.32
15	Daventry	GSD	25.53
15	Daventry	GSE	25.29
15	Daventry	GSF	19.82
15	Daventry	GSG	16.86
15	Daventry	GSH	13.97
15	Daventry	GSI	19.66
15	Daventry	GSJ	13.93
15	Daventry	GSL	49.1
19	Eindhoven (Holland) (Experimental)	PCJ	19.71
16	Guayaquil (Ecuador)	HC2RL	45.06
17	Halifax (Nova Scotia)	VE9HX	49.1
18	Havana (Cuba)	COCO	49.92
18	Havana (Cuba)	COCH	31.81

Ref.	Station	Call	m.
19	Huizen (Holland)	PHI	25.57
20	Johannesburg (S.A.)	ZTJ	49.2
21	Jeloy (Norway)	LKJ1	31.33
21	Jeloy (Norway)		48.94
22	Kharbarovsk (USSR)	RV15	70.2
23	Kuala Lumpur (Fed. Malay States)	ZGE	48.92
24	La Paz (Bolivia)	CP5	49.34
25	Lyndhurst (Australia)	VK3LR	31.32
26	Lisbon (Portugal)	CSL	48.78
26	Lisbon (Portugal)	CT1AA	31.25
26	Lisbon (Portugal)	CT1CT	24.83 31
27	Lobito (Angola)	CR6AA	41.8
28	Madrid (Spain)	EAQ	30.43
29	Manizales (Colombia)	HJ4ABB	49.14
30	Maracaibo (Venezuela, S. America)	YV5RMO	51.28
31	Medellin (Colombia)	HJ4ABE	50.42
32	Melbourne (Australia)	VK3ME	31.54
33	Montreal (Canada)	VE9DN	49.96

l Time-Zone Map of the World



reference numbers, names of stations, call-letters, wavelengths in meters (M), in orld-Radio" Short-Wave List. To ascertain the time at any station shown, add to or the appropriate zone number, except where "half-hour" times are indicated on the map

i, Persia, Arabia, Abyssinia, Borneo, Sumatra, Venezuela, Bolivia, Guatemala, Frank- and, and parts of New Guinea—either the legal time is not known, or no legal time on this map are based on the fact that Greenwich mean time is zero.

Ref.	Station	Call	m.
34	Moscow (U.S.S.R.)	RV72	45.38
34	Moscow (U.S.S.R.)	RV59	50
34	Moscow (U.S.S.R.)	RNE	25
35	Mozambique (East Africa)	CR7AA	84.67
36	Nairobi (Kenya, Africa)	VQ7LO	49.31
37	Parede (Portuguese Radio Club)	CT1GO	24.2
			48.4
38	Philadelphia (Penna., U.S.A.)	W3XAU	49.5
			31.28
			48.86
39	Pittsburgh (Pa., U.S.A)	W8XK	25.27
			19.72
			13.93
40	Ponta Delgada (Azores)	CT2AJ	74.95
41	Penang (Fed. Malay States)	ZHJ	39.32
42	Quito (Ecuador, So. America)	HCJB	26.5
43	Rabat (Morocco)	CNR	37.33
			23.36
44	Radio Colonial (Paris, France)		25.23
			19.68
45	Radio Nations (Prangins, Switzerland)	HBP	38.48
45	Radio Nations	HBL	31.27
46	Riobamba (Ecuador, S. America)	PRADO	45.31
47	Rio de Janeiro (Brazil)	PRF5	31.58
			25.4
48	Rome (Italy)	2RO	31.13
			49.3
49	Ruysselede (Belgium)	ORK	29.04
50	Santo Domingo (DR)	HIX	50.17
50	Santo Domingo (DR)	HIZ	47.5
51	Schenectady, U.S.A.	W2XAD	19.56
51	Schenectady (U.S.A.)	W2XAF	31.48
52	Singapore (S.S.)	ZHI	49.9
53	Skamleback (Den'k)	OXY	49.5
54	Sourabaya (Java)	YDB	67.11
55	Springfield (U.S.A.)	W1XK	31.35
56	St. John (New Bruns.)	VE9BJ	49.26
57	Sydney (Australia)	VK2ME	31.28
58	Tokio (Nazaki, Japan)	JVT	41.44
58	Tokio (Nazaki, Japan)	JVM	27.93
59	Tenerife Radio Club	EA8AB	41.6
60	Vancouver (British Columbia)	VE9CS	49.43
61	Vatican City (Italy)	HVJ	50.26
			91.84
62	Valencia (Venezuela)	YV6RV	46.01
63	Vienna Experimental (Austria)	OER2	49.4
			49.02
64	Wayne (N.J.)	W2XE	25.36
			19.64
65	Winnipeg (Canada)	CJRX	25.6
65	Winnipeg (Canada)	CJRO	48.78
66	Zeesen (Germany)	DJA	31.38
66	Zeesen (Germany)	DJB	19.74
66	Zeesen (Germany)	DJC	49.83
66	Zeesen (Germany)	DJD	25.49
66	Zeesen (Germany)	DJE	16.89
66	Zeesen (Germany)	DJN	31.45
66	Zeesen (Germany)	DJQ	19.83

Grand Short-Wave Station List

● *This Grand List of Short-Wave Stations of the World is a carefully edited one, and especially compiled by the editors. Only those short-wave stations which the average listener is likely to hear have been included in this list. A special "Quick Reference" list appears elsewhere in the magazine, giving the "Star" short-wave broadcasting stations, while another specially edited list contains the "Television" and "Police" station call letters.*

The editors will be glad at all times to receive corrections from our readers, and particularly any additional information on new stations not found in this list. In giving this information, please write such data on a separate sheet if the letter contains references to any other subject, so that these corrections can be handed directly to the editor of this department. A postcard will frequently serve the purpose for sending us such information.

Short Wave Phone Stations By Order of Frequency in Megacycles

Freq. Mc.	CALL	LOCATION
		199 TO 180 METERS
1.510	VAF	Alert Bay, Can.
1.510	CJD	Campbell River, B.C., Can.
1.510	VAC	Cape Lazo, Can.
1.510	CJN	Cardero Channel, B.C., Can.
1.510	CJE	Ceepeecee, B.C., Can.
1.510	CJK	Knight Inlet, B.C., Can.
1.510	VCU	Merry Island, Can.
1.510	CFV	Namu, B.C., Can.
1.510	CKQ	Powell River, B.C., Can.
1.510	YLZ	Riga, Latvia (X)
1.510	CJT	Theodosia Arm, B.C., Can.
1.510	CYG	Thurston Bay, B.C., Can.
1.510	VAI	Vancouver, B.C., Can.
1.510	CJH	Viner Sound, B.C., Can.
1.510	CJR	Wakeman Sound, B.C., Can..
1.520	VIA	Adelaide, Australia
1.520	VKO	Sydney, Australia
1.523	GUF	Alderney, United Kingdom
1.523	GUG	Guernsey, United Kingdom
1.523	GUB	Lochboisdale, United Kingdom
1.523	GUA	Tobermory, United Kingdom
1.530	W9XBY	Kansas City, Missouri, USA (BX)
1.530	W1XBS	Prospect Twp., Conn.,USA (BX)
1.530	SCJ	Karlskrona, Sweden (B)
1.532	CFC	Cub Lake, Sask., Can.
1.532	CGV	Emma Lake, Sask., Can.
1.532	CZJ	Ile-a-la-Crosse, Sask., Can.
1.532	CGQ	Lac la Ronge, Sask., Can.
1.532	CJC	Thunder Mountain, Sask., Can.
1.538	OSW	Antwerp, Belgium
1.538	OYM	Christianso, Denmark
1.538	OXJ	Thorshavn, Denmark
1.538	OZK	Thorshavn, Denmark
1.538	TFO	Malmey, Iceland
1.538	TFS	Stykkisholmur, Iceland
1.540	VBY	Lunenburg, N.S., Can.
1.540	VK3EJ	Melbourne, Australia (Fire)
1.540	CJD	Campbell River, B.C., Can.
1.540	CJD	Thurston Bay, B.C., Can.
1.550	W6XAI	Bakersfield, Calif. (BX)
1.550	W2XR	Long Island City, N.Y., USA (BX)
1.550	YDA4	Soekaboemi, Neth. India (B)
1.550	----	Naval stations, United Kingdom
1.560	CZA	Drummondville, P.Q., Can.
1.560	VBQ	Halifax, N.S., Can.
1.570	YDB6	Malang, Netherland India
1.579	VLA	Cape Bruny, Australia
1.579	VLB	Maatsuyker Isl., Australia
1.579	VLC	Tasman Isl., Australia
1.579	DCA	Adlergrund Lightship, Germany
1.579	DCV	Bremen Lightship, Germany
1.579	DCK	Elbe Lightship No. 2, Germany
1.579	DCG	Elbe Lightship No. 3, Germany
1.579	DCI	Elbe Lightship No. 4, Germany
1.579	DCU	Robbenplate Lighthouse, Germ.
1.579	----	Ship Stations, Germany
1.579	OYQ	Jakobshavn, Greenland
1.580	CJM	Borden, P.E.I., Canada
1.582	YDD3	Batavin, Netherland India (B)
1.585	PCC	Noordhinder Lightship, Neth.
1.585	PID	Vlissingen Canal Watch, Neth.
1.595	OZP	Lyngby, Denmark (B)
1.595	YDB5	Solo, Netherland India (B)
1.596	----	Experimental, USA
1.596	CFC	Cub Lake, Sask., Canada
1.596	CGV	Emma Lake, Sask., Canada
1.596	CZJ	Ile-la-Cross, Sask., Canada
1.596	CGQ	Lac la Ronge, Sask,. Canada
1.596	CJC	Thunder Mountain, Sask., Can.
1.596	TFZ	Isafjordur, Iceland
1.596	TFA	Reykjavik, Iceland
1.596	TFX	Siglufjordur, Iceland
1.596	TFV	Vestmannaeyjar, Iceland
1.600	PIE	Hoek van Holland, Netherlands
1.600	PCB	Maas Lightship, Netherlands
1.600	PIC	Scheveningen Lighthouse Dep. Netherlands
1.615	PIB	Brandaris Lighthouse, Neth.
1.615	PCD	Haaks Lightship, Netherlands
1.615	PIA	Kykduin Semaphore, Neth.
1.615	PCE	Terschellingerbank Lightship, Netherlands
1.615	YDB4	Tjepoe, Netherland India (B)
1.620	CZB	Bellevue, P.Q., Canada
1.620	CFC	Cub Lake, Sask., Canada
1.620	CGV	Emma Lake, Sask., Canada
1.620	CZJ	Ile-a-la-Crosse, Sask., Canada
1.620	CFD	Kenora, Ont., Canada
1.620	CGQ	Lac la Ronge, Sask., Canada
1.620	CMF	Manicouagan River, P.Q., Can.
1.620	CZY	Riviere du Chef, P.Q., Canada
1.620	CZZ	St. Felicien, P. Q., Canada
1.620	CFL	Tabouret, P. Q., Canada
1.620	CJC	Thunder Mt., Sask., Canada
1.620	----	Experimental, Canada
1.622	VKA	Bogolara, Australia
1.622	VJE	Burrinjuck, Australia
1.622	VJF	Cootamundra, Australia
1.622	VJH	Gundagai, Australia
1.622	VJO	Koorawatha, Australia
1.622	VKJ	Lithgow, Australia
1.622	VJG	Murrumburrah, Australia
1.622	VKB	Yass, Australia
1.622	----	Portable, Burrinjuck, Australia
1.622	----	Portable, Lithgow, Australia
1.622	OXB	Blaavand, Denmark, 2B
1.622	OUY	Vyl Lightship, Denmark
1.629	ESS	Osmussaar, Estonia
1.630	YDD2	Bandoeng, Netherland India
1.640	YDA3	Buitenzorg, Netherl. India, B
1.648	TFA	Reykjavik, Iceland
1.648	TFX	Siglufjordur, Iceland
1.648	TFV	Vestmannaeyjar, Iceland
1.660	YDB3	Djokjakarta Netherl. Ind., (B)
		180 TO 160 METERS
1.690	----	Burnham, United Kingdom
1.712	CZG	Prince Rupert, B. C., Canada
1.712	CZF	Vancouver, B. C., Canada
1.712	CZE	Victoria, B. C., Canada
1.714	ESG	Tallinn-Ulemiste, Etonia
1.715	----	Amateurs, Argentina

Freq. Mc.	CALL	LOCATION
1.715	----	Amateurs, Canada
1.715	----	Amateurs, Ecuador
1.715	----	Amateurs, Estonia
1.715	----	Amateurs, Union of So. Africa
1.716 to 2.000	----	Amateurs, USA
1.720	DAL	Bremerhaven Lloydhalle, Ger.
1.730	YLY	Liepaja, Latvia, (X)
1.735	RFAU	Bykovo (Moskow Obl.) Russia
1.754	OYE	Ronne, Deumark
1.760	GMH	Main Head, Irish Free State
1.760	GCK	Valentia Irish Free State
1.760	----	Burnham, United Kingdom
1.760	----	Cullercoats, United Kingdom
1.760	----	Fishguard, United Kingdom
1.760	----	Humber, United Kingdom
1.760	----	Lands End, United Kingdom
1.760	----	Niton, United Kingdom
1.760	----	North Foreland, United King.
1.760	----	Portpatrick, United Kingdom
1.760	----	Seaforth, United Kingdom
1.760	----	Wick, United Kingdom
1.764	EAI	Teneriffe, Canary Islands
1.764	DCS	Tonning, Germany
1.765	TFF	Flatey a Skjalfanda, Iceland
1.775	RHBD	Leningrad, Russia
1.775	ESR	Ruhnu, Estonia
1.775	----	Ship Stations, Germany
1.818	OUY	Vyl Lightship, Denmark
1.818	PDN	Scheveningen, Netherlands
1.818	RHBD	Leningrad, Russia
1.819	OXC	Ringsted, Denmark
1.840	YDJ4	Cheribon, Netherl. Indie, (B)
1.860	YDK6	Semarang, Netherl. India, (B)
		160 TO 120 METERS
1.875	EAU	San Lorenzo, Canary Islands
1.875	DCA	Adlergrund Lightship, Germany
1.875	DCV	Bremen Lightship, Germany
1.875	DCK	Elbe Lightship No. 2, Germany
1.875	DCG	Elbe Lightship No. 3, Germany
1.875	DCI	Elbe Lightship No. 4, Germany
1.875	DAC	Elbe-Weser, Germany
1.875	DCU	Robbinplate Lighthouse, Ger.
1.875	DAS	Rugen, Germany
1.875	----	Naval Stations, Germany
1.875	TFH	Husavik, Iceland
1.875	RFAW	Moscow, Russia
1.875	RLXS	Saratov, Russia
1.880	YDO9	Soerabaja, Netherl. India, (B)
1.898	ESP	Parnu, Estonia
1.900	YDG6	Batavia, Netherl. India, (B)
1.900	RW69	Odessa, Russia, (T)
1.910	----	Ship Stations, Germany
1.920	YDH9	Buitenzorg, Netherl. India, (B)
1.940	OHN	Hango, Finland
1.940	YDN3	Kediri, Netherland India, (B)
1.960	----	Ship Stations, Germany
2.000	OXK	Tveraa, Denmark
2.000	TFG	Grimsey, Iceland
2.020	RIAD	Nijni-Chkaft, Russia
2.020	----	Portable, Australia
2.050	VJI	Cloncurry, Australia
2.090	DAS	Rugen, Germany
2.098	----	Kronborg Light, Denmark
2.110	----	Ship-to-Shore radiophone, USA
2.110	YDI2	Soekaboemi, Netherl. India, (B)
2.126	----	Ship-to-Shore, USA
2.140	DAC	Elbe-Weser, Germany
2.140	VHO	Melbourne, Australia
2.174	----	Ship-to-Shore, USA
2.198	----	Ship-to-Shore, USA
2.206	VYV	Port Menier, P. Q., Canada
2.212	VYZ	High Falls, P. Q., Canada
2.230	RT7	Azov-on-le-Don, Russia
2.252	KIUG	Portable, USA
2.252	KIUF	Portable, USA
2.252	KIUE	Portable, USA
2.252	KIUD	Portable, USA
2.252	KIUC	Portable, USA
2.252	KIUB	Portable, USA
2.255	DAC	Elbe-Weser, Germany
2.284	CKO	Crane Island, P. Q., Canada
2.284	CFI	Flaggs Cove, N. B., Canada
2.284	CFT	Leamington, Ont., Canada
2.284	CKP	Montmagny, P. Q., Canada
2.284	CFX	Pelee Island, Ont., Canada
2.284	CKB	Pictou, N. S., Canada
2.284	CKU	Pictou Island, P. Q., Canada
2.284	CFZ	Welchpool, N. B., Canada
2.290	CFW	Bones Bay, B. C., Canada
2.290	CJE	Ceepeecee, B. C., Canada
2.290	VFJ	Homalko, B. C., Canada
2.290	CZL	Humpback Bay, B. C., Canada
2.290	CJY	Jackson Bay, B. C., Canada
2.290	CFV	Namu, B. C., Canada
2.290	CJL	Selwyn Inlet, B. C., Canada
2.290	CJR	Wakeman Sound, B. C., Canada
2.300	RHHA	Armavir, Russia
2.300	RKPU	Loubny, Russia
2.343	RFCQ	Moscow, Russia
2.350	VBQ	Halifax, N. S., Canada
2.355	----	Burnham, United Kingdom
2.355	----	Cullercoats, United Kingdom
2.355	----	Fishguard, United Kingdom
2.355	----	Humber, United Kingdom
2.355	----	Lands End, United Kingdom
2.355	----	Malin Head, United Kingdom
2.355	----	Niton Radio, United Kingdom
2.355	----	North Foreland, United King.
2.355	----	Portpatrick, United Kingdom
2.355	----	Seaforth, United Kingdom
2.355	----	Valentia, United Kingdom
2.355	----	Wick, United Kingdom
2.357	EDP	Palma de Mallorca, Spain
2.357	EDR4	Palma de Mallorca, Spain
2.366	----	Naval Stations, United King.
2.385	YDA2	Batavia, Netherl India, (B)
2.398	----	Experimental, USA
2.400	EST	Tallinn-Sadam, Estonia
2.400	DAF	Norddeich, Germany
2.400	OYR	Egedesminde, Greenland
2.415	YDE4	Soerabaja, Netherl. India, (B)
2.416	CZG	Prince Rupert, B. C., Canada
2.416	CJW	St. John, N. B., Canada
2.416	CZF	Vancouver, B. C., Canada
2.416	CZE	Victoria, B. C., Canada
2.416	VYW	Winnipeg, Man., Canada
2.450	YDB2	Semarang, Netherl. India, (B)
2.452	CQZ	Vancouver, B. C., Canada
2.452	CJZ	Verdun, P. Q., Canada
		120 TO 100 METERS
2.500	DAS	Rugen, Germany
2.500	TFQ	Djopivogur, Iceland
2.517	EDO	Madrid, Spain
2.517	EDR2	Madrid, Spain
2.517	EDS	Madrid, Spain
2.550	RHJS	Oust-Labinskaia, Russia
2.604	WZAS	Gasconade, Mo., USA
2.604	WXA	Juneau, Alaska
2.604	WXH	Ketchekan, Alaska
2.604	WYBF	Napoleon, Mo., USA
2.604	WXY	Nome, Alaska
2.604	----	Transports, USA
2.610	RELB	Boukhta Bertys, Russia
2.610	RELD	Boukhta Bertys, Russia
2.610	RELO	Boukhta Bertys, Russia
2.610	RELZ	Spasskyi Zavod, Russia
2.640	----	Airways, USA
2.644	----	Airways, USA
2.670	NOX	Biloxi, Miss., USA
2.670	NOB	Buffalo, N. Y., USA
2.670	NOV	Cape May, N. J., USA
2.670	NMD	Cleveland, Ohio, USA
2.670	NOL	Ft. Lauderdale, Fla., USA
2.670	NOY	Galveston, Texas, USA
2.670	NMW	Grays Harbor, Wash., USA
2.670	NMV	Jacksonville, Fla., USA
2.670	NOM	Miami, Fla., USA
2.670	NMG	Mobile, Ala., USA
2.670	NOU	New London, Conn., USA
2.670	NMC	Point Bonita, Calif., USA
2.670	NOJ	Point Vicente, Calif., USA
2.670	NOW	Port Angeles, Wash., USA
2.670	NOZ	Port Tounsend, Wash., USA
2.670	NMN	Princess Anne, Va., USA
2.670	NMY	Rockaway Point, N. Y., USA
2.670	NOF	St. Petersburg, Fla., USA
2.670	NOS	Salem, Mass., USA
2.670	NMP	Wilmette, Ill., USA
2.670	NMF	Winthrop, Mass., USA
2.672	EDO	Madrid, Spain

