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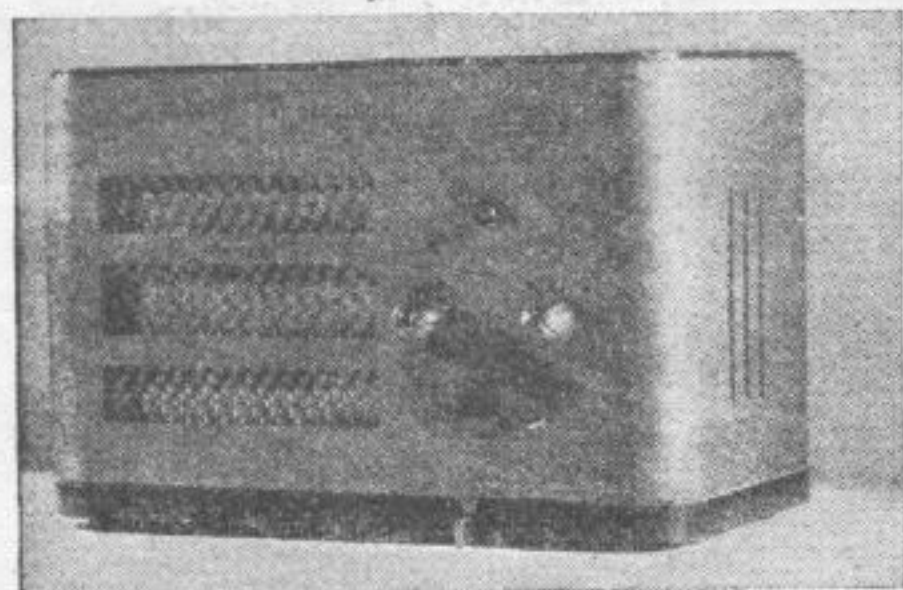
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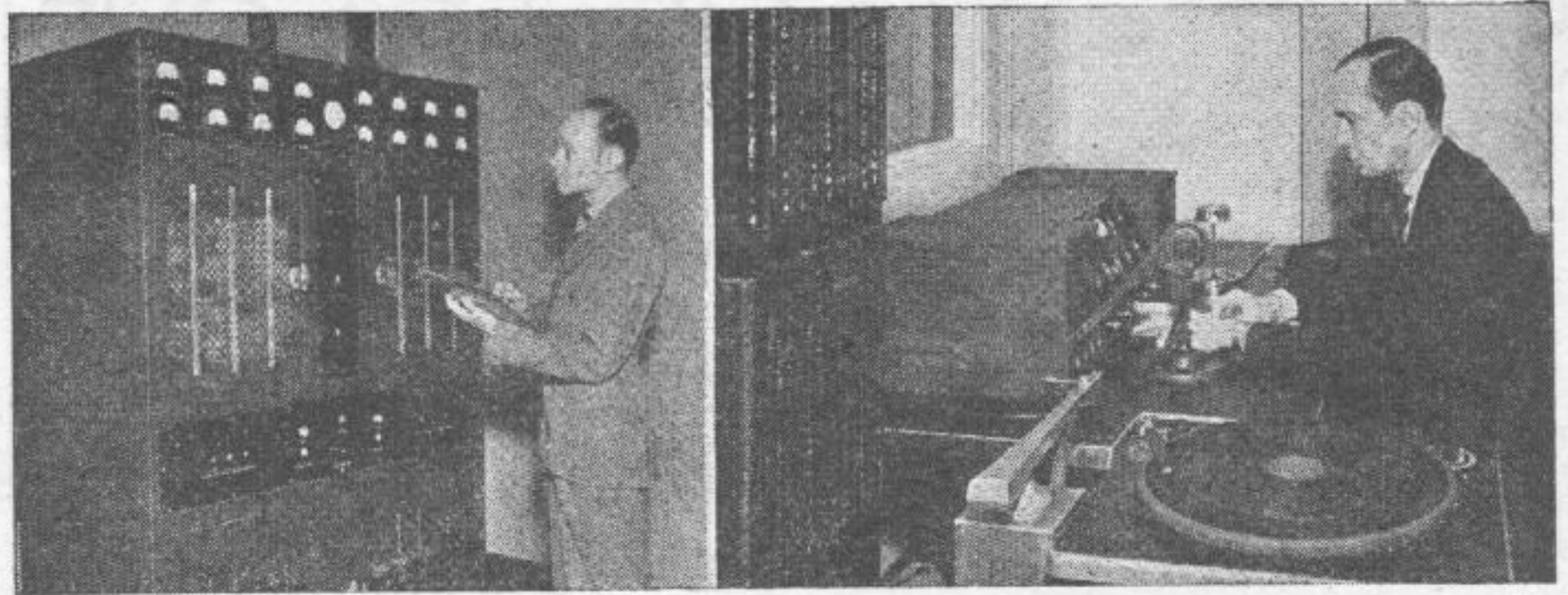
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Left: The W4XA composite transmitter, designed by J. H. DeWitt, Jr., Chief Engineer for WSM and built under his supervision. Checking meters is Harold Walker (W4DWS), Engineer in charge of W4XA operations. Right: Turntables, console and a portion of the W4XA Library, with Director Tom Stewart at the controls.

