

# More About the Short-Wave Broadcasting Stations

Valuable and Hitherto Unpublished "Dope" on Wavelengths and Hours of American and Foreign Stations Supplied by Readers

by **ROBERT HERTZBERG**

**T**HE LIST of the short-wave broadcasting stations of the world published in the last number of **RADIO DESIGN** was evidently something our readers have been wanting for a long time. We have been overwhelmed with letters from short-wave fans, thanking us for the accurate operating schedules and offering much additional information on stations we did not list.

We did not have room in the Winter issue to explain how difficult it is to obtain reliable short-wave "dope." The published list represents more than six months of work, and involved the writing of hundreds of letters and the scanning of all the radio magazines published in the entire world. We checked the lists in the American and British magazines against those in the German, French, Italian, South American, African, Australian, New Zealand and (believe it or not) Japanese magazines, and weeded out the stations that were actually reported by more than two listeners. After much weary cross-checking and classifying, we had a really good list.

There was not enough time between the last number of **RADIO DESIGN** and this one to reclassify the stations according to the letters sent to us and the new data accumulated from other sources. Instead, we are simply reproducing the contents of the best letters, with some comment and additional notes on the side. We wish to express our sincere thanks and appreciation to all who were kind enough to write and we invite them to continue sending in new "dope" whenever they can obtain it. This sportsmanlike exchange of information through the

columns of **RADIO DESIGN** is helping to make short-wave reception more and more interesting to every owner of a short-wave set.

These letters are especially valuable because many stations are strangely unwilling to release information about their own activities. All broadcasting stations want big audiences (if they didn't why should they be broadcasting?), yet the owners of **KDKA** and **WLW**, two of the largest and most important stations on the air, absolutely ignore letters and even telegrams sent to them in request for wavelengths, operating hours, etc.

Before plunging into the mass of station data, we would like to introduce to our readers Mr. Arthur J. Green, of Klondyke, Ohio, and to nominate him for the position of champion short-wave listener of the world. He has heard sixty-five foreign short-wave broadcasting stations (not counting the Americans), has letters of verification from forty-four of them and photographs from fourteen. Blessed with a marvelous location, a large amount of patience and a hankering to tinker, he has established an international

reputation by his exploits in the short-wave field, and is regarded by many of the stations of the world as the best source of reports on their transmissions.

As a result of the world-wide publicity he has received through stations **KDKA**, **PCJ**, **NRH** and **VRY**, Mr. Green's correspondence has reached staggering proportions. More as a matter of self-defense than anything else, he has formed the "International Short-Wave Club" and started the publication of a little monthly bulletin containing his latest data



*Arthur J. Green, short-wave listener extraordinary.*

*Vol. 3, No. 1, Radio Design*

on the short-wave broadcasters. He charges ten cents an issue or a dollar a year, a price that barely covers postage. We recommend this little sheet highly for its last minute dope. Mr. Green can be addressed at Box 713, Klondyke, Ohio.

Because Mr. Green is interested only in furthering the short-wave game as a hobby and not in making money out of it as a business, he has given RADIO DESIGN permission to reprint the information from his latest bulletin of February 10, 1930. We are presenting this as authentic and reliable. The following paragraphs are excerpts from the bulletin and not a complete copy, as much of the data in it was published in the last issue of RADIO DESIGN or is being published in the latter section of this article. The editors' notes are ours.

#### SPECIAL PROGRAM IN ENGLISH

"This month's prize happening was when the new station at Tegucigalpa, Honduras, call letters HRB, put on two special English programs for club members. We sent them their first report on reception in the U. S. A., and in return they gave us the two programs on January 18 and 25. (Ed. Note: These programs have been reported by hundreds of 'Super-Wasp' owners.)

"This station is owned by the Tropical Radio Telegraph Company, and broadcasts on Monday, Wednesday and Friday, 9:15 to 12:00 p. m. E. S. T. The present wave is 49.95 meters and the power 25 watts. (Ed. Note: Is that all? This station comes through like the proverbial ton of bricks). This will soon be replaced by a new 350-watt crystal-controlled affair that will work on the present wave except in static seasons, when the wave will be 25 meters. This station is very easy to get.