Freq. Mc.	CALL and LOCATION
2.672	EDR2 Madrid, Spain
2.673	EDS Madrid, Spain
2.698	NOX Biloxi, Miss., USA
2.698	NOB Buffalo, N. Y., USA
2.698	NMD Cleveland, Ohio, USA
2.698	NOW Port Angeles, Wash., USA
2.698	NOS Salem, Mass., USA
2.698	NMP Wilmette, Ill., USA
2.710	YDK5 Semarang, Netherl. India, (B)
2.730	KZGF Manila, Philippine Islands
2.730	---- North Foreland, United Kingdom
2.738	WKDX New York, N. Y., USA
2.740	CFD Kenora, Ont., Canada
2.740	---- Experimental, Canada
2.750	---- Experimental, tel., USA, (T)
2.750	---- Experimental, tel., Can., (T)
2.750	YDL6 Djokjakarta, Nethrl. India, (B)
2.758	---- Experimental, Can.
2.760	YZGH Iloilo, Philippine Islands
2.770	VK3LR Lyndhurst, Vic., Australia
2.770	VK3XX Lyndhurst, Vic., Australia
2.770	YDO6 Soerabaja, Netherl. India, (B)
2.790	YDN2 Madioen, Netherl. India, (B)
2.800	---- Aeronautical, Europe
2.810	YDQ6 Malang, Netherland India (B)
2.810	RHBD Leningrad, Russia
2.815	---- Aeronautical, Europe
2.820	VK3LR Lyndhurst, Vic., Australia, (B)
2.820	VK3XX Lyndhurst, Vic., Australia
2.820	RIAD Nijni-Chkaft, Russia
2.830	KZGG Cebu, Philippine Islands
2.830	YDU4 Medan, Netherland Indies (B)
2.830	---- Aeronautical, Europe
2.835	---- Rome, Italy
2.845	OHG Helsingfors, Finland
2.845	VLT Bulolo, New Guinea
2.870	YDJ3 Tegal, Netherland India, (B)
2.870	RFCQ Moscow, Russia
2.875	EDR4 Palma de Mallorca, Spain
2.890	YDJ2 Pekalongou, Netherl. India, (B)
2.910	YDE3 Semarang, Netherl. India, (B)
2.920	REKD Alma-Ata, Russia
2.930	YDO5 Soerabaja, Netherl. India, (B)
2.950	YDQ5 Malang, Netherland India, (B)
2.980	CZA Drummondville, P. Q., Canada
	100 TO 85 METERS
2.990	RHBB Novorjev, Russia
3.000	SQB Bialystok, Poland
3.000	SQA Lwow, Poland
3.000	SWZ Warsaw, Poland
3.040	YDA Tandjongpriok, Neth. Ind. (B)
3.040	CGE Calgary, Alta., Canada
3.040	CKS Calgary, Alta., Canada
3.040	RKDM Medvejia Gora, Russia
3.040	RKOO Odessa, Russia
3.040	RKDO Parandovo, Russia
3.048	KIOG Portable, USA
3.048	KIUF Portable, USA
3.048	KIUE Portable, USA
3.048	KIUD Portable, USA
3.048	KIUC Portable, USA
3.048	KIUB Portable, USA
3.050	RUF Moscow, Russia
3.050	---- Portable, Wyndham Meatsworks, Australia
3.058	VYY Masson, P. Q., Canada
3.060	RKNK Kharkov, Russia
3.060	RUF Moscow, Russia
3.080	PVV5 Tarauaca, Brazil
3.080	RHIK Rostov on Don, Russia
3.080	REBB Vladimir, Russia
3.088	---- Airplanes, USA
3.090	RBX Moscow, Russia
3.095	W7XA Portable, USA
3.095	W7XAQ Portable, USA
3.105	---- Airplanes, USA
3.125	RPF Moscow, Russia
3.130	YDH6 Bandoeng, Netherl. India, (B)
3.135	RKOP Kiev, Russia
3.140	RMDU Ouroulga, Russia
3.150	YDG3 Batavia, Netherl. India, (B)
3.150	REIX Akmolinsk, Russia
3.150	RLEE Bouchoulei, Russia
3.150	RMDK Ksenievskaia, Russia
3.152	CGM Montreal, P. Q., Canada
3.152	CGY Yamachichi P. Q., Canada

Freq. Mc.	CALL and LOCATION
3.155	W7XAQ Portable station, USA
3.158	OYN Upernivik, Greenland
3.160	CGM Montreal, P. Q., Canada
3.160	CGY Yamachichi, P. Q., Canada
3.160	RLEZ Zilovo, Russia
3.170	YDO4 Soerabaja, Netherl. India, (B)
3.170	RLEC Tehita, Russia
3.180	RMDG Bolchoi Never, Russia
3.180	RHJD Chakhty, Russia
3.180	RLED Chulka, Russia
3.180	RMWA Tashkent, Russia
3.180	RMDF Zeia, Russia
3.190	YDK2 Semarang, Netherl. India, (B)
3.190	RMDQ Amazar, Russia
3.190	RENI Tehimkent, Russia
3.195	W7XAQ Portable, USA
3.200	RMDM Mogotcha, Russia
3.210	YDL5 Djokjakarta, Nethrl. India, (B)
3.230	YDQ4 Malang, Netherland India, (B)
3,235	W7XAQ Portable, USA
3.240	RMAY Troitse Zaroubino, Russia
3.240	EDP Palma de Mallorca, Spain
3.240	EDO Madrid, Spain
3.240	EDR2 Madrid, Spain
3.250	YDH5 Garoet, Netherland India, (B)
3.256	---- Experimental, Canada
3.265	W7XAQ Portable, USA
3.270	YDK4 Mageland, Netherl. India, (B)
3.275	RMAS Tafouin, Russia
3.295	W7XAQ Portable, USA
3.310	YDH4 Bandoeng, Netherl. India, (B)
3.310	RIAC Penza, Russia
3.330	LPG General Pacheco, Argentina
3.330	YDV2 Bandjermasin, Neth. India, (B)
3.330	RRRR Tashkent, Russia
3.332	CFD Kenora, Ont., Canada
3.333	OGH Elmholm, Finland
3.333	OGF Fagerholm, Finland
3.333	OFL Haapasaari, Finland
3.333	OHN Hango, Finland
3.333	OGE Helsingfors, Finland
3.333	OHG Helsingfors, Finland
3.333	OHH Koivisto Finland
3.333	OFM Kotka, Finland
3.333	OFQ Lavansaari, Finland
3.333	OFY Mariehanin, Finland
3.333	OFW Pirttisaari, Finland
3.333	OFX Porkkala, Kallbada, Finland
3.333	OFV Porkkala, Ronnskar, Finland
3.333	OGI Saggo, Finland
3.333	OFS Seiskari, Finland
3.333	OFN Suursaari, Finland
3.333	OFI Tanimio, Finland
3.333	OFO Tytarsaari, Finland
3.333	OHT Uto, Finland
3.333	OGJ Vaasa, Finland
3.333	OFU Vatskar, Finland
3.333	OHP Viipuri, Finland
3.340	CGD Drummondville, P. Q., Canada
3.340	CGM Montreal, P. Q., Canada
3.345	W7XA Portable, USA
3.350	---- Naval Stations, Germany
3.350	YDQ3 Malang, Netherland India, (B)
3.370	YDU2 Medan, Netherland India, (B)
3.370	RIAY Tchernorttchenskoe, Russia
3.380	RGJV Iochkar-Ola, Russia
3.380	RENJ Karsakpai, Russia
3.385	KIIU Marshall, Alaska
3.385	W7XAP Portable, USA
3.390	RENG Atchi-Sai, Russia
3.390	YDQ2 Djember, Netherland India, (B)
3.410	WWG Cheboygan Range Light Station, Mich., USA
3.410	WWEC Delaware Breakwater Light, Del., USA
3.410	WWR Detroit, L.H. Depot, Mich., USA
3.410	WWN Detroit River Light Station, Mich., USA
3.410	WST Dry Tortugas Lgt. Sta., USA
3.410	WWDI Edgemoor Depot, Del.
3.410	WWDW Fourteen Foot Bank Light, Del., USA
3.410	WWZ Key West L.H. Dep. Fla., USA
3.410	WWAJ Manitou Lgt. Sta., Mich, USA
3.410	WWM Marquette Lgt. Sta., Wis., USA
3.410	WWAL Passage Isl. Lgt. Sta., USA
3.410	WRL Poe Reef Lgt. Sta., Mich., USA

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL	LOCATION
3.410	WWAM	Rock of Ages Lgt., Mich., USA
3.410	WWH	Standard Rock Lgt., Mich., USA
3.410	YDL4	Djokjakarta, Nethrl. India, (B)
3.410	RGAZ	Kotelnitch, Russia
3.410	RJBD	Soerdlovak, Russia
3.420	RFAU	Bykovo, Russia
3.435	OEHI	Vienna, Austria
3.430	YDO2	Soerabaja, Netherl. India, (B)
3.440	RFAX	Moscow, Russia
3.440	RKF	Moscow, Russia
3.445	W7XAQ	Portable, USA
3.450	YDL2	Solo, Netherland India, (B)
3.450	RKNZ	Kharkov, Russia
3.450	RFAG	Moscow, Russia
3.450	RFBL	Moscow, Russia
3.460	CFD	Kenora, Ont., Canada
3.460	CZG	Prince Rupert, B. C., Canada
3.460	CZF	Vancouver, B. C., Canada
3.460	CZE	Victoria, B. C., Canada
3.470	RFAJ	Moscow, Russia
3.480	VLT	Bululo, New Guinea
3.485	SQB	Bialystok, Poland
3.490	YDH3	Bandoeng, Java, (B)
3.490	HAP	Budapest, Hungary
3.490	SQZ	Warsaw, Poland
		85 TO 80 METERS
3.495	SQA	Lwow, Poland
3.495	----	Airway Stations Russia
3.495	RLXS	Saratov, Russia
3.500	----	
to		Amateurs,
4.000		
3.505	RHCU	Leningrad, Russia
3.510	RKNX	Debaltsevo, Russia
3.510	RKLA	Kramatorsk, Russia
3.515	RTU	Dolgoproudnaia, Russia
3.520	RFAO	Moscow, Russia
3.520	SQZ	Warsaw, Poland
3.530	TFR	Flatey a Breidafirdi, Iceland
3.530	TFP	Papey, Iceland
3.540	----	Airways Stations, Russia
3.543	CR7AA	Lourenco Marques, Mozambique, (B)
3.550	REIB	Alma-Ata, Russia
3.550	RFAW	Moscow, Russia
3.550	REJB	Sergiopol, Russia
3.550	REJA	Taldy-Kourgon, Russia
3.555	RRT	Vitebsk, Russia
3.560	RPOK	Korosten, Russia
3.565	RRT	Vitebsk, Russia
3.570	RGAP	Gorki, Russia
3.570	RGLG	Mezen, Russia
3.570	RCRI	Nakhitchevan, Russia
3.570	RRT	Vitebsk, Russia
3.580	RLW	Artemovsk, Russia
3.580	RMPB	Madrouchkent, Russia
3.580	RIU	Verkhoiansk, Russia
3.585	RHCC	Khibinigorsk, Russia
3.590	REX	Indigo-Boukhta, Russia
3.590	RUY	Pervomaisk, Russia
3.600	RPG2	Groumont Siti, Russia
3.600	RKNE	Kharkov, Russia
3.600	RCND	Neval, Russia
3.600	RJCZ	Soerdlovsk, Russia
3.610	RJRV	Kozlov, Russia
3.610	RKLW	Kramatorsk, Russia
3.620	DOA	Doeberitz, Germany
3.620	RCAD	Minsk, Russia
3.620	RGX	Minsk, Russia
3.620	RIAU	Samara, Russia
3.630	RFF	Kharkov, Russia
3.630	RENC	Temir, Russia
3.630	RGFW	Viatka, Russia
3.640	RKOV	Grichino, Russia
3.640	RKME	Kharkov, Russia
3.640	RCTS	Mamadych, Russia
3.640	RIBC	Penza, Russia
3.650	RENT	Gouriev, Russia
3.650	RKPA	Nikolaev, Russia
3.650	RMWA	Tashkent, Russia
3.658	RFAJ	Moscow, Russia
3.660	RKOB	Bobrinskaia, Russia
3.660	----	Konigs Wusterhausen, Ger.
3.670	RKNK	Kharkov, Russia
3.670	RHIY	Tatsinskaia, Russia
3.680	RJAJ	Moscow, Russia

Freq. Mc.	CALL	LOCATION
3.685	RAJ	Sovgavan, Russia
3.690	REAS	Chouia, Russia
3.690	RKNC	Kharkov, Russia
3.690	RCRJ	Lenkoran, Russia
3.700	VK3LR	Lyndhurst, Victora, Australia, (B)
3.700	VK3XX	Lyndhurst, Victoria, Australia,
3.700	JPY	Tobata, Japan
3.710	RIBB	Abdoulinskoe, Russia
3.710	RIAZ	Andreeoskoe, Russia
3.710	RGAQ	Ijevsk, Russia
3.710	RFCJ	Kachira, Russia
3.710	RKND	Kharkov, Russia
3.720	RCNQ	Novosokolniki, Russia
3.720	RHJS	Orist Labinskaia, Russia
3.720	RIBE	Samara, Russia
3.730	RKNB	Kharkov, Russia
3.730	RCQA	Koutais, Russia
3.740	RKOU	Kharkov, Russia
3.740	RJEJ	Sverdloosk, Russia
		80 TO 70 METERS
3.750	F8KR	Constantine, Algeria, (B)
3.750	VK3LR	Lyndhurst, Victoria, Australia, (B)
3.750	VK3XX	Lyndhurst, Victoria, Australia
3.750	2RO	Rome, Italy. (B)
3.750	RENY	Dozzor, Russia
3.750	REJQ	Ganiouchkino, Russia
3.750	REBO	Iavnovo, Russia
3.750	RFCV	Kalinin, Russia
3.750	CT1CT	Lisbon, Portugal, (B)
3.760	RENU	Aktinbinsk, Russia
3.760	----	Konigs Wusterhausen, Germany
3.760	RMWP	Sumarkand, Russia
3.760	RKOH	Znamenka, Russia
3.769	ZEZ	Broken Hill, Northern Rhodesia
3.769	ZDH	Sameson, Northern Rhodesia
3.769	ZDA	Livingston, Northern Rhodesia
3.769	ZDI	Mongu-Lealui, Northr. Rhodesia
3.769	ZFF	Mpika, Northern Rhodesia
3.770	RRR	Briansk, Russia
3.780	RLW	Artemovsk, Russia
3.780	RLX	Artemovsk, Russia
3.780	RELO	Boukhta Bertys, Russia
3.790	RPNA	Kharkov, Russia
3.800	RKOL	Krementchoug, Russia
3.800	RMPH	Stalinabad, Russia
3.810	RKPP	Ouman, Russia
3.820	RMSE	Karabougaz, Russia
3.830	----	Bykovo, Russia
3.830	RHAB	Leningrad, Russia
3.830	RIAL	Syzran, Russia
3.830	RCQY	Tiflis, Russia
3.840	RKOD	Kazatin, Russia
3.850	RKMC	Odessa, Russia
3.850	RGLC	Syktykvar, Russia
3.860	RKLO	Sorokino, Russia
3.860	RKPO	Vorochilovsk, Russia
3.870	RW77	Moscow, Russia
3.880	RIBA	Bouzoulouk, Russia
3.880	RKLQ	Dnepropetrovsk, Russia
3.880	RCBA	Jlobin, Russia
3.880	RENV	Karaton, Russia
3.885	RCRH	Batoum, Russia
3.890	RLY	Kharkov, Russia
3.900	RFAX	Moscow, Russia
3.910	RLEQ	Tchita, Russia
3.910	RLEV	Verkhne Oudinsk, Russia
3.910	RMCC	Roukhlovo, Russia
3.920	RKLA	Kramatorsk, Russia
3.920	RFAO	Moscow, Russia
3.950	RHAX	Leningrad, Russia
3.998	HCJB	Quito, Ecuador. (B)
4.000	ZGE	Kuala Lumpur, Federated Malay States. (B)
4.000	REJM	Karaganda, Russia
4.002	CT2AJ	Ponta Delgada, Sao Miguel, Azores, (B)
4.010	RFAU	Bykovo, Russia
4.030	RFAW	Moscow, Russia
4.050	DAS	Rugen, Germany
4.054	CNW	Tangier, Morocco
4.060	RGKX	Archangel, Russia
4.080	RFAO	Moscow, Russia
4.097	WND	Hialeah, Fla., USA
4.100	LCL	Jeloy, Norway, (X)

Freq. Mc.	CALL and LOCATION
4.110	HCJB Quito, Ecuador, (B)
4.110	RELO Boukhta, Bertys, Russia
4.110	RENA Bourondal, Russia
4.110	RKNX Debaltsevo, Russia
4.110	RISQ Novosibirsk, Russia
4.130	RTU Dolgoproudnaia, Russia
4.130	DAF Norddeich, Germany
4.135	W7XAQ Portable, USA
4.140	RELW Karalinsk Russia
4.140	RELX Djarkent, Russia
4.140	RJCU Magnetigorsk, Russia
4.150	SQZ Warsaw, Poland
4.150	REIB Alma Ata, Russia
4.150	RLEN Nijne Oudinsk, Russia
4.150	RMCC Roukhlovo, Russia
4.150	REJB Sergiopol, Russia
4.150	REJA Tandy-Kourgan, Russia
4.150	RLEQ Tchita, Russia
4.150	RLEV Verkneoudinsk, Russia
4.160	SQB Bialystok, Poland
4.165	LOB Puerto Aguirre, Argentine
4.165	SQZ Warsaw, Poland
4.170	SQA Lwow, Poland
4.174	---- British ships
4.177	---- Ship telephone
4.190	RJXC Makhatch-Kala, Russia
4.190	RMAT Vladivostok, Russia
4.272	WOY Lawrenceville, N. J., USA
4.272	WOO Ocean Gate, N. J., USA
4.273	RV15 Khabarovsk, Russia, (B)
4.280	RFAK Koutchino, Russia
	70 TO 60 METERS
4.283	---- Ship telephone
4.286	RKMF Jitomir, Russia
4.286	RKPL Jitomir, Russia
4.286	RCNF Smolensk, Russia
4.295	WTDW St. Croix, Virgin Islands
4.295	WTDX St. John, Virgin Islands
4.295	WTDV St. Thomas, Virgin Islands
4.300	---- Aeronautical, Europe
4.300	RKPE Liman, Russia
4.300	RKDM Medvejia Gora, Russia
4.300	RKDO Parandoyo, Russia
4.300	RHIK Rostov on Don, Russia
4.305	RGFK Kanavino, Russia
4.305	RKOG Vapniarka, Russia
4.310	RMDP Erofei Pavlovitch, Russia
4.310	RMDT Staibo, Russia
4.310	RLEC Tshita, Russia
4.315	RGFK Kanavino, Russia
4.315	RKOG Vapniarka, Russia
4.320	G6RX Hillmorton, United King., (X)
4.320	GDB Rugby, United Kingdom, (B)
4.330	RKLP Rovenki, Russia
4.355	IAC Coltano, Italy, (X)
4.350	RKOP Kiev, Russia
4.350	PROF Proskurov, Russia
4.350	RIMK Topki, Russia
4.360	RMDV Ekimtchan, Russia
4.360	RMDU Ouroulga, Russia
4.375	RUF Moscow, Russia
4.380	RMDW Dambouki, Russia
4.380	RUF Moscow, Russia
4.385	
4.390	RENG Atchi Sai, Russia
4.400	RMDX Komsomolsk, Russia
4.400	DAF Norddeich, Germany
4.410	RFAY Moscow, Russia
4.410	REIK Petropavlovsk, Russia
4.412	ZGC Kuala Lumpur, Federated Malay States
4.412	CNR Rabat, Morocco
4.412	RFAJ Moscow, Russia
4.420	RKLS Tchistiakovo, Russia
4.430	RLED Chilka, Russia
4.430	DOA Doeberitz, Germany
4.430	RMDH Ouroucha, Russia
4.430	RMDI Svobodnyi, Russia
4.430	RMDJ Tynda, Russia
4.430	RLEZ Zilovo, Russia
4.430	GBC Rugby, United Kingdom
4.440	RBX Moscow, Russia
4.440	RMXC Tchimion, Russia
4.445	WUM Tucson, Ariz., USA
4.450	RRY Moscow, Russia
4.450	RKOS Routchenkovo, Russia

