

**CAN BRAIN WAVES RUN SPACE SHIPS?**

# **RADIO-TV EXPERIMENTER**

OCTOBER—NOVEMBER 75c

**WHITE'S  
RADIO  
LOG**



AM-FM- STATIONS  
WORLD-WIDE  
SHORT-WAVE LISTINGS

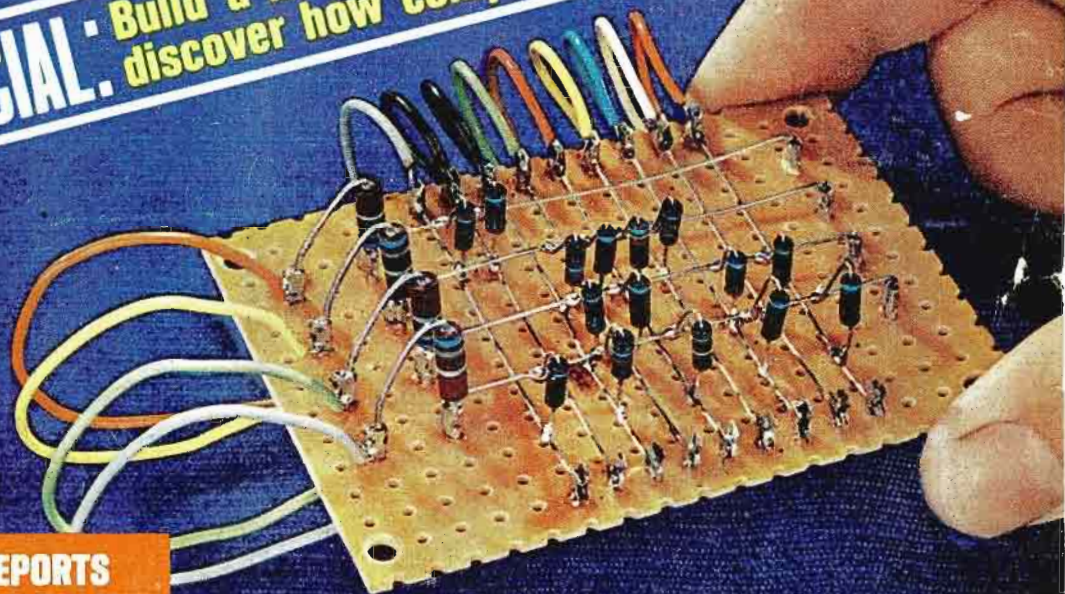
**INSIDE VLF EXPERIMENTS IN ANTARCTICA!**

**HOW TO WIRE AUTO GAUGES!**

**Working AT 30 mc PLUS!**

**Done in Soviet space shots,  
land services, etc.!**

**SPECIAL:** Build a Matrix Demonstrator—  
discover how computers think!



## **TEST REPORTS**

**EICO Model 3566  
Solid-State Receiver**

**Sonotone  
Sonomaster RM-1K  
Speaker System Kit**

**Amphenol Model 524  
CB Selective Call Unit**

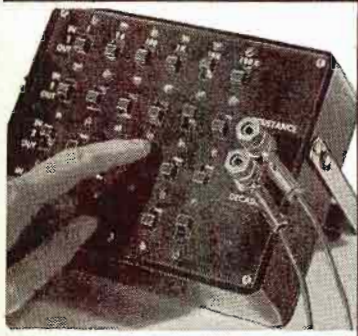
**Complete Plans for:**

**110-volt Auto Inverter—\$12**

**Midget Desk Speaker—\$1.50**

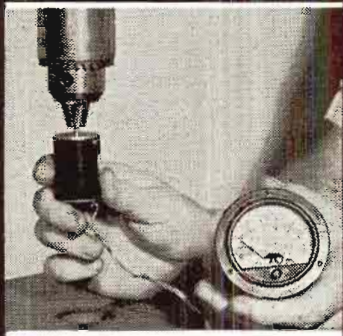
**Photo-Slave For Flashgun—\$7**

# Anyone Can Build These High Quality Precision S&M Kits At a Substantial Savings



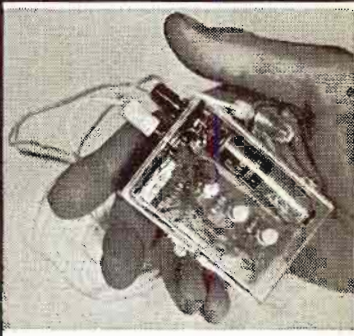
**Precision Decade  
Resistance Box**

Designed so the electronic experimenter can get any value of resistance at 1% accuracy. Made of precision components, this decade box offers such advantages as fast fingertip switching from any resistance value from 1 ohm to 1,111,110 ohms within seconds. Add or subtract as little as 1 ohm with 1% accuracy. And ordinary hand tools are all that's needed to assemble it in less than 2 hours.



**All Purpose  
Shop Tachometer**

This tachometer is guaranteed to outperform any \$50 tach available today or your money will be refunded. This tach belongs in the tool chest of every machinist, electrician, model maker, motor serviceman and inventor. A six position rotary switch enables you to select three speed ranges in either forward or reverse rotation. Three ranges—0—500, 500 and 15,000—cover the gamut of rpms in the home workshop or laboratory on machine tools, such as lathe cutting speeds, motor rpm, drilling speeds and other motor driven tools where rpm is an important factor.



**Pocket-Size  
Hearing Aid**

New hearing aid design provides a minimum of 42 decibels of gain and is adequate for 75% of all cases of partial deafness. The aid weighs only three ounces and is smaller than a king-size cigarette pack. Uses latest electromagnetic earphone and miniature crystal microphone. Powered by a 10¢ pen light flashlight battery and has a switch for turning power off when not in use and a control that lets you adjust the volume to a comfortable sound level.

SCIENCE & MECHANICS, KIT DIVISION  
505 Park Avenue, New York, N. Y. 10022

RTV-1065 108

Please send the S&M kits that have complete assembly plans, or the assembled and fully tested electronic aids checked below. I understand that if I am not completely satisfied I may return the kits within 10 days for a complete refund of the purchase price.

- |                   |                                      |  |
|-------------------|--------------------------------------|--|
| Hearing Aid ..... | <input type="checkbox"/> \$24.95 Kit | <input type="checkbox"/> \$34.95 Assembled |
| Tachometer .....  | <input type="checkbox"/> \$16.95 Kit | <input type="checkbox"/> \$21.95 Assembled |
| Decade Box .....  | <input type="checkbox"/> \$24.95 Kit | <input type="checkbox"/> \$29.95 Assembled |

Add 10% for Canadian and Foreign orders. New York City residents add 4% for N.Y.C. sales tax.

NAME \_\_\_\_\_ (Please Print)

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

- Check or money order enclosed, ship post paid.  Enclosed \$3.00 deposit, ship balance C.O.D., plus postage and C.O.D. charges.

Mail this coupon

for free  
**Success Kit**  
if someone has  
removed the  
postcard

1. "How to Succeed"—contains self-evaluation charts, a "master plan" for success, tells why some people fail.

2. Career Catalog—outlines career opportunities in field you select, contains complete course listing and descriptions.

3. Free Sample Lesson—"Selling Your Ideas," illustrates the I.C.S. method of instruction.

**I C S**

75th YEAR

**INTERNATIONAL CORRESPONDENCE SCHOOLS**

Dept. 1149, Scranton, Penna. 18515 (In Hawaii: P.O. Box 418, Honolulu. In Canada: I. C. S. Canadian, Ltd., Montreal)

Without cost or obligation, please rush me my FREE Success Kit.

Name \_\_\_\_\_ Age \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Field of Interest \_\_\_\_\_

Occupation \_\_\_\_\_

Employed by \_\_\_\_\_ Working Hours \_\_\_\_\_

**SPECIAL LOW RATES TO MEMBERS OF U. S. ARMED FORCES!**

If you will invest some of your spare time in home study, this postcard (or coupon) can start you on the most profitable venture of your life! By return mail—FREE and with no obligation—you will receive the I. C. S. SUCCESS KIT. These three valuable booklets have started thousands upon thousands of determined men and women on the road to pay boosts, promotions, new careers, job security.

Choose from 236 courses! All are practical, job-related. Complete, personalized service from the oldest and largest school of its kind in the world. Diplomas to graduates. Send card (or coupon) today!

**ACCREDITED MEMBER, NATIONAL HOME STUDY COUNCIL**



RADIO-TV EXPERIMENTER is published bimonthly at \$4.00 per year, by Science & Mechanics Publishing Co., 505 Park Avenue, New York, N.Y. 10022. Second class postage paid at New York, N.Y., and at additional mailing office. Copyright 1965 by Science and Mechanics Publishing Co.

# RADIO-TV EXPERIMENTER

Cover Photo  
by Don Lothrop

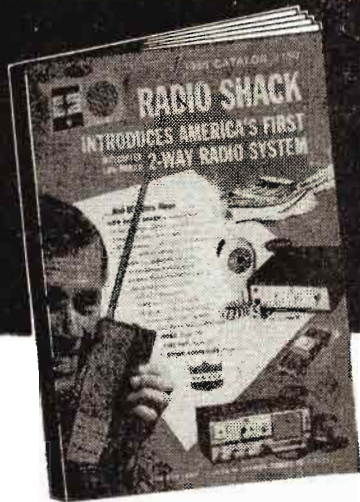
**NOW THERE ARE  
OVER 65 RADIO SHACKS  
COAST-TO-COAST**

October-November 1965 CONTENTS/INDEX ☆Cover Highlights	Feature	Theory	Construction	Ham/CB/SWL	Audio/Hi-Fi	AM/FM/TV	Test Bench	Related Subjects
☆ Dipole at the South Pole..... 45	✓	✓		✓	✓	✓		✓
Workbench Weegee Board..... 50		✓	✓				✓	
Electronics in the Oxygen Tank..... 52	✓	✓				✓		✓
☆ SCR Slave Photoflash..... 54		✓	✓					✓
☆ Matrix Circuits..... 57	✓	✓	✓					✓
☆ Back to Auto Gauges..... 61		✓	✓					✓
☆ Human Thought in Orbit..... 66	✓	✓						✓
The DXpedition..... 69	✓			✓				
☆ Lab Check—EICO 3566 Receiver... 75	✓	✓			✓	✓		
☆ Lab Check—Sonotone RM-1K..... 77	✓	✓			✓			
☆ 110-V Power for Your Car..... 79		✓	✓					✓
Mahlon Loomis/Discoverer of Radio... 83	✓	✓				✓		✓
☆ Canned Sound..... 86	✓		✓		✓	✓		
Propagation Forecast..... 88	✓	✓		✓				
☆ DX from Upper Limbo..... 89	✓	✓		✓				✓
☆ Lab Check—Amphenol 524..... 91	✓	✓		✓				
Take a Tape Break..... 93	✓	✓		✓	✓			
Push-Pull Crystal Receiver..... 95		✓	✓			✓		
BFD/Beat Frequency Oscillator..... 98		✓	✓	✓				
DF for CB..... 100	✓	✓		✓				
Precision RF-IF Oscillator..... 101		✓	✓	✓		✓	✓	

WHITE'S RADIO LOG, Vol. 44, No. 2—Page 107

DEPARTMENTS • Editorial 13 • CB Column 18 • Bookmark 26 •  
New Products 30 • Ask Me Another 34 • Literature Library 128

**CALIFORNIA**  
BAKERSFIELD — 1308 19th St., 322-6448  
LOS ANGELES (West L.A.) — Pico Blvd. at Overland, 837-7141  
LOS ANGELES (Anaheim) — 501 W. Katella Ave., 776-9540  
LOS ANGELES (Downey) — Stonewood Shop. Ctr., 923-1709  
LOS ANGELES (Mission Hills) — 10919 Seneuvala Blvd., 365-3118  
LOS ANGELES (Santa Ana) — Bristol Plaza Shop. Ctr., 1212 South Bristol, 546-5700  
SAN DIEGO (La Mesa) — Grossmont Shop. Ctr., 465-4062  
LONG BEACH — 3976 Atlantic Ave., 426-7514  
OAKLAND (San Leandro) — Bay Fair Shop. Ctr., 278-5200  
SACRAMENTO — 600 Fulton Ave., 483-2707  
**COLORADO**  
DENVER — 798 South Santa Fe Dr., 733-7833  
**CONNECTICUT**  
HAMDEN — Hamden Mart Shop. Ctr., 288-7911  
MANCHESTER — Manchester Shopping Parkade, 649-5247  
NEW HAVEN — 92 York St., 787-7121  
NEW LONDON — New London Shop. Ctr., 442-0522  
STAMFORD — 29 High Ridge Rd., 325-4371  
WEST HARTFORD — 39 So. Main St., 236-9441  
**ILLINOIS**  
CHICAGO — Evergreen Plaza at 95th St., 636-9796  
**MAINE**  
PORTLAND — Pine Tree Shop. Ctr., 773-7071  
**MASSACHUSETTS**  
BOSTON — 167 Washington St., 523-4719  
BOSTON — 594 Washington St., 426-3431  
BOSTON — 110 Federal St., 426-3997  
BRAINTREE — South Shore Plaza, 843-8200  
BROOKLINE — 730 Commonwealth Ave., 734-1000  
CAMBRIDGE — Fresh Pond Shop. Ctr., 491-2925  
FRAMINGHAM — Shoppers' World, 872-6569  
LOWELL — Central Shop. Plaza, 455-5469  
SAUGUS — N. E. Shop. Ctr., 233-5350  
SPRINGFIELD — 1182 Main St., 734-2189  
WEST SPRINGFIELD — Century Shop. Ctr., 732-4433  
WORCESTER — Lincoln Plaza, 757-9030  
**MINNESOTA**  
ST. PAUL — 473 North Snelling  
**NEW HAMPSHIRE**  
MANCHESTER — 1247 Elm St., 669-1303  
**NEW MEXICO**  
ALBUQUERQUE — 6315 Lomas, N.E., 268-5722  
**NEW YORK**  
BINGHAMTON (Vestal) — Vestal Shopping Plaza  
BUFFALO (Clarence) — Transitown Shop. Ctr., 632-7111  
NEW YORK — 1128 Ave. of the Americas, 687-4482  
355-9740  
SCHEENECTADY (Reterdam) — Shoporama Shop. Ctr.,  
SYRACUSE — 3057 Erie Blvd. East, 446-4990  
**OHIO**  
CINCINNATI — 852 Swifton Ctr., 631-4570  
**OKLAHOMA**  
OKLAHOMA CITY — Mayfair Shop. Ctr., 943-8491  
TULSA — 2730 South Harvard, 742-2255  
**OREGON**  
PORTLAND — 1928 N.E. 42nd St., 281-4842  
**PENNSYLVANIA**  
PHILADELPHIA — 2327B Cottman Ave., Roosevelt Mall, 338-4711  
PHILADELPHIA — 1128 Walnut St., 923-2198  
**RHODE ISLAND**  
CRANSTON — 1301 Reservoir Ave., 942-6600  
EAST PROVIDENCE — Shoppers' Town, 434-5672  
**TEXAS**  
ABILENE — 2910 North First St., 673-8169  
ARLINGTON — Collins at Park Row, 277-3151  
DALLAS — 1601 Main St., 741-6278  
DALLAS — Medallion Center, 363-6236  
DALLAS — 125 Wynnewood Village, 948-3201  
FORT WORTH — 1515 So. Univ. Dr., 335-4705  
FORT WORTH — 900 East Berry St., 927-7828  
FORT WORTH — 3524 East Denton Highway, 831-1951  
HOUSTON — 8458 Gulf Freeway, 643-4731  
HOUSTON — 2315 Travis St., 523-0871  
HOUSTON — 322 Northline Mall, 697-7914  
HOUSTON (Bellair) — 4755 Bissonnet, 667-5190  
SAN ANTONIO — 150 Wonderland Shop. Ctr., 735-9161  
SHERMAN — 1620 Highway 75 North, 892-6553  
WACO — 1016 Austin Ave., 752-7739  
**VIRGINIA**  
ARLINGTON — Washington-Lee Shop. Ctr., 524-5422  
**WASHINGTON**  
SEATTLE — 2028 Third Ave., 682-5280  
SEATTLE — 837 N.E. 110th St., 364-8670



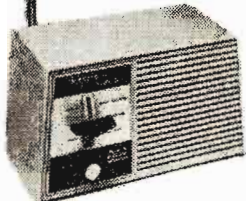
# free

## THE ONE CATALOG THAT REALLY SAVES YOU MONEY!

**Page After Page of  
Exclusive Bargains!**  
Radio Shack's free 43rd Anniversary Issue, just off the press and loaded with values like these:

- ✓ **BECAUSE** only Radio Shack has over 65 Mail Order Centers coast-to-coast.
- ✓ **BECAUSE** you save postage by ordering from the nearest Radio Shack.
- ✓ **BECAUSE** you save time, get faster delivery, by shopping your nearest Radio Shack by mail.
- ✓ **BECAUSE** Radio Shack has one low price—East, Central, South, West.
- ✓ **BECAUSE** Radio Shack is the world's largest chain of electronic stores. We buy better... give you exclusive Special Purchases month after month!

**'INTRaCOM'  
CB Transceiver/  
Intercom**



New solid-state crystal-controlled transceiver/intercom. Wireless 2-way radio! 100 mw output. No license! Has built-in mike, speaker, antenna. Desk-top styling. Uses 117 VAC. #21-903. Only \$34.95.

**16-Transistor TRC-12  
Mobile CB Radio**



Featuring 6 crystal-controlled receive and transmit channels; adjustable squelch; no tubes; instant operation! Only 2x6x7 1/2": fits under the dash of any 12V. car, truck, tractor or boat. #21-909. Only \$119.95.

**2-Channel  
9-Transistor  
Walkie-Talkie**



TRC-22 sends, receives up to 2 miles on TWO CB channels: 5 & 11! No-license 100 mw operation. Provision for AC operation, too. Ceramic filter module cuts adjacent channel interference. Batteries, case included. #21-904. Only \$39.95.