## Ultra-High Frequency Broadcasting

Perry Ferrell Jr.

● DURING the last six months the ultra-high frequency bands have undergone severe changes in station operation, the aftermath of the FCC Order No. 19, which dissolved the old 7- and 9-meter broadcast bands and gave the 31 stations then operating their choice of the new 7-meter band or the revised 11-meter band to do their further experimenting in.

All readers should keep in mind that every broadcasting station on the U.H.F. is an experimental one, both technically and from the standpoint of programs. They are all devoted to research in radio engineering and program planning for the usage of the ultra-high frequencies for "local" broadcasting. Therefore the writer urges all listeners, SWL's and DX'ers to listen for these stations and send reports of reception whenever possible. They'll appreciate it and you'll not only earn a new and unusual verification, but will have done something to aid the progress of radio engineering.

*The 11-Meter Band:* As defined by international agreement, the band of frequencies between 25,000 kc. and 27,000 kc. is an International Broadcasting band, as is the band between 6,000 and 6,200 kc., better known as the 49-meter band. It has been sadly neglected by all other countries except the United States, which in 1934 granted experimental licenses for operation.

Although we leave ourselves open for contradiction we will say the 11-meter band closely resembles the 10-meter amateur band in general characteristics and when stations are coming through on one, the other should be "open" in the same general direction, as a rule.

To get down to cases, W6XKG, "The Pioneer Short Wave Station of the West," was off the air after reportedly failing to file a program of research and experimentation with the FCC. The latest on renewal of their license has, however, not come through. W6XKG operated on 25.95 mc. from Los Angeles, Calif., with 100 watts and was the favorite of the East coast and Australasian dialers.

W9XOK, St. Louis, Mo., whose broadcasting activities heretofore have been confined to coverage experiments on 35.60 mc., is reported by our faithful California observer, O. Barneson, to be relaying KXOK on 26.30 mc., but badly interfered with by a severe heterodyne. The old transmitter of W9XOK is rated at 100 watts and reports can be address to the St. Louis *Star Times*.

W9XPD, the other St. Louis, Mo., broadcaster operated by the St. Louis *Post Dispatch*, has moved down to 25.90 mc. after a very brilliant record on 31.60 mc., where they were heard in 11 countries on 4 continents. W9XZP, the facsimile call for this outfit, shares time on this frequency with W9XPD.

Word is received from Tom Stewart, announcer for W4XA, 26.15 mc., Nashville, Tenn., that this station has a 1 kw. output and is on the air 35 hours each week, from 12 noon-2 p.m. and from 7:30 p.m. till about 11:00 p.m. The QSL issued by this National Life & Accident Insurance Co. outlet is of a very novel brown and cream color done in a unique musical scale.

W9XJL, 26.10 mc., Superior, Wis., is now using a full 250 watts from 9 a.m. to 5 p.m. daily. Much can be said for the fine quality and consistency this station has shown in the last three years and for its excellent verification policy. Our observers in Massachusetts, Connecticut, New Jersey, Florida, Arizona, California and Washington all report an R9 signal whenever the band opens.

W9XA, 26.00 mc., Kansas City, Mo., a little over a year old, has moved to this channel to provide a standard frequency for calibration purposes. The schedule of W9XA is reported to be 10 a.m.-1 p.m. and 3 p.m.-7 p.m., although there seem to be some reports to the contrary and the writer has recently heard them sign off at 5:30 p.m. and announce they would return the following day at noon E.S.T. We like to give particular note to the fine cooperation the personnel of W9XA has shown for the Ham and SWL and how much the fellows are missing the old DX talks and mailbag programs. Instead of a QSL card, giving little or no information, W9XA has devised a special four-page folder which describes the station, transmitter, antenna and personnel. It also editorially outlines the type of service and the purposes of such stations as W9XA. It's well worth your report and stamp for return postage.

W5XD, 25.30 mc., Dallas, Texas, one of the late 9-meter broadcasters, is using 1 kw. on an irregular schedule, but is generally heard between 12 noon and 2 p.m. on week days. The W5XD transmitter is also used for facsimile and can be heard nearly daily on the East coast with a terrific signal. All reports to this station should be sent c/o WFAA.