"A new ship-to-shore telephone service started this month. The ship is the *S. S. Olympic*, call letters G2GN, and talks to F8BZ, France, G2AA, England and WOO, U. S. A. (Deal, N. J.) No definite dope on them yet, but they have been heard near the following waves: G2GN, 18.3, 24 and 35 meters; F8BZ, 19.5 and 38 meters, and G2AA, 36 meters. Almost everyone is hearing these stations day and night. (Ed. Note: See letter on page 28 in regard to *S. S. Leviathan* transmissions.)

"Reception conditions changed rapidly during the month of January and the last week was fairly good. In this week the editor logged 41 foreign stations. This gives promise of good reception again after a long, bad spell. (Ed. Note: When

Mr. Green received only 21 foreign stations during the first week of January he thought conditions were terrible. What a man!) Here in Eastern U. S. the stations to the south were best. Some Europeans began to get in last week, while stations to the west faded some, except RA97 (Siberia), who seemed to improve. In the east stations NRH, VRY, HRB and PHI were leaders and in the west it was RA97, VK2ME (Sydney, Australia) and K1XR (Manila).

"All times given in following list are Eastern Standard. Each of these stations was heard during the past month here in Ohio:

30.8 meters—NRH, each night 10:00 to 11:00 p. m. Box 40, Heredia, Costa Rica, Central America.

31.4 meters — PCJ, Wednesday and Thursday, 1:00 to 3:00 p. m. Thursday and Friday, 7:00 to 10:00 p. m. N. V. Philips, Eindhoven, Holland.

16.88 meters: PHI, Irregular broadcasts. 7:00 to 10:00 a. m. N. V. Philips, 722 Keizersgracht, Amsterdam, Holland.

English phones GBU, GBS, GBK, GBX, GBW are heard at all hours on several waves. General Post Office, London, E. C. 1, England.

15.02 meters—LSG worked FW3 10:00 to 11:00 a. m. in French. San Martin, 329, Buenos Aires, Argentina.

15.42 meters—FW3 worked LAG. 79 Boulevard Hausseman, Paris, France.

15.02 meters—DIH worked XDA, Mexico City. Heard on Friday and Sunday near noon. 11-15 Schoneberger Strasse, Berlin Templehof, Germany.

14.0 meters—LSH worked DGW in German, irregular near 10:00 a. m. See LSG address.

#### WHERE IS "ART"?

"Station ARI broadcasts on several mornings a week on 29.5 and 49 meters. No definite wave is available as they change without notice. Heard on Tuesday, Wednesday, Friday, Saturday and Sunday, irregular after 8:00 a. m. No exact data available on this station as some say it is located at different places. Probably Hong Kong, China.

20.79 meters—VPD. Heard several times talking in English to VK2ME, near 3:00 a. m. Amalgamated Wireless A/Asia Suva, Fiji Island. (Ed. Note: Here's where that globe comes in so handy.)

28.5 meters—VK2ME. Tests and telephones to GBX, England, after 9:00 a. m. and also tests with KDKA and WGY oc-

#### MORE ABOUT EAM

"In reference to the station EAM, Madrid, Spain, mentioned in your Winter issue of RADIO DESIGN, I would like to inform you that I picked up a Spanish station last winter that I thought was EAM. I wrote to a man in Madrid, and he told me that there were no such station, but the only short-wave station was EAR110, operating with a power of 75 watts and on a wavelength of 29.7 meters."—*Sgt. Major Louis Hahn, 212th Coast Artillery, N. Y. N. G., 120 West 62nd St., New York, N. Y.*

(EDITOR'S NOTE: Station EAM has been definitely reported by numerous listeners, so it must be on the air.)

#### NEWS FROM HOLLAND

"Pleased to report the following short-wave broadcasting news received today (January 6th) from station PCV, Kootwijk, Holland:

"The short-wave transmitters of Kootwijk are all constructed by our laboratory and belong to the Dutch State Post Telegraph Service. Quite recently we have finished a new transmitter, PCV, with a power of 80 kilowatts, which you should be able to hear in the United States every day except Sunday, for telegraph and telephone experimentation, on a wave of 16.82 meters, together with PCK on 16.3 meters. As PCV has not a beam aerial, I think it will be heard very well in the United States.