Freq. Mc.	CALL and LOCATION
4.455	RRY Moscow, Russia
4.460	RKOT Dnepropetrovsk, Russia
4.460	RKOW Kharkov, Russia
4.460	RKOI Kiev, Russia
4.460	RKOE Odessa, Russia
4.460	RKOJ Stalino, Russia
4.460	RHIZ Taganrog, Russia
4.460	RKOC Vinnitsa, Russia
4.465	CGA4 Drummondville, P. Q., Canada
4.470	YID Baghdad, Iraq, (B)
4.470	YDB Soerabaya, Netherl. India, (B)
4.470	RBT Samarov, Russia
4.475	RRKNK Kharkov, Russia
4.477	RMGI Khabarovsk, Russia
4.480	RKMB Gorlovka, Russia
4.490	RMXA Kim, Russia
4.490	RLBY Kirensk, Russia
4.490	RKOR Krasnyi Loutch, Russia
4.490	RENC Temir, Russia
4.500	RELB Boukhta Bertys, Russia
4.500	RELO Boukhta Bertys, Russia
4.500	---- Naval Stations, Germany
4.505	CZP Claydon Bay, B. C., Canada
4.505	CGO Ocean Falls, B. C., Canada
4.505	CZO Prince George, B C., Canada
4.510	VPN Nassau, Bahamas
4.510	RKOA Berditchev, Russia
4.512	ZFS Nassau, Bahamas
4.520	RCNO Briansk, Russia
4.535	WDG Rocky Point, N. Y., USA
4.540	WIR Rocky Point, N. Y., USA
4.540	RMXB Kokand, Russia
4.545	RFAJ Moscow, Russia
4.545	WDW New Brunswick, N. J., USA
4.550	KIKC Bolinas, Calif., USA
4.550	WAD Rocky Point, N. Y., USA
4.555	WDN Rocky Point, N. Y., USA
4.570	RIBJ Kachirinsk, Russia
4.570	RKOQ Kadrevka, Russia
4.600	HC2ET Apartado 249, Guayaquil, Ecuador, (B)
4.600	RKON Gorlovka, Russia
4.615	RLXI Stalingrad, Russia
4.615	RJRS Voronei, Russia
4.625	ZGF Kuantan, Federtd. Malay States
4.670	RIBK Rouzaevka, Russia
4.687	RFCO Moscow, Russia
4.700	RCRB Erivan, Russia
4.710	RIAL Syzran, Russia
4.710	RENI Tchmekent, Russia
4.710	RKLM Zaporojie, Russia
4.715	EDP Palma de Mallorca, Spain
4.720	RFAJ Moscow, Russia
4.730	RKMD Cheptovka, Russia
4.740	RCNP Smolensk, Russia
4.740	RIBF Syzran, Russia
4.750	RLGL Kabansk, Russia
4.753	WOY Lawrenceville, N. J., USA
4.753	WOO Ocean Gate, N. J., USA
4.761	RMFN Grodekovo, Russia
4.775	CFD Kenora, Ont., Canada
4.785	CZA Drummondville, P. Q., Canada
4.790	RKMI Krivoi Rog, Russia
4.795	VE9BY London, Ont., Canada (X)
4.795	VE9BK Vancouver, B. C. (X)
4.800	RKMH Khristinovka, Russia
4.800	RCNQ Novosokolniki, Russia
4.810	CGP Prince Rupert, B. C., Canada
4.810	YDE2 Solo, Netherland India, (B)
4.810	RKMG Vinnitsa, Russia
4.820	PRO Olinda, Brazil
4.820	REJK Karsakpai, Russia
4.820	GDW Rugby, United Kingdom
4.838	RJRV Kozlov, Russia
4.839	RNZ Petropavlovsk, Russia
4.840	GDW Rugby, United Kingdom
4.850	RELO Boukhta Bertys, Russia
4.850	RKMF Jitomir, Russia
4.860	CGT Campbell River, B. C., Canada
4.860	RKMM Konstantinovka, Russia
4.860	RKF Moscow, Russia
4.860	RJCZ Sevrdlosk, Russia
4.875	RKF Moscow, Russia
4.880	RKME Kharkov, Russia
4.895	CEC La Granja, Chile
4.900	RKMN Sorokino, Russia
4.910	RENJ Korsakpai, Russia

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL	LOCATION
4.920	LCL	Jeloy, Norway, (X)
4.930	RFAJ	Moscow, Russia
4.930	RIBE	Samara, Russia
4.930	RKMK	Zouevka, Russia
4.940	REIL	Koounrad, Russia
4.950	RKMJ	Zaporojie, Russia
4.960	RHIE	Elizavetopolskaia, Russia
4.960	RCND	Nevel, Russia
4.970	RLY	Kharkov, Russia
4.975	GBC	Rugby, United Kingdom
4.980	RMWP	Samarkand, Russia
4.988	----	Airplanes, USA
		60 TO 50 METERS
5.000	FY3	Lyon, T.S.F., France
5.000	FHH3	Pointe-Noire, French Equatorial Africa
5.000	RCRI	Nakhitchevan, Arakse, Russia
5.000	RLXI	Stalingrad, Russia
5.000	RCNA	Viazma, Russia
5.000	RJRS	Voronej, Russia
5.000	TFL	Reykjavik, Iceland
5.015	KUF	Manila, Philippine Is.
5.023	ICQ	Naples, Italy
5.025	ZFA	Hamilton, Bermuda
5.030	REJJ	Koustanai, Russia
5.040	RIR	Tiflis, Russia
5.050	VRT	Hamilton, Bermuda
5.050	RMLD	Mouinak, Russia
5.058	TFI	Reykjavik, Iceland
5.060	EDO	Madrid, Spain
5.060	EDR2	Madrid, Spain
5.060	EDS	Madrid, Spain
5.070	RMLC	Tourtkoul, Russia
5.077	WCN	Lawrenceville, N. J., USA
5.085	RIO	Pakou, Russia
5.085	RMBK	Oust Bolcheretsk, Russia
5.090	REJV	Semipalatinsk, Russia
5.100	RCTQ	Kazan, Russia
5.105	KEC	Bolinas, Calif., USA
5.120	REIQ	Pribalkhachstroi, Russia
5.130	ZGD	Kuantan, Federatd. Malay States
5.140	EDR3	El Tablero, Canary Is.
5.140	PMY	Bandoeng, Netherl. India, (B)
5.140	PJEJ	Sverdlosk, Russia
5.145	OKIMPT	Prague, Czechoslovakia, (X)
5.200	RKLW	Kramatorsk, Russia
5.210	REIP	Vozrojdenie Ostrov, Russia
5.215	RCTP	Tchistopol, Russia
5.220	ZFC	Hamilton, Bermuda
5.220	RELO	Boukhta Bertys, Russia
5.222	ZEZ	Broken Hill, Northern Rhodesia
5.222	ZDH	Fort Jameson, Northn. Rhodesia
5.222	ZDA	Livingstone, Northern Rhodesia
5.222	ZDI	Mongu-Lealui, Northn. Rhodesia
5.222	ZFF	Mpika, Northern Rhodesia
5.250	RIBC	Penza, Russia
5.255	DJB	Zeesen, Germany, (B)
5.260	WQN	Rocky Point, N. Y., USA
5.263	RMFN	Grodekovo, Russia
5.265	CEC	La Granja, Chile
5.280	PWO	Nictheroy, Armacao, Brazil
5.280	RGAP	Gorkyi, Russia
5.290	RUY	Pervomaisk, Russia
5.300	ZFO	Cat Cay, Bahamas
5.310	RIAC	Penza, Russia
5.345	EDR4	Palma de Mallorca, Spain
5.350	RELT	Bouli-Tiube, Russia
5.350	RKOK	Korosten, Russia
5.357	ZGF	Kuantan, Federatd Malay States
5.357	RMPB	Madrouchkent, Russia
5.357	RMPH	Stalinabad, Russia
5.370	RLW	Artemovsk, Russia
5.370	RLX	Artemovsk, Russia
5.375	RSB	Stalinsk, Russia
5.380	LPG2	General Pacheco, Argentina
5.390	RKOU	Kharkov, Russia
5.400	HAT	Szekesfehervar, Hungary
5.400	RFAG	Moscow, Russia
5.405	CGT	Campbell River, B. C., Canada
5.410	----	Coast Stations, Japan
5.410	RKLO	Sorokino, Russia
5.415	IAF	Fiumicino, Italy
5.420	CGE	Calgary, Alta., Canada
5.420	JPY	Tobata, Japan
5.440	RSN	Sverdlovsk, Russia
5.450	ZGC	Kuala Lumpur, Federated Malay States

Freq. Mc.	CALL	LOCATION
5.450	RKLQ	Dnepropetrovsk, Russia
5.454	RHJD	Chakhty, Russia
5.455	VQR	Nairobi, Kenya
5.455	RLXI	Stalingrad, Russia
5.460	VIX	Wyndham Meatworks, Australia
5.460	RKPL	Jitomir, Russia
5.460	RCNF	Smolensk, Russia
5.460	ZFU	Arua, Uganda
5.470	RKOV	Grichino, Russia
5.490	RPOB	Bobrinskaia, Russia
5.490	ROI	Sverdlovsk, Russia
5.495	ZGD	Kuantan, Fed. Malay States
5.505	RKNK	Kharkov, Russia
5.510	----	Airplanes, USA
5.515	SPV	Warsaw, Poland
5.520	PRP	Olinda, Brazil
5.520	RMAT	Vladivostok, Russia
5.530	RINA	Novosibirsk, Russia
5.540	CFD	Kenora, Ont., Canada
5.542	RUU	Detskoe Selo, Russia
5.547	RUU	Detskoe Selo, Russia
5.552	RUU	Detskoe Selo, Russia
5.555	RUU	Detskoe Selo, Russia
5.555	LPD	General Pacheco, Argentina
5.555	LPG3	General Pacheco, Argentina
5.555	2RO	Rome, Italy, (B)
5.556	OXM	Scoresbysund, Greenland
5.556	OYI	Scoresbysund, Greenland
5.560	RKOH	Znamenka, Russia
5.570	----	Airplanes, USA
5.570	OQP	Astrida, Belgian Congo
5.580	RKOL	Krementchoug, Russia
5.600	----	Aeronautical, Europe
5.603	----	Airplanes, USA
5.610	FFK	St. Nazaire, France
5.610	2RO	Rome, Italy
5.610	RELO	Boukhta Bertys, Russia
5.615	OQY	Niangara, Belgian Congo
5.620	RKOD	Kazatin, Russia
5.630	RGFW	Viatka, Russia
5.635	DAS	Rugen, Germany
5.640	RGFK	Kanavino, Russia
5.640	RKOG	Vapniarka, Russia
5.650	OQM	Lusambo, Belgian Congo
5.650	YV5RMO	Maracaibo, Venezuela
5.653	WNEY	Baltimore, Md., USA
5.660	----	Airplanes, USA
5.660	CFD	Kenora, Ont., Canada
5.660	XQAJ	Shanghai, China
5.660	OZZ	Thule, Greenland
5.660	HJ5ABC	Cali, Colombia, (B)
5.660	2RO	Rome, Italy
5.660	VQR	Nairobi, Kenya
5.660	RKLP	Rovenki, Russia
5.670	RKON	Gorlovka, Russia
5.680	RKOF	Proskourov, Russia
5.692	FIQA	Tananarive, Madagascar
5.700	OSG	Luluabourg, Belgian Congo
5.700	RKLR	Lisitchansk, Russia
5.705	ZC2PC	Haifa, Palestine
5.705	ZC3PC	Mafrak, Transj., Palestine
5.705	ZC4PC	Pump Station H4, Transj., Pal.
5.710	JDZ	Dairen, Manchuria
5.713	TGS	Guatemala City, Guat. (B)
5.714	ZGA	Kuala Lumpur, Fed. Malay States
5.715	GIR	Dollis Hill, United Kingdom
5.725	OXL	Skamlebak, Denmark
5.725	2RO	Rome, Italy, (B)
5.730	JVV	Tokyo, Japan
5.740	RKLS	Tchistiakovo, Russia
5.750	RGAQ	Ijevsk, Russia
5.750	EDR2	Madrid, Spain
5.750	EDS	Madrid, Spain
5.760	RLX	Artemovsk, Russia
5.760	OQQ	Libenge, Belgian Congo
5.766	CFU	Rossland, B. C., Canada
5.766	XAM	Merida, Yucatan, Mexico
5.769	RELB	Boukhta Bertys, Russia
5.769	RELD	Boukhta Bertys, Russia
5.769	RMSX	Merv, Russia
5.769	RELZ	Spasskyi Zavod, Russia
5.780	OAX4D	P.O. Box 853, Lima, Peru, (B)
5.780	RKOS	Routchenkovo, Russia
5.780	HI1J	San Pedro de Macoris, Dom. Rep. (B)
5.790	RV50	Moscow, Russia, (B)
5.790	JVU	Tokyo, Japan

Freq. Mc.	CALL and LOCATION
5.800	YV2RC Caracas, Venezuela (B)
5.800	VK3XX Lyndhurst, Vic., Australia
5.800	VK3LR Lyndhurst, Vic., Australia. (B)
5.800	RKMK Zouevka, Russia
5.805	OSE Kanda Kanda, Belgian Congo
5.805	CSN Rossland, B. C., Canada
5.810	RKOR Krasnyi-Loutch, Russia
5.810	CGI Isle Maligne, P. Q., Canada
5.810	RFAN Moscow, Russia
5.810	CGR Quebec, P. Q., Canada
5.813	FZN6 Noumea, New Caledonia
5.820	CEC La Granja, Chile
5.820	RKML Krinditchovka, Russia
5.825	TIGPH San Jose, Costa Rica, (B)
5.830	JMP Shinkyo, Japan
5.830	RPG Borentsburg, Russia
5.830	CWD Cerrito, Uruguay
5.840	REKD Alma-Ata, Russia
5.840	RKMM Konstantinovka, Russia
5.840	RHIF Grozni, Russia
5.840	RHII Novo Kresitanovskoe, Russia
5.840	RHIH Sterkertitchka, Russia
5.842	FZP4 Papeete, Tahiti
5.845	KRO Kahuku, Hawaii
5.850	VK3LR Lyndhurst, Vic., Australia, (B)
5.850	RKOQ Kadievka, Russia
5.850	RFAL Moscow, Koutchino, Russia
5.853	WOB Lawrenceville, N. J.
5.855	OQZ Kamina, Belgan Congo
5.855	EDR3 El Tablero, Teneriffe, Canary Island
5.857	XDA Chapultepec, Mexico
5.860	XDA Chapultepec, Mexico
5.860	RPMN Sorokini, Russia
5.870	RKMB Gorlovka, Russia
5.870	RRRR Tashkent, Russia
5.875	HRN Tegucigalpa, Honduras (B)
5.880	YV8RB Barquisemeto, Ven. (B)
5.880	REKD Alma-Ata, Russia
5.880	RKNY Kharkov, Russia
5.880	RKMO Verkhne, Oudinsk, Russia
5.890	JIC Taihoku, Tauvan, Japan
5.890	RIKW Osmk, Russia
5.890	RRRZ Sverdlovsk, Russia
5.892	
5.895	
5.900	OQX Kabinda, Belgian Congo
5.900	CMBI Habana, Cuba, (B)
5.900	RMWA Tashkent, Russia
5.915	VRR Stony Hill, Jamaica
5.930	HJ4ABE Medellin, Colombia
5.940	---- Airplanes, USA
5.940	TG2X Guatemala City, Guat. (B)
5.950	HJ1ABJ Santa Marta, Colo., (B)
5.950	OSI Gule, Belgian Congo
5.950	TGX Guatemala City, Guat., (B)
5.952	FZF6 Fort de France Martinique
5.953	HIX Santo Domingo, Dom. Rep., (B)
5.955	RRRZ Sverdlovsk, Russia
5.969	HVJ Vatican City, (B)
5.970	HJ3ABH Bogota, Colo., AparTado 565, (B)
5.980	HIX Santo Domingo, Dominican Rep. (B)
5.980	XECW Calle del Bajio 120, Mexico City, Mex., (B)
5.985	HJ2ABC Cucuta, Col. (B)
5.990	FZK6 Dakar, Senegal
5.990	XEBT Mexico City, Mex., P. O. Box 79-44. (B)
	50 TO 45 METERS
5.995	WXE Anchorage, Alaska
5.995	WXH Ketchikan, Alaska
5.995	RPT Tashkent, Russia
6.000	OSF Panu, Belgian Congo
6.000	XGOX Nanking, China
6.000	VSZAB Kuala Lumpur, Fed. Malay States
6.000	Tananarive, Madagascar
6.000	TGW Guatemala City, Guat. (B)
6.000	---- St. Denis, Reunion
6.000	---- Buchorest, Rumania
6.000	RPDM Medvejia Gora, Russia
6.000	RV59 Moscow, Russia
6.000	RKDO Parandovo, Russia
6.000	RKDN Segja, Russia

Freq. Mc.	CALL and LOCATION
6.000	EAJ25 Barcelona, Spain
6.005	VE9DN Drummondville, P. Q., Canada
6.005	VE9DR Drummondville, P. Q., Canada
6.005	HJ3ABH Bogota, Colombia
6.005	CMCI Habana, Cuba
6.006	HJ1ABF Santa Marta, Colombia
6.010	COCO Habana, Cuba, (B)
6.010	---- Cairo, Egypt, (B)
6.010	XEBT Mexico City, Mexico, (B)
6.018	ZHI Singapore, Straits Settlements, (B)
6.020	CQN Macao, China
6.020	DJC Zeesen, Germany, (B)
6.020	PGD Kootwijk, Netherlands, (B)
6.023	XEW Mexico City, Mexico, (B)
6.025	PGD Kootwijk, Netherlands, (B)
6.030	VE9CA Calgary, Alta., Canada, (B)
6.030	OQT Buta, Belgian Congo, (B)
6.030	PGD Kootwijk, Netherlands, (B)
6.030	HP5B Panama, Panama
6.035	HJ4ABI Medellin, Colombia, (X)
6.035	YNA Managua, Nicaragua, (B)
6.040	YDA Tandjongpriok, Java (B)
6.040	W1XAL Boston, Mass., USA, (B)
6.040	W4XB Miami Beach, Fla., USA, (B)
6.040	PRA8 Pernambuco, Brazil (B)
6.040	CMCI Habana, Cuba, (B)
6.040	RILD Omsk, Russia
6.040	RLEC Tchita, Russia
6.042	HJ1ABG Barranquilla, Colombia, (B)
6.045	HJ3ABI Bogota, Colo., (B)
6.045	EAQ Aranjuez, Spain, (B)
6.050	VE9CF Halifax, N. S., Canada, (B)
6.050	RIMK Topki, Russia
6.050	GSA Daventry, United Kingdom, (B)
6.060	W8XAL Mason, Ohio, USA, (B)
6.060	W3XAU Newton Sq., Pa., USA, (B)
6.060	OSC Boende, Belgian Congo
6.060	CMCI Habana, Cuba, (B)
6.060	OXY Skamlebak, Denmark, (B)
6.060	HIX Santo Domingo, Dom. Rep., (B)
6.065	2RO Rome, Italy, (B)
6.060	VQ7LO Nairobi, Kenya, (B)
6.060	RLEE Bouchoulei, Russia
6.065	HJ4ABL Manizales, Colombia, (B)
6.070	VE9CS Vancouver, B. C., Canada, (B)
6.070	HJ4ABC Periera, Col. (B)
6.070	OXY Skamlebak, Denmark, (B)
6.070	RGFN Charia, Russia
6.070	EAQ Aranjuez, Spain, (B)
6.072	ZHJ Penang, Malaya, (B)
6.072	OER2 Vienna, Austria, (B)
6.074	HJ1ABF Barranquilla, Colombia, (X)
6.079	DJM Zeesen, Germany, (B)
6.080	W9XAA Chicago, Ill., USA
6.080	CP5 LaPaz, Bolivia, (B)
6.080	TIRA Cartago, Costa Rica, (B)
6.080	VE9EH Charlottetown, P.E.I., (B)
6.080	RFCK Moscow, Russia
6.085	2RO Rome, Italy, (B)
6.090	VE9BJ St. John, N.B., Canada, (B)
6.090	HJ4ABC Pereira, Colombia, (B)
6.095	CRCX Bowmanville, Ont., Canada, (B)
6.097	JB Johannesburg, Un. of S. A., (B)
6.098	HJ1ABD Cartagena, Colombia, (B)
6.100	W3XAL Bound Brook, N. J., USA, (B)
6.100	W9XF Downers Grove, Ill., USA, (B)
6.100	RMDQ Amazar, Russia
6.100	RMDK Ksenievskaia, Russia
6.100	RFCI Riazan, Russia
6.105	HJ4ABB Manizales, Colombia, (B)
6.110	VE9CG Calgary, Alta., Canada
6.110	GSL Daventry, England, B. B. C., Broadcast. Hse., Lon., E., (B)
6.110	VE9HX Halifax, N. S., Canada, (B)
6.110	HJ4ABB Medellin, Colombia, (X)
6.110	VUC Calcutta, India, (B)
6.110	EAQ Aranjuez, Spain, (B)
6.115	---- Warsaw, Poland, (B)
6.120	NAA Washington, D. C., USA, (B)
6.120	W2XE Wayne, N. J., USA, (B)
6.120	OQU Basankusu, Belgian Congo, (B)
6.120	XEFT Vera Cruz, Mex. (B)
6.120	YDA Bandoeng, Netherl. India, (B)
6.120	RKOM Dnepropetrovsk, Russia