**CLIP  
COUPON  
AND MAIL  
TODAY**

**Radio Shack Mailing List Department**  
2727 West 7th Street, Fort Worth, Texas

RTV 965

Please Mail My Free 1966 Radio Shack Catalog to—

Name (Please Print) \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_



# RADIO-TV EXPERIMENTER

## TERRIFIC GROVE VALUES!

- MIDLAND CB Transceiver with Push-to-Talk Mike. Tuneable (Model 13-160A). Reg. \$109.95 ..... SALE \$89.95
- MIDLAND WALKIE-TALKIE with AM Radio. 11 Transistors (Model 13-111). Reg. \$39.95 ..... SALE \$33.95
- MIDLAND WALKIE-TALKIE with full Accessories. 10 Transistors (Model 13-110). Reg. \$33.95 (2 Channel) ..... SALE \$29.95
- HALLMARK CB Transceiver (Model 1050). For 110 V. & 12 V. Base or Mobile. Reg. \$169.50 ..... SALE \$99.95

### Terrific Sale Prices on Hi-Gain CB 'Topper' Antennas!

- Model TLWR Roof Mount Omni-Topper. Reg. \$11.97 ..... SALE \$ 9.88
- Model TTMP AM-CE Duo-Topper. Reg. \$14.95 ..... SALE \$12.19
- Model TLWT Telescoping Topper Whip. Reg. \$7.00 ..... SALE \$ 5.88
- Model TLWM 50" Topper & Chrome Body Mount. Reg. \$8.95 ..... SALE \$ 7.20
- Model TRC Roof top Omni-Topper. Reg. \$14.95 ..... SALE \$12.15
- Model TMC All-purpose Topper & Body Mount. Reg. \$12.95 ..... SALE \$10.50
- Model TLW 50" Top-loaded Whip. Reg. \$6.90 ..... SALE \$ 5.40
- MODEL CB-3 3 Element Beam Antenna. Reg. \$19.95 ..... SALE \$17.95

### Close-Out Special!!

- TRANSISTORIZED INTERCOM—Two station, inc. 66 ft. cable, plugs, etc., & full instructions. Reg. \$10.95 ..... SALE \$ 7.77
- ROSS 11 TRANSISTOR WALKIE-TALKIE, complete with carrying case, earphone, batteries. Reg. \$39.95 ..... SALE \$29.95
- ROSS INTERCOM ADAPTER converts Ross Walkie Talkie to intercom or base station (110 V.). Reg. \$10.95 ..... SALE \$ 9.95
- COMMAND CRYSTALS for Citizens Band. .002% tol. Specify Make—Model—Channel ..... EACH \$ 1.79  
12 or more—assorted channels... EACH \$ 1.69

- KIT of 5 Assorted 110 V. Timing Motors (\$25.00 val.) ..... KIT \$ 1.99
- KIT of 6 Assorted Relays (\$20.00 val.) KIT \$ 3.19
- KIT of 6 Assorted Can Condensers (Lytics, etc. NEW) ..... KIT \$ 1.99
- KIT of 10 Assorted Rotary Switches (\$10.00 val.) ..... KIT \$ 1.19
- KIT of 10 Assorted Volume Controls (\$10.00 val.) ..... KIT \$ .99
- KIT of 5 Assorted Ferrite Loopsticks (\$10.00 val.) ..... KIT \$ .99
- GROVE BARGAIN FLYER mailed FREE

Check items wanted, return ad or order with check or money order, include additional amount for postage and insurance, excess refunded. 50¢ service charge on orders under \$10.00, minimum order \$5.00. No C.O.D.'s.

**GROVE ELECTRONIC SUPPLY COMPANY**  
4109 W. Belmont Ave. Telephone:  
Chicago, Ill. 60641 (Area 312) 382-6160

JULIAN M. SIENKIEWICZ WA2CQL/KMD4313	Editor
WILLIAM HARTFORD KKD7432	Technical Editor
ANTHONY MACCARRONE	Art Director
JOSEPH DAVIS	Assistant Art Director
RON STAFFIERI	Art Editor
ALBERT DE QUERQUIS	Art Associate
LYNDA P. KALMAN	Art Associate
ELLIOT S. KRANE	Advertising Director
JIM CAPPELLO	Advertising Manager
LEONARD F. PINTO	Production Director
CARL BARTEE	Production Manager
HELEN GOODSTEIN	Assistant Production Manager
RICHARD L. HOWE	Promotion Director
JOSEPH DAFFRON	Executive Editor

President and Publisher

B. G. DAVIS

Executive Vice President and Assistant Publisher

JOEL DAVIS

Vice President and Editorial Director

HERB LEAVY, KMD4529

RADIO-TV EXPERIMENTER, Vol. 19, No. 2 (#756), is published bi-monthly by SCIENCE & MECHANICS PUBLISHING CO., a subsidiary of Davis Publications, Inc. Editorial, business and subscription offices: 505 Park Ave., New York, N. Y. 10022. One-year subscription (six issues)—\$4.00; two-year subscription (12 issues)—\$7.00; and three-year subscription (18 issues)—\$10.00. Add \$1.00 per year for postage outside the U.S.A. and Canada. Advertising offices: New York, 505 Park Ave., PL-2-6200; Chicago: 520 N. Michigan Ave., 527-0330; Los Angeles: 6253 Hollywood Blvd., 213-463-5143; Atlanta: Pirnie & Brown, 3108 Piedmont Rd., N.E., 404-233-6729; Long Island: Lem Osten, 9 Garden Street, Great Neck, N.Y., 516-487-3305; Southwestern advertising representative: Jim Wright, 4 N. Eight St., St. Louis, CH 1-1965.

EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for return or safety of manuscripts, art work, or photographs. All contributions should be addressed to the Editor, Radio-TV Experimenter, 505 Park Avenue, New York, New York 10022.

Second class postage paid at New York, New York and at additional mailing offices. Copyright 1965 by Science and Mechanics Publishing Co.

Volume 44, Part 2

# WHITE'S RADIO LOG

**An up-to-date Broadcasting Directory of North American AM, FM and TV Stations. Including a Special Section on World-Wide Short-Wave Stations**

**T**his is the second part of *White's Radio Log*, now published in three parts twice each year. This format permits the Editors of RADIO-TV EXPERIMENTER to offer to its readers two complete volumes of *White's Radio Log* each year, while increasing the scope of the *Log* and inserting station changes as they occur.

**In this issue** of *White's Radio Log* we have included the following listings: U. S. AM Stations by Location, U. S. FM Stations by States, Canadian AM Stations by Location, Canadian FM Stations by Location, and the expanded, up-to-date World-Wide Short-Wave Section.

In the December/January issue of RADIO-TV EXPERIMENTER, the *Log* will contain the following listings: U. S. AM Stations by Call

Letters, U. S. FM Stations by Call Letters, Canadian AM Stations by Call Letters, Canadian FM Stations by Call Letters, and the expanded World-Wide Short-Wave Section.

**In the event** you missed any part of the *Log* published earlier this year, you will have a complete copy of *White's Radio Log* by collecting any three consecutive issues of RADIO-TV EXPERIMENTER during 1964. The three consecutive issues comprise a complete volume of *White's Radio Log* that offers complete listings with last minute station change data that can not be offered in any other magazine or book. If you are a broadcast band DX'er, FM station logger, like to photograph distant TV test patterns, or tune the short-wave bands, you will find *White's Radio Log* an unbeatable reference.

---

## QUICK REFERENCE INDEX

<b>U.S. AM Stations by Location.....</b>	<b>108</b>
<b>U.S. FM Stations by States.....</b>	<b>117</b>
<b>Canadian AM Stations by Location.....</b>	<b>122</b>
<b>Canadian FM Stations by Location.....</b>	<b>123</b>
<b>World-Wide Short-Wave Stations.....</b>	<b>123</b>



Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
	WBHM	1550	Bristol, Tenn.	WOPJ	1490	Carrollton, Ga.	WLBB	1100		WEDC	1240
	WBRC	960		WKYE	1550	Carrollton, Mo.	KAOL	1430		WGN	720
	WCRT	1260	Bristol, Va.	WCYB	990	Carson City, Nev.	KPTL	1300		WIND	560
	WAQY	1220		WFHG	680	Cartersville, Ga.	WBHF	1430		WJJD	1160
	WFEN	1320	Brookfield, Mass.	WBET	1460		WKRW	1270		WLS	800
	WATV	900		WOKW	1410	Carthage, Ill.	WCZA	990		WMAQ	670
	WSGN	610	Brookville, Ont.	CFJR	1450	Carthage, Mo.	KDMO	1450		WMBI	1110
	WYDE	850	Broken Bow, Nebr.	KCNJ	1280	Carthage, Miss.	WECP	1480		WNUS	1390
Bisbee, Ariz.	WVOK	690	Brookfield, Conn.	WINE	940	Cartnaga, Tenn.	WRKM	1350	Chicago Hgts., Ill.	WMPP	1470
	KSUN	1230	Brookfield, Mo.	KGHM	1470	Carthage, Tex.	KGAS	1590		WCGO	1600
Bishop, Calif.	KIBS	1230	Brookhaven, Miss.	WCHJ	1470	Caruthersville, Mo.	KGRV	1370	Chickasha, Okla.	KWCO	1560
Bishopville, S.C.	WAGS	1390		WJMB	1340	Casa Grande, Ariz.	KFPN	1260	Chico, Calif.	KHSL	1290
Bismarck, N.Dak.	KBRM	550	Brookings, Oreg.	KURY	910	Casey, Ill.	WEIS	900		KPAY	1060
	KBMR	1350	Brookings, S.Dak.	KBRK	1430	Casper, Wyo.	KTWO	1470	Chicopee, Mass.	WACE	730
Bismarck-Mandan, N.Dak.	KBOM	1270	Brookline, Mass.	WBSO	1600	Cathedral City, Calif.	KATI	1400	Childress, Tex.	KCTX	1510
			Brooksville, Fla.	WWJB	1450		KVOC	1230	Chillicothe, Mo.	KCHI	1010
Black Mountain, N.C.	WBMT	1350	Brownfield, Tex.	KKUB	1300	Cayce, S.C.	KWXV	1340	Chillicothe, Ohio	WBEX	1490
	WFGW	1010	Brownsville, Tenn.	WBHT	1520		WGAY	620	Chillicothe, Mo.	WBCH	1350
Black River Falls, Wis.	WUIS	1260	Brownsville, Tex.	KBOR	1600	Cedar City, Utah	KSUB	590	Chippewa Falls, Wis.	WBSG	1240
Blackfoot, Idaho	KBLI	690	Brownwood, Tex.	KBWD	1360		KCFI	1250		WAXX	1150
Blackshear, Ga.	WBSL	1350	Brunswick, Ga.	KEAN	1240		KLKW	1450	Christiansburg, Va.	WJJS	1260
Blackstone, Va.	WKLV	1440		WGIC	1440		WMT	600	Christiansted, V.I.	WIVJ	970
Blackwell, Okla.	KLTR	1580		WMOG	1490		KHAK	1360	Church Hill, Tenn.	WMCH	1260
Blaine, Wash.	KARI	550		WYNR	790		WGAA	1340	Cicero, Ill.	WYON	1450
Blakely, Ga.	WBBK	1260	Brunswick, Maine	WCME	900	Cedartown, Ga.	WGSM	1350	Cincinnati, Ohio	WCIN	1480
Blanding, Utah	KBYB	790	Bryan, Ohio	WBNO	1520	Celina, Ohio	WEIS	900		WCFO	1230
Bloomington, Ill.	WJBC	1230	Bryan, Tex.	KORA	1240	Center, Ala.	WAGT	1550		WKRC	550
Bloomington, Ind.	WTCS	1370	Buckhannon, W.Va.	WTAW	1150	Center, Tex.	KDCE	930	Centerville, Iowa	KCOG	1400
Bloomington, Pa.	WCNR	930	Bucyrus, Ohio	WBEO	1540	Centerville, Ind.	WHON	930	Centerville, Miss.	WLBS	1580
	WHLM	550	Buffalo, N.Y.	WBEN	980	Centerville, Tenn.	WHLP	1570	Centerville, Utah	KBBC	1600
Blountstown, Fla.	WKMK	1370		WYSL	1400	Central City, Ky.	WMCA	1380	Centralia, Ill.	WCNT	1210
Blue Earth, Minn.	KBEW	1560		WYSL	1400	Centralia & Chehalis, Wash.			Centralia, Ill.	KELA	1470
Bluefield, W.Va.	WYHS	1440	Buffalo, Wyo.	KBBB	1450		KELA	1470	Centerville, Ala.	WBIB	1590
	WKON	1240	Buford, Ga.	WDYX	1460	Ceres, Calif.	KLOC	920	Ceres, Calif.	KLOC	920
Blythe, Calif.	KYOR	1450	Burbank, Calif.	KBLA	1500	Chadburn, N.C.	WYVE	1390	Chadron, Nebr.	KCSR	610
Blytheville, Ark.	KLCN	910	Burley, Idaho	KBAR	1230	Chadron, Nebr.	KCSR	610	Chambersburg, Pa.	WCMA	1800
Boaz, Ala.	WBSSA	1300	Burlington, Iowa	KBUR	1490	Champaign, Ill.	WDWS	1400	Champaign, Ill.	WDWS	1400
Boca Raton, Fla.	WBBR	740		KBIA	1150	Chanute, Kans.	KCRB	1460	Chapel Hill, N.C.	WCHL	1360
Bogalusa, La.	WKIC	1490	Burlington, N.C.	WBBB	920	Charleroi, Pa.	WESA	940	Charles City, Iowa	KCHA	1580
	WBOX	920		WBAG	1150	Charles City, Iowa	KCHA	1580	Charleston, Ill.	WCHR	1270
Boise, Idaho	KBOI	670	Burlington, Vt.	WDOA	1400	Charleston, Mo.	KCHR	1350	Charleston, S.C.	WCSC	1390
	KEST	790		WJOT	1230		WCSC	1390		WOKE	1340
	KGEM	1140		WVMT	620	Charleston, S.C.	WCSC	1390		WPAL	730
	KIDO	630	Burnett, Tex.	KTSL	1340	Charleston, S.C.	WCSC	1390		WQSN	1450
	KYME	740	Burns, Oreg.	KRNS	1280	Charleston, S.C.	WCSC	1390		WQSN	1450
Bolivar, Mo.	KBLR	1550	Butler, Ala.	WPRN	1240	Charleston, S.C.	WCSC	1390		WQSN	1450
Bolivar, Tenn.	KBYN	1420	Butler, Mo.	KMAM	1580	Charleston, S.C.	WCSC	1390		WQSN	1450
Bonham, Tex.	KFGG	1260	Butler, Pa.	WBTU	1050	Charleston, S.C.	WCSC	1390		WQSN	1450
Boone, Iowa	KWBG	1590		WISR	680	Charleston, S.C.	WCSC	1390		WQSN	1450
	WATA	1450	Butte, Mont.	KBOW	550	Charleston, S.C.	WCSC	1390		WQSN	1450
Boonville, Ind.	WBNI	1540		KXLF	1370	Charleston, S.C.	WCSC	1390		WQSN	1450
Boonville, Mo.	KWRT	1370	Cadillac, Mich.	WATT	1240	Charleston, S.C.	WCSC	1390		WQSN	1450
Boonville, Miss.	WBIF	1400	Caguas, P.R.	WNLN	1430	Charleston, S.C.	WCSC	1390		WQSN	1450
Boonville, N.Y.	WBRV	900		WVJP	1110	Charleston, S.C.	WCSC	1390		WQSN	1450
Borger, Tex.	KHUZ	1490	Cairo, Ga.	WGRA	790	Charleston, S.C.	WCSC	1390		WQSN	1450
	KBBB	1600	Cairo, Ill.	WKBC	1400	Charleston, S.C.	WCSC	1390		WQSN	1450
Boston, Mass.	WBZ	1030	Calais, Maine	WQDY	1230	Charleston, S.C.	WCSC	1390		WQSN	1450
	WCOP	1150	Caldwell, Idaho	KCGN	1410	Charleston, S.C.	WCSC	1390		WQSN	1450
	WILD	1090	Calera, Ala.	WBVE	1370	Charleston, S.C.	WCSC	1390		WQSN	1450
	WNAO	680	Calixico, Calif.	KICO	1490	Charleston, S.C.	WCSC	1390		WQSN	1450
	WZL	1260	Calhoun, Ga.	WCGA	900	Charleston, S.C.	WCSC	1390		WQSN	1450
	WEEI	500	Camas, Wash.	KVAN	1460	Charleston, S.C.	WCSC	1390		WQSN	1450
	WHDH	850	Cambridge, Md.	WCEM	1240	Charleston, S.C.	WCSC	1390		WQSN	1450
	WMEX	1510	Cambridge, Mass.	WYHR	740	Charleston, S.C.	WCSC	1390		WQSN	1450
	WORL	950	Cambridge, Ohio	WILE	1270	Charleston, S.C.	WCSC	1390		WQSN	1450
Boulder, Colo.	KBOL	1490	Camden, Ark.	KAMD	910	Charleston, S.C.	WCSC	1390		WQSN	1450
	KBEY	1360	Camden, N.J.	WCAM	1310	Charleston, S.C.	WCSC	1390		WQSN	1450
Bowie, Tex.	KBYN	1410	Camden, S.C.	WKDN	800	Charleston, S.C.	WCSC	1390		WQSN	1450
Bowling Green, Ky.	WKCT	930	Camden, Tenn.	WFAL	1220	Charleston, S.C.	WCSC	1390		WQSN	1450
	WBGJ	1340	Cameron, Tex.	KMIL	1330	Charleston, S.C.	WCSC	1390		WQSN	1450
	WLBJ	1410	Camilla, Ga.	WCBL	1220	Charleston, S.C.	WCSC	1390		WQSN	1450
Bowl, Green, Ohio	WMGS	730	Campbell, Ohio	WHOT	1350	Charleston, S.C.	WCSC	1390		WQSN	1450
Boynton Beach, Fla.	WZZZ	1510	Campbellsville, Ky.	WTGO	1450	Charleston, S.C.	WCSC	1390		WQSN	1450
	KXXL	1450	Canandaigua, N.Y.	WCCR	1550	Charleston, S.C.	WCSC	1390		WQSN	1450
Bozeman, Mont.	KBRD	1230	Cannon City, Colo.	KRLN	1400	Charleston, S.C.	WCSC	1390		WQSN	1450
Bradbury Hgts., Md.	WPGC	1580	Canonburg, Pa.	WARO	540	Charleston, S.C.	WCSC	1390		WQSN	1450
Braddock, Pa.	WLOA	1550	Canton, Ga.	WCHK	290	Charleston, S.C.	WCSC	1390		WQSN	1450
Braddocks Heights, Md.	WMHI	1370	Canton, Ill.	WBYS	1560	Charleston, S.C.	WCSC	1390		WQSN	1450
Bradenton, Fla.	WTRF	1490	Canton, Miss.	WMGO	1370	Charleston, S.C.	WCSC	1390		WQSN	1450
	WBFD	1420	Canton, N.C.	WWIT	970	Charleston, S.C.	WCSC	1390		WQSN	1450
Bradford, Pa.	WNAO	680	Canton, Ohio	WCNS	900	Charleston, S.C.	WCSC	1390		WQSN	1450
Brady, Tex.	KNEL	1490		WHOF	1060	Charleston, S.C.	WCSC	1390		WQSN	1450
Brainard, Minn.	KLIZ	1380		WHBC	1480	Charleston, S.C.	WCSC	1390		WQSN	1450
	KVBR	1340		WINW	1520	Charleston, S.C.	WCSC	1390		WQSN	1450
Branson, Mo.	KBHM	1220	Canyon, Tex.	KCAN	1550	Charleston, S.C.	WCSC	1390		WQSN	1450
Brantford, Ont.	CKPC	1380	Cape Girardeau, Mo.	KFVS	960	Charleston, S.C.	WCSC	1390		WQSN	1450
Brattleboro, Vt.	WTA	1450		KZYM	1220	Charleston, S.C.	WCSC	1390		WQSN	1450
	WAB	1490		KGMO	1550	Charleston, S.C.	WCSC	1390		WQSN	1450
Brawley, Calif.	KROP	1300	Carbondale, Ill.	WCIL	1020	Charleston, S.C.	WCSC	1390		WQSN	1450
Brazil, Ind.	WVCM	1380	Carbondale, Pa.	WDBI	1440	Charleston, S.C.	WCSC	1390		WQSN	1450
Breckenridge, Minn.	KBMW	1450	Caribou, Maine	WFST	800	Charleston, S.C.	WCSC	1390		WQSN	1450
	KSTB	1430	Carlisle, Pa.	WHYL	960	Charleston, S.C.	WCSC	1390		WQSN	1450
Breckenridge, Tex.	KSTB	1430		WIOO	1000	Charleston, S.C.	WCSC	1390		WQSN	1450
Bremen, Ga.	WWCC	1440	Carlsbad, N.Mex.	KAVE	1240	Charleston, S.C.	WCSC	1390		WQSN	1450
Bremerton, Wash.	KBRD	1490		KPEM	740	Charleston, S.C.	WCSC	1390		WQSN	1450
Brenham, Tex.	KWHI	1280	Carmel, Calif.	KRML	1410	Charleston, S.C.	WCSC	1390		WQSN	1450
Brevard, N.C.	WPNF	1240	Carmi, Ill.	WROY	1460	Charleston, S.C.	WCSC	1390		WQSN	1450
Brewster, N.Y.	WBRW	1510	Carroll, Pa.	WZUN	1390	Charleston, S.C.	WCSC	1390		WQSN	1450
Brewton, Ala.	WEBJ	1240	Caro, Mich.	WKYO	1360	Charleston, S.C.	WCSC	1390		WQSN	1450
Bridgeton, Ala.	WBTS	1480	Carolina, P. R.	WVOZ	1400	Charleston, S.C.	WCSC	1390		WQSN	1450
Bridgeton, Conn.	WICC	600	Carrington, N.Dak.	KDAK	1600	Charleston, S.C.	WCSC	1390		WQSN	1450
	WAB	1450	Carrizo Springs, Tex.			Charleston, S.C.	WCSC	1390		WQSN	1450
Bridgeton, N.J.	WSNJ	1240		KBEN	1450	Charleston, S.C.	WCSC	1390		WQSN	1450
Brigham City, Utah	KBUH	800		KCIM	1380	Charleston, S.C.	WCSC	1390		WQSN	1450
Brighton, Colo.	KBRN	800		WRAG	590	Charleston, S.C.	WCSC	1390		WQSN	1450
Brinkley, Ark.	KBRI	1570				Charleston, S.C.	WCSC	1390		WQSN	1450
Bristol, Conn.	WBIS	1440				Charleston, S.C.	WCSC	1390		WQSN	1450