Other facsimile transmitters in the 11-meter band are: W2XWE, 25.05 mc., from Albany, N. Y., with 500 watts; and W8XUM, 25.20 mc., from Columbus, Ohio, with 100 watts.

W8XNU, 25.95 mc., Cincinnati, Ohio, "has put a consistent signal in here for quite some time and has come through on all but one or two days," says the Arizona UHF ace, W6QLZ, "and we may hear them as late as 10 p.m. local time." On daily from 7 a.m. to 1 a.m. with 1,000 watts into a four-element turnstile array, this is certainly a record of some kind, considering that the turnstile array is supposed to cut off the sky wave!

W2XOO, 25.50 mc., New York City, N. Y., reports Chief Engineer Frank Marx, "operates 12 noon to 9 p.m. daily. The transmitting equipment is a modified 100 watt RCA unit with high



fidelity Class B audio. The output is fed by concentric line to a special coupling at the base of one of WMCA's radiators, where it isolates the WMCA signal but allows at the same time free passage of the W2XOO energy to the top of the tower where is installed a new Bell Laboratories co-axial antenna. The antenna is about 300 feet above ground."

W9XH, 26.05 mc., South Bend, Ind., is reportedly operating each afternoon from 2:30 to 6:30 p.m., although definite information concerning this station is lacking.

WRUW, 25.60, 11.73 & 15.13 mc., Scituate, Mass., an international broadcast station, has been allotted this channel.

WCAB, 25.725, 6.06, 9.59, 15.27 and 21.52 mc., Newton Square, Philadelphia, Pa., WCAU's short wave outlet, has been reported as testing on this channel with a weak signal, which seems strange in view of the fact the licensed power is 10,000 watts!

Scheduled for early operation on 11 meters are: W2XVP, 26.10 mc., New York City, N. Y., part of the Municipal Broadcasting System; W9XTB, Kansas City, Mo., also on 26.10, is to relay WHC.

The 11-meter band affords the DXer a chance to get in on UHF DX if he has only a little time to spend, through its loud signals and low (comparatively for the UHF) frequencies. In regard to the number of DXers listening to 11 meters on a Sunday afternoon, we recall when Everett L. Dillard of W9XA read a letter from this writer over the air. Came the following week and came an influx of letters and postcards to our location all of which said, "Heard your letter read over W9XA last Sunday." It must have been OK, for at last count six states are represented, but your writer didn't hear it; he tuned in 10 minutes too late!

**The 7-Meter Band:** In all radio there is not another transmitting medium as unusual and of so many mixed strains as the UHF band from 7 meters down.

Even the very inexperienced listener will recognize that there are specifically three kinds of DX possible at these wavelengths; one extending to the ends of the earth, one limited to distances between 400 and 1,100 miles, and a third restricted to a maximum of perhaps 300 miles.

The first mentioned, better known as "sky-wave" DX, is an accomplished fact, although we are not able to begin to expect any degree of consistency, such as we might expect on lower frequencies. Reception of stations 1,800 miles or more distant is to be considered as a freak and open to considerable further study.

The second form is more or less possible a number of times during the spring and summer months of May, June, July and August, and is referred to as "short-skip." It is not quite as erratic in signal strength as its big brother, but is entirely unpredictable as to what time of day or night it will occur.

The last is somewhat more commonplace and is easily noted around 7 to 10 a.m. and again from 7 p.m. to midnight. This effect of extending a station's ground wave coverage is often misconstrued, for it, too, is a freak and many people who hear stations 200 or 300 miles away immediately suppose that they possess a super-sensitive receiver and on sending in a report of reception many stations conclude that they have erred in their calculations and that their station is getting out "something marvelous." Such, although we wish it were so, is often not exactly the case, for the bending earthward of UHF waves within a radius of 300 miles of the station's transmitter is dependent upon three equally important factors: power output, type and location of transmitting antenna, and weather. The effectiveness of the first two needs little consideration, but the definite connection of weather phenomena with signal strength is rather vague, at the present time. A connection does exist, that is assured, and the particular tieup this writer noted is concerned with the very strongest "lower atmosphere bending" possible. During such intervals it was noted that there existed a very heavy low-lying fog over the receiving position, and moving toward the received station, or those stations that were being heard with the best signals.

W2XDA, W2XOY, Schenectady, and Albany, N. Y., are testing on frequencies between 39.42 and 39.54 mc., with frequency and amplitude modulation while determining bandwidth and coverage of the two stations. Licensed for 43.20.