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION
6.128	HJ1ABH Cienaga, Colombia, (X)
6.128	YV11RMO Maracaibo, Venezuela
6.128	LKJ1 Jeloy, Norway, (B)
6.130	HJ1ABE Cartagena, Colombia, (B)
6.130	VE9BA Montreal, P. Q., Canada, (B)
6.130	COCD Havana, Cuba (B)
6.135	HJ1ABC Quibdo, Colombia, (X)
6.135	ZGE Kuala Lumpur, Fed. Malay Sts., (B)
6.135	YID Baghdad, Iraq, (B)
6.135	RKK Moscow, Russia
6.140	W8XK Saxonburg, Pa., USA. (B)
6.140	VK3LR Lyndhurst, Vic., Australia, (B)
6.140	KZRM Manila, P. I., (B)
6.145	--- Pontoise, France
6.150	CJRO Winnipeg, Manitoba, Can., (B)
6.150	HJ5ABC Cali, Colombia, (B)
6.150	RKOO Odessa, Russia
6.150	CSL Lisbon, Portugal, (B)
6.150	YV3RC Caracas, Venezuela
6.155	CO9GC Grau & Cameneros Labs., Box 137, Santiago, Cuba, (B)
6.160	2RO Rome, Italy
6.170	CFD Kenora, Ont., Canada
6.170	CFG Pickle Lake, Ont., Canada
6.170	CFJ Red Lake, Ont., Canada
6.170	CFB Sioux Lookout, Ont., Canada
6.170	HJ3ABF Bogota, Colombia, (B)
6.175	OND Banana, Belgian Congo
6.175	FTX St. Assise, France
6.175	HJ2ABA Tunja, Colombia, (B)
6.180	TGW Guatemala City, Guatemala, (B)
6.180	RKOP Kiev, Russia
6.180	REIK Petropavlovsk, Russia
6.185	HI1A P.O. Box 423, Santiago, Dominican Rep., (B)
6.190	RIPV Barnaoul, Russia
6.190	RRRR Tashkent, Russia
6.198	CT1GO Portuguese Radio Club, Parede, Portugal, (B)
6.200	RMDP Erofei Pavlovitch, Russia
6.200	RMDM Mogotcha, Russia
6.200	RMWW Tashkent, Russia
6.210	HJN Bogota, Colombia, (B)
6.230	OAX4G Apartado 1242, Lima, Peru, (B)
6.235	OCN Lima, Peru, (B)
6.240	RMAS Tafouin, Russia
6.240	RMAY Troitse Zaroubino, Russia
6.245	OQE Costermansville Belgian Congo
6.250	---- Airways, Germany
6.250	OCI Lima, Peru
6.250	REIX Akmolinsk, Russia
6.250	RGAZ Kotelnich, Russia
6.250	RFAQ Moscow, Russia
6.250	REIA Ouialy, Russia
6.250	REIM Ouzounkair, Russia
6.250	HJ4ABC Periera, Col., (B)
6.260	PBB Den Helder, Netherlands
6.280	HI1A Santo Domingo, Dom. Rep., (B)
6.285	CZA Drummondville, P. Q., Canada
6.300	RCE Leningrad, Russia
6.300	RMBA Preobrajenia, Russia
6.320	CFD Kenora, Ont., Canada
6.320	HIZ Santo Domingo, Dominican Rep., (B)
6.320	OQA Kigoma, Tanganyika
6.330	---- Tokyo, Japan
6.335	VE9AP Drummondville, P. Q., Canada, (B)
6.345	OSD Kigali, Belgian Congo, (B)
6.375	YV4RC Caracas, Venezuela
6.375	OQR Usumbura, Belgian Congo
6.380	HC1DR Quito, Ecuador, (B)
6.383	RNZ Petropavlovsk, Russia
6.385	YN1GG Managua, Nicaragua
6.405	OQJ Inongo, Belgian Congo
6.410	TIPG San Jose, Costa Rica, (B)
6.420	RGX Minsk, Russia
6.425	VE9AS Fredericton, N. B., Canada, (X)
6.425	W3XL Bound Brook, N. J., USA, (B)
6.425	CZE Victoria, B. C., Canada
6.425	CZF Vancouver, B. C., Canada
6.425	CZG Prince Rupert, B. C., Canada
6.425	VE9BY London, Ont., Canada, (B)
6.430	OQF Port Franqui, Belgian Congo
6.440	RTA Novosibirsk, Russia
6.450	H-J4AB-J Ibaque, Col. (B)

Freq. Mc.	CALL and LOCATION
6.450	OTO Leopoldville, Belgian Congo
6.450	HJ1ABB Barranquilla, Colombia, (B)
6.460	RHCC Khibinogorsk, Russia
6.465	OQO Basoko, Belgian Congo
6.470	RCAD Minsk, Russia
6.480	EDR4 Palma de Mallorca
6.482	HI4D Santo Domingo, Dominican Rep., (B)
6.495	OTH Elizabethville, Belgian Congo
6.500	HJ5ABD Manizales, Col., (B)
6.520	RELT Bourli-Tiube, Russia
6.520	YV6RV Valencia, Venezuela, (B)
6.528	HIL Santo Domingo, D.R., (B)
6.535	OSB Kikwit, Belgian Congo
6.550	TIRCC San Jose, Costa Rica (B)
6.550	RKLM Zaporojie, Russia
6.570	OQV Albertville, Belgian Congo
6.580	HJ1ABB Barranquilla, Colombia, (B)
6.590	VQR Nairobi, Kenya
6.593	ZDG Mpika, Northern Rhodesia
6.593	ZEB Bulawayo, Southern Rhodesia
6.593	ZEA Salisbury, Southern Rhodesia
6.593	ZTG Germiston, Union of S. A.
6.600	RJTL Dmitriev-Igovsky, Russia
6.600	RKLX Odessa, Russia
6.605	OQW Banningville, Belian Congo
6.610	RV72 Moscow, Russia, (B)
6.610	CWE Cerrito, Montevideo, Urugauy
6.620	PRADO Riobamba, Ecuador, (B)
6.630	---- Moscow, Russia, (B)
6.635	OTC Coquilhatville, Belgian Congo
6.650	IAC Coltano, Italy, (X)
6.650	---- Naval Stations, Japan
6.650	XFD Mexico City, Mexico. (B)
6.650	HC2RL P.O. Box 759, Guayaquil, Ecuador, S.A., (B)
6.660	TGW Guatemala City, Guatemala, (B)
6.660	TIEP La-Voz Del Tropico, San Jose, Costa Rica, (B)

45 TO 40 METERS

6.664	YNCRG Granada, Nicaragua, (B)
6.665	LPG4 General Pacheco, Argentina
6.672	YVQ Maracay, Venezuela
6.674	IRT Rome, Italy
6.675	HBQ Prangins, Switzerland
6.677	FZ14 Brazzaville, Fr. Equa., Africa
6.680	DGP Nauen, Germany, (X)
6.685	OZS Skamlebak, Denmark
6.685	ZGA Kuala Lumpur, Fed. Malay States
6.685	YNLF Managua, Nicaragua, (B)
6.690	CFA Drummondville, P. Q., Canada
6.690	VQR Nairobi, Kenya
6.690	ZDB Broken Hill, Northern Rhodesia
6.690	ZDG Mpika, Northern Rhodesia
6.690	ZEB Bulawayo, Southern Rhodesia
6.690	ZEA Salisbury, Southern Rhodesia
6.690	ZTG Germiston, Union of So. Africa
6.690	ZTF Maitland Cape, Un. of S. Africa
6.695	OQI Lisala, Belgian Congo
6.700	RIBF Syzran, Russia
6.703	TIK Cartago, Costa Rica
6.707	YNCRG Granada, Nicaragua, (B)
6.718	WDB Rocky Point, N. Y., USA
6.718	KBK Manila, P. I.
6.733	WDA Rocky Point, N. Y., USA
6.738	TIGP San Jose, Costa Rica, (B)
6.745	OQB Bumba, Belgian Congo
6.750	JVT Tokyo, Japan
6.750	RMSE Karabougaz, Russia
6.755	WOA Lawrenceville, N. J., USA
6.755	KZGF Manila, Philippine Islands
6.760	CFA2 Drummondville, P. Q., Canada
6.760	RENJ Karsakpai, Russia
6.770	KZGF Manila, Philippine Islands
6.775	OQK Aketi, Belgian Congo
6.780	RENT Gouriev, Russia
6.780	EAH Madrid, Spain
6.785	OQD Kindu, Belgian Congo
6.790	SQB Bialystok, Poland
6.790	RIBO Kvarkeno, Russia
6.792	HAP3 Budapest, Hungary
6.792	SQZ Warsaw, Poland
6.795	---- Rugby, United Kingdom
6.800	EDR3 Tablero, Canary Islands
6.800	SQA Lwow, Poland

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION	
6.800	HIH	San Pedro de Macoris, Dominican Rep., (B)
6.810	OSK	Kitega, Belgian Congo
6.810	RENG	Atch-Sai, Russia
6.818	RELZ	Spasskyi Zavod, Russia
6.840	OQG	Kongolo, Belgian Congo
6.840	CFA	Drummondville, P. Q., Canada
6.840	HAS	Szekesvehervar, Hungary,
6.840	HAT2	Szekesvehervar, Hungary
6.840	RKNP	Kharkov, Russia
6.850	LPG5	General Pacheo, Argentina
6.850	VPE	Labasa, Fiji Islands, (X)
6.850	VQL	Savu-Savu, Fiji Islands, (X)
6.850	VRO	Suva, Flji Islands, (X)
6.850	VPF	Taveuni, Fiji Islands, (X)
6.850	RKF	Moscow, Russia
6.860	KEL	Bolinas, Calif., (X)
6.860	OTL	Leopoldville, Belgian Congo
6.870	EAK	San Lorenzo, Canary Islands
6.870	RFK	Moscow, Russia
6.880	OQN	Irumu, Belgian Congo
6.880	CFA4	Drummondville, P. Q., Canada
6.880	RKF	Moscow, Russia
6.880	RINY	Oirat-Toura, Russia
6.890	RLGL	Kabansk, Russia
6.895	EDK	San Lorenzo, Canary Islands
6.895	EDT	San Lorenzo, Canary Islands
6.905	GDS	Rugby, United Kingdom
6.910	ZEZ	Broken Hill, Northern Rhodesia
6.910	ZDH	Fort Jameson, Northrn Rhodesia
6.910	ZDA	Livingstone, Northern Rhodesia
6.910	ZDI	Mongu-Lealui, Northn. Rhodesia
6.910	ZFF	Mpika, Northern Rhodesia
6.910	RJBD	Sverdlovsk, Russia
6.915	ZCI	Cape D'Aguilar, Hong Kong
6.920	RFAX	Moscow, Russia
6.930	RENU	Aktubinsk, Russia
6.930	RGKX	Archangel, Russia
6.930	RLEV	Verkhne-Oudinsk, Russia
6.940	RFAU	Bykovo, Russia
6.950	RLXS	Saratov, Russia
6.958	WEO	New Brunswick, N. J., USA
6.960	OTS	Stanleyville, Belgian Congo
6.965	KZGG	Cebu, Philippine Islands
6.966	EDO	Madrid, Spain
6.970	EDR2	Madrid, Spain
6.976	EA4AQ	Madrid, Spain, (B)
6.977	----	Aeronautical, Europe
6.977	RNZ	Petropavlovsk, Russia
6.980	2RO	Rome, Italy
6.980	VQR	Nairobi, Kenya
6.980	KZGH	Iloilo, Philippine Islands
6.980	RKNZ	Kharkov, Russia
6.980	RFAO	Moscow, Russia
6.980	EAR110	Madrid, Spain, (B)
6.990	JVS	Tokyo, Japan
6.990	LCL	Jeloy, Norway
6.996	PZH	Paramirabo, Dutch Guiana (B)
7.000 to 7.300		Amateurs,
7.010	RHCU	Leningrad, Russia
7.020	RFBL	Moscow, Russia
7.020	EAR125	Madrid, Spain, (B)
7.030	HRP1	San Pedro Sula, Honduras, (B)
7.050	----	Experimental Sta., Japan (X)
7.050	RGFO	Arzamas, Russia
7.050	RFBO	Mojaisk, Russia
7.060	RENB	Boukhta Bertys, Russia
7.060	RENA	Bouroundal, Russia
7.070	RHAX	Leningrad, Russia
7.080	VP3MR	Georgetown, Bri. Guiana (B)
7.080	RTU	Dolgoproudnaia, Russia
7.100	HKE	Bogota, Colombia, (B)
7.100	----	Experimental and Amateurs, Japan, (X)
7.160	OA4B	Lima, Peru, (B)
7.170	RELD	Boukhta Bertys, Russia
7.170	RELO	Boukhta Bertys, Russia
7.177	CR6AA	Lobito, Angola, (B)
7.211	EA8AB	Teneriffe, Canary Islands, (B)
7.220	----	Experimental, Japan, (X)
7.225	RPK	Moscow, Russia
7.230	DOA	Doberitz, Germany
7.250	----	Rome, Italy
7.260	RFF	Kharkov, Russia
7.260	VS1AB	Singapore, S. S., (B)
7.275	RTZ	Irkutsk, Russia

Freq. Mc.	CALL and LOCATION	
7.300	----	Rome, Italy
7.310	RFBY	Moscow, Russia
7.310	RMWP	Samarkand, Russia
7.310	HJ1ABD	Cartagena, Colo., (B)
7.320	HJ5ABD	Cali, Colombia, (B)
7.320	ZTJ	Johannesburg, Un. of S. Africa
7.330	RKMI	Krivoi Rog, Russia (B)
7.333	DFH	Nauen, Germany
7.340	RGLC	Syktyvkar, Russia
7.345	GDL	Rugby, United Kingdom
7.360	ZEZ	Broken Hill, Northern Rhodesia
7.360	ZDH	Ft. Jameson, Northern Rhodesia
7.360	ZDA	Livingstone, Northern Rhodesia
7.360	ZFF	Mpika, Northern Rhodesia
7.360	ZDI	Mongu-Lealui, Northr. Rhodesia
7.370	RFBX	Moscow, Russia
7.370	RKLX	Odessa, Russia
7.380	XECR	Foreign Office, Mexico City, Mex., (B)
7.390	JVR	Tokyo, Japan
7.390	ZLT	Wellington, N. Z.
7.390	RKNE	Kharkov, Russia
7.400	WEM	Rocky Point, N. Y., USA
7.400	HJ3ABD	Bogota, Colombia, (B)
7.400	RRRH	Khabarovsk, Russia
7.407	WEN	New Brunswick, N. J., USA
7.408	RFAJ	Moscow, Russia
7.410	XGV	Shanghai, China
7.410	VQR	Nairobi, Kenya
7.415	WEG	Rocky Point, N. Y., USA
7.430	RKMJ	Zaporojie, Russia
7.440	RKMH	Khristinovka, Russia
7.444	HBQ	Prangins, Switzerland, (B)
7.450	RUK	Stalinabad, Russia
7.460	CZG	Prince Rupert, B. C., Canada
7.460	CZF	Vancouver, B. C., Canada
7.460	CZE	Victoria, B. C., Canada
7.460	RKMF	Jitomir, Russia
7.470	JVQ	Tokyo, Japan
7.470	RKME	Kharkov, Russia
		40 TO 35 METERS
7.500	LPG6	General Pacheco, Argentina
7.500	ZGB	Kuala Lumpur, Fed. Malay States
7.500	JVP	Tokyo, Japan
7.500	RKI	Moscow, Russia
7.510	JVP	Nazaki, Japan
7.510	REJK	Karsapkai, Russia
7.510	RKND	Kharkov, Russia
7.518	IRV	Rome, Italy
7.520	KKH	Kahuku, Hawaii
7.520	RKI	Moscow, Russia
7.545	RKI	Moscow, Russia
7.565	KWY	Dixon, Calif., USA
7.580	RKNC	Kharkov, Russia
7.610	KWX	Dixon, Calif., USA
7.610	----	Konigs Wusterhausen, Germany
7.620	RKPO	Vorochilovsk, Russia
7.626	RIM	Irkutsk, Russia
7.626	RIM	Tashkent, Russia
7.630	ZHJ	Penang, Malaya (B)
7.632	OEJ	Vienna, Austria
7.650	REAJ	Moscow, Russia
7.660	FTL	Ste. Assise, France
7.660	----	Taihoku, Japan
7.685	TIO	Cartago, Costa Rica
7.688	TYC3	Paris, France
7.700	ONE	Banana, Belgian Congo
7.700	TYC2	Paris, France
7.700	RKNB	Kharkov, Russia
7.715	KEE	Bolinas, Calif., (X)
7.725	----	Radom, Poland
7.730	WEV	New Brunswick, N. J., USA
7.730	PDL	Kootwijk, Netherlands
7.735		
7.740	CEC	La Granja, Chile
7.755	OQA1	Kigoma, Tanganyika
7.760	PCK	Kootwijk, Netherlands
7.760	PDM	Kootwijk, Netherlands
7.765	PDM	Kootwijk, Netherlands
7.770	FTF	Ste. Assise, France
7.770	PDM	Kootwijk, Netherlands
7.780	PSZ	Sepetiba, Brazil
7.785	TIR	Cartago, Costa Rica
7.790	HBP	Prangins, Switzerland, (B)
7.795	LPZ	Buenos Aires, Argentina, (P)
7.800	RKNA	Kharkov, Russia