# WHITE'S RADIO LOG

Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
Columbia, Mo.	KFRU	1400	Crewe, Va.	WJSB	1050	Elizabethtown, N.C.		
Columbia, Pa.	KCGM	1580	Crockett, Tex.	WSPS	800	WBLA	1440	
Columbia, S.C.	WC0Y	1580	Crookston, Minn.	KIVY	1240	Elk City, Pa.	WHRY	1600
	WCOS	1400	Crosssett, Ark.	KROX	1250	Elk City, Okla.	KBEK	1420
	WOIC	1320	Crossville, Tenn.	KAGH	800	Elkhart, Ind.	WTRC	1340
	WNOK	1230	Crowley, La.	WAEW	1330		WCMR	1270
Columbia, Tenn.	WQXL	1470	Cuero, Tex.	KSFH	1600	Elkins, N.C.	WIFM	1540
	WMPG	1280	Cullman, Ala.	WFMH	1600	Elkins, W.Va.	WDNE	1240
	WKRM	1340		WVUA	1490	Elko, Nev.	KELK	1240
Columbus, Ga.	WDAK	540	Culpeper, Va.	WCVA	1490	Elkton, Md.	WSEB	1550
	WREL	1420	Cumberland, Ky.	WCPC	1280	Elensburg, Wash.	KWSP	1240
	WGBA	1270	Cumberland, Md.	WCUM	1230	Ellenville, N.Y.	WELV	1370
	WCLS	1580		WTBO	1450	Ellsworth, Me.	WDEA	1370
	WOKS	1340	Cummings, Ga.	WSNE	1410	Elmira, N.Y.	WELM	1410
Columbus, Ind.	WCST	1010	Cushing, Okla.	KUSH	1600		WENY	1230
Columbus, Miss.	WAGR	1050	Cuyahoga Falls, Ohio	WCUE	1150	Elmira Heights- Horseheads, N.Y.		
	WCBI	550				WEHH	1590	
	KJSK	900	Cypress Gardens, Fla.	WGTO	540	El Paso, Tex.	KROD	600
	KWJ	1510		WCYN	1400		KELP	920
Columbus, Ohio	WBNS	1460	Cynthiana, Ky.	WCYN	1400		KHEY	690
	WCOL	1230	Dade City, Fla.	WDVC	910		KINT	1590
	WMNI	920	Dadeville, Ala.	KXIT	1410		KIZZ	1150
	WOSU	820	Dalhart, Tex.	WAAA	960		KSET	1340
	WTYN	610	Dallas, N.C.	KRDW	1460		KTSM	1380
	WKCO	1580	Dallas, Oreg.	KRLD	1080	El Reno, Okla.	KREL	650
Colville, Wash.	WJJC	1270	Dallas, Tex.	KIXL	1040	Ely, Minn.	WELY	1450
Lomache, Tex.	KCOM	1550		KSKY	660	Ely, Nev.	KELY	1230
Commerce, Ga.	WJJC	1270		KLIF	1190	Elyria, Ohio	WEOL	930
Concord, Calif.	KWUN	1480		WFAA	570	Eminence, Ky.	WSTL	1600
Concord, N.H.	WXKL	1450		WFAA	570	Emporia, Kans.	KVOE	1400
Concord, N.C.	WEGO	1410		WFAA	570	Emporia, Va.	WEVA	860
Concordia, Kans.	KNGK	1390		WFAA	570	Emporium, Pa.	WLSM	1250
Conneaut, Ohio	WDDW	1420		WFAA	570	Endicott, N.Y.	WENE	1480
Connellsville, Pa.	WCVI	1340		WFAA	570	Englewood, Colo.	KGMC	1150
Connersville, Ind.	WCNB	1580		WFAA	570	Englewood, Fla.	WENG	1580
Conroe, Tex.	KMCO	900		WFAA	570	Enid, Okla.	KCRC	1390
Conter, Ark.	KCON	1230		WFAA	570		KGWA	960
	KVEE	1330		WFAA	570	Enterprise, Ala.	WIRE	600
Conway, N.H.	WBNC	1050		WFAA	570	Enterprise, Oreg.	KYRB	1340
Conway, S.C.	WLAT	1330		WFAA	570	Ephrata, Pa.	WGEF	650
Cookeville, Tenn.	WPTN	1550		WFAA	570	Ephrata, Wash.	KULF	790
	KCKY	1150		WFAA	570	Erie, Pa.	WVNY	1260
	KOOS	1230		WFAA	570		WICU	1380
	KYNG	1420		WFAA	570		WJET	1400
	WLSB	1400		WFAA	570		WVGO	1450
Copper Hill, Tenn.	KWRO	830		WFAA	570	Erwin, Tenn.	WEMB	1420
Cornville, Oreg.	WVRT	1220		WFAA	570	Escanaba, Mich.	WELC	600
Coral Gables, Fla.	WVCG	1080		WFAA	570		WLB	600
	WYGO	1330		WFAA	570	Eseondido, Calif.	KOWN	1450
Corbin, Ky.	WCTT	680		WFAA	570	Espanola, N. M.	KDCE	970
	WVJM	1490		WFAA	570	Etowah, Tenn.	WCPH	1220
Cordele, Ga.	KLAM	1450		WFAA	570	Eufaula, Ala.	WULA	1240
Cordova, Alaska	WCMA	1230		WFAA	570	Eugene, Oreg.	KORE	1450
Corinth, Miss.	WCDB	1450		WFAA	570		KPIR	1500
Cornelia, Ga.	KCOR	1260		WFAA	570		KWNC	780
Corning, Ark.	WCBA	1350		WFAA	570		KATR	1320
Corning, N.Y.	WCLI	1450		WFAA	570		KERG	1280
Corona, Cal.	KREL	1370		WFAA	570		KUGN	590
Corpus Christi, Tex.	KCTA	1030		WFAA	570		KWFS	1540
	KCGT	1150		WFAA	570	Eunice, La.	KEUN	1490
	KEYS	1440		WFAA	570	Eureka, Calif.	KINS	980
	KRYB	1360		WFAA	570		KIDN	790
	KSIX	1230		WFAA	570	Eustis, Fla.	WLO	1240
	KUNO	1400		WFAA	570	Evanston, Ill.	WEAW	1330
Corry, Pa.	WOTR	1370		WFAA	570		WNMP	1590
	KAND	1340		WFAA	570	Evanston, Wyo.	KEVA	1240
Corsicana, Tex.	KFCF	740		WFAA	570	Evanville, Ind.	WROZ	1400
Cortice, Colo.	WKRT	1320		WFAA	570		WGBF	1280
Cortland, N.Y.	KFLY	1240		WFAA	570		WKY	820
	KLOO	1550		WFAA	570		WJSP	1330
	KLOO	1550		WFAA	570	Eveleth, Minn.	WEVE	1340
Corvallis, Ore.	KLOO	1550		WFAA	570	Everett, Pa.	WDSO	1110
Corydon, Ind.	WPDF	1340		WFAA	570	Everett, Wash.	KRKO	1380
Coshocton, Ohio	WTNS	1560		WFAA	570		KWYZ	1230
Cottage Grove, Ore.	KNDN	1400		WFAA	570	Evergreen, Ala.	WBLO	1470
Cottonwood, Ariz.	KVFD	1240		WFAA	570	Fairbanks, Alaska	KFRB	610
	KVIO	1600		WFAA	570		KFRB	900
Cottonsport, Pa.	WFRM	600		WFAA	570	Fairfax, Nebr.	KFB	1310
Council Bluffs, Iowa	KFNF	920		WFAA	570	Fairfax, Va.	WEEL	1310
	KRCB	1360		WFAA	570	Fairfield, Ill.	WFIW	1390
	KFCP	1440		WFAA	570	Fairfield, Iowa	KMCD	1570
Courtenay, B.C.	WGFS	1430		WFAA	570	Fairhope, Ala.	WABF	1220
Covington, Ga.	WCUL	1320		WFAA	570	Fairmont, Minn.	KSUM	1370
Covington, La.	WARR	730		WFAA	570	Fairmont, N.C.	WFMO	860
Covington, Tenn.	WKBL	1250		WFAA	570	Fairmont, W.Va.	WMNN	920
Covington, Va.	WKEX	1540		WFAA	570		WTCB	1490
Cowan, Tenn.	WZYX	1440		WFAA	570	Fairway, Kan.	KUDL	1380
Craig, Colo.	KRAI	1550		WFAA	570	Fajardo, P.R.	WMDD	1480
Crane, Tex.	KCRR	1380		WFAA	570	Fall River, Mass.	KPSO	1260
	KBSN	970		WFAA	570	Fall River, Tex.	WALE	1400
				WFAA	570		WSAR	480
Crawfordsville, Ind.	KPVL	1550		WFAA	570		WVSP	980
Crescent City, Calif.	WCYL	1240		WFAA	570	Falls Church, Va.	WFAZ	1220
	KPOD	1310		WFAA	570	Falls City, Nebr.	KTNC	1230
Creston, Iowa	KSIB	1520		WFAA	570	Fargo, N.Dak.	WDAY	970
Crestview, Fla.	WCNU	1010		WFAA	570		KFNW	900
				WFAA	570		KQWB	1550
				WFAA	570	Farihaull, Minn.	KXGO	790
				WFAA	570	Farmersville, La.	KTDL	1470
				WFAA	570	Farmington, Me.	WKJT	1380
				WFAA	570	Farmington, Mo.	KREI	800
				WFAA	570	Farmington, N.M.	KENY	1390
				WFAA	570		KWYK	960
				WFAA	570		KRZE	1280
				WFAA	570	Farmville, N.C.	WEAG	1250
				WFAA	570	Farmville, Va.	WFLO	870
				WFAA	570	Farrell, Pa.	WFAF	1470
				WFAA	570	Farwell, Tex.	KZOL	1570
				WFAA	570	Fayette, Ala.	WWVF	990
				WFAA	570	Fayetteville, Ark.	KHOG	1440
				WFAA	570		KFAY	1230

Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
Fayetteville, N.C.	WFAI	1230	Fremont, Mich.	WBFC	1490	Grand Junction, Colo.	KREX	920	Harriman, Tenn.	WHBT	1600
	WFNC	940		WSHN	1550		KXEX	920	Harrisburg, Ill.	WEBQ	1240
	WFLB	1490	Fremont, Nebr.	KHUB	1340		KEXO	1230	Harrisburg, Pa.	WFEC	1400
	WIDU	1600	Fremont, Ohio	WFRO	900		KSTR	620		WCMB	1460
Fayetteville, Tenn.	WEKR	1240	Fresno, Calif.	KARM	1430		KWSL	1340		WHP	580
				KBIF	900	Grand Prairie, Tex.	KPCW	730		WKBO	1230
Fergus Falls, Minn.	KOTE	1250		KIRV	1510				Harrison, Ark.	KHOZ	900
				KEAP	980	Grand Rapids, Mich.	WJEF	1230	Harrisonburg, Va.	WHSG	1360
Fernandino Beach, Fla.	WFBF	1570		KXEX	1550		WFUR	1570		WSA	550
	KFNV	1600		KFRE	920		WGRD	1410	Harrodsburg, Ky.	WHBN	1420
Festus, Mo.	KJCF	1400		KGST	1600		WLAJ	1340	Hartford, Conn.	WDRC	1360
				KMAK	1340		WMAJ	1480		WCCC	1290
Festus-St. Louis, Mo.	KXEN	1010		KMJ	580	Grand Rapids, Minn.	WOOD	1300		WPOP	1410
Findlay, Ohio	WFJN	1330	Front Royal, Va.	KYNO	1900				Hartford, Wis.	WTKM	1540
Fisher, W.Va.	WELD	690	Frostburg, Md.	WFRB	580	Grangeville, Idaho	KORT	1230	Hartselle, Ala.	WHRJ	860
Fitchburg, Mass.	WEIM	1280	Fulton, Ky.	WFUL	1270	Granite City, Ill.	WGNO	920	Hartsville, S.C.	WHSC	1450
	WFGM	960	Fulton, Mo.	KFAL	900	Granite Falls, N.C.	WKJK	1580	Hartwell, Ga.	WKLY	980
Fitzgerald, Ga.	WBHB	1240	Fulton, N.Y.	WOSC	1300				Harvard, Ill.	WMCW	1600
Flagstaff, Ariz.	KCLS	600	Fuquay Sprgs., N.C.	WFVG	1460	Grants, N.Mex.	KMIN	980	Harvey, Ill.	WBEE	1570
	KJKJ	1400		WGAD	1350	Grants Pass, Ore.	KAGI	980	Hastings, Mich.	WBCH	1220
	KEOS	600	Gadsden, Ala.	WZTO	930		KJIO	1270	Hastings, Minn.	KDWA	1400
	KFMO	1240		WAAX	570	Grayson, Ky.	WGHO	1370	Hastings, Nebr.	KHAS	1230
Flat River, Mo.	WFDF	910		WEAC	1500	Gt. Barrington, Mass.	WSBS	860		KICS	1550
	WTRX	1330	Gaffney, S.C.	WFGN	1570		WSBS	860	Hattiesburg, Miss.	WBJH	950
	WAMM	1420	Gainesville, Fla.	WDVH	980	Gt. Bend, Kans.	KFBG	1590		WFOR	1400
	WMRP	1570		WGGG	1230	Gt. Falls, Mont.	KFBB	1310		WHSY	1230
	WKMF	1470		WRUF	850		KDUI	1450		WXXX	1310
	WTA	600		WUWU	1390		KMON	960	Havelock, N.C.	WUSM	1330
Flomaton, Ala.	WTCB	990	Gainesville, Ga.	WGGA	550		KARR	1400	Haverhill, Mass.	WHAV	1490
Florence, Ala.	WJGI	1340		WDUN	1240	Greeley, Colo.	KFKA	1310	Havre, Mont.	KOJM	610
	WOWL	1240		WLBA	1580		KYOU	1450	Havre de Grace, Md.	WASA	1330
Florence, S.C.	WJMX	970	Gainesville, Tex.	KGAF	1580	Green Bay, Wis.	WBAY	1360		WCEH	610
	WOLS	1230	Gaithersburg, Md.	WHMC	1150		WJPG	1440	Haynesville, La.	KLUV	1580
	WYNN	540	Galax, Va.	WBOB	1360		WDUZ	1400	Hays, Kans.	KAYS	1410
Floydada, Tex.	KFLD	900	Gatesburg, Ill.	WGIL	1400	Greeneville, Tenn.	WGRV	1340	Hayward, Wis.	WHSM	900
Foley, Ala.	WELA	1310		WGTB	1450		WGWB	1520	Hazard, Ky.	WKIC	1390
Fond du Lac, Wis.	KFIZ	1450	Gallatin, Tenn.	WHIN	1010	Greenfield, Mass.	WHAI	1240	Hazelhurst, Ga.	WVOH	920
Fordeyce, Ark.	KBJT	1570	Gallipolis, Ohio	WJEH	990	Greensboro, N.C.	WBIG	1470	Hazelhurst, Miss.	WMDC	1220
Forest, Miss.	WMAG	860	Gallup, N. Mex.	KGAK	1330		WCQG	1320	Hazleton, Pa.	WAZL	1490
Forest City, N.C.	WBBO	780		KYVA	1230		WEAL	1510	Helena, Ark.	KFFA	1360
	WAGY	1320	Galveston, Tex.	KILE	1400		WKTG	1550	Helena, Mont.	KCAP	1340
Forest Grove, Ore.	KWAY	1570		KGBC	1540		WGBG	1400		KBLL	1240
Forrest City, Ark.	KXJK	950	Gander, Md.	CBG	1450	Greensburg, Pa.	WPET	950	Hemet, Calif.	KHJS	1320
Ft. Atkinson, Wis.	WPAW	940	Garden City, Kans.	KNCS	1030		WGYV	1380	Hempstead, N.Y.	WHLI	1100
Ft. Bragg, Calif.	KDAC	1230		KIUL	1240	Greenville, Ala.	WYFL	1600	Henderson, Ky.	WSON	860
Ft. Campbell, Ky.	WABD	1370	Garden City, Mich.	WERB	1090	Greenville, Mich.	WPLB	1380	Henderson, Nev.	KBML	1400
Ft. Collins, Colo.	KCOL	1410		WGVA	1340	Greenville, Miss.	WJPR	1330		WZDR	1280
	KZIX	600	Gardner, Mass.	WGWA	1370		WDOT	900	Henderson, N.C.	WHNC	890
Ft. Dodge, Iowa	KVFD	1400	Gary, Ind.	WGCA	1240		WGVW	1260		WIZS	1450
	KWMT	540		WLTI	1370	Greenville, N.C.	WNCT	1590	Henderson, Tex.	KGRI	1000
Ft. Knox, Ky.	WSAC	1470	Gastonia, N.C.	WGNC	1450		WOOU	1340	Hendersonville, N.C.	WHKP	1450
Ft. Lauderdale, Fla.	WFTL	1400		WLTC	1370		WPXY	1550		WHLP	1600
	WWIL	1500	Gate City, Va.	WGAT	1050	Greenville, S.C.	WESC	660	Henryetta, Okla.	KHEN	1590
Ft. Madison, Iowa	KXGI	1360	Gaylord, Mich.	WATC	900		WFBC	1330	Hereford, Tex.	KPAN	860
Ft. Morgan, Colo.	KFTM	1400	Geneseo, Ill.	WGEN	1500		WWRB	1490	Herkimer, N.Y.	WALY	1420
Ft. Myers, Fla.	WINK	1240	Geneva, Ala.	WGEA	1150	Greenville, Tex.	WGCH	1490	Hermiston, Ore.	KOHU	1570
	WMYR	1410	Geneva, Ill.	WGSB	1480	Greenwich, Conn.	WABG	960	Herndon, Va.	WHRN	1440
	WCAI	1350	Geneva, N.Y.	WGEA	1240	Greenwood, Miss.	WGRM	1240	Herrin, Ill.	WJPF	1340
	WJTV	1400	Georgetown, Del.	WGVA	1400		WLEF	1450	Hettinger, N.Dak.	KNDC	1490
	WZOB	1250	Georgetown, Ky.	WAXU	1580		WGRM	1240	Hibbing, Minn.	WFMC	1440
Ft. Pierce, Fla.	WARR	1380	Georgetown, S.C.	WGTT	1400	Grinnell, Iowa	KGRN	1410	Hickory, N.C.	WHKY	1290
	WIRA	1400	Georgetown, Tex.	WGTO	1470		WGRN	1410		WIRG	630
Ft. Scott, Kans.	KMDO	1600	Gettysburg, Pa.	WGTT	1320	Greenwood, S.C.	WLEF	1450		WSPF	1000
Ft. Smith, Ark.	KFPV	1230	Gillette, Wyo.	KIML	1490	Greer, S.C.	WGSW	1350	Highland, Ill.	WINU	1510
	KFSA	950	Gilroy, Calif.	KFEI	1490		WCKI	1300	Highland Park, Ill.	WEEF	1440
	KTCS	1410	Gladewater, Tex.	KEES	1430	Grenada, Miss.	WNAG	1400	Highland Park, Tex.	KVIL	1150
	KHHN	1320	Glasgow, Ky.	WKAY	1490	Gresham, Ore.	KDRR	1230	Highland Springs, Va.	WENZ	1430
Ft. Stockton, Tex.	KFST	860	Glasgow, Mont.	WCDS	1440	Griffin, Va.	WMNA	730		WVNF	1250
Ft. Valley, Ga.	WFPM	1150	Glen Burnie, Md.	WISZ	1590		WKEU	1450	High Point, N.C.	WNOS	1590
Ft. Walton Beach, Fla.	WNUE	1400	Glendale, Ariz.	KRUX	1360		WHIE	1320		WHPE	1070
	WFTW	1260	Glendale, Calif.	KIEV	870	Grinnell, Iowa	KGRN	1410	Hillsboro, Ohio	WSRW	1590
Ft. Wayne, Ind.	WGL	1250	Glendive, Mont.	KXGN	1400	Groton, Conn.	WSUB	980	Hillsboro, Ore.	KUJK	1360
	WWDW	1160	Glennallen, Alaska	KCAM	790	Grove City, Pa.	WSAJ	1340	Hillsboro, Tex.	KHBB	1560
	WANE	1450	Glens Falls, N.Y.	WSET	1410	Grundy, Va.	WNRR	940	Hillsdale, Mich.	WCSSR	1340
	WKJG	1380		WWSC	1450	Guayama, P.R.	WFRF	1590	Hillsville, Va.	WHVV	1400
Ft. Worth, Tex.	KJIM	670	Glenwood Sprgs., Colo.	WKIG	1580	Gulfport, Miss.	WROA	1390	Hilo, Hawaii	KHCB	970
	KCUL	1540	Globe, Ariz.	KGLN	980		WGCM	1240		KIPA	1110
	KFJZ	1270	Globe, Ariz.	KZOW	1240	Gunnison, Colo.	KGUC	1490	Hinesville, Ga.	KIMO	850
	KNOK	970	Gloucester, Va.	WDDY	1420	Guntersville, Ala.	WGSV	1270	Hinton, W. Va.	KGML	990
	WBAP	570	Gloversville-Johnston, N.Y.	WENT	1340	Guthrie, Okla.	KWRW	1490	Hobbs, N.Mex.	WKWE	1480
	WBAP	820		KBLY	1220	Guyton, Okla.	KGYN	1220		KHOB	1390
Fostoria, Ohio	WFOB	1430	Gold Beach, Ore.	KICM	1250	Hagerstown, Md.	WARK	1490	Holbrook, Ariz.	KDJI	1270
Fountain City, Tenn.	WGYV	1430	Golden, Colo.	KLEB	1600	Haines City, Fla.	WHAN	930	Holdenville, Okla.	KVYL	1370
	WROL	1490	Golden Meadow, La.			Haleyville, Ala.	WHL	930	Holdredge, Nebr.	KUVR	1380
Fountain Inn, S.C.	WFIS	1600	Golden Valley, Minn.	KQRS	1440	Halfway, Md.	WHAG	1410	Holland, Mich.	WHTC	1450
Fowler, Calif.	WFIS	1220		KUXL	1570	Hamden, Conn.	WDEE	1220		WGHT	1520
Framingham, Mass.	WKOX	1190		KFMS	1570	Hamilton, Ala.	WERH	970	Hollybrook, Fla.	WGMA	1320
Frankfort, Ind.	WILQ	1570		WGBR	1150	Hamilton, Mont.	KYLQ	980	Holly Hill, S.C.	WHHL	1440
Frankfort, Ky.	WFKY	1490		WGOL	1300	Hamilton, Ohio	WMOH	1450	Holyoke, Mass.	WRBB	930
Franklin, Ky.	WFKN	1220	Gonzales, Tex.	KCTI	1450	Hamlet, N.C.	WKDC	1250	Homer, La.	KHAL	1320
Franklin, La.	KFRA	1390	Goodland, Kans.	KLOE	730	Hammond, Ind.	WJOB	1230	Homestead, Fla.	WHI	1430
Franklin, N.C.	WFSC	1050	Goshen, Ind.	WKAM	1460	Hammond, La.	WFPR	1400	Honolulu, Hawaii	KAIM	870
Franklin, N.H.	WFTR	1240	Gouverneur, N.Y.	WIGS	1230	Hammond, N.J.	WNJH	1580		KGMB	500
Franklin, Pa.	WFRN	1450	Grafton, N.D.	KGPC	1340	Hampton, S.C.	WBEC	1270		KZOO	1210
Franklin, Tenn.	WAGG	950	Grafton, W.Va.	WVWV	1260	Hampton, Va.	WHCC	1490		KHAI	1090
Franklin, Va.	WYSR	1250	Graham, Tex.	KSWA	1350	Hancock, Mich.	WML	920		KPOI	1380
Frederick, Md.	WFMD	930	Grand Coulee, Wash.	KFDR	1460	Hanford, Calif.	KNGS	620		KIKJ	830
Frederick, Okla.	KTAT	1570	Grand Forks, N.D.	KFJM	1370	Hannibal, Mo.	KHMO	1070		KGLD	760
Fredericksburg, Tex.	KNFA	910		KILO	1440	Hanover, N.H.	WDSL	1400		KHVN	1040
	WFVA	1280	Grand Haven, Mich.	WGHN	1370		WDCR	1340		KNDI	1270
	WFLS	1350	Grand Island, Nebr.	KMMJ	750	Hanover, Pa.	WHVR	1280		KOHO	1170
Fredericktown, Mo.	KFTW	1450		KRGJ	1430	Hardin, Mont.	KHDN	1230		KOLL	1420
Fredonia, N.Y.	WBUZ	1570				Harlan, Ky.	WHLN	1410		KOBL	650
Freeport, Ill.	WFRL	1570				Hartington, Tex.	KGRT	1530		KTRG	990
Freeport, N.Y.	WGBB	1240									
Freeport, Tex.	IKBRZ	1460									

# WHITE'S RADIO LOG

Location C.L. Kc.

Hood River, Oreg. KULA 600  
KIHR 1340  
Hope, Ark. KXAR 1490  
Hopewell, Va. WHAP 1340  
Hopkinsville, Ky. WHDP 1230  
WKO 1480  
KHOK 1560  
Heguiam, Wash. WHHG 1320  
Hornell, N.Y. WLEA 1480  
Hot Springs, Ark. KAAB 1340  
KBHS 590  
KZNG 1470  
Hot Springs, S.Dak. KOBH 580  
Houghton, Mich. WHDF 1400  
Houghton Lake, Mich. WHGR 1290  
Houlton, Maine WHOU 1340  
Houma, La. KCIL 1490  
Houston, Miss. WCFP 940  
Houston, Mo. KTBC 1250  
Houston, Tex. KCOH 1430  
KENB 1070  
KILT 610  
KNUZ 1230  
KODA 1010  
KPRC 950  
KTHT 790  
KTRH 740  
KXYG 1320  
KYOK 1590  
Howell, Mich. WHMI 1350  
Hudson, N.Y. WHUC 1230  
Hugo, Okla. KIHN 1340  
Humacao, P.R. WALO 1240  
Humboldt, Tenn. WHRJ 740  
Huntingdon, Pa. WHUN 1150  
Huntington, Ind. WHLT 900  
Huntington, N.Y. WGSW 740  
Huntington, W.Va. WKEE 800  
WSAZ 930  
WWHY 1470  
Huntsville, Ala. WBPH 1230  
WHP 1600  
WFIX 1450  
WAAY 1550  
KSAM 1490  
KIJV 1340  
Hutchinson, Kans. KWBW 1450  
KWHK 1260  
KDUZ 1260  
Hyde Park, N.Y. WHYW 950  
Idabel, Okla. KBEL 1240  
Idaho Falls, Idaho KID 590  
KTEE 1260  
WCOF 1490  
Independence, Ia. KUPI 980  
KOUR 1220  
Independence, Kans. KIND 1010  
KCCX 1510  
Indiana, Pa. WDAO 1450  
Indianapolis, Ind. WATI 810  
WBRI 1500  
WFBM 1260  
WGEE 1590  
WIBC 1070  
WIFE 1310  
WIRE 1430  
WXLW 950  
Indianola, Iowa KBAB 1490  
Indianola, La. KBAB 1490  
Indianola, Miss. WILA 1380  
Indian Rocks Beach, Fla. WGNP 1520  
Indio, Calif. KREO 1400  
Inglewood, Calif. KTYM 1460  
Inkster, Mich. WCHB 1440  
International Falls, Minn. KGHs 1230  
KALN 1370  
Iola, Kansas WIDN 1430  
Ionia, Mich. WSUI 910  
Iowa City, Iowa KXIC 800  
KFTG 1510  
Iowa Falls, Iowa WMIQ 1450  
Iron Mtn., Mich. WRIX 1480  
Irondale, Ala. WIRO 1230  
Ironwood, Mich. WMS 630  
Irvine, Ky. WIRY 1550  
Isabella, P.R. WISA 1390  
Ishpeming, Mich. WJPD 1240  
WCKD 970  
Islip, N.Y. WBC 540  
Ithaca, N.Y. WICU 870  
WTKO 1470  
Iuka, Miss. WVOM 1270  
Jackson, Ala. WHOD 1290

Jackson, Mich. WIBM 1450  
WKHM 970  
WJCO 1510  
WJDX 820  
WJQS 1400  
WJXN 1450  
WOKJ 1550  
WWUN 1590  
WRBC 1300  
WLSI 930  
WLMJ 1280  
WDXI 1310  
WJAK 1460  
WJTS 1390  
WYLO 540  
KSGT 1340  
KGMR 1500  
WJAX 980  
WAFE 600  
WZOK 320  
WVIV 1050  
WMBR 1460  
WOB 1360  
WPDQ 600  
WQIK 1280  
WRHC 1400  
WJLS 1550  
WDDS 1180  
WJQS 1400  
WJNC 1240  
WLAS 910  
KEBE 1400  
WBJX 1010  
KEYJ 1400  
KSJB 600  
WJTN 1240  
WKSJ 1340  
WCLC 1260  
WCLD 1230  
WVWB 1380  
WARF 1240  
WITZ 990  
KTXJ 1350  
KLIK 950  
KWOS 1240  
WJCF 1480  
WVXW 1450  
KCKW 1480  
KJEF 1290  
KART 1400  
WJBM 1480  
WBGR 1370  
KJID 400  
WJCW 910  
WETB 790  
WJES 250  
WIZR 900  
WJAC 850  
WARD 1490  
WCRO 1230  
WJOL 1340  
WIRC 1510  
CJLM 1350  
KBTM 1230  
KNEA 970  
KTCC 920  
WJSO 1590  
KANV 1480  
WMBW 1450  
KQYX 1560  
KFSB 1310  
KODE 1230  
KMBL 1450  
KJCK 1420  
KJNO 630  
KINY 800  
KLEI 1130  
WKPR 1420  
WKZO 590  
WKLZ 1470  
WKMI 1360  
KGEZ 600  
KOFI 930  
WADP 960  
WKAN 1320  
WGTL 870  
WRKB 1460  
KCKN 1340  
KCMO 810  
KMBG 980  
KFRS 1590  
WDAF 610  
WHB 710  
WKAU 1050  
KAML 990  
KEKO 790  
KGFV 1340  
KRN 1460  
WKNE 1290  
WKBK 1220  
KLOG 1490  
KMER 950  
KAWK 1570  
KABL 990  
KBOA 830  
KBXN 1540  
Kennewick-Pasco-Richtland, Wash. KEPR 610  
Kenosha, Wis. WLIP 1050

Kent, O. WKNT 1520  
Keokuk, Iowa KOKK 1310  
Kermit, Tex. KERB 600  
Kerrville, Tex. KER 1230  
Kershaw, S.C. WKSC 1300  
Ketchikan, Alaska KTKN 930  
Kewanee, Ill. WKEJ 1450  
Keyser, W.Va. WKYR 1270  
WKLP 1390  
Key West, Fla. WKWF 1600  
WJZ 1500  
Kilgore, Tex. KOCA 1240  
Killen, Tex. KLEN 1050  
Kimball, Nebr. KIMB 1260  
King, N.C. WKTE 1090  
King City, Calif. KRKC 1490  
Kingman, Ariz. KAAA 1230  
Kings Mountain, N.C. WKMT 1220  
WKIN 1320  
Kingsport, Tenn. WKPT 1550  
Kingston, N.Y. WBAZ 1550  
WGHQ 920  
WKNY 1490  
Kingstree, S.C. WDKD 1310  
Kingsville, Tex. KLINE 1350  
Kinston, N.C. WJLT 1010  
WFTC 960  
WJSP 1230  
KYAC 1460  
KBLE 1050  
Kirksville, Mo. KIRX 1450  
Kissimmee, Fla. WOSB 1220  
Kittanning, Pa. WACB 1380  
Klamath Falls, Ore. KAGO 1150  
KFLG 1450  
KLAB 960  
KNIA 1320  
Knoxville, Iowa WBRF 1240  
Knoxville, Tenn. WJTB 1600  
WATE 620  
WKXV 900  
WNOX 990  
WROL 1490  
WIOU 1350  
WKQZ 1350  
WLNH 1350  
WLA 1490  
LaCrosse, Wis. WKBB 1410  
WLXC 1490  
WKTY 580  
WLDY 1340  
WLFA 1590  
WASK 1450  
WYAB 1110  
WBAA 920  
KPEL 1420  
KVOL 1330  
KXXW 1520  
WEEN 1460  
WLAF 1450  
WLAN 1350  
WLAG 620  
WTRP 620  
WTAQ 1570  
KVLG 1370  
KBZZ 1450  
KLOU 1580  
KPN 1470  
KADK 400  
WDSR 1340  
WRO 960  
WJOT 1260  
WLR 1510  
WLAJ 1430  
WON 1230  
WWAY 1330  
Lake Placid, N.Y. WIRD 920  
Lake Providence, La. KLPL 1050  
Lake Tahoe, Calif. KOWL 1490  
Lakeview, Oreg. KQIK 1230  
Lake Wales, Fla. WIPC 1280  
Lakewood, Colo. KLAK 1600  
Lakewood Center, Wash. KFHA 1480  
WLR 1380  
Lamar, Colo. KLMR 920  
Lamesa, Tex. KPET 690  
KCYL 1450  
KAVL 1310  
KBYN 1300  
WMMJ 610  
WROK 1520  
WGL 1490  
WLAN 1390  
WLCM 1360  
WAGL 1560  
KOVE 930  
Lander, Wyo. WRLD 1490  
Lanett, Ala.-W. Point, Ga. WNPV 1440  
WLSH 1410  
WILS 1320  
WJIM 1240  
WITL 1210  
WIPC 1280  
WTHM 1530  
WLOI 1540  
KLM 1490  
KOWB 1290  
KGN 1390  
KVOZ 1400