"The beams of PCK and PCL are directed toward the Dutch East Indies. PCK and PCV are on the air from 0800 to 1400 G. M. T. on the wavelengths mentioned; after that time they transmit on 38.8 and 38.3 meters. (3:00 to 11:00 a. m. E. S. T.)"—*Richard H. Addison, 29 Armandine Street, Boston P. O. District 24, Mass.*

#### FROM THE DUTCH EAST INDIES

"I am in receipt of your letter dated October 8th, and can inform you that the call letters of our short-wave station ANE have been changed to PLE. The exact wavelength is 15.94 meters. Our broadcasting hours are every Tuesday between 1340 and 1540 G. M. T. (corresponds to Wednesday 8:40 to 10:40 a. m., E. S. T.) The call letters of ANH have been changed to PLF, wavelength 16.8 meters, but no broadcasting is given by PLF."—*F. F. Bruler, Chief of the International Telephone Office, Government Telegraph and Telephone Station, Bandoeng, Dutch East Indies.*

(EDITOR'S NOTE: Announcements from

PLE are usually made in Dutch, French, German and English, and generally in this order.)

#### SCHEDULE OF THE PARIS STATION

According to the British magazine *Wireless World*, the Dutch government short-wave plant at Kootwijk will soon be augmented by the addition of three new transmitters equipped for C.W. and radio telephony. These will use the call letters PCO, PCS and PDM. Their wavelengths will be 15.68, 16.60 and 16.12 meters, respectively.

This same magazine gives some further data on the Paris experimental station mentioned in the last issue of RADIO DESIGN. The wavelength of 31.65 meters was correct as stated. A power of one kilowatt is used, and transmission of phonograph music and speech are made four days a week at the following times: Sunday, 5:00 to 6:30 a. m., E. S. T.; Tuesday, at 4:30 p. m.; Thursday, 1:00 to 2:30 p. m., and Friday, at 2:00 p. m. The interval signal between announcements is that of a metronome with 120 beats per minute. The station closes down with the playing of the French military march *Entre Sambre et Meuse*.

#### A LONG LETTER, WITH SOME GOOD DOPE

"Just a little over a week ago I got to brooding over the scarcity of reliable dope we short-wave fans really had. We could get hold of lists of several dozen stations with their wavelengths, if known, but outside of a few like PCJ and G5SW, and possibly PHI and a few American stations, all of which come in with utmost regularity, we hadn't the slightest idea at what time we might expect to hear them. Then, too, these stock lists were published month after month without any changes or additions even though the same magazines published letters from subscribers that gave accurate and reliable information concerning new stations and changes in the wavelengths of old ones. Much of this information, too, was often several months old before it was published. A condition like this is sure to be discouraging. But what to do? As I pondered on these dark thoughts I devised a little plan. Why not send letters to as many fans as I could get the addresses of and give them all the latest information I had? Then ask them to send their latest dope. All this information I could combine and send out to these same fans. With this scheme it would be possible to get information concerning stations, wavelengths and

schedules that would be right up to date. I had planned to start this scheme that very week end. I changed my plans, however. I bought a copy of your Winter issue and there found the missing information nicely classified in Robert Hertzberg's list of short-wave stations.

"That is one reason why I am sending in a subscription for RADIO DESIGN. That is also the reason why I am sending in as much additional dope as I have at the present.

"I do not own a Super-Wasp. I might add I wish I did. At any rate I have gotten a great deal of enjoyment and some education besides out of my contact with short-wave radio. I am planning to write (mostly for my own amusement) a little article on my first year of short-wave radio. It will give some idea of the thrills I received listening to voices from eleven countries on four continents and code from twenty-two countries (in spite of my very poor knowledge of code). It may prove encouraging to those who became disgusted (and I personally know some) when the first small receiver which they threw together failed to function as it should, or when they failed to receive distance stations because they skipped over them, because I myself had no success for about five months.

"Just a few suggestions before the dope on short-wave stations:

"Why not publish a schedule of time signals? A large number of short-wave fans are interested in these transmissions. For instance, NAA (Arlington, Va.) sends time signals beginning at 11:55 a. m., and 9:55 p. m. on 74.72 meters, 37.36 meters and 24.9 meters. Signals are also sent at 2:55 a. m. on at least the 37.36 meter wave. WNBT at Elgin, Ill., sends signals at other times. Short-wave time signals are probably sent from the Eiffel Tower station, and possibly from Nauen. A time signal that is probably not recognized as such is sent from G5SW. This signal is sent at 8:00 a. m. and 4:00 p. m. on the days the transmitter is on the air. It is in the form of six dots at second intervals, the final dot marking the exact hour. I think a list of time signal transmissions would prove helpful."