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION	
7.805	KZGF	Manila, Philippine Islands
7.810	VRR	Stony Hill, Jamaica
7.813	DFT	Nauen, Germany
7.815	LPZ	Buenos Aires, Argentina, (P)
7.820	OCO	Lima, Peru
7.830	PGA	Kootwijk, Netherlands
7.830	PZGG	Cebu, Philippine Islands
7.835	PDV	Kootwijk, Netherlands
7.835	LCN	Jeloy, Norway, (B)
7.840	PGA	Kootwijk, Netherlands
7.851	SUX	Abou Zabal, Egypt
7.853		
7.855	PZGH	Iloilo, Philippine Islands
7.860	HC2JSB	Guayaquil, Ecuador, (B)
7.860	SUX	Abou Zabal, Egypt
7.867		
7.869		
7.870	RXC	Panama City, Panama
7.877	SUX	Abou Zabal, Egypt
7.880	JYR	Chiba, Japan, (X)
7.890	VPD	Suva, Fiji Islands
7.895	RMGI	Khabarovsk, Russia
7.901	LSL	Hurlingham, Argentina, (X)
7.905	OSKI	Kitega, Belgian Congo
7.910	REJV	Semipalatinsk, Russia
7.920	RCKJ	Lenkoran, Russia
7.920	GCP	Rugby, United Kingdom
7.930	DOA	Doberitz, Germany
7.935	PSL	Marapicu, Brazil
7.935	KZGF	Manila, Philippine Islands
7.945	VK2ME	Sydney, Australia
7.960	VLZ	Sydney, Australia
7.965	OQP1	Astrida, Belgian Congo
7.968	HSP	Bangkok, Siam
7.980	VLJ	Sydney, Australia
7.980	VLZ4	Sydney, Australia
7.980	HSJ	Bangkok, Siam
7.990	OQM1	Lusambo, Belgian Congo
7.995	HC2JSB	Guayaquil, Ecudaor, (B)
8.020	HSJ	Bangkok, Siam
8.035	OQB1	Bumba, Belgian Congo
8.035	CNR	Rabat, Morocco, (B)
8.050	RCNV	Smolensk, Russia
8.055	OQW1	Banningville, Belgian Congo
8.065	LPZ	Buenos Aires, Argentina, (P)
8.068	----	Konigs Wusterhausen, Germany
8.075	WEZ	Rocky Point, N. Y., USA
8.075	TYB2	Paris, T.S.F., France
8.085	OQS	Stanleyville, Belgian Congo
8.095	VLK3	Sydney, Australia, (B)
8.100	EATH	Vienna, Austria
8.100	J1AA	Tokyo, Japan
8.103	HCJB	Quito, Ecudaor, (B)
8.110	RELB	Boukhta Bertys, Russia
8.110	RELO	Boukhta Bertys, Russia
8.120	KAZ	Manila Philippine Islands
8.120	KTP	Manila Philippine Islands
8.130	OSF1	Panu, Belgian Congo
8.135	VIG	Baghdad, Iraq.
8.140	FRS9	Saigon, Indo China
8.155	PGB	Kootwijk, Netherlands
8.160	OSE1	Kanda-Kanda, Belgian Congo
8.170	RV5O	Moscow, Russia, (B)
8.170	CO9JQ	Carnaguey, Cuba (B)
8.185	PSK	Rio de Janeiro, Brazil, (B)
8.195	OQL	Leopoldville, Belgian Congo
8.200	LPG7	General Pacheco, Argentina
8.205	EDR2	Madrid, Spain
8.205	EDS	Madrid, Spain
8.214	HCJB	Quito, Ecuador, (B)
8.215	HJ5ABF	Popayan, Colombia, (X)
8.220	ZP10	Asuncion, Paraguay (B)
8.220	ZSV	Walvis Bay, Un. of So. Africa
8.225	RRD	Moscow, Russia
8.230	EAP	S. Lorenzo, Canary Islands
8.235	OOC	Coquilhatville, Belgian Congo
8.250	RKNK	Kharkov, Russia
8.270	OQD1	Kindu, Belgian Congo
8.290	RIKW	Omsk, Russia
8.305	OQE1	Costermansville, Belgian Congo
8.328	----	Ship telephone
8.333	YQI	Constanta, Rumania
8.333	LPD	General Pacheco, Argentina
8.333	LOB	Puerto Aguirre, Argentina
8.333	OXM	Scoresbysund, Greenland
8.333	RMAT	Vladivostok, U.S.S.R.
8.340	OQF1	Port-Francqui, Belgian Congo

Freq. Mc.	CALL and LOCATION	
8.345	FFK	St. Nazaire, France
8.380	IAC	Coltano, Italy, (X)
8.380	RJXC	Makhatch Kala, Russia
8.396	HSP	Bangkok, Siam
8.400	----	Aeronautical, Europe
8.420	EAK	San Lorenzo, Canary Islands
8.430	EAK	San Lorenzo, Canary Islands
8.440	SPU	Warsaw, Poland
8.445	OSB1	Kikwit, Belgian Congo
8.450	PRAG	Porto Alere, Brazil, (B)
8.455	CWF	Cerrito, Montevideo, Uruguay
8.460	FFK	St. Nazaire, France
8.470	DAF	Norddorch, Germany
8.485	OQI1	Lisala, Belgian Congo
8.510	RILD	Omsk, Russia
8.515	CZA	Drummondville, P. Q., Canada
8.515	IAC	Coltano, Italy, (X)
8.525	OQJ1	Inongo, Belgian Congo
8.540	EAK	San Lorenzo, Canary Islands
8.540	DAS	Rugen, Germany
8.540	RLEC	Tchita, Russia
8.550	HSG	Bangkok, Siam
8.555	OQK1	Aketi, Belgian Congo
8.560	WOY	Lawrenceville, N. J., USA
8.560	WOO	Ocean Gate, N. J., USA
8.565	HAT3	Szekesfehervar, Hungary
8.566	----	Ship Telephone
8.570	RRRQ	Novosibirsk, Russia
		35 TO 30 METERS
8.580	RKOM	Dnepropetrovsk, Russia
8.585	OQX1	Kabinda, Belgian Congo
8.595	OXU	Skamlebak, Denmark
8.600	----	Aeronautical, Europe
8.600	RIPV	Barnaoul, Russia
8.610	TYD2	Paris, T.S.F., France
8.630	VJI	Cloncurry, Australia
8.630	PBB	Den Helder, Netherlands
8.635	OXC1	Poenda, Belgian Congo
8.650	VE9BY	London, Ontario, Canada, (X)
8.650	HAS	Szekesfehervar, Hunagry, (B)
8.680	GBC	Rugby, United Kingdom
8.691	VWZ	Kirkee, India
8.693		
8.700	VWZ	Kirkee, India
8.700	RKLX	Odessa, Russia
8.707	VWZ	Kirkee, India
8.709		
8.710	CEC	La Granja, Chile
8.715	OSD1	Kigali, Belgian Congo
8.730	GCI	Rugby, United Kingdom
8.750	ZEK	Hongkong, China, (B)
8.760	GCQ	Rugby, United Kingdom
8.765	----	Naval Stations, Germany
8.770	RSZ	Irkutsk, Russia
8.775	PNI	Makassar, Netherland Indies
8.790	OQQ1	Libenge, Belgian Congo
8.790	TIN	Cartago, Costa Rica
8.790	TIR	Cartago, Costa Rica
8.793	CNP	Casablanca, Morocco
8.795	HKV	Bogota, Colombia, (X)
8.830	----	Portable-Interior Commission, Australia
8.830	----	Ship Telephone
8.850	OQO1	Basoko, Belgian Congo
8.870	NPO	Cavite, P. I., (Time)
8.875	CWK	Cerrito, Montevideo, Uruguay
8.880	----	Naval Stations, Japan
8.890	WYL	Barksdale Field, La., USA
8.890	WUK	Chapman Field, Fla., USA
8.890	WYS	Clark Field, Philippine Isl.
8.890	WYY	Dryden, Tex., USA
8.890	WZO	Ft. Bliss, Tex., USA
8.890	WZG	Ft. Bragg, N. C., USA
8.890	WZB	Ft. Clark, Tex., USA
8.890	WVR	Ft. McPherson, Ga., USA
8.890	WZI	Ft. Ringgold, Tex., USA
8.890	WVB	Ft. Sam Houston, Tex., USA
8.890	WYN	Hatbox Field, Okla., USA
8.890	WYO	Hensley Field, Tex., USA
8.890	WXA	Juneau, Alaska
8.890	WYG	Kelly Field, Tex., USA
8.890	WYR	Kingley Field, Philippine Is.
8.890	WYZ	Lordsburg, New Mexico, USA
8.890	WUG	Marfa, Texas, USA
8.890	WYT	Nichols Field, Philippine Is.
8.890	WUM	Tueson, Ariz., USA

Freq. Mc.	CALL	LOCATION
8.900	ZLS	Wellington, New Zealand
8.900	ZLT	Wellington, New Zealand
8.902	RKN	Moscow, Russia
8.920	GCX	Rugby, United Kingdom
8.925	OQH	Elisabethville, Belgian Congo
8.935	CNR	Rabat, Morocco, (B)
8.940	KZGG	Cebu, Philippine Islands
8.950	TGX	Guatemala City, Guatemala, (B)
8.955	ZGB	Kuala Lumpur, Fed. Malay St.
8.960	----	Algiers-Eucalyptus, Algeria
8.965	OQC	Coquilhatville, Belgian Congo
8.975	VWY	Kirkee, India
9.005	OQN1	Irumu, Belgian Congo
9.010	KEJ	Bolinas, Calif., USA
9.020	GCS	Rugby, United Kingdom
9.037	TYA2	Paris, T.S.F., France
9.050	OQR1	Usumbura, Belgian Congo
9.060	TFK	Reykjavik, Iceland
9.091	XDA	Chapultepec, Mexico
9.091	XFD	Mexico City, Mexico, (B)
9.104	LST	Olivos, Argentina
9.110	KUW	Manila, Philippine Islands
9.110	EAH	Madrid, Spain
9.120	CP5	La Paz, Bolivia, (B)
9.125	OSI1	Gule, Belgian Congo
9.125	HAT4	Szekesfehervar, Hungary
9.150	YVR	Maracay, Venezuela
9.170	WNA	Lawrenceville, N. J., USA
9.170	KZGF	Manila, Philippine Islands
9.180	ZSR	Kliphuevel, Un. of So. Africa
9.195	OQZ1	Kamina, Belgian, Congo
9.200	GBS	Rugby, United Kingdom
9.230	FLJ	Paris, France
9.235	PDP	Kootwijk, Netherlands
9.240	PDP	Kootwijk, Netherlands
9.250	GBK	Bodmin, United Kingdom
9.275	GCS	Ongar, United Kingdom
9.280	GCB	Rugby, United Kingdom
9.300	CNR	Rabat, Morocco, (B)
9.310	GBC	Rugby, United Kingdom
9.315	OQT1	Buta, Belgian Congo
9.330	VLJ4	Sydney, Australia
9.332	CJA2	Drummondville, P. Q., Canada
9.350	CEC	La Granja, Chile
9.355	OQU1	Basankusu, Belgian Congo
9.370	VQR	Nairobi, Kenya
9.370	PGC	Kootwijk, Netherlands
9.375	XDA	Chapultepec, Mexico
9.375	PGC	Kootwijk, Netherlands
9.375	RFCQ	Moscow, Russia
9.380	----	Aeronautical, Japan
9.400	XDC	Mexico City, Mexico. (X)
9.415	PLV	Bandoeng, Java
9.428	COCH	Habana, Cuba, (B)
9.435	LPZ	Buenos Aires, Argentina, (P)
9.445	OQV1	Albertville, Belgian Congo
9.450	WES	Rocky Point, N. Y., USA
9.470	WET	Rocky Point, N. Y., USA
9.470	RRRN	Irkutsk, Russia
9.480	KET	Bolinas, Calif., USA
9.480	LPR5	General Pacheco, Argentina
9.480	EAH	Madrid-Vallecas, Spain
9.490	KEI	Bolinas, Calif., USA
9.490	KZGH	Iloilo, Philippine Islands
9.493	SRI	Posen, Poland, (B)
9.495	OXY	Skamlebak, Denmark, (B)
9.500	XGOX	Nanking, China, (B)
9.500	RFAJ	Moscow, Russia
9.500	HSP2	Bangkok, Siam, (B)
9.501	PRF5	Rio de Janeiro, Brazil (B)
9.510	GSB	Daventry, United Kingdom, (B)
9.510	YV3RC	Caracas, Venezuela
9.518	VK3ME	Melbourne, Australia, (B)
9.520	OXY	Skamlebak, Denmark, (B)
9.525	OSG1	Luluabourg, Belgian Congo
9.530	W2XAF	Schenectady, N. Y., USA, (B)
9.530	YNA	Managua, Nicaragua
9.540	DJN	Zeesen, Germany. (B)
9.540	----	Batavia, Netherland India, (B)
9.545	EAQ	Aranjuez, Spain, (B)
9.550	NAA	Washington, D. C., USA (B)
9.560	DJA	Zeesen, Germany, (B)
9.560	----	Japan, (B)
9.565	VUB	Bombay, India, (B)
9.570	W1XK	Westinghouse Elec. & Mfg. Co., Springfield, Mass., (B)
9.570	W8XK	Saxonburg, Pa., USA
9.570	SUV	Abou Zaabal, Egypt. (B)
9.570	KZRM	Manila, Philippine Islands, (B)
9.572	LKJ1	Jeloy, Norway, (B)
9.575	VUC	Calcutta, India, (B)
9.579	XGBD	Shanghai, China, (B)
9.580	VK3LR	Lindhurst, Vic., Australia, (B)
9.580	VE9DR	Drummondville, P.Q., Can., (B)
9.580	HBL	Prangins, Switzerland, (B)
9.580	GSC	Daventry, United Kingdom, (B)
9.585	----	Paris, France, (B)
9.590	W3XAU	Newton Square, Pa., USA, (B)
9.590	VK2ME	Sydney, Australia, (B)
9.590	HP5J	J. St. Panama City, Panama, (B)
9.590	TIRA	Cartago, Costa Rica, (B)
9.590	PCJ	Eindhoven, Netherlands, (B)
9.595	HBL	Prangins, Switzerland. (B)
9.600	2RO	Rome, Italy, (B)
9.600	XEFT	Vera Cruz, Mex. (B)
9.600	LGN	Bergen, Norway
9.600	CT1AA	Lisbon, Portugal, (B)
9.616	VQ7LO	Nairobi, Kenya, (B)
9.620	FZR2	Saigon, French Indo-China
9.620	DGU	Nauen, Germany, (X)
9.635	2RO	Rome, Italy, (B)
9.640	HSP2	Bangkok, Siam
9.655	OQY1	Niangara, Belgian Congo
9.660	PSJ	Marapicu, Brazil
9.700	LQA	Buenos Aires, Argentina
9.710	GCA	Rugby, United Kingdom
9.750	WOF	Lawrenceville, N. J., USA
9.750	RFK	Moscow, Russia
9.760	VK2ME	Sydney, Australia, (B)
9.760	VIJ	Sydney, Australia
9.760	VLZ2	Sydney, Australia
9.772	EAM	Madrid, Spain, (B)
9.780	2RO	Rome, Italy
9.790	GBW	Rugby, United Kingdom
9.800	LSE	Monte Grande, Argentina
9.800	GCW	Rugby, United Kingdom
9.820	EAK	San Lorenzo, Canary Islands
9.824	LSI	Buenos Aires, Argentina
9.830	IRF	Rome, Italy
9.830	IRM	Rome, Italy, (B)
9.830	IRU	Rome, Italy
9.840	FTI	St. Assise, France
9.840	FYC2	Paris, France
9.840	JYS	Chiba, Japan, (B)
9.860	EAQ	Aranjuez, Madagascar
9.863	FZT5	Lawrenceville, N. J., USA
9.870	WON	Buenos Aires, Argentina, (P)
9.875	LPZ	Buenos Aires, Argentina
9.890	LSA	Hurlinghan, Argentina
9.890	LSN	Tananarive, Madagascar
9.895	FZV2	Buenos Aires, Argentina. (B)
9.900	LSN	Drummondville, P. Q., Canada
9.905	CGA5	Dairen, Manchuria
9.925	JDY	Moscow, Russia
9.928	RRLY	Rugby, United Kingdom
9.950	GCU	Buenos Aires, Argentina
9.964	LSL	Rome, Italy
9.966	IRS	Buenos Aires, Argentina. (B)
9.990	LSN	Manila, Philippine Islands
9.990	KAZ	Pointe-Noire, French Equatorial

30 TO 25 METERS

10.000	FHH4	Africa
10.000	EAQ	Aranjuez, Spain
10.000	----	Belgrade, Yugoslavia, (B)
10.055	ZFB	Hamilton, Bermuda
10.055	SUV	Abou Zaabal, Egypt, (B)
10.065	JMP2	Shinkyo, Japan
10.070	EDM	Madrid, Spain
10.070	EDR2	Madrid, Spain
10.070	EDS	Madrid, Spain
10.070	EHY	Madrid, Spain
10.090	EDR3	Tablero, Teneriffe, Canary Is.
10.100	EHY	Madrid, Spain
10.105	REX	Indigo Boukhta, Russia
10.120	PSI	Marapicu, Brazil
10.140	OPM	Leopoldville, Belgian Congo
10.163	----	Ship telephone
10.169	HSJ	Bangkok, Siam
10.220	PSH	Marapicu, Brazil
10.230	CEC	Santiago, Chile
10.250	LSK3	Hurlinghan, Argentina
10.260	PMN	Bandoeng, Netherland Indies
10.260	RRRO	Irkoutsk, Russia
10.290	DIQ	Nauen, Germany
10.290	HPC	Panama City, Panama

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION
10.300	LSL2 Hurlinghan, Argentina
10.330	ORK Ruysselede, Belgium, (B)
10.335	ZFD Hamilton, Bermuda
10.350	LSX Monte Grande, Argentina (B)
10.370	EDR3 El Tablero, Canary Islands
10.370	EHZ El Tablero, Canary Islands
10.375	JVO Tokyo, Japan
10.380	WCG Rocky Point, N. Y., USA
10.390	KER Bolinas, Calif., USA
10.390	GBX Rugby, United Kingdom
10.400	KEZ Bolinas, Calif., USA
10.410	KES Bolinas, Calif., USA
10.410	PDK Kootwijk, Netherlands
10.410	LSY Monte Grande, Argentina
10.415	PDK Kootwijk, Netherlands
10.420	XGW Shanghai, China
10.420	PDK Kootwijk, Netherlands
10.430	YBG Medan, Sumatra
10.440	DGH Nauen, Germany
10.515	FZT2 Tananarive, Madagascar
10.520	CJA4 Drummondville, P. Q., Canada
10.520	VLK Sydney, Australia, (B)
10.526	FZT2 Tananarive, Madagascar
10.530	GBX Rugby, United Kingdom
10.535	JIB Taihoko, Taiwan, Japan
10.550	WOK Lawrenceville, N. J., USA
10.578	FYB Paris, France, (B)
10.610	WEA Rocky Point, N. Y., USA
10.620	WEF Rocky Point, N. Y., USA
10.620	EDN Madrid, Spain
10.620	EDS Madrid, Spain
10.620	EDR2 Madrid, Spain
10.620	EHX Madrid, Spain
10.630	WED Rocky Point, N. Y., USA
10.640	WQW Rocky Point, N. Y., USA
10.640	OZT Skamlebak, Denmark
10.660	JVN Tokyo, Japan
10.670	CEC Santiago, Chile
10.675	WNB Lawrenceville, N. J., USA
10.714	RNZ Petropavlovsk, Russia
10.740	JVM Tokyo Japan
10.760	PSG Marapicu, Brazil
10.770	GBP Rugby, United Kingdom
10.840	KWV Dixon, Calif., USA
10.850	DFL Nauen, Germany
10.860	RQT Irkutsk, Russia
10.870	GIQ Dollis Hill, United Kingdom
10.910	KTR Manila, Philippine Islands
10.940	FTH St. Assise, France
10.950	VLK4 Sydney, Australia
10.975	OCI Lima, Peru
10.975	GCL Rugby, United Kingdom
10.990	ZLT Wellington, N. Z.
11.000	PLP Bandoeng, Java
11.110	RUU Detskoe Selo, Russia
11.110	LPD General Pacheco, Argentina
11.110	---- Aronautical, Japan
11.111	XFD Mexico City, Mexico, (B)
11.140	XGB Shanghai, China
11.140	---- Naval Stations, Germany
11.187	XAM Merida, Yuc., Mexico
11.200	XBJQ Mexico City, Mexico (B)
11.200	---- Aeronautical, Europe
11.210	SPT Warsaw, Poland
11.260	---- Aeronautical, Europe
11.340	DAN Norden, Germany
11.370	CWG Cerrito, Montvideo, Uruguay
11.425	OQK2 Aketi, Belgian Congo
11.435	DHC Nauen, Germany
11.465	OQV2 Albertville, Belgian Congo
11.470	IBDK S. S. Eyecttra, (G. Mahreoni's Yacht) (X)
11.490	EAH Madrid, Spain
11.490	GBK Bodmin, United Kingdom
11.500	VIZ3 Melbourne, Australia
11 500	VQR Nairobi, Kenya
11.500	RPT Tashkent, Russia
11.505	OSH Elisabethville, Belgian Congo
11.530	LSN Buenos Aires, Argentina, (B)
11.530	CGA Drummondville, P. Q.
11.538	---- Rome, Italy
11.540	XGR Shanghai, China
11.565	OQP2 Astrida, Belgian Congo
11.570	GNS Ongar, United Kingdom
11.620	EAH Madrid, Spain
11.660	PPQ Sepetiba, Brazil, (X)
11.660	---- Aeronautical. Europe
11.660	JVL Tokyo, Japan
11.660	RPG Barentsbourg, Russia