Larned, Kans. KANS 1510  
LaSalle, Ill. WLPO 1220  
Las Cruces, N.Mex. KOB 1450  
KRTF 870  
Las Vegas, Nev. KENO 1460  
KLAB 1230  
KORK 1340  
KRAM 920  
KLUC 1050  
KVEG 970  
WLSB 860  
Las Vegas, N.Mex. WPKV 1570  
Latrobe, Pa. WQTV 1570  
WTRA 1480  
Laurel, Md. WLM 900  
Laurel, Miss. WAML 1340  
WLAU 1680  
WNSL 1260  
Laurens, S.C. WEWO 1088  
Laurinburg, N.C. WLNC 1308  
Lawrence, Kans. KFKU 1250  
KFWN 1320  
WCCM 800  
Lawrence, Mass. Lawrenceburg, Tenn. WDXE 1370  
WAKO 910  
Lawrenceville, Ga. WLES 580  
Lawton, Okla. KSWO 1380  
KCCO 1050  
KBRR 1280  
Leaksville, N.C. WLOE 1490  
Leavenworth, Kans. KCLO 1410  
Lebanon, Ky. WBLN 1590  
Lebanon, Mo. WLS 1230  
Lebanon, Oreg. KGAJ 920  
Lebanon, Pa. WLB 1270  
Lebanon, Tenn. WCOR 900  
Leesburg, Fla. WLB 790  
WBL 1410  
WAGE 1290  
Leesville, La. WLA 790  
WNS 1150  
Leitchfield, Ky. WMTL 1580  
Leland, Miss. WESY 1580  
LoMars, Iowa KLEM 1410  
Lemoore, Calif. KOAD 1240  
WJRI 1340  
Lenoir, Tenn. WLL 730  
Leonardtown, Md. WKIK 1370  
Levelland, Tex. KLVT 1230  
Levittown, Pa. WBCB 1490  
Lewisburg, Pa. WUNS 1410  
Lewisburg, Tenn. WJIM 1490  
Lewiston, Idaho KRLC 1350  
KOZE 1300  
WLN 1290  
Lewiston, Maine WLAM 1470  
Lewistown, Mont. KXLO 1230  
WKVA 920  
WMRF 1490  
Lexington, Ky. WLAP 650  
WBLG 1300  
WVLC 590  
Lexington, Miss. WLC 1490  
Lexington, Mo. KLEX 1570  
Lexington, Nebr. KRVN 1010  
Lexington, N.C. WBU 1440  
Lexington, Tenn. WDXL 1490  
Lexington, Va. WREL 1450  
Lexington Pk., Md. WPTX 920  
Libby, Mont. KLCB 1230  
KIL 1470  
KSCB 270  
WPHN 1560  
WVOS 1240  
Liberty, Tex. KFAZ 1050  
Lihue, Hawaii KTOH 1490  
Lima, Ohio WIMA 1150  
WCT 340  
Lincoln, Ill. WPRC 1370  
Lincoln, Me. WLKN 1450  
Lincoln, Nebr. KFOR 1240  
KLIN 1400  
KLM 1480  
KLOL 1530  
WLDN 1050  
Linton, Ind. WLB 1600  
Litchfield, Ill. WSMI 1540  
Litchfield, Minn. KLFD 1410  
Little Falls, Minn. KLT 960  
Little Falls, N.Y. WLFH 1230  
Littlefield, Tex. KZZN 1490  
Little Rock, Ark. KARK 920  
KALO 1250  
KLI 1470  
KDKY 1440  
KAAY 1090  
KVLV 1050  
KDKO 1510  
WLTN 1400  
WNER 1250  
KPRK 1340  
Livingston, Tenn. WLV 820  
Livingston, Tex. KEX 1440  
KVL 1220  
Lock Haven, Pa. WBP 1230  
Lockport, N.Y. WUS 1340  
Lodi, Calif. KCVR 1570  
Logan, Utah KVN 610

Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
		KSTU 1300	Manitou Springs, Colo.		KCMS 1490	Meriden, Conn.	WMMM 1470				KNOE 540
Logan, W. Va.		KLGN 1390		WCUB 980	Meridian, Miss.	WCOC 910			Monroe, Mich.	WQTE 540	
		WLOG 1250	Manitowoc, Wis.	WFOU 1240		WDAL 1330			Monroe, N.C.	WMAF 1080	
		WJWV 1290		WQMG 1240		WMOX 1040			Monroe, Wis.	WMTN 1210	
Logansport, Ind.		WSAL 1230	Mankato, Minn.	KYSM 1230		WOKK 1450			Monroeville, Ala.	WMEF 1360	
Lompoc, Calif.		KKOK 1410		KTQE 1420		WQIC 1390			Monterey, Calif.	KIDD 630	
		KLOM 1330	Manning, S.C.	WYMB 1410		WKFA 1500				KMBY 1240	
		KNEZ 960	Mansfield, La.	KDXI 1360		WXMT 730			Montevideo, Minn.	KDMA 1460	
London, Ky.		WFTG 1400	Mansfield, Ohio	WMAN 1400		KBUZ 1310			Monte Vista, Colo.	KSUV 1240	
Long Beach, Calif.		KFOX 1280		WCLW 1570		KALF 1510			Montezuma, Ga.	WNNZ 1050	
		KGER 1390	Maplewood, Minn.	WRCR 1010		WMBK 920			Montgomery, Ala.	WBAW 740	
Longmont, Colo.		KLMO 1060	Marquette, Iowa	KMQA 1320		WMO 1560				WAB 170	
Long Prairie, Minn.		KLYL 1400	Marathon, Fla.	WFFG 1300		KBUS 1590				WAPX 1600	
Longview, Tex.		KFRG 1370	Marianna, Ark.	KZOT 1460		KXEO 1340				WHYY 1440	
		KLUE 1280	Marianna, Fla.	WTYS 1340		WJUN 1220				WMGY 800	
		KEDO 1400		WTOT 980		KIKO 1340				WRMA 950	
		KBAM 1270	Marietta, Ga.	WFOM 1230		WGBS 710			Montgomery, W. Va.	WMON 1340	
Lookout Mtn., Tenn.		WFLI 1070		WBLE 1080		WIOD 610				WMBN 1430	
Lorain, Ohio		WWIZ 1380	Marietta, Ohio	WMOA 1490		WFBF 990			Monticello, Ark.	KHBM 1430	
Loretto, Pa.		WWSF 1400		WBRJ 910		WFBM 1220			Monticello, Fla.	WWSO 1090	
Loris, S.C.		WLSJ 1570	Marine City Mich.	WDGO 1590		WAME 1260			Monticello, Ky.	WFLW 1360	
Los Alamos, N. Mex.		KRSN 1490	Marinette, Wis.	WMAN 570		WMBE 1140			Montpelier-Barre, Vt.		
Los Angeles, Calif.		KABC 790	Marion, Ala.	WJAM 1310		WQAM 560				WSKI 1240	
		KFI 640	Marion, Ill.	WGGH 1150		WSGP 1450			Montrose, Colo.	KUBC 580	
		KHJ 930	Marion, Ind.	WBAT 1400		WINZ 940			Montrose, Pa.	WPFL 1250	
		KFWB 980	Marion, N.C.	WMRI 860		WGLC 910			Moorestville, N.C.	WHNC 1350	
		KGFJ 1230	Marion, Ohio	WMRN 1490					Moorhead, Minn.	KVOX 1170	
		KFAC 1390	Marion, S.C.	WATP 1490		WMBM 1490			Moorhead, Ky.	WMOR 1330	
		KLAC 570	Marion, Va.	WMEV 1010		WFUN 790					
		KMPG 710		WOLD 133		WIMS 1420			Morgan City, La.	WMBL 740	
		KNX 1070	Marked Tree, Ark.	KPCA 1580		WJMS 720				KMRC 1480	
		KPOL 1540	Marksville, La.	KAPB 1370		WJMO 1390			Morganfield, Ky.	WMSK 1550	
		KGBS 1020	Marlborough, Mass.	WSRO 1470		WMPO 390			Morgantown, N.C.	WMNC 1430	
		KRKD 1150	Marquette, Mich.	WDM 1320		WMID 1350			Morgantown, W. Va.	WCLG 1300	
Los Banos, Calif.		KLBS 1330	Marshall, Mich.	WMRR 1540		WMDD 1340				KVOM 800	
Louisburg, N.C.		WYRN 1480	Marshall, Minn.	KMHL 1400		WPFB 910			Morrilton, Ark.	WCSS 1550	
Louisville, Ga.		WPEH 1420	Marshall, Mo.	KMMO 1300		WMDN 1490			Morris, Ill.	WMOR 1250	
Louisville, Ky.		WAVE 970	Marshall, N.C.	WMMH 1460		WKRS 550			Morris, Minn.	KMRS 1580	
		WAKY 790	Marshall, Tex.	KMHT 1450		KJBC 1150			Morris, N.J.	WMTR 1250	
		WHAS 840		KADO 1410		KWEL 1440			Morrison, Tenn.	WCRR 1150	
		WKLO 1080	Marshalltown, Iowa	KFJ 1330		KABJ 600			Morton, Tenn.	KRAN 1280	
		WINN 1240	Marshalltown, Wis.	WDLB 1450		KATL 1340			Morton, Tex.	KRPL 1400	
		WKYV 900	Martin, Tenn.	WCMT 1410		WFFJ 1500			Moscow, Idaho	KSEM 1470	
		WLOU 1350	Martinsburg, W. Va.	WEPM 1340		WFIF 1500			Moses Lake, Wash.	KWIK 1260	
		WTMT 620	Martinsville, Va.	WHEE 1370		WWSB 930			Moss Point, Miss.	WACY 1460	
Louisville, Miss.		WLSM 1270	Marystown, Nfld. Can.	WMVA 1450		WMRC 1490			Moulton, Ala.	WLCB 1530	
Loveland, Colo.		KLOV 1270	Marysville, Calif.	CHCM 560		WMVG 1450			Moultrie, Ga.	WMGA 1400	
Loves Park, Ill.		WLUV 1520	Marysville, Kans.	KMYC 1410		WSSR 1570				WTVN 1300	
Lowington, N. Mex.		KLEA 630	Marysville, Tenn.	KNDY 1570		WGSR 1800			Moundsville, W. Va.	WEIF 1370	
Lowell, Mass.		WCAP 980	Mason City, Iowa	WGAP 1400		WMKR 1240			Mountain Grove, Mo.	KLRS 1360	
		WLLH 1400		KGLO 1300		WMBV 1440			Mountain Home, Ark.		
		KCBD 1590		KRIB 1490		WEBY 1330				KTLO 1490	
Lubbock, Tex.		KDAV 580	Massena, N.Y.	KSMN 1010		WSRA 1490				KFLI 1240	
		KLBC 1340		WMSA 1340		WMLP 1570			Mt. Airy, N.C.	WPAQ 740	
		KFYO 790	Massillon, Ohio	WSDM 1530		WARC 1380				WYSD 1300	
		KLLL 1460	Matawan, W. Va.	WTIG 990		WVAC 1250			Mt. Carmel, Ill.	WMCV 1360	
		KSEL 950	Mattoon, Ill.	WLBH 1170		WFOX 960			Mt. Clemens, Mich.		
Lucaleda, Miss.		WHHT 1440	Mauston, Wis.	WRJC 1270		WISN 1150				WBRB 1430	
Ludington, Mich.		WKLA 1450	Mayaguez, P.R.	WAEI 680		WMIL 1290			Mt. Dora, Fla.	WYGT 1580	
Lufkin, Tex.		KRBA 1340		WJJB 710		WOKY 920			Mt. Holly, N.J.	WJJJ 1460	
		KTRE 1420	Mayfield, Ky.	WNGO 1320		WTMJ 620			Mt. Jackson, Va.	WJSJ 740	
Lumberton, N.C.		WAGB 580	Mayoan, N.C.	WMYN 1420		WQMG 1390			Mt. Kisco, N.Y.	WYD 1300	
		WTSB 1340	Maysville, Ky.	WFTM 1240		WFEY 1510			Mt. Olive, N.C.	WDCS 1430	
Luray, Va.		WRAA 1330	McAlester, Okla.	KTMC 1400		WFGO 1520			Mt. Pleasant, Mich.	WCEN 1150	
Lynchburg, Va.		WLVA 590	McAllen, Tex.	KNEO 520		WGO 1480			Mt. Pleasant, Tex.	KIMP 960	
		WLLL 930	McCamey, Tex.	KAMY 1450		WGRC 1280			Mt. Shasta, Calif.	KWSD 620	
		WDM5 1820	McComb, Miss.	WHNY 1250		WHTC 1280			Mt. Sterling, Ky.	WMST 1150	
		WWD0 1390	McCook, Nebr.	WAPF 980		KTRC 690			Mt. Vernon, Ill.	WMIX 940	
		WBRG 1050	McGehee, Ark.	KWRV 1360		KTIS 900			Mt. Vernon, Ind.	WPCC 1390	
Lynn, Mass.		WLYN 1380	McKeesport, Pa.	KVSA 1220		KUOM 770			Mt. Vernon, Ky.	WVCP 600	
Lyon, Ga.		WGBT 1340		WEDD 810		KSTP 1500			Mt. Vernon, Ohio	WMVO 1300	
Macomb, Ill.		WKAI 1510	McKenzie, Tenn.	WHDM 1440		KPMP 1390			Mt. Vernon, Wash.	KAPS 1470	
Macon, Ga.		WBML 1240	McKinney, Tex.	KMAE 1600		KHRT 1320				KBCR 1430	
		WCZY 900	McMinnville, Oreg.	KMCM 1260		KRCB 910			Muleshoe, Tex.	KMUL 1380	
		WIBB 1280	McMinnville, Tenn.	WBMC 960		WRT 1340			Mullins, S.C.	WJAY 1280	
		WMAZ 940	McPherson, Kans.	WAKI 1230		KJBB 1340			Muncie, Ind.	WLBC 1340	
		WNEX 1400	McRae, Ga.	WDAX 1410		KKRN 1490			Munfordville, Ky.	WERK 990	
Macon, Miss.		WBMC 1400	Mead, Wash.	KLFF 1590		KYSS 910			Munising, Mich.	WMAB 1400	
Madawaska, Me.		WBSJ 1230	Meadville, Pa.	WMGW 1490		WVAC 1250			Murfreesboro, N. C.		
Madera, Calif.		KHOT 1250	Medford, Mass.	WHIL 1430		WVMO 1290				WWDR 1080	
Madill, Okla.		KMAD 1550	Medford, Oreg.	KMED 1440		KQTT 1430			Murfreesboro, Tenn.	WGN5 1450	
Madison, Fla.		WMAF 1230		KSHA 860		KRNT 1340				WMTS 810	
Madison, Ga.		WYTH 1250		KDOV 1300		KRTB 850			Murphy, N.C.	WCVP 600	
Madison, Ind.		WORX 1270		KBOY 830		KRFB 1320				WKRC 1320	
Madison, S.D.		KJAM 1390		KYJC 1230		WVUN 1410			Murphysboro, Ill.	WINI 1420	
Madison, Tenn.		WENO 1430		WIGM 1430		KNCM 1230			Murray, Ky.	WNBS 1340	
Madison, Wis.		WHA 750		WHBR 1430		WUNJ 1410			Murray, Utah	KMUR 1230	
		WIBA 1310		WHQR 1430		WVAB 1480			Muscatine, Iowa	KWPC 860	
		WISM 1480		WVAC 1250		WGO 900			Muscle Shoals City, Ala.		
		WKOW 1070		WVMO 1350		WMO 1350				WLA 1450	
		WMAD 1530		WVUN 1410		WWRG 710				WLBZ 150	
Madisonville, Ky.		WFMW 730		WVWR 690		WLQ 1360				WKJR 1520	
		WTTT 1310		WVWR 690		WMOZ 960				WMUS 1090	
Magee, Miss.		WLSJ 790		WHBR 1430		KOLY 1300				KBIX 1490	
Magnolia, Ark.		KVMA 630		WVAC 1250		WDSL 1520				KMUS 1380	
Makawao, Hawaii		KNUI 1310		WVBR 560		KTRB 850				WFBZ 150	
Malden, Mo.		KTCB 1470		WHQR 1430		KTRB 850				WKJR 1520	
Malone, N.Y.		WICY 1490		WHQR 1430		KTRB 850				WTRU 1600	
Malvern, Ark.		KBDK 1310		WHQR 1430		KTRB 850				WMUS 1090	
Manassas, Va.		WPRW 1460		WHQR 1430		KTRB 850				KBIX 1490	
Manati, P.R.		WNMT 1500		WHQR 1430		KTRB 850				WMUS 1090	
Manchester, Conn.		WNF 1230		WHQR 1430		KTRB 850				WVUN 1340	
Manchester, Ga.		WFRD 1370		WHQR 1430		KTRB 850				WVUN 1340	
Manchester, Ky.		WWXL 1450		WHQR 1430		KTRB 850				WVUN 1340	
Manchester, N.H.		WFEE 1370		WHQR 1430		KTRB 850				WVUN 1340	
		WGIR 610		WHQR 1430		KTRB 850				WVUN 1340	
		WKBR 1250		WHQR 1430		KTRB 850				WVUN 1340	
Manchester, Tenn.		WMSR 1320		WHQR 1430		KTRB 850				WVUN 1340	
Manhattan, Kans.		KSAC 580		WHQR 1430		KTRB 850				WVUN 1340	
		KMAN 1850		WHQR 1430		KTRB 850				WVUN 1340	
		KMAN 1850		WHQR 1430		KTRB 850				WVUN 1340	
		KMAN 1850		WHQR 1430		KTRB 850				WVUN 1340	
		KMAN 1850		WHQR 1430		KTRB 850				WVUN 1340	
		KMAN 18									