(EDITOR NOTE: Good idea. That's our next job.)

"In regard to the short-wave dope I am sending, I want to say that in every instance in which I am not absolutely sure of the accuracy of my information, I have sufficiently implied my doubt.

"Here is some short-wave dope. Much

has been ascertained during the past two weeks. (Jan. 1st to 10th, 1930.) First, the American stations.

W8XAG, located on the Spring Valley Road, Dayton, Ohio, was heard Jan. 3, between 8:00 and 8:30 p. m., sending a musical program on 8,660 kc. Reception was good. Would welcome reports.

W3XAU, in Philadelphia. Heard several times during the last few days. On Jan. 4, at 8:00 a. m., announced that they would be on the air from that time until midnight. Uses a frequency of 6,060 kc. Will probably broadcast programs of WCAU, with which station it is affiliated.

W3XC (or D or E or?) Broadcasts programs of WFBR of Baltimore, Md. Heard several times from 12:00 to about 2:00 p. m. Did not get frequency or wave although both are announced at frequent intervals. Approximately 8,650 kc., or between 34.5 and 35 meters.

W2XV, Long Island City. 8,650 kc. or 34.69 meters. Radio Engineering Laboratories. Heard first in the latter part of September calling WFBN, the *Leviathan*. This led me to believe it was affiliated with WOO, the *Leviathan's* land station, which sometimes uses about the same wave. Since that time has been heard several times sending musical programs. These are heard at about 4:30 and 10:00 p. m."



*This is the 500-watt transmitter of W2XE, in New York, that makes such a big noise in the ether on 49.02 meters*

(EDITOR NOTE: See letter from W2XV.)

"Now, a few foreigners.

XDA, Mexico City, Mexico. 15.9 meters. During the early part of October, held daily schedules with Nauen. Heard them between (about) 12:15 and 12:45. Was always unable to listen after about 12:45, so don't know how long they were on the air. After the time changed from Day-light-saving to Standard, was unable to listen at this time. However, XDA still sends code on this wave and may still have voice schedules. Music was sent during these test periods.

The station in Nauen I at first thought was DGV, which DHC announced (in June), sent television on 14.87 meters. It is probably the station you have listed as DGW on 14.83.

G2GN, heard first sending code and thought was a British amateur. In the morning, Jan. 6, called London. The same afternoon, from 4:15 to 4:30, called some place in French. Wave is around 19 meters. I believe this is the station I heard speaking French on Christmas morning. This station was on the air for several hours but I didn't get the call letters.

VK2ME, Sydney, Australia, uses a power of 20 kw., according to my latest report.

DHC, when I first heard it, April 11, 1929, and a few days previous, was using a wave of 26.22 meters. This wave was used for several weeks. From May 25, however, each time I heard this station the wavelength was announced as 26.04 meters. I have not heard this station now for several months, and so am not sure which wave is used at this time.

The station in Königswusterhausen, which you report as sending on 31.88 meters, really operates on 31.38 meters. This is confirmed by the announcements as well as the fact that the wave used is lower than that used by W2XAF. These corrections may seem almost unnecessary but, as far as I am concerned, I think that if I had not heard this station it might prove embarrassing to look for it above W2XAF when it really is below.

"On Jan. 7, G2GN was heard at 4:15 p. m., talking with someone in English but with a French accent. At 4:20 he called, in French, the same station he called at about the same hour on Jan. 6. As nearly as I could make out, this French station is F8EZ or F6EZ. Nothing more definite. He called for about 20 minutes without success. On Jan. 8, at 8:20 a. m., a station called G2GN in French and was apparently answered right away. He was still talking at about 9:00, and again at

10:00. It was this French station, and not G2GN, that I heard on Christmas morning.

"In regard to RFM, I have a card that was sent from that station to Mr. Fred Grimm, of 1611 Tibbits Avenue, Troy, dated Nov. 29 1929, stating that this station is now RA97, using the wave 70.2 meters. The card also states that the station transmits every day from 9 to 1430 G. M. T. (4:00 to 9:30 a. m., E. S. T.).

I have also a letter sent to Mr. Grimm from Bandoeng on Oct. 24. This letter states that besides PLE, on 15.94 meters, and PLE, on 16.8 meters (which seems to be a new wave) there are the following other telephony transmitters: PMB on 14.5 meters; PLG on 16.88 meters; PLR on 28.8 meters, 'but mostly PLE and PLF are used.' The letter also says: 'Very occasionally we carry out tests with Manila, Sydney, Bangkok, Paris, Nauen, and San Francisco, but we are unable to send you any information regarding these tests in advance.'