Freq. Mc.	CALL and LOCATION
11.670	---- Rome, Italy
11.675	OQM2 Lusambo, Belgian Congo
11.680	LPG8 General Pacheco, Argentina
11.680	KIO Kahuku, Hawaii
11.695	YV2RC Caracas, Venezuela
11.710	HJ4ABA P. O. Box 50, Medellin, Colo bia, (B)
11.710	OQW2 Banningville, Belgian Congo
11.715	Paris, France, (B)
11.720	CJRX Winnipeg, Man., Canada, (B)
11.730	PHI Huizen, Netherlands, (B)
11.730	NAA Washington, D. C., USA, (B)
11.740	RFK Moscow, Russia
11.740	RRPR Tashkent, Russia, (B)
11.750	GSD Daventry, United King., (B)
11.760	XDA Chapultepec, Mexico, (B)
11.770	DJD Zeesen, Germany, (B)
11.780	VE9DN Drummondville, P. Q., Can., (B)
11.780	VE9DR Drummondville, P. Q., Can., (B)
11.780	---- Cairo, Egypt
11.790	W1XAL Boston, Mass., USA, (B)
11.790	TITR San Jose, Costa Rica, (B)
11.795	DJO Zeesen, Germany, (B)
11.800	---- Japan, (B)
11.800	CO9WR P.O. Box 85, Sancti Spiritu Cuba, (X)
11.801	OER3 Vienna, Austria, (B)
11.801	XGBC Shanghai, China, (B)
11.810	VE9GW Bowmanville, Ont., Can., (B)
11.810	2RO Rome, Italy, (B)
11.810	EAQ Aranjuez, Spain, (B)
11.830	W9XAA Chicago, Ill., USA
11.830	W2XE Wayne, N. J., USA, (B)
11.835	VE9HX Halifax, N. S., Canada, (B)
11.840	KZRM Manila, Philippine Islands
11.845	---- Paris, France, (B)
11.855	DJP Zeesen, Germany
11.860	VE9CA Calgary, Alta., Canada, (B)
11.860	GSE Daventry, United Kingdom. (B)
11.870	W8XK Saxonburg, Pa., USA, (B)
11.870	VUC Calcutta, India, (B)
11.875	"Radio Colonial," Paris, France, (B)
11.880	VK3LR Lyndhurst, Vic., Australia
11.880	---- Paris, France, (B)
11.880	RSN Everdlovsk, Russia
11.885	---- Paris, France
11.890	YNA Managua, Nicaragua, (B)
11.895	OSL Leopoldville, Belgian Congo
11.900	XGOX Nanking, China. (B)
11.910	RRRZ Sverdlovsk, Russia
11.920	RRRQ Novosibirsk, Russia
11.940	FTA St. Assise, France
11.950	FTA St. Assise, France
11.950	KKQ Bolinas, Calif., (X)
11.960	OQU2 Basankusu, Belgian Congo
11.970	HSJ Bangkok, Siam
11.980	FZS Saigon, French Indo-China
11.985	OQO2 Basoko, Belgian Congo
11.991	FZS2 Saigon, French Indo-China
	25 TO 20 METERS
12.000	FZG Saigon, French Indo-China
12.000	VQR Nairobi, Kenya
12.000	RNE Moscow, Russia, (B)
12.015	OSC2 Boende, Belgian Congo
12.028	CT1CT Lisbon, Portugal, (B)
12.030	HBO Prangins, Switzerland, (B)
12.035	DJK Nauen, Germany
12.050	VRR Stony Hill, Jamaica
12.050	PDV Kootwijk, Netherlands
12.055	
12.060	PDV Kootwijk, Netherlands
12.082	CT1CT Lisbon, Portugal, (B)
12.085	OQB2 Bumba, Belgian Congo
12.100	CJA6 Drummondville. P. Q., Canada
12.100	TIR6 Cartago, Costa Rica
12.120	---- Algiers, Algeria
12.145	CQN2 Urumu, Belgian Congo
12.150	FQO-FQE St. Assise, France
12.150	GBS Rugby, United Kingdom
12.180	OQT2 Buta, Belgian Congo
12.185	FRSS Saigon, French Indo-China
12.185	---- Radom, Poland
12.215	TYA Paris, T.S.F., France
12.229	CT1CT Lisbon, Portugal. (B)
12.235	TFJ Reykjavik, Iceland

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION
12.240	OQE2 Costermansville, Belgian, Congo
12.244	LPD General Pacheco, Argentina
12.250	FTN Ste. Assise, France
12.250	TYB Paris, France
12.250	RFBY Moscow, Russia
12.250	GBS Rugby, United Kingdom
12.260	FTN Ste. Assise, France
12.270	RKK Moscow, Russia
12.275	FZT3 Tananarive, Madagascar
12.280	KUV Manila, Philippine Islands
12.290	GBU Rugby, United Kingdom
12.295	ZLT Wellington, New Zealand
12.295	ZLU Wellington, New Zealand
12.300	ONC Coquilhatville, Belgian Congo
12.300	ZLW Wellington, New Zealand
12.325	DAF Norddeich, Germany
12.360	OSF2 Panu, Belgian Congo
12.394	DAF Norddeich, Germany
12.396	CT1GO Parede, Portugal, (B)
12.425	OS12 Gule, Belgian, Congo
12.450	RLGL Kabansk, Russia
12.470	OQJ2 Inongo, Belgian Congo
12.485	CNP Casablanca, Morocco
12.500	PBB Den elder, Netherlands
12.500	SPN Warsaw, Poland
12.500	YQI Constanta, Rumania
12.500	RKF Moscow, Russia
12.500	ZSV Walvis Bay, Un. of So. Africa
12.550	---- Aeronautical, Europe
12.565	OQX2 Kabinda, Belgian Congo
12.570	FFK St. Nazaire, France
12.640	OQZ2 Kanuna Belgian Congo
12.660	CZA Drummondville, P. Q., Canada
12.705	FFK St. Nazaire, France
12.740	OSE2 Kanda-Kanda, Belgian Congo
12.745	DAF Norddeich, Germany
12.750	---- Aeronautical, Europe
12.780	GBC Rugby, United Kingdom
12.800	IAC Coltano, Italy, (X)
12.800	OSD2 Kigali, Belgian Congo
12.825	CNR Rabat, Morocco, (B)
12.840	WOY Lawrenceville, N. J., USA
12.840	WOO Ocean Gate, N. J., USA
12.860	OQD2 Kindu, Belgian Congo
12.865	IAC Coltano, Italy, (X)
12.910	OSK2 Kitega, Belgian Congo
12.910	OXR Skamlebak, Denmark
12.980	OQG2 Kongolo, Belgian Congo
13.000	TYC Paris T.S.F., France
13.025	OQQ2 Libenge, Belgian Congo
13.040	---- Ship Telephone
13.074	JYK Tokyo, Japan
13.075	VPD Suva, Fiji Islands, (X)
13.085	OQI2 Lisala, Belgian Congo
13.100	---- Naval Stations, Germany
13.105	IRJ Rome, Italy
13.140	CWH Cerrito, Montevideo, Uruguay
13.150	OSG2 Luluabuorg, Belgian Congo
13.180	DGG Nauen, Germany
13.200	---- Ship Telephone
13.205	ONF Banana, Belgian Congo
13.215	---- Ship Telephone
13.220	---- Ship Telephone
13.240	KBJ Manila, Philippine Islands
13.245	OSV Stanleyville, Belgian Congo
13.260	IRR Rome, Italy
13.285	CJA7 Drummondville, P. Q., Canada
13.300	---- Aeronautical, Europe
13.300	---- Naval Stations, Japan
13.315	OQY2 Niangara, Belgian Congo
13.335	WYS Clark Field, Philippine Isl.
13.335	WYY Oryden, Texas, USA
13.335	WYM Ft. Leavenworth, Kans., USA
13.335	WYN Hatbox Field, Okla., USA
13.335	WYO Hensley Field, Texas, USA
13.335	WYG Kelly Field, Texas, USA
13.335	WYR Kindley Field, Philippine Isl.
13.335	WUG Marfa, Texas, USA
13.335	WYT Nichols Field, Philippine Isl.
13.335	WUM Tucson, Ariz., USA
13.340	VLJ2 Sydney, Australia
13.340	VLZ3 Sydney, Australia
13.340	CGA Drummondville, P. Q., Canada
13.345	YVQ Maracay, Venezuela
13.360	OQF2 Port-Francqui, Belgian Congo
13.390	WMA Lawrenceville, N. J., USA
13.405	GBJ Bodmin, United Kingdom
13.410	YID Baghdad, Iraq, (B)

Freq. Mc.	CALL and LOCATION
13.415	OQR2 Usumbura, Belgian Congo
13.415	GCJ Rugby, United Kingdom
13.460	LPR6 General Pacheco, Argentina
13.510	OSB2 Kikwit, Belgian Congo
13.540	GMS Ongar, United Kingdom
13.560	JVI Tokyo, Japan
13.585	GBB Rugby, United Kingdom
13.591	GBC Rugby, United Kingdom
13.605	OQA2 Kigoma, Belgian Congo
13.610	JYK Tokyo, Japan, (XB)
13.635	SPW Warsaw, Poland
13.685	HAT Szekesfehervar, Hungary
13.740	CGA Drummondville, P. Q., Canada
13.790	EAK San Lorenzo, Canary Islands
13.800	VLK5 Sydney, Australia
13.811	SUZ Abou Zaabal, Egypt
13.813	
13.820	
13.827	SUZ Abou Zaabal, Egypt
13.829	
13.880	RELO Boukhta Bertys, Russia
13.885	WQT RockyPoint, N. Y., USA
13.890	LPG9 General Pacheco Argentina
13.950	---- Aeronautical, Europe
13.950	YO1 Bucharest Rumania, (B)
13.965	TFL Reykjavik, Iceland
13.980	LCO Jeloy, Norway, (B)
13.990	GBA Rugby, England
14.000	RFBD Mojaisk, Russia
14.000	HJ5ABE Cali, Colombia
14.005	
to	
14.395	Amateurs,
14.151	HSJ Bangkok, Siam
14.250	RPK Moscow, Russia
14.285	LPR2 General Pacheco, Argentina
14.286	RMNK Kharkov, Russia
14.286	RKV Moscow, Russia
14.410	DIP Zeesen, Germany
14.420	VPD Suva, Fiji
14.435	LSJ2 Hurlingham, Argentina
14.440	GBW Rugby, United Kingdom
14.450	RPK Moscow, Russia
14.470	WMF Lawrenceville, N. J., USA
14.479	HSJ Bangkok, Siam
14.480	LSN Buenos Aires, Argentina, (B)
14.480	GBW Rugby, United Kingdom
14.485	TGF Guatemala City, Guat.
14.485	HPF Panama, Panama
14.485	YNA Managua, Nicaragua
14.485	TIR Cartago, Costa Rira
14.500	LSM2 Hurlingham, Argentina
14.500	RRRF Moscow, Russia
14.510	RRRF Moscow, Russia
14.515	Panama City, Panama
14.525	XDA Chapultepec, Mexico
14.530	LSA Buenos Aires, Argentina
14.530	LSN Buenos Aires, Argentina,
14.535	HBJ Prangins, Switzerland
14.540	---- Tokyo, Japan
14.545	RTZ Irkutsk, Russia
14.550	RTZ Irkutsk, Russia
14.550	HBJ Prangins, Switzerland
14.560	RTZ Irkutsk, Russia
14.570	RTZ Irkutsk, Russia
14.590	WMN Lawrenceville, N. J., USA
14.600	JVH Tokyo, Japan
14.605	DGZ Nauen, Germany
14.620	XDA Chapultepec, Mexico
14.620	EDM Madrid, Spain
14.620	EDN Madrid, Spain
14.620	EDR2 Madrid, Spain
14.620	EDS Madrid, Spain
14.620	EHY Madrid, Spain
14.635	RELB Boukhta Bertys, Russia
14.635	RELO Boukhta Bertys, Russia
14.653	GBL Rugby, United Kingdom
14.665	DFD Nauen, Germany
14.690	PSS Rio de Janeiro, Brazil
14.705	OZW Skamlebak, Denmark
14.710	VLZ5 Sydney, Australia
14.750	FZV Tananarive, Madagascar
14.770	WEB Rocky Point, N. Y., USA
14.800	WQV Rocky Point, N. Y., USA
14.815	WQL New Brunswick, N. J., USA
14.820	EAK San Lorenzo, Canary Islands
14.830	WKU Rocky Point, N. Y., USA

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION
14.830	RRRW Moscow, Russia
14.840	RRRW Moscow, Russia
14.910	JVG Tokyo, Japan
14.920	KQH Kahuku, Hawaii
14.935	PSE Marapicu, Brazil
14.940	EAK San Lorenzo, Canary Islands
14.950	HJB Bogota, Col.
14.965	EAK San Lorenzo, Canary Islands
14.980	KAY Manila, Philippine Islands
14.985	EFR2 Madrid, Spain
14.985	EDS Madrid, Spain
	20 TO 17 METERS
15.040	WQG Rocky Point, N. Y., USA
15.040	RKI Moscow, Russia
15.055	WNC Hialeah, Fla., USA
15.065	EAK San Lorenzo, Canary Islands
15.070	PSD Marapicu, Brazil
15.090	RKI Moscow, Russia
15.104	RAU Tashkent, Russia, (B)
15.110	DJL Zeesen, Germany, (B)
15.120	J1AA Tokyo, Japan, (B)
15.120	HVJ Vatican City, (B)
15.123	HVJ Vatican City, (B)
15.130	NAA Washington, D. C., USA, (B)
15.130	VE9DN Drummondville, P.Q., Can., (B)
15.140	GSF Daventry, United Kingdom, (B)
15.190	VE9BA Montreal, P. Q., Canada, (X)
15.200	DJB Zeesen, Germany, (B)
15.210	W8XK Saxonburg, Pa., USA
15.220	PCJ Eindhoven Netherlands, (B)
15.230	VK3LR Lyndhurst, Vic., Aus., (B)
15.230	2RO Rome, Italy (B)
15.243	Paris, France, (B)
15.250	W1XAL Boston, Mass., USA, (B)
15.252	RIM Rachkent, Russia
15.260	GSI Daventry, United Kingdom, (B)
15.265	EAQ Aranjuez, Spain, (B)
15.270	W2XE Wayne, N. J., USA, (B)
15.275	---- Warsaw, Poland, (B)
15.280	DJQ Zeesen, Germany, (B)
15.290	2RO Rome, Italy (B)
15.295	CP5 La Paz, Bolivia, (B)
15.295	Paris, France, (B)
15.300	OXY Skamlebak, Denmark, (B)
15.320	---- Taihoku, Japan
15.330	W2XAD Schenectady N. Y., USA, (B)
15,340	DJR Zeesen, Germany, (B)
15.350	CT1AA Lisbon, Portugal, (BX)
15.355	KWU Dixon, Calif., USA
15.370	TIR Cartago, Costa Rica
15.370	HAS3 Szekesfehervar, Hungary, (B)
15.410	PRADO Riobamba, Ecuador, (B)
15.415	KWO Dixon, Calif., USA
15.430	KWE Bolinas, Calif., USA
15.445	WQZ San Juan, Puerto Rico
15.460	KRR Bolinas, Calif., USA
15.475	KKL Bolinas, Calif., USA
15.490	KEM Bolinas, Calif., USA
15.510	JDX Dairen, Manchuria
15.530	HSG Bangkok, Siam
15.560	PYR Sepetiba, Brazil
15.620	JVF Tokyo, Japan
15.625	OCJ Lima, Peru
15.660	JVE Tokyo, Japan
15.670	LCQ Jeloy, Norway
15.680	JZA Shinkyo, Japan
15.740	TFM Reykjavik, Iceland
15.740	JIA Taihoku, Taiwan, Japan
15.760	JYT Tokyo (Kemikawa) Jap., (BX)
15.810	LSL Hurlingham, Argentina
15.860	FTK St. Assise, France
15.860	JVD Tokyo, Japan
15.865	CEC La Granja, Chile
15.880	FTK St. Assise, France
15.930	FYC Paris, France
15.935	
15.970	RRRI Khabarovsk, Russia
15.985	WAZ New Brunswick, N. J., USA
16.000	WKQ Rocky Point N. Y., USA
16.000	RFAJ Moscow, Russia
16.015	WQR New Brunswick, N. J., USA
16.030	KKP Kahuku, Hawaii
16.050	JVC Tokyo, Japan
16.070	RRRI Khabarovsk, Russia

Freq. Mc.	CALL and LOCATION
16.090	EDR2 Madrid, Spain
16.090	EDS Madrid, Spain
16.120	IRY Rome, Italy
16.140	---- Rugby, United Kingdom
16.150	GBX Rugby, United Kingdom
16.162	PSA Maripicu, Brazil
16.200	FZR Saigon, French Indo-China
16.214	FZR3 Saigon, French Indo-China
16.233	FZR3 Saigon, French Indo-China
16.240	KTO Manilla, Philippine Islands
16.270	WLK Lawrenceville, N. J., USA
16.270	WOG Ocean Gate, N. J., USA
16.300	EDR3 El Tablero, Canary Islands
16.305	PCL Kootwijk, Nehterlands
16.330	VLJ3 Sydney, Australia
16.330	VLK Sydney, Austral,ia, (B)
16.330	VLZ Sydney, Australia
16.430	---- Naval Stations, Germany
16.440	---- Aeronautical, Europe
16.665	LPD General Pacheco, Argentina
16.665	DAN Norden, Germany
16.666	LOB Puerto Aguirre, Argentina
16.800	---- Aeronautical, Europe
16.854	ZSV Walvis Bay, Un. of So. Africa
16.870	FFK St. Nazaire, France
17.080	GBC Rugby, United Kingdom
17.120	WOY Lawrenceville, N. J., USA
17.120	WOO Ocean Gate, N. J., USA
17.130	HAS5 Szekesfehervar, Hungary, (B)
17.143	---- Shanghai, China
17.150	OPC Coquilhatville, Belgian Congo
17.190	OXV Skamlebak, Denmark
17.200	---- Aeronautical, Europe
17.200	CWI Cerrito, Montevideo, Uruguay
17.260	DAF Norddeitch, Germany
17.260	PBB Den Helder, Netherlands
17.300	VE9BY London, Ont., Canada, (B)
17.310	W3XL Bound Brook, N. J., USA, (B)
17.310	CZA Drummondville, P. Q., Canada
17.341	DIM Nauen, Germany
17.400	J1AA Tokyo, Japan, (B)
17.430	CWM Cerrito, Montevideo, Uruguay
17.470	TYD Paris, T.S.F., France
17.480	VWY Kirkee, India
17.510	VWY2 Kirkee, India
17.512	DFB Nauen, Germany
17.520	DEB Nauen, Germany
17.600	---- Ship Telephone
17.600	GBC Rugby, United Kingdom
17.620	---- Ship Telephone
17.630	VLJ5 Sydney, Australia
17.630	RRRU Khabarovsk, Russia
17.640	RRRU Khabarovsk, Russia
17.640	---- Ship Telephone
	17 TO 15 METERS
17.650	XGM Shanghai, China
17.650	RRRU Khabarovsk, Russia
17.660	RRRV Khabarovsk, Russia
17.670	RRRV Khabarovsk, Russia
17.680	RRRV Khabarovsk, Russia
17.690	LQB2 Monte Grande, Argentina
17.699	IAC Coltano, Italy (X)
17.700	---- Naval Stations, Japan
17.710	CJA9 Drummondville, P. Q., Canada
17.710	RRRV Khabarovsk, Russia
17.719	HSP Bangkok, Siam
17.720	RRRV Khabarovsk, Russia
17.725	CNP Casablanca, Morocco
17.730	RRRV Khabarovsk, Russia
17.735	
17.740	HSP Bangkok, Siam
17.750	IAC Coltano, Italy, (X)
17.760	DJE Zeesen, Germany, (B)
17.765	Paris, France, (B)
17.770	2RO Rome, Italy (B)
17.775	PHI Huizen, Netherland, (B)
17.780	W3XAL Bound Br., N. J., USA, (B)
17.780	W9XAA Chicago, Ill., USA, (B)
17.780	W9XF Downer's Grove, Ill., USA, (B)
17.780	W8XK Saxonburg, Pa., (B)
17.780	---- Warsaw, Poland, (B)
17.790	RRRV Khabarovsk, Russia
17.790	GSG Daventry, United Kingdom (B)
17.794	XGBB Shanghai, China
17.795	PCV Kootwijk, Netherlands
17.800	XGOX Nanking, China, (B)