WNYE, 41.10 mc., Brooklyn, N. Y., one of the two non-commercial educational broadcasting stations now in daily operation, supplies historical plays, Spanish, English and French lessons and similar programs to the New York City Public Schools while using a Western Electric 500-watt transmitter. The antenna for WNYE is 450 feet above street level and is a shunt excited W.E. co-axial. All reports are appreciated and may be sent to the Brooklyn Technical High School, 29 Fort Greene Place, Brooklyn, New York.

WBOE, 41.50 mc., Cleveland, Ohio, is also using 500 watts and has been heard by our California and Arizona observers. WBOE has experimented with facsimile and has indicated the usefulness of such a system in modern education. Both WNYE and WBOE are active daily around 11 a.m. local time.

W6XDA, 42.30 mc., Los Angeles, Calif., is going to try something a little unusual for UHF broadcasters when it installs a 3-element close-spaced beam antenna pointed in a general

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Send for WARD'S new Amateur Catalog at once! Use it for selecting receivers, transmitters, mikes, keys, parts—anything you need in radio or sound system work. Note how it makes it easy to compare testing instruments. And especially, note the money-saving prices on everything. It's FREE. Just mail the coupon.

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easterly direction. W6XDA is located in the new Columbia studios in Los Angeles with the present antenna mounted some 150 feet above street level. W6XDA verifies all correct reports with a photographic QSL and has been heard in Pennsylvania, New Jersey and New York.

W1XEH, Hartford, Conn., advises us through J. C. Randall, plant manager for the Travelers Broadcasting Service, has moved from 63.50 to 42.46 mc., in conformance with the new rules. W1XEH will continue to operate with 150 watts output from Avon, Conn., where their transmitting antenna is some 770 feet above sea level. The Cruft Laboratories has in the past collaborated with the Travelers Corporation in research work on comparison of signal strength and weather, principally barometric pressure. All reports of W1XEH will be verified at the above address. 7 a.m. to 1 a.m. is the schedule.

W9XER, 42.46 mc., Kansas City, Mo., is now operating daily, rebroadcasting KMBC with 500 watts. "Their signal is so strong in this neighborhood that they are breaking through the background of my short wave receiver, which doesn't cover their actual frequency," says Merton Meade, Mid-Western DXer. W9XER is owned and operated by the Midland Broadcasting Co., Inc., and is reported to verify.

W1XSO, 42.30 mc., Hartford, Conn., will be on the air by the first of the year with 1,000 watts and frequency modulation, rebroadcasting programs of WTIC.

W3XEZ, 42.60 mc., Camden, N. J., has been heard testing with both amplitude and frequency modulation and utilizing an audio oscillator signal from 20 to 20,000 cycles. This station is licensed as "Experimental—Class 1," and is using special authority for these tests with 1 kw. R.C.A. is the owner.

W2XMN, 42.80 and 117.43 mc., Alpine, N. J., the original frequency modulated station owned and operated by Major E. H. Armstrong, is now heard daily rebroadcasting either WQXR or WABC. The signal from this station is exceptional due to the high power (50 kw.) and the 16-element turnstile antenna that are used. DXers within 120 miles of the station (Alpine is 15 miles north of New York City) should be able to hear it with considerable ease. In regard to that, Major Armstrong says, "For reception of W2XMN, I would advise a half-wave horizontal wire placed as high as possible with a balanced transmission line (no ground) and mounted at right angles to the station."

W1XOJ, 43.00 mc., Paxton, Mass., operated by the Yankee Network, will soon increase power to 50 kw. from the 2 kw. now used. They broad-

(Turn the page, please)

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Model 9000

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Here is proof that Consolidated offers QUALITY at LOW PRICE. The Model 9000 tests the newest tubes, as well as the older ones, and yet is priced to dealers at only \$37.50.

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You get personal attention you can't get elsewhere; fair trade-in value for your receiver and equipment; ten day trial of all receivers; and my cooperation in every way to see that you are 100% satisfied. No wonder W9ARA's customers are boosters. You will be too.

Your inquiries and orders invited. You can reach me by letter, telegram, phone, or visit nearly 24 hours a day, 365 days a year. Foreign orders solicited too. Write for full information.