"I hope that some of this information may assist you in helping other short-wave fans to get more enjoyment out of their Super-Wasps or other short-wave receivers. I would appreciate any assistance in gaining a little more information concerning G2GN or his French friend."—*Henry C. Ort, Jr., 2203 Burdette Avenue, Troy, New York.*

(G2GN is the S.S. Olympic.)

In regard to that Siberian station, it has been definitely identified by a number of listeners and by the station officials themselves as RA97. This is located at Khabarovsk, Siberia, U. S. S. R., which is at the north end of the Sea of Japan. Mr. Green writes in regard to this station:

"From my own reception I would say that RA97 is on both 35 and 70 meters, beginning at the lower wave and changing over near 4:30 a. m. This is not authentic but checks with my reception."

The schedule of the Siberian station are somewhat in doubt, as its own cards seem to contain conflicting information. This is brought out in the following letter:

"For the benefit of the short-wave fans of RADIO DESIGN, I would like to make a correction relative to radiophone station RA97. Here's the correct dope, from the station itself: The old call letters of this station were RFM. (EDITOR'S NOTE: On this point everyone is agreed.)

"Khabarovsk, Far East, Union of Soviet Socialistic Republics, crystal controlled

short-wave radio telegraph and broadcasting station. Wavelength 70.2 meters. Regular transmissions daily except Wednesday 2:00 to 7:00 a. m. Pacific time (5:00 to 10:00 a. m. Eastern time). Operator, B. Ageer. Heard out here as loud as WGY.

"Here's the dope of DHC, Nauen, Germany. Experimental commercial station, 15 kilowatts power, wavelength 26.22 meters, transmission not regular. Experimental telephone, commercial television and telegraphy. Dr. Bohn in charge.

"Also, two new stations on 20, 25 and 30 meters testing. Call letters G2GN and WOO. They don't give their location; who are they? May the good work of RADIO DESIGN continue."—*Fred A. Dear-dorff, 1416 S. Harvard Boulevard, Los Angeles, Cal.*

(G2GN is the S.S. *Olympic*; WOO the Bell Telephone land station in New Jersey.)

#### THAT MANILA STATION

"Your letter of Dec. 31, 1929, has just been forwarded from San Diego and, in answer to your query, I am giving below all the information I know re Manila and VK2ME.

"The Philippine station was on 24.9 meters when I heard it, but soon after shifted to 48.8 meters, and the last I heard, this is the wave they were using. I do not know their correct call, for although I listened for several hours no call was given, but they relay the programs of KZRM, and that is the call given in my verification. Here are their schedules, as given in the letter from them:

	Manila Time	Pacific Time
MONDAY .....	4.00 to 5.30 p. m.	12 m. to 1.30 a. m.
TUESDAY .....	4.00 to 11.00 p. m.	12 m. to 7.00 a. m.
WEDNESDAY ..	4.00 to 10.30 p. m.	12 m. to 6.30 a. m.
THURSDAY .....	4.00 to 10.30 p. m.	12 m. to 6.30 a. m.
FRIDAY .....	4.00 to 11.00 p. m.	12 m. to 7.00 a. m.
SATURDAY .....	4.00 to 12.00 p. m.	12 m. to 8.00 a. m.
SUNDAY .....	10.30 a. m.	6.30 p. m.
	3.00 to 4.00 p. m.	11 p. m. to 12 m.
	6.00 to 10.00 p. m.	2.00 to 6.00 a. m.

"When it was 9:28 p. m. Saturday, Manila Time, by their clock, it was 5:28, Saturday morning, Pacific Time. That is the basis used for my conversion of their schedules above. I had them from 2:20 until shortly after 5:30 a. m., and reception grew constantly better and was loudest when I quit.

"VK2ME says 'We have no regular transmission schedule as 2ME is experimental only.' I usually heard them after 9 p. m., Pacific Time, with best reception around 1 a. m. PST. I never tried for them in the morning, but a friend writes that he gets them fine in the a. m. around seven o'clock, PST. I have picked up their carrier at 10 a. m., but could not tune it in.