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL and LOCATION
17.800	PCV Kootwijk, Netherlands
17.800	RRRV Khabarovsk, Russia
17.800	HSC Bangkok, Siam
17.805	PCV Kootwijk, Netherlands
17.810	PCV Kootwijk, Netherlands
17.810	RRRV Khabarovsk, Russia
17.820	RRRV Khabarovsk, Russia
17.830	PCV Kootwijk, Netherlands
17.830	RRRV Khabarovsk, Russia
17.850	LSN Buenos Aires, Argentina,
17.850	RRRV Khabarovsk, Russia
17.860	WQC Rocky Point, N. Y., USA
17.860	RRRV Khabarovsk, Russia
17.870	RRRV Khabarovsk, Russia
17.880	WQI New Brunswick, N. J., USA
17.890	TFN Reykjavik, Iceland
17.890	FZT Tananarive, Madagascar
17.900	WLL Rocky Point, N. Y., USA
17.900	FZT Tananarive, Madagascar
17.910	CWO Cerrito, Montevideo, Uruguay
17.910	RRRV Khabarovsk, Russia
17.920	WQF Rocky Point, N. Y., USA
17.920	RRRV Khabarovsk, Russia
17.930	RRH Tashkent, Russia
17.940	WQB Rocky Point, N. Y., USA
17.980	KQZ Bolinas, Calif., USA
18.030	RRI Novosibirsk, Russia
18.040	GAB Rugby, United Kingdom
18.050	RRRX Khabarovsk, Russia
18.060	KUN Bolinas, Calif., USA
18.060	RRRX Khabarovsk, Russia
18.070	RRRX Khabarovsk, Russia
18.080	---- Camaguey, Cuba
18.080	RRRX Khabarovsk, Russia
18.100	RRRX Khabarovsk, Russia
18.110	RRRX Khabarovsk, Russia
18.115	LSY3 Monte Grande, Argentina
18.120	RRRX Khabarovsk, Russia
18.135	PMC Bandoeng, Java
18.150	---- Camaguey, Cuba
18.150	RRRX Khabarovsk, Russia
18.160	RRRX Khabarovsk, Russia
18.170	CGA Drummondville, P. Q., Canada
18.170	RRRX Khabarovsk, Russia
18.190	JVB Tokyo, Japan
18.200	GAW Rugby, United Kingdom
18.220	KUS Manila, Philippine Islands
18.230	EAH Madrid, Spain
18.240	FRE St. Assise, France
18.240	JVB Tokyo, Japan
18.250	FTO St. Assise, France
18.295	YVR Maracay, Venezuela
18.310	FZS Saigon, Indo-China
18.310	GBS Rugby, United Kingdom
18.340	WLA Lawrenceville, N. J., USA
18.340	ZLW Wellington, N. Z.
18.345	FZS3 Saigon, French Indo-China
18.390	---- Warsaw, Poland
18.400	PCK Kootwijk, Netherlands
18.405	
18.410	PCK Kootwijk, Netherlands
18.411	VWZ Kirkee, India
18.413	
18.420	VWZ Kirkee, India
18.427	
18.429	
18.480	HBH Prangins, Switzerland
18.535	PCM Kootwijk, Netherlands
18.535	---- Warsaw, Poland
18.540	PCM Kootwijk, Netherlands
18.545	PCM Kootwijk, Netherlands
18.595	GLS Ongar, United Kingdom
18.600	PDM Kootwijk, Netherlands
18.610	RRK Tiflis, Russia
18.620	GBJ Bodmin, United Kingdom
18.620	GAU Rugby, United Kingdom
18.630	IRZ Rome, Italy
18.640	PSC Marapicu, Brazil
18.680	OCI Lima, Peru
18.680	GAX Rugby, United Kingdom
18.700	DFQ Nauen, Germany
18.770	TYD3 Paris, T.S.F., France
18.830	PLE Bandoeng, Java, (C)
18.860	WKM Rocky Point, N. Y., USA
18.890	ZSS Klipheuvel, Un. of So. Africa
18.910	JVA Tokyo, Japan
18.950	HBF Prangins, Switzerland

Freq. Mc.	CALL and LOCATION
18.960	LSR Buenos Aires, Argentina
18.960	EAH Madrid, Spain
18.970	GAQ Rugby, United Kingdom
18.980	WFX Rocky Point, N. Y. USA
19.000	HSJ Bangkok, Siam
19.010	PSB Marapicu, Brazil
19.030	EDM Madrid, Spain
19.030	EDR2 Madrid, Spain
19.030	EDS Madrid, Spain
19.030	EHY Madrid, Spain
19.160	GAP Rugby, United Kingdom
19.200	ORG Ruysselede, Belgium
19.220	WKF Lawrenceville, N. J. USA
19.240	DFA Nauen, Germany
19.250	FZV3 Tananarive, Madagascar
19.260	PPU Sepetiba, Brazil
19.300	VLK2 Sydney, Australia
19.345	PMA Bandoeng, Java
19.355	FTM St. Assise, France
19.380	WOP Ocean Gate, N. J., USA
19.400	LQD Monte Grande, Argentina
19.400	FRE St. Assise France
19.430	ORH Elisabethville, Belgian Congo
19.435	EDR2 Madrid, Spain
19.435	EDS Madrid, Spain
19.460	DFM Nauen, Germany
19.500	LSQ Buenos Aires, Argentina,
19.520	IRW Rome, Italy
19.530	EDR2 Madrid, Spain
19.530	EDS Madrid, Spain
19.600	LSF Monte Grande, Argentina
19.650	LSN5 Hurlinghan, Argentina
19.656	IRL Rome, Italy
19.680	CEC La Granja, Chile
19.700	DFJ Nauen, Germany
19.720	EAQ Aranjuez, Spain, (B)
19.800	---- Tokyo, Japan
19.820	WKN Lawrenceville, N. J., USA
19.840	FTD St. Assise, France
19.900	LSG Monte Grande, Argentina
19.920	HSJ Bangkok, Siam
19.947	DIH Nauen, Germany
19.930	KAX Manila, Philippine Islands
	15 TO 6 METERS
20.020	DHO Nauen, Germany
20.040	OPL Leopoldville, Belgian Congo
20.140	DGW Nauen, Germany
20.140	DWG Nauen, Germany
20.165	---- Warsaw, Poland
20.180	WQX Rocky Point, N. Y., USA
20.260	WQQ Rocky Point, N. Y., USA
20.310	RFAJ Moscow, Russia
20.360	EAH Madrid, Spain
20.380	GAA Rugby, United Kingdom
20.400	VLK7 Sydney, Australia
20.430	IRK Rome, Italy
20.500	DGQ Nauen, Germany
20.570	EDR2 Madrid, Spain
20.570	EDS Madrid, Spain
20.570	EHX Madrid, Spain
20.585	ORS Stanleyville, Belgian Congo
20.595	ORL Leopoldville, Belgian Congo
20.610	EAH Madrid, Spain
20.620	CEC La Granja, Chile
20.640	FSR Paris France
20.670	EHX Madrid, Spain
20.680	LSN Buenos Aires, Argentina,
20.680	LSX Monte Grande, Argentina,
20.730	LSY Monte Grande, Argentina
20.740	DGP Nauen, Germany
20.780	KMM Bolinas, Calif., USA
20.820	KSS Bolinas, Calif., USA
20.825	PFF Kootwijk, Netherlands
20.830	PFF Kootwijk, Netherlands
20.835	
20.860	EDM Madrid, Spain
20.860	EDR2 Madrid, Spain
20.860	EDS Madrid, Spain
20.860	EHY Madrid, Spain
20.960	EAH Madrid, Spain
21.000	OKI Podébrady, Czechoslovakia
21.020	LSN Buenos Aires, Argentina,
21.060	KWN Dixon, Calif., USA
21.060	WKÁ Lawrenceville, N. J., USA
21.080	PSA Marapicu, Brazil
21.110	CEC La Granja, Chile

B=Broadcasting; X=Experimental.

Freq. Mc.	CALL	LOCATION
21.130	LSM	Buenos Aires, Argentina
21.140	KBI	Manila, Philippine Islands
21.150	HAS4	Szekesfehervar, Hungary (B)
21.160	LSL	Buenos Aires, Argentina
21.180	DGN	Nauen, Germany
21.220	WQA	Rocky Point, N. Y., USA
21.240	WQJ	Rocky Point, N. Y., USA
21.260	WBU	Rocky Point, N. Y., USA
21.340	DGM	Nauen, Germany
21.420	WKK	Lawrenceville, N. J. USA
21.460	W1XAL	Boston, Mass., USA, (B)
21.470	GSH	Daventry, United Kingdom. (B)
21.480	----	Warsaw, Poland, (B)
21.490		Paris, France, (B)
21.500	NAA	Washington, D. C., USA
21.510	2RO	Rome, Italy (B)
21.530	GSJ	Daventry, United Kingdom, (B)
21.540	W8XK	Pittsburgh, Pa., USA
21.540	VK3LR	Lyndhurst, Vic., Aus., (B)
21.550	XGBA	Shanghai, China, (B)
21.600	CGG	Drummondville, P. Q., Canada
22.300	GBU	Rugby, United Kingdom
22.460	EDS	Madrid, Spain
22.520	DGE	Nauen, Germany
22.600	DGF	Nauen, Germany
22.760	EDR2	Madrid Spain
22.820	CEC	La Granja, Chile
23.240	HSJ	Bangkok, Siam

Freq. Mc.	CALL	LOCATION
25.650	2RO	Rome, Italy (B)
26.100	GSK	Daventry, United Kingdom (B)
28.000 to 30.000		Amateurs,
29.817	IAF	Fiumicino, Italy
30.604	IAG	Golfo Aranci, Italy
36.144	TYZ	Calenzana, France
36.300	KGXM	Waikiki, Hawaii
36.800	----	Amateur and Experimental, Japan, (X)
37.400	KGXC	Manawahua, Hawaii
39.473	TY4	La Turbie, France
39.600	KGXA	Manawahua, Hawaii
40.700	KGXJ	Ulupalakua, Hawaii
41.040	LQL	Monte Grande, Argentina
41.400	LQK	Monte Grande, Argentina
46.200	KGXO	Kalepa, Hawaii
47.300	KGXB	Manawahua, Hawaii
48.400	KGXH	Ulupalakua, Hawaii
49.500	KGXK	Waikiki, Hawaii
56.000 to 60.000		Amateurs, USA
400.000 to 401.000		Amateurs, USA

Time when S-W Stations Transmit

TIME				STATIONS ON THE AIR
PST	MST	CST	EST	
9	10	11	Midn.	DJA, DJN, JVT, VPD, VK2ME, W8XAL, W8XK
10	11	Midn.	1 a.m.	DJA, DJN, VPD, W8XAL, VK2ME
11	Midn.	1 a.m.	2	
Midn.	1 a.m.	2	3	GSB, GSD, DJB, DJN, VK3LR
1 a.m.	2	3	4	GSD, GSF, DJB, NJN, VK3LR, JVT, JVU
2	3	4	5	GSD, GSF, DJB, DJN, VK3LR, JVT, JVU, VK3ME, VK2ME
3	4	5	6	GSF, GSE, DJB, DJN, VK3LR, JVT, JVU, VK3ME, VK2ME
4	5	6	7	GSF, GSE, DJB, DJN, VK3LR, JVT, JVU, VK2ME, Pontoise, W1XK, W8XAL, W8XK
5	6	7	8	GSF, GSE, DJB, DJN, DJA, DJE, VK2ME, Pont., PHI, W1XK, W8XAL, W8XK, 2RO
6	7	8	9	GSE, GSB, DJB, DJN, DJA, DJE, Pont., PHI, W1XK, W8XAL, W8XK, W3XAL, 2RO
7	8	9	10	GSE, GSB, GSA, DJN, DJB, DJA, DJE, Pont., HVJ, PLV, PMA, W1XK, W8XK, W3XAL, W8XAL, 2RO
8	9	10	11	GSB, GSA, DJB, DJN, DJA, DJE, W2XE, W1XK, W8XK, W3XAL, W8XAL
9	10	11	Noon	GSB, GSD, GSI, DJD, DJC, 2RO, Pont., W2XE, W1XK, W8XK, W3XAL, W8XAL
10	11	Noon	1 p.m.	GSB, GSD, GSI, DJD, DJC, 2RO, Pont., W2XE, W1XK, W8XK, W8XAL
11	Noon	1 p.m.	2	GSB, GSD, GSI, GSL, DJD, DJC, 2RO, Pont., W2XE, W1XK, W8XK, W8XAL, ORK
Noon	1 p.m.	2	3	GSB, GSD, GSL, DJD, DJC, 2RO, ORK, W2XE, W1XK, W8XK, W8XAL
1 p.m.	2	3	4	GSB, GSA, DJD, DJC, 2RO, CT1AA, Pont., JVM, JVP, W1XK, W8XK, W2XE, W8XAL
2	3	4	5	GSB, GSA, DJC, DJA, DJN, CT1AA, Pont., PRF5, RV59, EAQ, YV2RC
3	4	5	6	2RO, GSC, GSA, DJC, DJA, DJN, CT1AA, EAQ, YV2RC, YV3RC, COCO, COCD, W1XK, W8XK
4	5	6	7	2RO, GSC, GSA, DJC, DJA, DJN, EAQ, YV2RC, COCO, COCD, CRCX, HJ1ABB, XEBT
5	6	7	8	2RO, DJC, DJA, DJN, EAQ, YV2RC, YV3RC, COCO, COCD, CRCX, HP5B, W3XAU
6	7	8	9	DJC, DJN, EAQ, YV2RC, YV3RC, COCD, CRCX, HP5B, CJRO, W3XAU, W2XE
7	8	9	10	GSC, GSL, DJC, DJN, PRADO, OAX4D, CRCX, CJRO, W2XE, W2XAF
8	9	10	11	PRADO, CRCX, CJRO, W2XAF, W1XK, W3XAL, COCD

The Listener Speaks

(*Continued from page 251*)

your excellent sister magazine *Short Wave Craft*. The same goes for your "Good Ground" article. Why not leave out everything like that such as Aerials, Grounds, S.W. Hints, and everything else leaning towards the technical side and publish more articles on the stations to which we listen?

Articles on various S.W. sets (just a bare outline and no technical dope) would be a very, very welcome addition to your publication, I think.

Your *"S-W Time Graph"* is, without a doubt, the greatest and best thing I have ever had the good fortune to come across!

The "Best" S.W. Station list is also a "corker", but don't you think that your "Grand" S.W. station list is just so much paper wasted? Especially when you again give a list of stations and call it the "Alphabetical List"?

Your department *"The Listener Asks"* doesn't fit in your magazine at all, when you start answering such questions as "Set-squeals," "Loose aerials," etc. Refer those readers to your other "mags" and answer such questions as "Has Mary Smith of Station EXPXZ, Timbuctoo, any family" or "has 'Jim Jones of Station IOU a wooden leg." Such information would be the real thing for the listener. Or would it!!!

And now I think it time to say (regardless of my "brickbat") you magazine is O.K. "The Top"—"Ace High"—"It." But again —what's the use—the magazine fills a sorely endurely vacant hole in the life of a S.W. radio listener.

ARNOLD RIDINGS,
Dept. Hd'qtr's. D.E.M.L.,
Angel Island, Calif.

More About Veris

(*Continued from page 246*)

assure listeners, be always welcome to the officials of this Corporation who are responsible for the operation of our Empire Broadcasting Service.

Yours faithfully,
The British Broadcasting Corporation.
M. A. Frost,
Empire Press Representative.

ENGLISH LETTER

Chief Engineer . . . .
Short Wave Broadcast Station . . . .
City and Country . . . .
Dear Sir:

I recently tuned in your short wave station, call ....., and below I give a brief outline of that part of your program which I heard. The weather was clear.....;

cloudy____; rainy____; cold____; warm____.
I used a _____ type aerial, _____ feet high, pointing in_____ direction.

Please check this report with your records and send me a verification card. I am enclosing International Postal reply coupon.

Yours very truly,

GERMAN LETTER

An den
Chefingenieur der
Kurzwellen Rundfunkstation
_____(name of station)
_____(name of city)
_____(name of country)

Sehr geehrter Herr,

Ich hörte kurzlich Ihre Station mit dem Rufzeichen _____, und gebe Ihnen untenstehend eine kurze Zusammenfassung des gehörten Programmteils. Das Wetter war klar—; wolkig—; regnerisch—; kalt—; warm—.

Ich benutze eine _____Antenne _____Fuss hoch, ausgespannt in_____ Richtung.

Darf ich Sie höflichst bitten meinen Bericht mit Ihren Aufzeichnungen zu vergleichen, und mir eine Bestätigungskarte zuzusenden. In der Anlage finden Sie einen Internationalen Antwortschein.

Ihr sehr ergebener.

FRENCH LETTER FORM

Monsieur le Directeur Téchnique,
Poste de Radiodiffusion à ondes courtes . . .
Adresse . . .
Monsieur,

J'ai l'honneur de vous signaller que je viens d'entendre votre poste, à ondes courtes . . .

Ci-dessous je vous soumet un compte rendu de votre programme, tel que je l'ai entendu. Le temps fasait clair . . . brumeux . . .pluvieux . . . froid . . . chaud.

J'ai employé(e) un aérial type . . . d'un hauteur de . . . dirigé dans le sens . . .

Voulez-vous rendre le service de homologuer les faits contre vos records et de me remettre une notification à cet égard? Vous trouverez, ci-inclus, un coupon de poste international.

Veuillez agréer, Monsieur, l'assurance de mes sentiments distingués.

SPANISH LETTER

Ingeniero Jefe
Estacion de Ondas Cortas
Ciudad . . . Pais . . .
Muy Señor Mio:

He oido su Estacion de Ondas Cortas, letras . . . y a continuacion doy un breve resumen de la parte del programa que oi. El tiempo era, claro . . . nublado . . . lluvioso . . . frio . . . caluroso . . .

Uso una antena tipo . . . de metros . . . de altura y su direccion es . . .

Verifique estos datos con los suyos y mandeme una tarjeta de verificacion para cuyo objeto le incluyo un cupon internacional de respuesta.

Suyo Affmo.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF MARCH 3, 1933

Of Official Short-Wave Listener, published bimonthly at New York, N. Y. for Oct. 1, 1935.

State of New York } ss.
County of New York }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Hugo Gernsback, who, having been duly sworn according to law, deposes and says that he is the Editor of the Official Short-Wave Listener and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Popular Book Corp., 99-101 Hudson St., New York City.

Editor, Hugo Gernsback, 99-101 Hudson St., New York City.

Managing Editor, H. Winfield Secor, 99-101 Hudson St., New York City.

Business Managers, None.

2. That the owner is: Popular Book Corp., 99-101 Hudson St., New York City. D. Gernsback, 99-101 Hudson St., New York City. H. Winfield Secor, 99-101 Hudson St., New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: none.

H. GERNSBACK.
(Signature of publisher)

Sworn to and subscribed before me this 3rd day of October, 1935.

(SEAL) MAURICE COYNE

(My commission expires May 30, 1936.)

If you have some new ideas which you think would help to make this magazine more useful, write 'em out and send them to the Editor.

Canadian S-W Reception Notes

(*Continued from page* 263)

In the past month, the German stations at Zeesen have been considerably in evidence over here—DJA, DJN, and DJD. However, it is very rarely that any of these stations carry enough depth of modulation, as received here, to be of any real use. Time after time, DJN and DJD in particular have been checked in at R7-8 (carrier), only to find the program modulation barely audible. This is a serious fault, and one which we found very frequently on the Daventry transmissions of a year or so ago. The latter, however, for many months now have been perfectly modulated.