# WHITE'S RADIO LOG

Location	C.L.	Kc.
Nashville, Tenn.	WKDA	1240
	WLAC	1510
	WNAK	1560
	WHAH	1360
	WSIX	980
	WSM	650
	WWGM	1560
Nassau, Bahamas	ZNS-2	1240
Natchez, Miss.	WHIS	1240
	WNAT	1450
Natchitoches, La.	WYAC	1480
Naugatuck, Conn.	WOWW	860
Navasota, Tex.	KWBC	1550
Nebraska City, Nebr.	KNCY	1600
	KSFE	1340
Needles, Calif.	WNAM	1380
Neehah, Wis.	WCCN	1270
Neillsville, Wis.	WNKY	1480
Neosho, Mo.	KBTN	1420
Nevada, Mo.	KNEM	1240
New Albany, Ind.	WNUW	1570
New Albany, Miss.	WNAU	1470
Newark, Del.	WNRK	1260
Newark, N.J.	WJRZ	970
	WNJR	1450
	WVNI	1320
Newark, N.Y.	WACK	1420
Newark, Ohio	WCMT	1430
New Bedford, Mass.	WBSM	1420
	WNBH	1340
New Bern, N.C.	WHIT	1450
Newberry, S.C.	WRNB	1430
New Boston, Ohio	WKKB	1240
New Braunfels, Tex.	WIDJ	1010
New Britain, Conn.	KGNB	1420
	WRCH	910
	WRYM	840
New Brunswick, N.J.	WCTC	1450
Newburgh, N.Y.	WGNV	1220
Newburyport, Mass.	WBP	1470
New Castle, Ind.	WCTW	1550
New Castle, Pa.	WKST	1280
Newcastle, Wyo.	KASL	1240
New City, N.Y.	WRKL	910
New Haven, Conn.	WAVZ	1300
	WELI	960
	WCOH	1490
New Iberia, La.	KANE	1240
	KVIM	1360
New Kensington, Pa.	WKPA	1150
New London, Conn.	WNLC	1510
New Martinsville, W.Va.	WETZ	1330
Newnan, Ga.	WNEA	1300
	WDSU	1280
New Orleans, La.	WNNR	990
	WBOK	800
	WNOE	1060
	WSMB	1350
	WSPS	1450
	WSHO	1230
	WTIX	690
	WWL	770
	WWOM	600
	WYLD	940
Newport, Ark.	KNBY	1280
Newport, N.H.	WNLC	1010
Newport, Oreg.	KNPT	1310
Newport, R.I.	WADK	1540
Newport, Tenn.	WLIK	1270
Newport, Vt.	WIKE	1490
Newport News, Va.	WGHI	1310
	WTID	1270
Newport Richey, Fla.	WGUL	1500
New Richmond, Wis.	WIXK	1590
New Roads, La.	KWRG	1500
New Rochelle, N.Y.	WVOX	1460
New Smyrna Beach, Fla.	WSBB	1280
	WORT	1550
	WCB	1280
	KJRG	950
	WBKN	1410
	WNNJ	1360
	WNNC	1280
	WUJM	1360
	WABC	770
	WQD	1280
	WBX	1380
	WCBS	880
	WEVD	1330

Location	C.L.	Kc.
	WHN	1050
	WHOM	1480
	WINS	1010
	WLIB	1190
	WMCA	570
	WNBC	660
	WNEW	1130
	WNYC	830
	WOR	710
	WPOW	1330
	WQXR	1560
Niagara Falls, N.Y.	WHLI	1270
	WJLL	1440
Niceville-Valparaiso, Fla.	WNSM	1340
Nicholasville, Ky.	WNVL	1280
Niles, Mich.	WNIL	1390
Niles, Ohio	WNIO	1540
Nogales, Ariz.	KNOG	1340
Nome, Alaska	KICY	850
Norfolk, Nebr.	WJAG	780
Norfolk, Va.	WTAR	790
	WCMS	1050
	WNOR	1230
	WFAP	850
Normal, Ill.	WIOK	1440
Norman, Okla.	WNAD	1440
	KNOR	1400
Norristown, Pa.	WNAR	1110
N. Adams, Mass.	WMBB	1230
N. Atlanta, Ga.	WATY	680
N. Augusta, S.C.	WBUS	1380
	WFNL	1600
	WTHB	1550
North Bend, Oreg.	KFRH	1340
North Charleston, S.C.	WNCG	910
Northampton, Mass.	WHMP	1400
Northfield, Minn.	WCAL	770
N. Little Rock, Ark.	KDXE	1380
	KXLR	1150
North Platte, Nebr.	KJLT	970
	KNOP	1410
	KODY	1240
No. Syracuse, N.Y.	WSOQ	1220
N. Vernon, Ind.	WOCH	1480
Northwestern, Ind.	WNWI	1080
No. Wilkesboro, N.C.	WKBC	1310
Norton, Kans.	KNBI	1530
Norton, Va.	WNVA	1350
Norwalk, Conn.	WNLC	1350
Norwich, Conn.	WICH	1310
Norwich, N.Y.	WCHN	970
Oakdale, La.	KREH	900
Oakes, N. Dak.	KEYD	1220
Oak Grove, La.	KWCL	1280
Oak Hill, W.Va.	WOAY	860
Oakland, Calif.	KEWB	910
	KABL	960
	KDIA	1310
Oakland, Md.	WMSG	1050
Oakland Park, Fla.	WJXX	1520
Oak Park, Ill.	WOPA	1490
Oak Ridge, Tenn.	WATO	1290
Ocala, Fla.	WMOP	900
	WTMC	1290
	WKOS	1370
	WETT	1590
Ocean City, Md.	WJST	1520
Ocean City, Somers Pt., N.J.	KBCH	1380
Oceanside, Oreg.	KUDE	1320
Oceanside, Calif.	KSZ	1380
Ocala, Ga.	KECK	920
Odessa, Tex.	KOSA	1230
	KOYL	1310
	KRIG	1410
Oelwein, Iowa	KOEL	950
Ogallala, Nebr.	KOGA	930
Ogden, Utah	KLO	1430
	KANN	1250
	KSVN	730
	KVOG	1490
Ogdensburg, N.Y.	WSLB	1400
Oil City, Pa.	WKRZ	1340
Okeechobee, Fla.	WOKC	1570
Okla. City, Okla.	KBYE	890
	KLPR	1140
	KOCY	1340
	KOMA	1520
	KTKO	1000
	KJEM	800
	WKY	930
Okmulgee, Okla.	KOKL	1240
Old Saybrook, Conn.	WLIS	1420
Olean, N.Y.	WMNS	1360
	WHDL	1450
	WVLN	740
Olney, Ill.	KGY	1240
Olympia, Wash.	KITN	820
Omaha, Nebr.	KBON	1440
	KFAB	1110
	KOIL	1290
	KOOD	1420
	KOWH	660
	WOW	590
	KOMW	680
Omak, Wash.	WMCR	1600
Oneida, N.Y.	WBNT	1310
Oneida, Tenn.	WBNT	1310
O'Neill, Nebr.	KBRX	1350

Location	C.L.	Kc.
Oneonta, Ala.	WCRL	1570
Oneonta, N.Y.	WDOS	730
Ontario, Calif.	KASK	1510
Ontario, Oreg.	KSRV	1380
Opelika, Ala.	WPHO	1400
Opelousas, La.	KSLO	1230
Opp, Ala.	WAMI	860
Opportunity, Wash.	KZUN	630
Orange, Mass.	WATN	980
Orange, Tex.	KGT	1600
Orange, Va.	WJMA	1340
Orangeburg, S.C.	WOIX	1150
	WORG	1580
	WTSO	920
Orango Park, Fla.	WAYR	550
Orang City, Oreg.	WYOB	1520
Orlando, Fla.	WDBO	380
	WHOO	990
	WHY	1270
	WLOF	950
	WKIS	740
Ormond Beh., Fla.	WQXR	1380
Oronho, Idaho	KLER	950
Orovillo, Calif.	KAOR	1340
Ortonville, Minn.	KDIO	1350
Osage Beh., Mo.	KRMS	1150
Oseola, Ark.	KOSE	860
Oshkosh, Wis.	WOSH	1490
Oskaloosa, Iowa	KBOE	1440
Oswego, N.Y.	WSG	1470
Othello, Wash.	KRSB	1400
Ostego, Mich.	WAOP	980
Otsego, Ill.	WCMY	1430
Ottawa, Kans.	KOFO	1220
Ottumwa, Iowa	KBIZ	1240
	KLEE	1480
Owatonna, Minn.	KRF	1390
Owego, N.Y.	WEDB	1330
Owensboro, Ky.	WOMI	1490
	WOP	1430
Owosso, Mich.	WOAP	1080
Oxford, Miss.	WSUH	1420
Oxford, N.C.	WOXF	1340
Oxnard, Calif.	WOXR	910
Ozark, Ala.	WOZK	960
Paducah, Ky.	WOXR	1500
	WKYX	570
	WPA	1430
Page, Ariz.	KPGE	1340
Painesville, Ohio	WPVL	1460
Paintsville, Ky.	WSIP	1490
Palatka, Fla.	WPFP	1260
	WSUZ	800
Palestine, Tex.	KNET	1450
Palm Bch., Fla.	WQXT	1340
Palm Sprgs., Calif.	KCMJ	1010
	KDES	920
	KPAL	1450
Palmdale, Calif.	KUTY	1470
Palo Alto, Calif.	KIBE	1270
Pampa, Tex.	KPDN	1340
	KHHH	1230
	WDL	1430
Panama City, Fla.	WPCF	1430
Panama City Beach, Fla.	WTHR	1480
	WSCM	1290
	WVAK	1560
Paoli, Ind.	KNGL	980
Paradise, Calif.	KDRS	1490
Paragould, Ark.	KDRS	1490
Paris, Ark.	KDAB	1460
Paris, Ill.	WPRS	1440
Paris, Ky.	WLXL	1440
Paris, Tenn.	WTPR	710
Paris, Tex.	KPLT	1470
	KFTV	1250
Parkersburg, W.Va.	WCFE	1050
	WPAP	1450
	WTAP	1230
Park Falls, Wis.	WPFP	1450
Park Rapids, Minn.	KPRM	1240
	KLKC	1540
Parsons, Kans.	KPPC	1240
Pasadena, Cal.	KRLA	1110
	KWKW	1300
Pasadena, Tex.	KLVL	480
	KIKK	650
Pascagoula-Moss Point, Miss.	WPMP	1580
Pasco, Wash.	KORD	910
	KGRS	1340
Paso Robles, Calif.	KPRL	1230
Patchogue, L.I., N.Y.	WALK	1370
	WPAC	930
Paterson, N.J.	WPAT	1580
Pauls Valley, Okla.	KVLH	1470
Pawhuska, Okla.	KOSG	1570
Pawtucket, R.I.	WTRF	550
Pearsall, Tex.	KVWG	1280
Pecos, Tex.	KLVL	1480
Peekskill, N.Y.	WLNA	1420
Pekin, Ill.	WSIV	1140
Pell City, Ala.	WFHK	1430
Pendleton, Oreg.	KTXI	1240
	KUMA	1290
Pennington Gap, Va.	WSVW	1570
Pensacola, Fla.	WBOP	980
	WBSR	1540
	WMEL	610

Location	C.L.	Kc.
	WVNY	1230
	WCOA	1370
Peoria, Ill.	WAA	1350
	WMBD	1470
	WIRL	1290
	WPEO	1020
Perry, Fla.	WPRY	1400
	WCKR	1310
Perry, Ga.	WPCA	1480
Perry, Iowa	KDLS	1310
Perryton, Tex.	KEYE	1400
Peru, Ind.	WARU	1600
Petaluma, Calif.	KTOB	1490
Petersburg, Va.	WSSV	1240
Petosekey, Mich.	WMBN	1340
Phenix City, Ala.	WPNX	1460
Philadelphia, Pa.	WHOC	1490
	WCAU	1210
	WDAS	1480
	WFL	560
	WFLN	900
	WHAT	1340
	WHAT	940
	WHIP	610
	WHJ	1480
	WFEN	950
	WRCV	1060
	WTEL	860
Philipsburg, Pa.	WPBH	1260
Phillipsburg, Kans.	KKAN	1490
Phoenix, Ariz.	KIFN	860
	WHAT	1480
	KHAT	1480
	KHEP	1280
	KCAC	1010
	KOY	550
	KOOL	960
	KPHO	910
	KRIZ	740
	KRIZ	1230
	KTAR	620
Phoenix City, Ala.	WPNX	1460
Piedmont, Ala.	WPID	1280
Pierre, S.Dak.	KGFX	630
	WCCR	1240
Pikeville, Ky.	WPIK	1240
Pine Bluff, Ark.	WPKE	1240
	KCLA	1400
	KADL	1270
	KOTN	1490
	KCAT	1530
	KPBA	1590
Pine City, Minn.	WFSD	578
Pinellas Park, Fla.	WFSD	578
Pineville, Ky.	WMLF	1230
Pineville, W.Va.	WVVO	970
Pipestone, Minn.	KLOH	1050
Piqua, Ohio	WPTW	1570
Pittsburg, Calif.	KKIS	890
Pittsburg, Kans.	KKIS	890
	KSEK	1340
Pittsburgh, Pa.	KDKA	1020
	KQV	1410
	WAMO	860
	WJAS	1320
	WPI	730
	WRYT	1250
	WEEP	1080
	WWSW	970
Pittsfield, Ill.	WBBA	1580
Pittsfield, Mass.	WBEC	1420
	WBRK	1340
Pittston, Pa.	WPTS	1540
Plainfield, N.J.	WERA	1590
Plainview, Tex.	KVPL	1400
Plant City, Fla.	WPLA	910
Platteville, Wis.	WSWW	1590
Plattsburg, N.Y.	WEAV	960
	WIRY	1340
Pleasanton, Tex.	KBOP	1380
Pleasantville, N.J.	WOND	1400
Plymouth, Ind.	WTCA	1050
Plymouth, Mass.	WPLM	1390
Plymouth, N.C.	WPNC	1470
Plymouth, N.H.	WPNH	1300
Plymouth, Wis.	WPLY	1420
Pocahontas, Ark.	KPOC	1420
Pocatello, Idaho	KSEI	930
	KWAB	1240
	KSNN	1290
Pocomoke City, Md.	WDMV	560
Pomona, Calif.	KWOW	1400
	KIKAR	1220
Pompton Lakes, N. J.	WKER	1500
Pompano Beach, Fla.	WLOD	980
	WRBD	1470
Ponca City, Okla.	WBZZ	1230
Ponce, P.R.	WPRP	910
	WEUC	1420
	WPAB	550
	WLEO	1170
	WISO	1260
Pontiac, Ill.	WIBG	1000
Pontiac, Mich.	WPON	1450
Pontotoc, Miss.	WSEL	1440
Pooli, Ind.	WYAK	1560
Poplar Bluff, Mo.	KWOC	930
	KLID	1340
Poplarville, Miss.	WRPM	1530

Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
Portage, Pa.	WWM	1470	Raleigh, N.C.	WKIX	850	Rockingham, N.C.	WAYN	900	Salem, O.	WSOM	600
Portage, Wis.	WPDR	1350		WNOH	1550	Rock Island, Ill.	WHBF	1270	Salem, Ore.	KSLM	1390
Portageville, Mo.	KMIS	1050		WPTF	680	Rockland, Maine	WRKD	1450		KAPT	1220
Portales, N. Mex.	KENM	1450		WLLE	570	Rockmart, Ga.	WPLK	1220		KBZY	1490
Port Angeles, Wash.	KAFY	1000		WRAL	1240	Rock Springs, Wyo.	KVRS	1360		KGAY	1430
	KON	1450	Rails, Tex.	KCLR	1530	Rockville, Md.	WINX	1600	Salem, Va.	WBLU	1480
Port Arthur, Tex.	KOLE	1340	Rantoul, Ill.	WFTL	1460	Rockwood, Tenn.	WRKH	580	Salida, Colo.	KVRH	1340
	KPAC	1250	Rapid City, S. Dak.	KOTA	1380	Rocky Ford, Colo.	KAVI	1320	Salina, Kans.	KSAI	1150
Porterville, Calif.	KTIP	1450		KIMM	1150	Rocky Mount, N.C.	WECE	810		KFBM	550
Port Hueme, Calif.	KACY	1520		KRSJ	1940		WEED	1390		KISI	910
Port Huron, Mich.	WHLS	1450		KEZU	920		WRMT	1490	Salinas, Calif.	KDON	1460
	WTT	1380	Raton, N. Mex.	KRTN	1490		WKWS	1290		KBSW	1380
Port Jervis, N.Y.	WDLC	1490	Ravenswood, W. Va.	WMOV	1360	Rocky Mount, Va.	WYTI	1570	Salinas, Calif.	KCTY	980-1000
Port Lavaca, Tex.	KGH	1560	Rawlins, Wyo.	KRAL	1240	Rogers, Ark.	KAMO	1890	Saline, Mich.	WOIB	1290
Portland, Ind.	WGJ	1440	Raymond, Wash.	KAPR	1340	Rogers City, Mich.	WHAQ	960	Salisbury, Md.	WBOC	960
Portland, Maine	WCSH	970	Raymondville, Tex.	KSOX	1240	Rogersville, Tenn.	WRGS	1370		WICD	1320
	WGAN	560	Rayville, La.	KRIH	990	Rolla, Mo.	KCLU	1950	Salisbury, N.C.	WSTP	1490
	WLOB	1310	Reading, Pa.	WEUU	850		KTRR	1490		WSAT	1280
	WPOR	1490		WHUM	1240	Rome, Ga.	WLAQ	1410	Salmon, Idaho	KSRA	960
Portland, Ore.	KBPS	1450		WRWB	1400		WYIN	1350	Salt Lake City, Utah		
	KBEV	1010	Redding, Calif.	KRDG	1230		WRGA	1470		KALL	910
	KLJ	1290		KABR	1340	Rome, N.Y.	WKAL	1450		KCPX	1320
	KEX	1190		KQMS	1400		WRNY	1350		KLUB	570
	KGW	620		KVCV	600	Ronceverte, W. Va.	WRON	1410		KNAK	1280
	KOIN	970		KVIP	540	Roseau, Minn.	KRWB	1400		KSL	1160
	KPAM	1410	Red Bluff, Calif.	KFCB	1380	Roseburg, Ore.	KRNR	1490		KSOP	1370
	KPDQ	800	Redfield, S. Dak.	KCAL	1410		KQEN	1240		KSXX	630
	KPOJ	1330	Redlands, Calif.	WGBG	1440		KRXL	1250		KWHO	860
	KWJ	1080	Red Lion, Pa.	KRBB	1450		KYES	950	San Angelo, Tex.	KTED	1340
	KXL	750	Red Lodge, Mont.	KRBB	1450	Rosenberg, Tex.	KBYE	980		KTOG	950
Port Neches, Tex.	KPNG	1150	Redmond, Ore.	KRBB	1240	Roservelt, N. M.	KRDD	1320		KPEP	1420
Portsmouth, N.H.	WBBS	1380	Red Wing, Minn.	KCUJ	1250	Roswell, N. Mex.	KRSY	1230		KWFR	1260
	WHEB	750	Redwood Falls, Minn.				KGFL	1430	San Antonio, Tex.	KAPE	1480
Portsmouth, Ohio	WPAY	1460		KLGR	1490		KBIM	910		KBAT	680
	WNXT	1200	Reedsburg, Wis.	WRDB	1400		KRDD	1320		KBER	1150
Portsmouth, Va.	WHIP	1400	Reedsport, Ore.	KRAF	1470		KRKB	960		KCOR	1350
	WPMH	1010	Reidsville, N.C.	WPCA	1340	Roxboro, N.C.	KRKB	960		KITE	950
	WAVY	1350		WREV	1220	Royal Oak, Mich.	WEXL	1340		KUKA	1250
Port Washington, Wis.			Remsen, N.Y.	WREM	1480	Rugby, N. Dak.	KGCA	1450		KUBO	1310
	WGLB	1560	Reno, Nev.	KOH	630	Ruidoso, N. Mex.	KRRR	1340		KMAC	630
Post, Tex.	KPOS	1370		KBET	1340	Rumford, Me.	WRUM	790		KONO	860
Poteau, Okla.	KLCO	1280		KOLO	920	Rupert, Idaho	KAYT	970		KTSA	550
Potomac-Cabin John, Md.				KONE	1450	Rushton, La.	KRUS	1490		WDAT	1200
	KLN	950	Rensselaer, Ind.	WRIN	1560	Rusk, Texas	KRTY	1580	San Bernardino, Calif.	KCIC	1350
Potosi, Mo.	KYRO	1280	Rensselaer, N.Y.	WEEE	1300	Russell, Kans.	KRFB	1330		KFCM	590
Potsdam, N.Y.	WPDM	1470	Renton, Wash.	KREN	1420	Russellville, Ala.	WVWR	920		KRNO	1240
Pottstown, Pa.	WPAZ	1370	Rexburg, Idaho	KRXK	1230	Russellville, Ark.	KXRJ	1490		KMEN	1290
Pottsville, Pa.	WPAM	1450	Rhineland, Wis.	WOBT	1240	Russellville, Ky.	WRUS	610	Sandersville, Ga.	WSNT	1490
	WPPA	1360	Rice Lake, Wis.	WJMC	1240	Rutland, Vt.	WHWB	1000	San Diego, Calif.	KCBQ	1170
Poughkeepsie, N.Y.	WKRO	1390	Richfield, Utah	KSMC	980	Sacramento, Calif.	WSYB	1380		KCFB	760
	KPOW	1450	Richland, Wash.	KALE	1450		KCRS	1320		KDGB	1010
Powell, Wyo.	KPOW	1450	Richland, Wis.	WRGO	1450		KCMS	1380		KGB	360
Poynette, Wis.	WIBU	1240	Richlands, Va.	WRIC	540		KJAY	1430		KSON	1240
Prairie du Chien, Wis.			Richmond, Ind.	WKBV	1490		KGMS	1380		KSDO	1130
	WPRE	980	Richmond, Ky.	WEKY	1340		KRAK	1140	Sandpoint, Idaho	KSPT	1400
Pratt, Kan.	KWNS	1290	Richmond, Va.	WANT	990	Safford, Ariz.	KGLU	1470	Sand Spring, Okla.	KTOW	1340
Prescott, Ariz.	KYCA	1440		WBBL	1480		KGTL	1480	Sandusky, Ohio	WLEC	1450
	KENT	1490		WGBM	1540	Saginaw, Mich.	KKJO	1550	San Fernando, Calif.	KGIL	1260
Prescott, Ark.	KTPA	1370		WLEE	1480		KRFB	1330	Sanford, Fla.	WRR	1400
Presque Isle, Me.	WAGM	950		WEET	1320		WLNK	1210	Sanford, Me.	WSME	1220
	WEGP	1390		WGEO	1590		WSAM	1400	Sanford, N.C.	WWEY	1290
Preston, Idaho	KPST	1340		WMBG	1380		WSGW	790	San Francisco, Calif.		
Prestonsburg, Ky.	WPRT	960		WRNL	910	St. Albans, Vt.	WWSR	1420		KFRK	610
	WDOC	1310	Richwood, W. Va.	WRVA	1140	St. Albans, W. Va.	WKLC	1300		KCBS	740
Price, Utah	KDAL	1230	Ridgecrest, Calif.	WRGM	1540	St. Augustine, Fla.	WFOY	1240		KFXA	1100
Prichard, Ala.	WSIM	1270		WWEI	1320		WTT	1420		KGO	810
Prince Albert, Sask.	CKBI	900		WWEI	1320	St. Charles, Mo.	KADY	1460		KNBR	680
Princeton, Ill.	WZOE	1490		WWEI	1320	St. Charles, Mo.	KADY	1460		KIHI	1550
Princeton, Ind.	WRAY	1250		WWEI	1320	St. Cloud, Minn.	KFAM	1450		KSAI	1010
Princeton, Ky.	WPKY	1580		WWEI	1320		WJON	1240		KSFO	560
Princeton, N.J.	WHWH	1350		WWEI	1320	St. Genevieve, Mo.	KSGM	1340		KSFL	1450
Princeton, W. Va.	WLOH	1430		WWEI	1320	St. George, S.C.	WQIZ	1300		KYA	1260
Prineville, Ore.	KRCO	1390		WWEI	1320	St. George, Utah	KDXU	1450	San Gabriel, Cal.	KATL	1430
Prosser, Wash.	KARY	1310		WWEI	1320	St. Helen, Mich.	WHTC	1530	San German, P. R.	WRJS	1050
Providence, R.I.	WEAN	790		WWEI	1320	St. Helens, Ore.	WJUD	1580	Sanitobia, Miss.	WSAO	1590
	WHIM	1110		WWEI	1320	St. Johns, Mich.	WJUD	1580	San Jose, Calif.	KLOK	1170
	WICE	1290		WWEI	1320	St. Johnsbury, Vt.	WTWN	1340		KLIV	1590
	WJAR	920		WWEI	1320	St. Joseph, Mich.	WSJM	1400		KENY	1370
	WLKW	990		WWEI	1320	St. Joseph-Benton Harbor, Mich.	WHFB	1060		KXRK	1500
	WPRO	630		WWEI	1320		KFEQ	680	San Juan, P.R.	WAPA	680
	WRIB	1220		WWEI	1320		KKJO	1550		WHOA	870
Provo, Utah	KIXX	1400		WWEI	1320		KUNJ	1270		WIAC	740
	KEYY	1450		WWEI	1320		KATZ	1600		WIPR	940
	KOVO	960		WWEI	1320		KMOX	1120		WKAQ	580
Pryor, Okla.	KOLS	1570		WWEI	1320		KSTL	690		WKWM	810
Pueblo, Colo.	KDZA	1230		WWEI	1320		KWK	1380		WKYN	630
	KQAL	690		WWEI	1320		KKOK	630		WITA	1140
	KCSJ	590		WWEI	1320		WEW	770	San Luis Obispo, Calif.		
	KFEL	970		WWEI	1320		WIL	1430		KATY	1340
Pueblo, Colo.	KKAM	1350		WWEI	1320		KXEN	1010		KSLY	1400
	KPUB	1480		WWEI	1320		KRSI	950		KVEC	920
Pulaski, Tenn.	WKSR	1420		WWEI	1320		KRBI	1310	San Marcos, Tex.	KCNY	1470
Pulaski, Va.	WPUV	1580		WWEI	1320		WST	1500	San Mateo, Calif.	KOFY	1050
Pullman, Wash.	KWSC	1250		WWEI	1320		KDWB	630	San Rafael, Calif.	KTIM	1510
	KOFE	1580		WWEI	1320		WMIN	1400	San Saba, Tex.	KBAL	1410
	WCCF	1580		WWEI	1320		WCCO	830	San Sebastian, P.R.		
Punta Gorda, Fla.	WPME	1540		WWEI	1320		WSPN	680		WFB	1460
Putnam, Conn.	WINY	1350		WWEI	1320		WSUN	620	Santa Ana, Calif.	KWIZ	1480
Puyallup, Wash.	KPUY	1450		WWEI	1320		WCLY	1380	Santa Barbara, Cal.	KDB	1490
Quannah, Tex.	KOLJ	1150		WWEI	1320		WILZ	1590		KGUD	990
Quanto, Va.	KQCY	900		WWEI	1320		WGGO	1590		KTST	1340
Quincy, Calif.	KQCY	900		WWEI	1320		WJBD	1350		KTMS	1230
Quincy, Fla.	WCNH	1230		WWEI	1320		WSLM	1220	Santa Clara, Calif.	KGBA	1430
Quincy, Ill.	WGEM	1440		WWEI	1320		WESX	1230	Santa Cruz, Calif.	KSCO	1080
	WTAD	930		WWEI	1320		KSMO	1340	Santa Fe, N. Mex.	KTRC	1400
Quincy, Mass.	WIDA	1300		WWEI	1320		WJIC	1510		KVSF	1260
Quincy, Wash.	KPOR	1370		WWEI	1320				Santa Maria, Cal.	KCCG	1400
Quitman, Ga.	WSFB	1490		WWEI	1320					KHER	1600
Racine, Wis.	WRAC	1460		WWEI	1320						
Radford, Va.	WRJN	1400		WWEI	1320						
Raeeford, N.C.	WAD	1460		WWEI	1320						
	WSHB	1400		WWEI	1320						



Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
Tyrone, Pa.	KZEY	690	Warner Robbins, Ga.	WRPB	1350	West Chester, Pa.	WCHE	1520	Winchester, Ky.	WWKY	1380
Urbansville, Ohio	WTRN	1340	Warren, Ark.	KWRF	860	West Covina, Cal.	KGRB	900	Winchester, Tenn.	WCOE	1340
Ukiah, Calif.	WBTG	1340	Warren, Ohio	WHHH	1440	W. Frankfort, Ill.	WFRX	1300	Winchester, Va.	WHPL	610
Union, S.C.	KUKJ	1400	Warren, Pa.	WNAE	1310	W. Hartford, Conn.	WEXT	1550	Windsor, Pa.	WWRB	1350
Union City, Tenn.	KMSL	1250	Warrensburg, Mo.	KOKO	1450	West Jefferson, N.C.	WJKS	1600	Windemere, Fla.	WXIV	1480
Uniontown, Pa.	KULY	1420	Warrenton, Mo.	KWRE	730	W. Liberty, Ky.	WLKS	1450	Winder, Ga.	WIMO	1300
Urbana, Ill.	WBUS	590	Warrenton, Va.	WEER	1250	West Looma, Cal.	KGRB	900	Windom, Minn.	KDOM	1580
Utica, N.Y.	WVNT	580	Warsaw, Ind.	KWCV	1480	W. Memphis, Ark.	KSUD	700	Windsor, Conn.	WSOR	1480
	WIBX	950	Warsaw, Va.	WWSN	690	W. Monroe, La.	KUZN	1310	Winfield, Ala.	WEOL	1300
	WBVM	1550	Warwick-E. Greenwich, R.I.	WYNG	1590	W. Palm Beach, Fla.	WEAT	850	Winfield, Kan.	KNIC	1550
	WRUN	1150	Wasco, Calif.	KWSO	1050		WEAT	850	Winnemucca, Nev.	KWNA	1400
	WTBL	1310	Washington, D.C.	WGMS	570		WJNO	1230	Winnfield, La.	KVCL	1270
	WUPR	1530		WMAL	630	West Plains, Mo.	KWPM	1450	Winner, S. Dak.	KWYR	1260
	KVOJ	1400		WOL	1430	West Point, Ga.	WBMK	1310	Winnsboro, La.	KMAR	1570
	WSVM	1490		WQOK	1340	W. Point, Ga.-Lanett, Ala.	WRLO	1490	Winnsboro, S.C.	WKCM	1250
	WGOV	950		WQUC	1260		WRLO	1490	Winona, Minn.	KWNO	1230
	WGAJ	910		WRC	980		WROB	1450	Winona, Miss.	WOMA	1570
	WJEM	1150		WTOP	1500		WMMM	1260	Winslow, Ariz.	KVNC	1010
	WVLD	1450		WKLE	1370		WSPR	1490	Winston-Salem, N.C.	KINC	1230
Valentine, Nebr.	KVSH	940	Washington, Ga.	WAMW	1580		WTLX	1490			
Vallejo, Calif.	KNBA	910	Washington, Ind.	KCII	1380		WOCB	1240			
Valley City, N. Dak.	KOYC	1490	Washington, Iowa	KCFW	1580		WUEP	1230			
Valparaiso-Niceville, Fla.	WVSS	1150	Washington, N.J.	WEWE	1320		WOWE	1570			
	WNSM	1340	Washington, N.Y.	WITN	930		WTRR	1470			
Valparaiso, Ind.	WYKJ	1500	Washington, Pa.	WJPA	1450		WTTA	1480			
Van Buren, Ark.	KFDJ	1580	Washington Court House, Ohio	WCHO	1250		WUAW	1450			
Van Cleve, Ky.	WMTG	730	Waterbury, Conn.	WATR	1320		WVRI	1450			
Vancouver, Wash.	WKKS	1570		WBRY	1590		WVWJ	1450			
	KKEY	910		WVWC	2490		WVWZ	1250			
	KGAR	1550		WDEV	550		WVWZ	1250			
	KPMB	1500		KXEL	1540		WVWZ	1250			
	WERT	1220		KXNS	1090		WVWZ	1250			
	WAMR	1320		KWVL	1330		WVWZ	1250			
	KVEN	1430		WATN	1240		WVWZ	1250			
	KUDU	1590		WTTT	1410		WVWZ	1250			
	KUSO	590		WVWV	790		WVWZ	1250			
	KVCL	1250		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ	1250			
	WVIM	1490		WVWV	790		WVWZ	1250			
	KNAL	1410		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KCIN	1590		WVWV	790		WVWZ	1250			
	WVOP	970		WVWV	790		WVWZ	1250			
	WVIV	1370		WVWV	790		WVWZ	1250			
	KVPI	1050		WVWV	790		WVWZ	1250			
	WAOV	1450		WVWV	790		WVWZ	1250			
	WVWZ	1360		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ	1250			
	WVIM	1490		WVWV	790		WVWZ	1250			
	KNAL	1410		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KCIN	1590		WVWV	790		WVWZ	1250			
	WVOP	970		WVWV	790		WVWZ	1250			
	WVIV	1370		WVWV	790		WVWZ	1250			
	KVPI	1050		WVWV	790		WVWZ	1250			
	WAOV	1450		WVWV	790		WVWZ	1250			
	WVWZ	1360		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ	1250			
	WVIM	1490		WVWV	790		WVWZ	1250			
	KNAL	1410		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KCIN	1590		WVWV	790		WVWZ	1250			
	WVOP	970		WVWV	790		WVWZ	1250			
	WVIV	1370		WVWV	790		WVWZ	1250			
	KVPI	1050		WVWV	790		WVWZ	1250			
	WAOV	1450		WVWV	790		WVWZ	1250			
	WVWZ	1360		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ	1250			
	WVIM	1490		WVWV	790		WVWZ	1250			
	KNAL	1410		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KCIN	1590		WVWV	790		WVWZ	1250			
	WVOP	970		WVWV	790		WVWZ	1250			
	WVIV	1370		WVWV	790		WVWZ	1250			
	KVPI	1050		WVWV	790		WVWZ	1250			
	WAOV	1450		WVWV	790		WVWZ	1250			
	WVWZ	1360		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ	1250			
	WVIM	1490		WVWV	790		WVWZ	1250			
	KNAL	1410		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KCIN	1590		WVWV	790		WVWZ	1250			
	WVOP	970		WVWV	790		WVWZ	1250			
	WVIV	1370		WVWV	790		WVWZ	1250			
	KVPI	1050		WVWV	790		WVWZ	1250			
	WAOV	1450		WVWV	790		WVWZ	1250			
	WVWZ	1360		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ	1250			
	WVIM	1490		WVWV	790		WVWZ	1250			
	KNAL	1410		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KCIN	1590		WVWV	790		WVWZ	1250			
	WVOP	970		WVWV	790		WVWZ	1250			
	WVIV	1370		WVWV	790		WVWZ	1250			
	KVPI	1050		WVWV	790		WVWZ	1250			
	WAOV	1450		WVWV	790		WVWZ	1250			
	WVWZ	1360		WVWV	790		WVWZ	1250			
	KVLC	1340		WVWV	790		WVWZ	1250			
	KVWC	1490		WVWV	790		WVWZ	1250			
	WAXE	1370		WVWV	790		WVWZ	1250			
	WTTB	1490		WVWV	790		WVWZ	1250			
	WQBC	1420		WVWV	790		WVWZ				





# WHITES RADIO LOG

Location	C.L.	Mc.
<b>NEW MEXICO</b>		
Alamogordo	KXXI	94.3
Albuquerque	KANW	*89.1
	KARA-FM	99.5
	KDEF-FM	94.1
	KEOL	92.3
	KHFM	96.3
	KOAT-FM	100.3
	KOB-FM	93.3
	KTQM-FM	99.9
	KHOB-FM	95.7
Clovis	KRSN-FM	98.5
Hobbs	KLEA-FM	101.7
Los Alamos	KMEF	97.9
Lovington	KBFM	97.9
Mountain Park	KBM-FM	94.9
Roswell	KSNM	95.5
Santa Fe	KKIT-FM	99.3
Taos	KRWG	*91.7
University Park		
<b>NEW YORK</b>		
Albany	WAMC	*90.3
Auburn	WMBO-FM	106.9
Babylon	WTFM	103.5
	WGU-FM	102.3
Binghamton	WNBF-FM	98.1
	WKOP-FM	99.1
Brooklyn	WNYE	*91.5
Brookville	WCWP	*88.1
Buffalo	WBEN-FM	102.3
	WDXC	*88.7
	WBFO	93.3
	WBUR	94.5
	WGR-FM	96.9
	WTSL-FM	103.3
	WWOL-FM	104.1
	WYSL-FM	103.3
	WDIF	*88.7
	WSLU	*89.3
	WCSU	*89.3
	WJIV	101.9
	WHCL-FM	88.7
	WCJL-FM	106.1
Clinton	WKRT-FM	99.9
Corning	WBLK-FM	99.7
Cortland	WOIV	105.1
Depon	WECW	*88.1
DeRuyter	WENY-FM	92.7
Elmira	WSHS	*90.3
Floral Park	WLRJ	92.7
Garden City	WGSU	88.3
Hornell	WHCL-FM	98.3
Ithaca	WHWC	*88.7
	WWHG-FM	105.3
	WHCU-FM	97.3
	WEIV	103.7
	WVBR-FM	93.5
Jamestown	WJTN-FM	93.3
	WKSN-FM	99.7
	WYSL-FM	103.3
Kenmore	WTFM	103.5
Lake Success	WVOS-FM	95.9
Liberty	WVCR-FM	89.1
Loudonville	WALL-FM	92.7
Middletown	WRNW	107.1
Mt. Kisco	WVP-FM	106.3
New Rochelle	WVON-FM	89.5
New York	WABC-FM	99.7
	WBAL	99.5
	WCBS-FM	101.1
	WEVD-FM	97.9
	WFUV	*90.7
	WHOM-FM	92.3
	WKCR-FM	89.9
	WLIB	107.5
	WNCN	104.3
	WNEW-FM	102.7
	WNBC-FM	97.1
	WNYC-FM	93.9
	WNYE	91.5
	WOR-FM	88.7
	WPIX-FM	96.7
	WQXR-FM	96.3
	WRFM	105.1
	WRRV	106.7
Niagara Falls	WHLD-FM	98.5
Norwich	WCHN-FM	93.9
Olean	WHDL-FM	95.7
Oswego	WOSJ	98.9
Pittsburg	WEAV-FM	99.9
Patchogue	WALK-FM	97.5(5)
	WPAC-FM	106.1
	WLNA-FM	100.7
	WTSC-FM	91.1
Peekskill	WKIP-FM	104.7
Petsdam	WOFM	103.5
Poughkeepsie	WAPC-FM	101.9
	WHFM	98.9
	WBBF-FM	92.5
	WCMF	96.5
	WIRQ	*90.9
	WROC-FM	97.9
	WYOR	100.5
Schenectady	WVFM	99.3
South Bristol	WMIV	95.1
Springville	WSPE	*88.1
Syracuse	WAER	*88.1
	WDDS-FM	93.1
	WONO	107.9
	WSYR-FM	94.5