"The verification says 'VK2ME is the largest broadcasting station in the Southern Hemisphere, having a power unit of 20 kw., and is located at A.W.A. Radio Centre, Pennant Hills, Sydney, N. S. W. Australia.'

"I hope that this information can be of use to you, and thank you for the copy of RADIO DESIGN, which you mention has been sent under separate cover.

"It might interest you to know that I use Pilot parts almost exclusively for short-wave work."—*Willis Werner, 4423 Fulton Street, San Francisco, California.*

#### SHORT WAVES FROM THE LION COUNTRY

From British sources of information, we learn that Kenya Colony (British East Africa), which has already won laurels with its station at Nairobi, has started a new station at Mombasa, which will operate 24 hours a day. Wavelengths of 36.74 and 21.59 meters will be used, as well as higher waves for ship telegraph traffic.

Kenya Colony, which is cut right in half by the Equator, borders on the Indian Ocean, and is probably the most famous big-game hunting country in the world. Mombasa is on the coast, while Nairobi is a few miles inland. Nairobi is noted as the jumping-off place of numerous hunting and exploring parties.



*Mr. Startz, the famous announcer of station PCJ, who announces in six languages*

Since the publication of the Winter issue of RADIO DESIGN, we have received a letter directly from the director of the Nairobi station, 7LO, who writes as follows:

"We are in receipt of your letter and have pleasure in giving you the following information in connection with our broadcasting station. We transmit on a wavelength of 31.1 meters, with a power of approximately one-half kilowatt, and our times of transmissions are from 1600 to 1900 G. M. T. (11:00 a. m. to 2:00 p. m., E. S. T.). The usual type of program is broadcast, viz.: gramophone records, music provided by local artists, news bulletins, church services, children's programs, etc. The programs are broadcast entirely in English." (EDITOR NOTE: "Gramophone" means "phonograph" in American.)

Station 7LO is operated by the British East African Broadcasting Company, Ltd., Nairobi, Kenya Colony, British East Africa.

#### AMERICAN STATIONS

The number of American short-wave stations is increasing rapidly, and soon the short-wave channels will probably be as crowded as the 200-500 meter range. However, the more stations the more fun there is listening. Following is the latest "dope" on the U. S. transmitters:

#### W3XAU, PHILADELPHIA

A new station that has produced numerous letters from listeners is W3XAU, which is operated in conjunction with WCAU, Philadelphia, Pa. This is the Philadelphia key station of the Columbia Broadcasting System, and takes many of its programs from WABC in New York. Two waves are used: 9,590 kc. (31.28 meters) and 6,060 kc. (49.5 meters). The station is on the air from 8:00 a. m. to midnight.

#### STATION W2XV, LONG ISLAND CITY

"The present schedule for our experimental short-wave station W2XV calls for official broadcasting each Wednesday and Friday night, between 8:00 and 10:00 p. m., E. S. T., on a frequency of 8,650 kilocycles, which is equivalent to 34.68 meters. We also have other periods of transmission during the day time. Some of these are carried on a frequency of 17,300 kc. (17.34 meters) and 4,975 kc

(60.3 meters). Day time transmission is experimental and done at indefinite times. Therefore, we cannot give you the exact periods. The transmitter employed is crystal controlled, using 100% modulation. The output power is 750 watts."—*Charles M. Srebroff, Radio Engineering Laboratories, Inc., 100 Wilbur Avenue, Long Island City, N. Y.*

#### W3XAL, BOUND BROOK, N. J.

Regarding W3XAL, which is associated with the regular transmitter of WJZ at Bound Brook, N. J., we have the following:

"I learn from Mr. C. W. Horn, our General Engineer, that W3XAL is operating on 6,100 kilocycles (49.18 meters), experimenting regularly from midnight to 1:00 a. m., as well as at other intermittent times. The station is owned by the Radio Corporation of America and operated by the National Broadcasting Company."—*G. W. Johnstone, Manager of Press Relations, National Broadcasting Company, 711 Fifth Avenue, New York, N. Y.*

#### SHIP-TO-SHORE TELEPHONE

The ship-to-shore radio telephone experiments being conducted by the Bell Telephone Laboratories and the S.S. *Leviathan* and between the S.S. *Olympic* and various British and French short stations, are providing short-wave set owners with some very interesting reception. Many people have been able to follow the progress of the two vessels right across the Atlantic, the signals coming in with fine strength and clarity.