Various published program schedules show a good deal of confusion as to the transmissions of the Autralian 3LR (announced as such, by the way. Note the Aussies have dropped the "VK" in their station announcements, some months ago). This station comes on the air with test records, at about 0000 (mid-night) PST, and joins the Australian Broadcasting Commission (or Corporation?) at 0015. No transmission *Sundays* (*Sat.* nights). Time of closedown, I do not know, as he always fades out here, with daylight. *Fridays* he is on at, I believe, 2200 PST, and also *Sundays* at about the same time. It is difficult to catch the actual opening time here, as the signal strength usually builds up from zero, very slowly, to about R7-8 maximum. Quality is never at all good on this station, and his carrier always has a very annoying strong booming hum. This has been the case ever since he first started transmissions, so far as I know.

SYDNEY R. ELLIOTT,
Box 213,
Princeton, B.C., Canada.

Don't fail to write the Editor if you hear new stations not found in our lists. This is the only way to help make YOUR magazine better and better!—Editor.

New Stations in Latin America

(*Continued from page* 249)

YV2RC, the powerful Caracas transmitter leading the way. This station, with increased power, successfully drowns out existing interference from PSM of Brazil, a station which operates telegraph on the same frequency, 5,800 kc. Slight interference is to be noted from TIGH, the Costa Rican, which is actually working on about 5,805 kc. Most likely, the officials of YV2RC, noting that the listed frequency of TIGH is not near their own, are not aware of this interference. At any rate, it reacts unfavorably for TIGPH, which is, by far, the weaker of the two signals.

* * *

HJ4ABD, "La Voz Catia," the new municipal station of Medellin, Colombia, S.A., has followed the example of YV2RC, and moved to approximately 5,760 kc. or 52 meters; this station has been heard during the past month, on 6,060 kc. daily, from 8-11 p.m., and its 300 watts power have brought it through the American interference well, but the change in wavelength now places HJ4ABD clear of all interference (temporarily, at least!), and American fans should experience no difficulty in hearing this station.

* * *

Two other Colombians have been found to be operating on frequencies differing from those on which they are at present listed. HJ4ABC of Pereira is to be found near 6,080 kc., and HJ4ABJ, "Ecos de Combeima," a new station in Ibague, on about 6,465 kc. each evening. The latter station is heard particularly well; 4ABC, has a good signal, but is often interfered with, by its neighbors!

* * *

It would seem to the listener that there were more than enough S-W stations in the city of Guayaquil (what with HC2AT, HC2ET, HC2JSB and HC2RL!), but such is evidently not the case, for two new transmitters from this city have appeared on the air during the past month. The first, call-letters unknown, works from 7-10 p.m., irregularly, on about 7,200 kc., transmitting musical broadcasts. The second, HC2CW, known as "Ondas del Pacifico," transmits on approximately 8,620 k.c. each evening at about the same time.

News From U.S.S.R.

Editor, SHORT WAVE LISTENER:

At the request of many listeners we have now arranged for the 12 midnight Moscow Time shortwave broadcast to be given on a wave length of 50 metres instead of 25 meters.

We shall be glad if you will amend this wave length accordingly in any announcement of our program in your paper.

Yours faithfully,
Inna Marr, Chief Editor.
Radio Centre, Moscow, U.S.S.R.

BEST SHORT WAVE STATIONS

(*Continued from page 261*)

Station	Dial
6040 kc. *W1XAL -B- 49.67 meters BOSTON, MASS. Tues., Thurs. 7:15-9:15 p.m.	
6040 kc. YDA -B- 49.67 meters N.I.R.O.M. TANDJONGPRIOK, JAVA Testing 5:30-11 a.m.	
6030 kc. *HP5B -B- 49.75 meters P. O. BOX 910 PANAMA CITY, PAN. 12 N.-1 p.m., 8-10:30 p.m.	
6030 kc. VE9CA -B- 49.75 meters CALGARY, ALBERTA, CAN. Thurs. 9 a.m.-2 a.m. (Fri.) Sun. 12 n.-12 m. Irregularly on other days from 9 a.m.-12 m.	
6020 kc. CQN -B- 49.83 meters MACAO, CHINA Mon. and Fri. 3-5 a.m.	
6020 kc. *DJC -B- 49.83 meters BROADCASTING HOUSE. BERLIN 12 n.-4:30 p.m., 5:05-10:45 p.m.	
6020 kc. HJ3ABH -B- 49.83 meters BOGOTA, COLO APARTADO 565 7-11 p.m.	
6018 kc. ZHI -B- 49.9 meters RADIO SERVICE CO., 20 ORCHARD RD., SINGAPORE, MALAYA Mon., Wed. and Thurs. 5:40-8:10 a.m. Sat. 10:40 p.m.-1:10 a.m. (Sun.) Every other Sunday 5:10-6:40 a.m.	
6010 kc. *COCO -B- 49.92 meters P. O. BOX 98 HAVANA, CUBA Daily 9:30-11 a.m., 4-7 p.m. and 8-10 p.m. Sat. also at 11:30 p.m.	
6000 kc. TGWA Sat. also 11:30 p.m.-1:30 a.m. -B- 50 meters GUATEMALA CITY, GUAT. 12 n.-1 p.m., 6:30-7:30 p.m. Sat. also from 12 m.-6 a.m. (Sun.)	
6000 kc. RV59 -B- 50 meters MOSCOW, U. S. S. R. Daily 3-6 p.m.	

Station	Dial
5990 kc. *XEBT -B- 50.08 meters MEXICO CITY, MEX. P. O. Box 79-44 8 a.m.-1 a.m.	
5985 kc. HJ2ABC -B- 50.13 meters CUCUTA, COLOMBIA Irreg. in evening	
5980 kc. XECW -B- 50.17 meters CALLE del BAJIO 120 MEXICO CITY, MEX. 4-4:30 p.m., 10:30 p.m., 12 m.	
5980 kc. HIX -B- 50.17 meters SANTO DOMINGO, DOMINICAN REP. Sun. 7:10 a.m.; Tues. and Fri. 11:10 a.m., 4:40 and 8:10 p.m.; Mon., Wed., Thurs. and Sat. 11:10 a.m. and 4:40 p.m.	
5968kc. HVJ -B- 50.27 meters VATICAN CITY (ROME) 2-2:15 p.m., daily. Sun. 5-5:30 a. m.	
5950 kc. HJ1ABJ -B- 50.42 meters SANTA MARTA, COLO. 11 a.m.-1 p.m., 7-9 p.m.	
5950 kc. HJ4ABE -B- 50.42 meters MEDELLIN, COLO. Daily 11 a.m.-12 n., 6-10:30 p.m.	
5940 kc. TG2X -B- 50.5 meters GUATEMALA CITY, GUAT. 4-6, 9-10 p.m.	
5880 kc. YV8RB -B- 51.02 meters "LA VOZ de LARA" BARQUISIMETO, VENEZULA 6-10 p.m.	
5875 kc. HRN -B- 51.06 meters TEGUCIGALPA, HONDURAS 7-9 p.m.	
5850 kc. *YV5RMO -B- 51.28 meters CALLE REGISTRO, LAS DELICIAS APARTADO de CORRES 214 MARACAIBO, VENEZUELA 11 a.m.-1 p.m., 5:30-10 p.m.	

Station	Dial
5825 kc. TIGPH -B- 51.5 meters SAN JOSE, COSTA RICA 6:15-11 p.m.	
5800 kc. *YV2RC -B- 51.72 meters BROADCASTING CARACAS CARACAS, VENEZUELA Sun. 8:30 a.m.-10:30 p.m. Daily 11 a.m.-1:30 p.m., 4-9 p.m.	
5790 kc. JVU -C- 51.81 meters NAZAKI, JAPAN Broadcasts 2-7:45 a.m.	
5780 kc. OAX4D -B- 51.9 meters P.O. Box 853 LIMA, PERU Mon., Wed. & Sat. 9-11:30 a.m.	
5780 kc. HI1J -B- 51.9 meters SAN PEDRO de MACORIS, DOM. REP. 7-9:30 p.m.	
5720 kc. YV10RSC -B- 52.45 meters "LA VOZ de TACHIRA" SAN CRISTOBAL, COLOMBIA Testing near 12 m.	
5714 kc. HCK -B- 52.5 meters QUITO, ECUADOR, S. A.	
5713 kc. TGS -B- 52.51 meters GAUTEMALA CITY, GUAT. Tues., Thurs., and Sun. 6-8 p.m.	
5500 kc. TI5HH -B- 54.55 meters SAN RAMON, COSTA RICA Irregularly around 9:45 p.m.	
4600 kc. HC2ET -B- 65.22 meters Apartado 249 GUAYAQUIL, ECUADOR Wed., Sat. 9-11:30 p.m.	
4470 kc. YDB -B- 67.11 meters N.I.R.O.M. SOERABAJA, JAVA 10:30 p.m.-1:30 a.m., 5:30-11 a.m., 5:45-6:45 p.m.	
4273 kc. RV15 -B- 70.20 meters KHABAROVSK, SIBERIA, U. S. S. R. Daily, 3-9 a.m.	

Fifth Trophy Goes to C. Yrizarry

(*Continued from page* 255)

I have received over one hundred verification cards from about thirty-two countries, having gotten two from each continent, and also veris from Japan, Congo, Morocco and three from Australia.

I also use an RCA "double-doublet" aerial, which works very well—it reduced the noise picked up previously from the nearby elevated railroad.

Carlos Yrizarry,
46 Johnson Street,
Brooklyn, New York.

A. B. Steinmetz Rolls 'em In

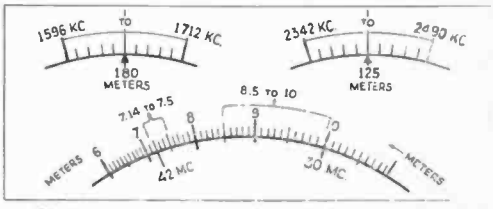
Stephen's Crown, with which all Hungarian Kings (up to Karoly the IVth—in 1916) were crowned.

I truly may call this, the "*World-wide Listening Post*," because I have "logged" all the worthwhile short-wave stations on 5 continents (excluding Africa) (with me "*Quality*,' not "*Quantity*" counts!)

My receiver is a 1934 Model "B"—16 tube DeLuxe Midwest. It has 5 bands, covering from 33,000 kc. to 160 kc. My present antenna is an R.C.A. double-doublet running from N.W. to S.E.—18 ft. above the roof.

Albert Bila Steinmetz,
411 West Girard Ave.,
Philadelphia, Pa.

Where to Find Police Calls



Diagrams above show where to hunt on the dial of your receiver for the police calls.

MANY short wave listeners miss a lot of thrills by not listening in on the "secret" police bands. The accompanying diagram shows where to tune in on your short-wave or all-wave receiver to pick up police calls, and strange as it might seem, the police calls come in fast and furious after dark, seemingly verifying the old adage that "crime" and "darkness" seem to go together.

The two principal bands are the 180 and 125 meter bands. Recently a number of installations have been made in the region of 7½ and 9 meters, and if your receiver tuns that low, you will be able to hear police calls to scout cars from such installations as that at Newark, N. J., and others.

Here are the Six BEST SHORT-WAVE RADIO BOOKS!

Without doubt you will go a long way to buy better books on short waves than you find on this page. Each book is written by a well-known authority . . . each book illustrated with photographs and diagrams to make the study of short-waves much simpler. The volumes on this page are THE FINEST BOOKS ON SHORT-WAVES WHICH ARE PUBLISHED TODAY. Order one or more copies today. Prices are postpaid.

HOW TO GET BEST S. W. RECEPTION

By M. HARVEY GERNSBACK

Why is one radio listener enabled to pull in stations from all over the globe, even small 100 watters, 10,000 miles away, and why is it that the next fellow, with a much better and more expensive equipment, can only pull in the powerful stations that any child can get without much ado?

The reason is intimate knowledge of short wave and how they behave. Here are the chapters of this new book:

50c

40 Illustrations. 72 Pages.
Stiff, flexible covers

1. What are Short Waves and what can the listener hear on a short wave receiver or converter? 2. How to tune and when to listen in on the short waves. 3. How to identify short-wave stations. 4. Seasonal changes in short-wave reception. 5. Types of receivers for short-wave reception. 6. Aerial systems for short-wave receivers. 7. Verifications from s-w stations.

HOW TO BUILD AND OPERATE SHORT-WAVE RECEIVERS

This is the most up-to-date book on the subject. It is edited and prepared by the editors of SHORT WAVE CRAFT, and contains a wealth of material on the building and operation, not only of typical short-wave receivers, but short-wave converters as well. Dozens of short-wave sets are found in this book, which contains hundreds of illustrations; actual photographs of sets built, hookups and diagrams galore.

150 Illustrations. 72 Pages.
Stiff, flexible covers.

50c

THE SHORT-WAVE BEGINNER'S BOOK

Here is a book that solves your short wave problems—leading you in easy stages from the simplest fundamentals to the present stage of the art as it is known today.

It also gives you a tremendous amount of important information, such as time conversion tables, all about aerials, noise elimination, all about radio tubes, data on coil winding and other subjects.

Partial List of Contents

Short Wave Aerials—the points that determine a good aerial from an inefficient one.

The Transposed Lead-In for reducing Static.

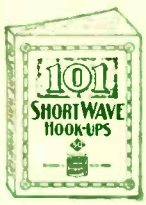
The Beginner's Short-Wave Receiver—a simple one tube set that anyone can build. Etc., etc.

25c

75 Illustrations. 40 Pages.
Stiff, flexible covers.

101 SHORT-WAVE HOOKUPS

Compiled by the Editors of SHORT WAVE CRAFT



To be sure, all of the important sets which have appeared in print during the past five years are in this valuable book. Sets such as the Doerle, Dinsmore, the "19" Twinplex, Oscillodyne, Denton "Stand-by," Megadyne Triplex 2, "Globe-Trotter" 2-Tube Superhet., Minidyne, "Loop" Receiver, "Doerle" 2-tube Battery, "Doerle" 3-tube Battery, "Doerle" 2-tube A.C., "Doerle" 3-tube A.C. Doerle "Signal Gripper," Duo R.F. 4-tube Receiver, The Sargent 9-33 Tapped Coil Receiver, Globe-Girdler 7, The 2-Tube "Champ"—2 Tubes Equal 3, Ham-Band "2-Tube Pee-Wee" Wyeth All-Wave 6, Denton Economy 3, 2-Tube "Regenerative-Oscillodyne" will be found here, with full descriptions.

100 Illustrations. 72 Pages.
Stiff, flexible covers.

50c

HOW TO BECOME AN AMATEUR RADIO OPERATOR

We chose Lieut. Myron F. Eddy to write this book because his experience in the amateur field has made him preeminent in this line. For many years he was instructor of radio telegraphy at the R.C.A. Institute. He is a member of the I.R.E. (Institute of Radio Engineers), also the Veteran Wireless Operators' Association.

If you intend to become a licensed code operator, if you wish to take up phone work eventually—this is the book you must get.

50c

150 Illustrations, 72 Pages,
Stiff, flexible covers.

TEN MOST POPULAR SHORT-WAVE RECEIVERS—HOW TO MAKE AND WORK THEM

CONTENTS

The Doerle 2-Tube Receiver That Reaches the 12,500 Mile Mark, by Walter C. Doerle.

2-R.F. Pentode S-W Receiver having two stages of Tuned Radio Frequency, by Clifford E. Denton and H. W. Secor.

My de Luxe S-W Receiver, by Edward G. Ingram.

The Binneweg 2-Tube 12,000 Mile DX Receiver, by A. Binneweg, Jr.

Build a Short-Wave Receiver in your "Brief-Case," by Hugo Gernsback and Clifford E. Denton.

The Denton 2-Tube All-Wave Receiver, by Clifford E. Denton.

The Denton "Stand-By," by Clifford E. Denton.

The "Stand-By" Electrified.

25c

75 Illustrations. 40 Pages,
Stiff, flexible covers.

SHORT WAVE CRAFT, 99-101 Hudson Street, New York, N. Y. SL-1-36

Gentlemen: I enclose herewith my remittance for the amount of $..... for which you are to send me, postpaid, the books checked below.

( ) How to Get Best Short-Wave Reception ..... 50c each
( ) 101 Short-Wave Hook-ups ..... 50c each
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( ) How to Become an Amateur Radio Operator ..... 50c each
( ) Ten Most Popular Short-Wave Receivers. How to Make and Work Them ..... 25c each
( ) The Short Wave Beginner's Book ..... 25c each

Name .....

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

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Melbourne, C. 1

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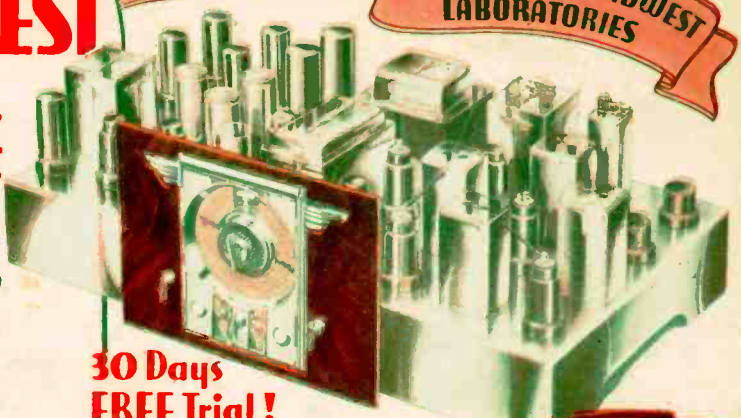

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GUARANTEED FOREIGN RECEPTION

This super radio will out-perform $200 and $300 sets on a side by side test. It is so powerful, so amazingly selective, so delicately sensitive that it brings in distant foreign stations with full loud speaker volume, on channels adjacent to powerful locals. The 18 tubes permit of advanced circuits, make it possible to use the tremendous reserve power, and to exert the sustained maximum output of the powerful new tubes.

80 SENSATIONAL ADVANCEMENTS

Scores of marvelous Midwest features, many of them exclusive, explain Midwest glorious tone realism, super performance and thrilling world-wide 6-band reception. They prove why nationally known orchestra leaders like Fred Waring, George Olsen, Jack Denny, etc., use a Midwest in preference to more costly makes. Pages 12 to 21 in FREE catalog illustrate the new Midwest features. Study them before you make up your mind.

ACOUSTI-TONE V-SPREAD DESIGN

The V-Front Dispersing Vanes established a new radio style overnight. They spread the beautiful lace-work of the "highs" throughout the room in a scientific manner... directing the High Fidelity waves uniformly to the ear. Now, get complete range of audible frequencies from 30 to 16,000 cycles... achieving glorious new acousti-tone . . . assuring life-like crystal-clear reception . . . "concert" realism.

Push Button Tuning

Simply pushing Silencer Button silences set between stations. Beautiful tuning lights automatically indicate when station is properly tuned. Release button... and station comes in perfectly. Pressing Station Finder Button (Midwest's exclusive ROBOT EAR) automatically determines proper dial position for bringing in extremely weak stations.

Ginger Rogers Amazed at Midwest Performance

Hollywood, California. "Your Midwest is a wonderful instrument. The tone quality is delightful and it surpasses any set I have ever owned. I have heard stations from all over the world. I got a thrill the first time I tuned in on the booming of 'Big Ben'."

Ginger Rogers

ONCE again Midwest demonstrates its leadership by offering the world's most powerful Super De Luxe 18-METAL Tube 6-Tuning Range radio. It is a master achievement . . . today's most highly perfected, precisely built, laboratory adjusted set. It is a radio musical instrument that will thrill you with its marvelous super performance... glorious new acousti-tone... crystal-clear "concert" realism ...and magnificent foreign reception. Before you buy any radio, write for FREE 40-page 1936 catalog. Learn about the successful Midwest Laboratory-To-You policy that saves you 30% to 50%... that gives you 30 days FREE trial.

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

SIX TUNING RANGES

This exclusive engineering triumph (U. S. Patent No. 96750) puts Midwest radio years ahead of ordinary sets and makes them the "World's Greatest Radio Values." Now, it is easy to make the nations of the world parade before you. You can switch instantly from American programs to Canadian, police, amateur, commercial, "secret," experimental, airplane and ship broadcasts . . . to the finest and most fascinating programs from Europe, Asia, Australia, South America . . . 12,000 miles away.

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