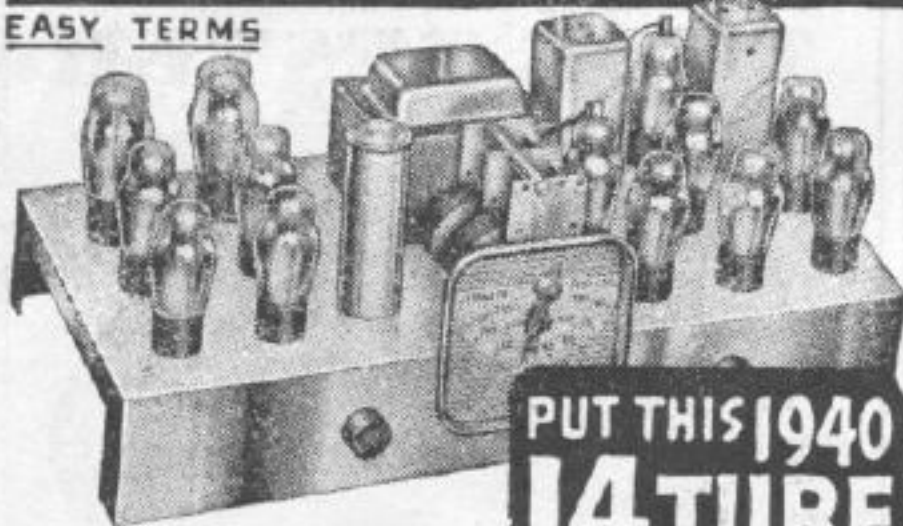
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PUT THIS 1940  
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Here's our big 20th Anniversary radio special... the 14-tube 1940 Television-Adapted Midwest! Brilliant performance... and amazing foreign reception!

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Absolute satisfaction guaranteed on money-back basis. Catalog also shows 14-tube cabinet console for only \$29.95 complete! See Midwest's Answer To TRADE-INS!

Other models from 5 to 17 Tubes, and up to 5 Wave Bands.

Send 1¢ postcard for FREE 1940 catalog, showing complete line.

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PRECISION CRYSTAL CONTROL  
FOR ALL AMATEUR BANDS  
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CRYSTALS Now \$3.35 UP  
BLILEY ELECTRIC CO., ERIE, PA.

## Ultra-High Frequency Broadcasting

(Continued from preceding page)

cast frequency modulated programs from 8 a.m. to 12 midnight daily and will verify all reports addressed to 21 Brookline Ave., Boston, Mass. W1XOJ receives their programs from Boston via a relay station (WEOD) operating on 133.03 mc., and using a beam directed 3 degrees south of west. WEOD uses 250 watts and is frequency modulated. The writer has logged this station on several occasions, although over 255 miles away, while Allen B. Raymond, Plainville, Conn., hears

Call	Frequency	Location	Power	Remarks
W2XDG	42.42	Bound Brook, N. J.	.15 kw.	Testing on new frequency.
W2XBF	43.74	New York City, N. Y.	1.00 kw.	Daily in afternoons.
W1XKB	42.38	Springfield, Mass.	1.00 kw.	Under construction.
W2XHJ	42.06	New York City, N. Y.	.15 kw.	Testing daily.
W8XWJ	42.06	Detroit, Mich.	.50 kw.	Daily operation.
W9XAZ	42.26	Milwaukee, Wis.	.50 kw.	Under construction.
W8XKA	42.46	Pittsburgh, Pa.	1.00 kw.	Under construction.
W1X	42.60	Boston, Mass.	1.00 kw.	Under construction. F-M.
W2X	42.60	New York City, N. Y.	1.00 kw.	Under construction. F-M.
W8X	42.60	Rochester, N. Y.	1.00 kw.	Under construction. F-M.
W9X	42.60	Milwaukee, Wis.	1.00 kw.	Under construction. F-M.
W9XYH	43.00	Superior, Wis.	1.00 kw.	Under construction.
W2XQR	43.20	New York City, N. Y.	1.00 kw.	Under construction. F-M.
W3X	43.20	Whippany, N. J.	5.00 kw.	Under construction. F-M.
W3XO	43.20	Washington, D. C.	1.00 kw.	Testing daily.
W8X	43.20	Rochester, N. Y.	1.00 kw.	Under construction. F-M.
W2X	43.40	New York City, N. Y.	1.00 kw.	Under construction. F-M.

Notice is called to the fact that a great many of the UHF stations are in the process of construction, and the number of frequency-modulated

them daily at 140 miles! This shows just what can be done on 7 meters.

W1XPW, 43.40 mc., Meriden, Conn., another mountain-top radio station, is broadcasting F-M daily with 1 kw. The programs of WDRC are used. W1XPW is also heard at the writer's location 165 miles away with an R3 to 4 signal.

It has been impossible to consider every 7-meter station in detail, but those not discussed are listed below.

Call	Frequency	Location	Power	Remarks
W1XPW	43.40	Meriden, Conn.	1 kw.	F-M

(F-M) stations is steadily increasing. From all present indications they will soon be in majority to other types using 7 meters.

## I Cover the Pacific Coast!

(P. C. S. Time)

AS regularly as the seasons change, so the interest of Pacific Coast short wave listeners shifts from one continent and group of stations to another. At present, with powerful signals from Latin-American stations on the air, many listeners are turning nightly to South and Central America.