We have little data on the activities of the British ship, other than that its call letters are G2GN and its wave around 18.5 meters. However, we have the following from Mr. Paul B. Findley, of the Bell Telephone Laboratories:

"The one pair of frequencies used between the *Leviathan* and the shore is 4,116 and 4,392 kilocycles (72.9 and 68.3 meters); another pair is 8,630 and 8,830 kilocycles (35.89 and 33.98 meters). Work is progressing on a third frequency in the vicinity of 13,000 kilocycles (23 meters)."

The American shore station through which the telephone traffic is handled is located at Deal Beach, N. J. This is connected by land line to the long-distance headquarters of the A. T. & T. Co., at 24 Walker Street, New York, from which the trans-Atlantic radio channels are also operated.

## W9XF, CHICAGO, ILL.

Station W9XF, which has been putting such strong signals into short-wave receivers, is operated by the Great Lakes Broadcasting Company, 310 South Michigan Avenue, Chicago, Ill., in conjunction with WENR. According to a letter from E. H. Gager, chief engineer, the transmitter has an output of 5,000 watts and uses the frequency of 6,020 kilocycles (49.83 meters). It is located at the site of the WENR station, which is three and a half miles south of Downers Grove, Ill., or about twenty-three miles south-

west of Chicago. W9XF broadcasts all the programs of WENR and all announcements include the call letters of both stations.

Station W9XF was constructed for the purpose of relaying the WENR programs to foreign countries, where they may be rebroadcast for local consumption. A successful relay to New Zealand was accomplished on January 26th, when station 3YA, at Christ Church, rebroadcast a special program. The management of the New Zealand station reported excellent transmission and quality.

## Cashing-in on the Short Waves

IF you have had some slight experience in building radio receivers from standard kits, particularly the two models of the Pilot "Super-Wasp," you can make quite a little money on the side by assembling these short-wave kits for people who haven't either the time or the ability to do the work themselves. The general public is slowly but surely waking up to the fact that short-wave reception is a very thrilling and interesting hobby, and people in all walks of life are inquiring about suitable receivers. There are thousands of mechanically inclined Americans to whom the job of assembling a "Super-Wasp" is quite easy, but there are many others who would prefer to have the work done for them.

Now is the time to take advantage of this interest. Even if you have a regular day-time position you can easily assemble a set a week, working only an hour or so an evening; or you can do the whole job in two single evenings. You should charge a minimum of \$5.00 a set, and up to \$10.00 if you do a special job.

Your problem, as an individual, is to advertise your availability for work of this kind. The best thing to do is to make the acquaintance of the local radio dealers, if you don't already know them, and to offer to do assembling on "Super-Wasps." In many cases the dealer's regular service man or men are too busy to do work of this kind in the store's shop, or they are not very familiar with short-wave equipment. Present yourself as a specialist, and you undoubtedly will be able to pick up enough orders to keep you quite busy in your spare time. Leave your name, address and telephone number with the dealer, so that he will know where to get in touch with you.

Some dealers may prefer to pay you

themselves, so that the whole sales transaction goes through their hands. Others may turn the customer over to you directly.

If you care to invest a few dollars in a small advertisement in your local newspaper, you will probably be able to build up a nice little business as a custom set builder. We might suggest that you place an ad something like this:

### HEAR FOREIGN STATIONS ON THE SHORT-WAVES

*There are dozens of foreign short-wave broadcasting stations that you can pick-up right in your own home with a simple and inexpensive receiver. Don't depend on occasional local rebroadcasting; hear stations in England, Holland, Australia and Asia every day.*

*I am a short-wave specialist, and will assemble the famous Pilot "Super-Wasp" for you. No batteries to fuss with; this set operates right off the lamp socket. Let me help you get into the interesting short-wave game!*

JOHN T. SMITH

145 Pine Street

Phone 117

You'll be surprised at the number of inquiries that you will receive. Once you sell one set, you will have a continuous string of customers, because one set always sells another. It really is not difficult to tune in the foreign stations, and your first customer will go around boasting about his trans-oceanic DX. He'll rave about hearing Europe and Australia to his associates in his office and to his friends in the train, and sooner or later one of his acquaintances will get bitten by the "bug," too.

The fact that the K-115 "Super-Wasp" works entirely in A.C. is a strong selling point. Of course, some people may have storage batteries that they would like to use, in which case you can recommend the K-110 battery model.