Reception during the past month has been excellent and it will undoubtedly improve further throughout the winter. Powerful daytime European broadcasters appear to be holding their own, while the Latin-Americans are fast approaching the volume of broadcast band stations.

Perhaps the strongest South American at present is LRX of Buenos Aires. Its schedule reveals that the station is on the air from 6:15 a.m. to 7 p.m., although several listeners have reported hearing the station as late as 8 p.m.

Other Argentina broadcasters heard with excellent volume on the Pacific Coast are LRA1 on 9.69 mc. until 6 p.m., and LRA2 near 6 p.m. on Fridays only.

Popular with many Pacific Coast listeners have been the nightly English programs from station CB1180 (11.97 mc.) in Santiago, Chile. From 7 to 7:30 each night, a special program of American dance tunes with announcements in English is broadcast.

In spite of recent announcement that all Colombian stations have moved to the 62 meter band, several listeners have reported HJCX "La Voz de Bogota," on 9.7 mc. Kendall Walker of Yamhill writes that for the duration of the European war no English announcements will be given over Colombian stations.

Peru's OAX4J on 9.34 mc. still is booming through with excellent strength until as late as 9 p.m. Mr. Walker reports receiving a very beautiful verification card from this station.

Several Panama stations are audible during the evenings. The best of these is HP5J on 9.59 mc. HP5J signs off at 7:30. Other Panama stations heard here during the evenings are HP5A on 11.70, HP5G on 11.78, and HP5H on 6.12 mc.

John Cavanagh of Oregon City writes that Australia's VLR on 9.58 mc. is reaching here with good volume as early as 9 p.m. VLR signs off at 6 a.m.

By Lyle M. Nelson

Several listeners, including C. F. Burns of Vancouver, have reported good reception from TIPG of San Jose, Costa Rica. This station, they report, now is broadcasting on 9.62 mc. until as late as 8:30 p.m. The station becomes audible here about 6 p.m.

CXA8 of Colonia, Uruguay, must also be listed among South American "best bets." CXA8 tickles the antenna daily until as late as 8 p.m. on 9.64 mc. Occasionally the station is on the air until as late as 10 p.m.

Noticeably absent in the propaganda broadcasts from Berlin have been any derogatory remarks about the French. It seems that German propagandists are attempting to win the war by using the radio as an instrument to separate the Anglo-French alliance. All broadcasts show a hatred of the British, but nothing is said of the French.

The latest German schedule for North America is as follows: From 1:50 to 7:50 p.m. over DJJ on 11.77 and DXB on 9.61 mc.; from 1:50 to 5 p.m. over DJL on 15.11 mc.; and 5 to 6 a.m. over DJB on 15.20 mc.

The English reply is heard here nightly on Transmission 6 from 6:40 to 8:30, with a complete news resumé at 8 o'clock. GSD on 11.75 mc. is the best received of the stations carrying this program, although both GSC on 9.58 mc. and GSB on 9.51 mc. can be heard.

ROUND 'N' ABOUT—From listeners' reports: RNE now on the air from 6 to 10:30 p.m. on 12.00 mc. Heavy code interference sometimes blots out reception... COCQ is on 8.83 mc. at present... PMN, on 10.26 mc., occasionally heard as late as 8 a.m.... Several New Zealand stations will soon be on the air... Mysterious Soviet station on 15.39 mc. heard in early mornings... ZBW on 9.53 mc. is excellent here from 5 to 7 a.m. daily... JZI on 9.54 mc. now is carrying the Pacific Coast program from 9 to 10:30 p.m. daily... MTCY still coming in with good volume... A new Hungarian station, HAD, will make test transmissions on 11.85 and 9.62 mc. in the near future... The 62 meter band is alive with Spanish-speaking broadcasters during early evening... Radio Tananarive is on 5.80 mc. from 9:30 to 9:45 p.m.

## Award of Honor

(Continued from page 530)

and most of my operation is on the 10- and 20-meter bands. On 10 meters, only phone operation is used, and this is the band I use most frequently because of the swell contacts and friendships I make there. On 20 meters, only C.W. operation is used, and if I keep on I may eventually use C.W. more than phone as it holds a fascination of its own that I can't explain. Other bands operated are 40- and 80-meter C.W. However, these latter two bands are operated only about 10 per cent of the other two. The line-up of the rig is a 616 crystal oscillator and doubler, using an RK20 in the final. The RK20 is suppressor grid modulated by a 6F6 modulator, and that is

driven by a high-gain amplifier using a 6J7 and 6C5. The output on phone is about 18 watts, and on C.W. about 85 watts. On 10 meters I use a half-wave vertical antenna; a horizontal Zepp is used on the other bands, due to its flexibility. The receiver is a Hallicrafter model SX16.

In the 625 contacts made, are included all U. S. districts comprising 46 states, and also Canadian, Mexican, Hawaiian and Alaskan stations. After I receive W.A.S., I will try for W.A.C.

MARY E. RODEN, W7GPO,  
319 N. Lincoln Street,  
Pendleton, Ore.



# Let's Listen In with Joe Miller

• HERE we are, starting a new year of DX, and, though somewhat premature, with this coming out in mid-December, we are taking this opportunity to wish all of you brother DX hounds the very best o' luck and DX in 1940.

Quite a few of the boys are mentioning the poor conditions lately, which, coupled with the effect the war situation has had on short waves (mostly, of course, on the ham bands), makes the gathering of DX news all the more difficult. So we will devote a good deal of attention to that always interesting phase of DXing—logging the commercial phone stations.

We have often "cooled off" a tuner who liked to brag about his ham DX by asking him what commercial DX he had verified. Usually, the chap could mention very few good catches, which, in our opinion, made very little of his ability as a real DXer.

Why? Rather easily explained. To get good amateur DX, one of course needs a good receiver, one or two good antennae, a fairly good location, and then needs merely to "park" on 10 or 20 meters and "log" each call as it is heard. Reading any DX periodical, a fellow very easily learns when each band delivers its best results.

But—can't anyone, with some experience and similarly good equipment, do just about as well? Right! Of course, some experience will always help him to be better, but the argument, taken in the main, is sound.

Taking the commercials, however, is entirely another matter, and how—as our DX friends will certainly attest! Hearing an inverted speech Xmsn, the average DXer will pass over it as hopeless, but a good DXer will try to identify it by combing the nearby frequencies for its contact station. If such is heard, this chap will then have to consult quite a number of magazines and station lists for possible identification.

A good DXer will be able, by the mere sound of an inverted or clear speech carrier, to judge from what part of the world a certain signal is being received, aided no little by the certain frequency and time heard. That sort of knowledge can be gained only by many hours of usually vain tuning, but what is heard is real DX!

Keep in mind, too, the fact that whereas some ham DXers with better locations, antennae and receivers can outdo most other OM's, the commercial DX can be heard by all, as most of these of necessity are high-powered, to be able to establish reliable contact with most of the world. Therefore, it would seem the commercials, more than any other type of DX, would serve as a test of the real DXer. However, let this not serve as a detraction from the DX feats of some ham DXers, who, by their perseverance and many hours (often early A.M.) spent at the dials, have amassed an imposing list of amateur DX.

## ALL TIMES E. S. T.

### JAPAN

JZI, 9.535 mc., Tokyo, has replaced JZK on the Overseas Program, time 12-1:30 a.m. JZK, 15.16 mc., now back to 4:30-5:30 p.m. for So. America, and 8:30-9 p.m. for eastern No. America. JZI also shares the China and South Seas program with JZJ, 11.80 mc., from 7-9:30 a.m. JWV, 7.257 mc., with JZJ, 2-4 p.m. for Europe. JZJ shares with JZK on 4:30-5:30 p.m. Xmsn. Hope you can straighten this out. West Coast DXers claim JZI covers KGEI and DJN.

### ITALIAN EAST AFRICA

I2AA is the new call for IABA, still on 9.65 mc., but now on a new sked of 3:30-5:30 a.m. and 11 a.m.-2:30 p.m. Of course, the best time for U. S. is the first broadcast. Address reports to I2AA, Addis Ababa.

### MADAGASCAR

Radio Tananarive evidently has either another frequency, or has cancelled their 9.51 mc. transmissions, now being heard on 9.87 mc. Most likely R.T. is still on same sked, being on 10.95 and 9.87 mc. from 12:30-12:45, 10-11 a.m., and 2:30-4 a.m. ex. Suns. Also, on 6.069 mc. 12:30-12:45, 3:30-4:30, 10-11 a.m., and on Suns. 2:30-4 a.m.

### YUGOSLAVIA

YUG, 15.24 mc., or YUE, 11.735 mc., Belgrade, BC to No. America at 7-9:05 p.m. The I.D.A. notes that before s.o., a 12 note horn signal is heard several times, preceding National Anthem. New list of calls and frequencies sent by OM Gus Gallagher, W6, follows: YUA, 6.10; YUB, 6.10; YUC, 9.505; YUD, 9.505; YUE, 11.735; YUF, 15.24; YUG, 15.24 mc. As YUD and YUF are listed for So. America, and YUE and YUG for No. America, it appears that different calls for same frequencies indicate certain frequencies will have other calls, when directed to different continents. Here's a good chance to add this hard-to-get country to your verified country list.

### ALBANIA

ZAA, 7.85 mc., has a new sked of 6:30-8:30

a.m. and 12:20-4:30 p.m. Best heard near end of latter broadcast.

### MANCHUKUO

MTCY, 11.775 mc., Hsingking, 20 kw., is being heard with a very FB signal on their No. America and Hawaii broadcast from 1:30-2:20 a.m., when music with news in English is heard. Also heard 9:50-10:50 a.m. and 4-4:50 p.m.

### CHINA

XGOX, 15.19 mc., Chungking, which was bombed in Sept., is now back as strong as ever from 9-11 p.m. Evidently it was rebuilt in very short time.

### INDO-CHINA

Radio Saigon, 11.78 mc., with 12 kw., is really coming in these a.m.'s, one of the finest Asiatic sigs to be heard. Sked is 12:15-12:45, 6-6:45 a.m., with English news at 6:30. You just can't miss 'em on latter Xmsn. Also on 6.116 mc., same sked, 1 kw. power, i.e., same latter Xmsn., but on earlier Xmsn. is on 11:45 p.m.-12:15 a.m.

### FRENCH SOMALILAND

FZE8, 17.28 mc., Djibouti, often fones Paris near 8:30 a.m., when heard here with a FB signal, using French in clear speech. Easily identified by their calling Paris.

### BURMA

VVS, 12.87 mc., Mingaladon, is also heard frequently near 6 a.m.-7 a.m. when contacting VVN, 13.35 mc., Fort Madras, India. Both of these sigs are really well heard, with the typical Asiatic flutter.

### EGYPT

SUZ, 13.83 mc., Cairo, frequently contacts Rugby, England, GBB, 13.58 mc., near 11 a.m. However, we've heard it as late as 1 p.m. and as early as 6 a.m., so keep after this commercial every a.m. when possible. SUV, 10.055 mc., also heard, but not so frequently, or as well, usually in mid-afternoon, 3-5 p.m.

### BELGIAN CONGO

OPL, 20.04 mc., Leopoldville, heard near 11 a.m. here. Usually can be heard contacting Belgium between 9:30-11:30 a.m., with a good signal here, often R. 7-8. Also, OPM, on 10.14 mc., really pounds in, when heard on regular contact time bet. 2-3:30 p.m.

### THAI

HSP, 17.741 mc., Bangkok, should be tuned for also, being occasionally heard when conditions are good, in early a.m., using inverted speech. Best bet is near 6 a.m. Another Bangkok fone is HSE2, 19.016 mc., which is often used in place of HSP, usually with JVE, 15.66 mc., Tokyo, anywhere between 11 p.m.-6 a.m.

### FED. MALAY STATES

ZGB, 13.643 mc., Kuala Lumpur, is often a good bet, phoning PLQ, 10.68 mc., Bandoeng, Java, using inv. speech, with good sigs on both. Usual contact time is 7:45-8:15 a.m.

Try for the Javanese phones listed on page 299 of Sept., 1939, issue "R. & T." These are well reported anywhere from 5-11 a.m., best from 5:30-8 a.m., always strong signals. List was erroneously captioned *Japanese*.

Merton M. Hiatt, Dryden, Washington, asks that we list several special broadcasts to be dedicated to the DXers' International Exchange Club of Dryden. Glad to do it, OM. TG1 and TG2, Guatemala, will broadcast on Dec. 17, 2:30-2:45 a.m. E.S.T. TG2 is on 6.195 mc., and, we believe, TG1 is on 5.855 mc., though latter freq. not certain. Also, YN3DG, or YNDG, on 13.90 mc., will do a special on Dec. 24 at 12:30-1 a.m., E.S.T. These stations will be well heard, no doubt.

Due to lack of good reports on ham DX, we will omit Ham Stardust this month, hoping for better luck next month. Though with conditions as they are, we'll keep right on hoping. Only 10 meters has supplied any DX lately, and then only a few stations. Try this band around 10 a.m.-noon for east U. S. On 20, the Asiatics coming in quite well last month seem to have "passed out," much to our regret, though we'll keep trying.

Several inquiries received as to where one can obtain addresses of foreign amateur stations. One can do so by writing the Radio Amateur Call Book, Inc., 608 So. Dearborn St., Chicago, Illinois, U. S. A. Their Call Book lists every amateur station in the world. These Call Books are issued quarterly, one for each season.

Let's hear from some of you boys as to this commercial DX piece, and maybe a few reports from you on same?

Anyway, again our best wishes and—keep plugging! Very 73.

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