Location	C.L.	Mc.	
<b>NEW MEXICO</b>			
Troy	WFLY	92.3	
Utica	WRPI	*91.5	
Wethersfield	WRUN-FM	95.7	
White Plains	WBIV	105.7	
	WFAS-FM	103.9	
<b>NORTH CAROLINA</b>			
Albemarle	WBAB-FM	100.9	
Asheboro	WGWR-FM	92.3	
Asheville	WLOS-FM	104.3	
Burlington	WRFB-FM	101.1	
	WFNS-FM	93.9	
Black Mountain	WMIT	106.9	
Burgaw	WPGF-FM	99.9	
Burlington-Graham	WBAG-FM	92.9	
Chapel Hill	WUNC	*91.5	
Charlotte	WBTF-FM	107.9	
	WIST-FM	95.7	
	WSOC-FM	103.7	
	WYFM	104.7	
	WMIT	106.9	
	WEGO-FM	97.9	
	WDNC-FM	105.1	
	WFNC-FM	100.9	
	WFBC-FM	98.1	
	WBBF-FM	98.3	
	WAGY-FM	105.3	
	WGNCFM	101.9	
	WEQR	96.9	
	WMDE	98.7	
	WQMG-FM	97.1	
	WUAG	*99.9	
	WVWS	*91.7	
	WNCT-FM	107.7	
	WITN-FM	93.3	
	WHNC-FM	92.5	
	WHKP-FM	102.5	
	WHKY-FM	102.9	
	WHCF-FM	95.7	
	WHPE-FM	95.5	
	WHPS	*89.3	
	WMFR-FM	99.5	
	WNOS-FM	100.3	
	WJNC-FM	92.1	
	WXQR-FM	105.5	
	WEWB-FM	99.7	
	WVBC-FM	96.5	
	WLOE-FM	94.5	
	WVUE-FM	94.3	
	WTSB-FM	95.7	
	WAGR-FM	102.3	
North Wilkesboro	WKBC-FM	97.3	
	WKIX-FM	96.1	
	WPTF-FM	94.7	
	WRAL-FM	101.5	
	WMOO-FM	102.1	
	WEED-FM	92.1	
	WFMA	100.7	
	WVOR	92.5	
	WRXO-FM	96.7	
	WSTP-FM	106.5	
	WVGP-FM	105.9	
	WOHS-FM	96.1	
	WFMX	105.7	
	WCPS-FM	104.3	
	WTNC-FM	98.3	
	WITN-FM	93.3	
	Wilmington	WVPR	99.9
Wilson	WVOT-FM	106.1	
Winston-Salem	WAIR-FM	93.1	
	WYFS	107.5	
	WFDD-FM	*88.1	
	WSJS-FM	104.1	
<b>NORTH DAKOTA</b>			
Fargo	KFNW-FM	97.9	
	WDAY-FM	93.7	
<b>OHIO</b>			
Akron	WAKR-FM	97.5	
	WAPS	*89.1	
	WUCF	96.5	
	WFAH-FM	101.7	
	WNCO-FM	101.3	
	WFIO-FM	97.1	
	WATH-FM	97.1	
	WOUTH-FM	105.5	
	WDBN	94.9	
	WOMP-FM	100.5	
	WBWC	*88.3	
Bowling Green	WAWR-FM	93.5	
	WBVG	*88.1	
Bryan	WBNO-FM	99.9	
Bucyrus	WBGO-FM	92.7	
Cambridge	WILE-FM	96.7	
Canton	WHRC-FM	94.1	
	WCNO	106.9	
	WTOF	98.1	
Celina	WMER-FM	94.3	
	WCSN-FM	96.7	
Chillicothe	WBXC-FM	99.3	
Cincinnati	WAEF-FM	98.5	
	WCPO-FM	105.1	
	WAKW-FM	93.3	
	WGUC	*90.9	
	WKRC-FM	101.9	
	WJBI	102.7	

Location	C.L.	Mc.
Cleveland	WOIO	94.1
	WZLP-FM	92.5
	WNRE	104.9
	KYWF-FM	105.7
	WBQE	90.3
	WCRF-FM	108.3
	WCJL	95.5
	WDOK-FM	102.1
	WERE-FM	98.5
	WGR-FM	99.5
	WHK-FM	100.7
	WJW-FM	104.4
	WNOB	106.5
	WXIA	97.1
	WZAK	93.1
Cleveland Hts.	WCUY-FM	92.3
Columbus	WCBE	*90.5
	WBNS-FM	97.1
	WCOL-FM	92.3
	WMNI-FM	99.7
	WOSU-FM	*89.7
	WTVN-FM	96.3
	WVIO	94.7
	WFIZ	104.9
Dayton	WHIO-FM	99.1
	WONE-FM	104.7
	WDAO	107.7
	WSLN	*91.1
Delaware	WOHL-FM	101.3
East Liverpool	WCTM	92.9
Eaton	WEOL-FM	107.3
Elyria	WFIN-FM	100.5
Findlay	WFOB	96.7
Fosteria	WFRO-FM	99.3
Fremont	WJEF-FM	101.5
Gallipolis	WDOB-FM	91.3
Granville	WDRB-FM	106.5
Greenville	WQMS	97.7
Hamilton	WHOH	103.5
	WCNW-FM	94.9
Hillsboro	WSRW-FM	106.7
Kent	WKSU-FM	*88.1
	WKNT-FM	100.1
Kenton	WKTN-FM	98.3
Kettering	WVID-FM	99.9
Lancaster	WHOK-FM	95.5
Lima	WIMA-FM	102.1
London	WLNO	106.3
Mansfield	WYNO	106.1
Marietta	WCMO	*89.3
Marion	WMRN-FM	106.9
Miamisburg	WFCJ	93.9
Middletown	WPFB-FM	99.9
Mt. Vernon	WVMO-FM	93.7
New Concord	WMCO-FM	*91.9
Newark	WCLT-FM	100.3
Norwalk	WLKR-FM	95.3
Oxford	WMUB	*88.5
	WOXR	97.7
Piqua	WPTW-FM	95.7
Port Clinton	WRWF-FM	94.5
Portsmouth	WPAY-FM	104.1
	WNXT-FM	99.3
Salem	WSOM-FM	105.1
Sandusky	WLEC-FM	102.7
Sidney	WMVR-FM	105.5
Springfield	WBLV-FM	103.9
	WEEC-FM	100.7
	WSTP-FM	95.5
Staubenville	WKTL	90.7
Struthers	WTTF-FM	103.7
Tiffin	WSPD-FM	101.5
Toledo	WMHE	92.5
	WTDS	*91.3
	WTOL-FM	104.7
	WTRT	99.9
Urbana	WCMB	101.7
Van Wert	WERT-FM	98.9
Wapakoneta	WERM	92.1
Washington Court House	WCHO-FM	105.5
Westerville	WOBN	*91.5
Wilberforce	WJSC-FM	*86.9
Wooster	WSTF-FM	104.5
Worthington-Columbus	WRFD-FM	97.9
Xenia	WHBM-FM	103.9
Yellow Springs	WYSO	*91.5
Youngstown	WBKN-FM	98.9
	WBWB-FM	93.3
	WREB	101.7
Zanesville	WHIZ-FM	102.5
<b>OKLAHOMA</b>		
Durant	KSEO-FM	107.3
Edmond	KWHB	97.7
Lawton	KLAW	101.5
McAlester	KNED-FM	101.3
Midwest City	KMWC	*87.7
Norman	KTEA-FM	92.5
Nowata	WNAD-FM	*90.9
Nowata	KNFB	94.3
Oklahoma City	KOKH	*88.9
	KEFM	94.7
	K100	100.5
	KJEM-FM	98.7
	KOCY-FM	96.1
	KOFM	104.1
	KYFM	98.9
	KNFB	101.9
	KBGC	*89.9
Shawnee	KOSU-FM	*91.7
Stillwater		

Location	C.L.	Mc.	
<b>NEW MEXICO</b>			
Troy	WFLY	92.3	
Utica	WRPI	*91.5	
Wethersfield	WRUN-FM	95.7	
White Plains	WBIV	105.7	
	WFAS-FM	103.9	
<b>NORTH CAROLINA</b>			
Albemarle	WBAB-FM	100.9	
Asheboro	WGWR-FM	92.3	
Asheville	WLOS-FM	104.3	
Burlington	WRFB-FM	101.1	
	WFNS-FM	93.9	
Black Mountain	WMIT	106.9	
Burgaw	WPGF-FM	99.9	
Burlington-Graham	WBAG-FM	92.9	
Chapel Hill	WUNC	*91.5	
Charlotte	WBTF-FM	107.9	
	WIST-FM	95.7	
	WSOC-FM	103.7	
	WYFM	104.7	
	WMIT	106.9	
	WEGO-FM	97.9	
	WDNC-FM	105.1	
	WFNC-FM	100.9	
	WFBC-FM	98.1	
	WBBF-FM	98.3	
	WAGY-FM	105.3	
	WGNCFM	101.9	
	WEQR	96.9	
	WMDE	98.7	
	WQMG-FM	97.1	
	WUAG	*99.9	
	WVWS	*91.7	
	WNCT-FM	107.7	
	WITN-FM	93.3	
	WHNC-FM	92.5	
	WHKP-FM	102.5	
	WHKY-FM	102.9	
	WHCF-FM	95.7	
	WHPE-FM	95.5	
	WHPS	*89.3	
	WMFR-FM	99.5	
	WNOS-FM	100.3	
	WJNC-FM	92.1	
	WXQR-FM	105.5	
	WEWB-FM	99.7	
	WVBC-FM	96.5	
	WLOE-FM	94.5	
	WVUE-FM	94.3	
	WTSB-FM	95.7	
	WAGR-FM	102.3	
North Wilkesboro	WKBC-FM	97.3	
	WKIX-FM	96.1	
	WPTF-FM	94.7	
	WRAL-FM	101.5	
	WMOO-FM	102.1	
	WEED-FM	92.1	
	WFMA	100.7	
	WVOR	92.5	
	WRXO-FM	96.7	
	WSTP-FM	106.5	
	WVGP-FM	105.9	
	WOHS-FM	96.1	
	WFMX	105.7	
	WCPS-FM	104.3	
	WTNC-FM	98.3	
	WITN-FM	93.3	
	Wilmington	WVPR	99.9
Wilson	WVOT-FM	106.1	
Winston-Salem	WAIR-FM	93.1	
	WYFS	107.5	
	WFDD-FM	*88.1	
	WSJS-FM	104.1	
<b>NORTH DAKOTA</b>			
Fargo	KFNW-FM	97.9	
	WDAY-FM	93.7	
<b>OHIO</b>			
Akron	WAKR-FM	97.5	
	WAPS	*89.1	
	WUCF	96.5	
	WFAH-FM	101.7	
	WNCO-FM	101.3	
	WFIO-FM	97.1	
	WATH-FM	97.1	
	WOUTH-FM	105.5	
	WDBN	94.9	
	WOMP-FM	100.5	
	WBWC	*88.3	
Bowling Green	WAWR-FM	93.5	
	WBVG	*88.1	
Bryan	WBNO-FM	99.9	
Bucyrus	WBGO-FM	92.7	
Cambridge	WILE-FM	96.7	
Canton	WHRC-FM	94.1	
	WCNO	106.9	
	WTOF	98.1	
Celina	WMER-FM	94.3	
	WCSN-FM	96.7	
Chillicothe	WBXC-FM	99.3	
Cincinnati	WAEF-FM	98.5	
	WCPO-FM	105.1	
	WAKW-FM	93.3	
	WGUC	*90.9	
	WKRC-FM	101.9	
	WJBI	102.7	

Location	C.L.	Mc.	Location	C.L.	Mc.	Location	C.L.	Mc.	Location	C.L.	Mc.						
Tulsa	KSPI-FM 93.9 KWGS 90.5 KRMC-FM 93.5 KOCW 97.5 KOGM-FM 92.9 KRAV 96.5		Sharon	WPIC-FM 102.9 WVSC-FM 97.7		Amarillo	KFMN 99.3 KWKC-FM 105.1 KNGC-FM 93.1 KVII-FM 94.1 KHFI-FM 98.8		Burlington	WJOY-FM 98.5							
<b>OREGON</b>																	
Cervallis	KFLY-FM 101.5		Stroudsburg	WRSC-FM 96.7		Austin	KAZZ 95.5 KTBC-FM 98.7 KUT-FM 90.7		Arlington	WAVA-FM 105.1 WCCV-FM 97.5							
Eugene	KRVM 91.9 KEED-FM 93.1 KFMY 97.9 KUGN-FM 99.1 KWAX 91.1 KBAB 94.5 KGPO 96.9 KBOY-FM 95.3 KTEC 88.3 KOAP-FM 92.3 KGMG 95.5 KDDN-FM 101.1 KPDQ-FM 105.3 KPM 98.5 KPOJ-FM 98.5 KQFM 100.3 KRRC 89.3		Townsend	WSVB 105.5 WTTG-FM 95.3 WGMR-FM 100.3 WDFM 91.1 WRNN 92.3 WJPA-FM 95.3 WAYZ-FM 101.5 WBRE-FM 98.5 WYZZ 92.9 WLYC-FM 103.1 WRAK-FM 103.3 WNOW-FM 105.7 WSBA-FM 108.3		Beaumont	KACB-FM 105.7 KADF-FM 97.5 KFNE 95.3 KWHI-FM 106.3 KHPC 88.1 KMSC 102.1 KCLE-FM 94.9 WTAW-FM 92.1 KNRO 106.9 KZFM 95.5 KIXL-FM 104.5 KMAP 105.3 KNER 88.1 KRLO-FM 92.5 KLI-FM 98.7 WFAA-FM 97.9 WRR-FM 101.1 KVTI 91.7 KQRO 102.9 KBOX-FM 100.3 KNDT-FM 96.1 KSPD-FM 95.5 KPAW-FM 95.3 KYOF-FM 88.5 KISM-FM 99.9 KHMS 94.7 WBAP-FM 96.3 KFJZ-FM 97.1 KJIM-FM 102.1 KQUL-FM 93.9 KNOF-FM 107.5 KTCU-FM 89.1 KGA-FM 94.5 KQBC-FM 106.5 KELT 94.5 KGRI-FM 100.1 KPAW-FM 106.1 KVI-LF 103.7 KHBR-FM 102.3 KHGM 102.9 KHCB-FM 105.7 KHUL 95.7 KFMK 97.9 KODA-FM 99.5 KLEF 94.5 KQST 100.3 KQUE 102.9 KRBE 104.1 KXYZ-FM 96.5 KTRH-FM 101.1 KHUF 91.3 KBNQ 93.7 KLEN-FM 93.3 WJRX-FM 102.3 KSAM-FM 101.7 KTXJ-FM 102.3 KLJT 107.3 KPEI-FM 100.3 KLUE-FM 105.7 KSE-FM 93.7 KBFM 96.3 KXTI-FM 91.9 KMHT-FM 97.3 KNFM 92.3 KM0D-FM 93.3 KIMP-FM 100.7 KBNQ 96.7 KWMO 99.1 KQCV 91.3 KQYL-FM 97.9 KLVL-FM 92.5 KHBL 88.1 KFMP 93.8 KPA-C-FM 98.5 KSWL 93.9 KJSJ 97.5 KISS 99.5 KEEZ 97.3 KAKI-FM 98.1 KITI 92.9 KMF-FM 96.1 KTOD-FM 101.3 KBMF-FM 98.3 KYLE-FM 104.9 KTAL-FM 98.1 KOSY-FM 102.5 KZAK 93.1 KDKC-FM 101.5 KTXX-FM 92.1 KEFC 97.5 KLUR 99.9 KNTO 95.1		Big Spring	WVSC-FM 97.7		Denton	KFMN 99.3		Portsmouth	WYFI-FM 99.7 WAVY-FM 96.9	
<b>PENNSYLVANIA</b>																	
Allentown	WFMZ 100.7 WAEB-FM 104.1		Woonsocket	WVSC-FM 97.7		DiBoll	KFMN 99.3		Richmond	WRAD-FM 101.7 WRDC 91.1							
Altoona	WVAM-FM 100.1 WFBG-FM 98.1		Anderson	WCAC 101.1		El Paso	KFMN 99.3		Roanoke	WYFI-FM 99.7 WVAV-FM 96.9							
Beaver Falls	WBVP-FM 106.7		Batesburg	WBLR-FM 92.1		Ft. Worth	KFMN 99.3		Radford	WRAD-FM 101.7							
Bethlehem	WGPA-FM 95.5		Beaufort	WBEU-FM 98.7		Galveston	KFMN 99.3		Richmond	WRDC 91.1							
Bloomsburg	WHLS-FM 98.5		Charleston	WCSC-FM 96.9		Harlingen	KFMN 99.3		South Boston	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Boyerstown	WBYC-FM 107.5		Clemson	WTMA-FM 95.1		Henderson	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Bradock	WLOA-FM 96.9		Columbia	WBSF-FM 98.1 WCCS-FM 97.0 WNOK-FM 104.7 WUSC-FM 89.9		Highland Park-Dallas	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Butler	WBUT-FM 97.7		Conway	WNOK-FM 104.7		Hillsboro	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Carbondale	WDDL-FM 94.3		Dillon	WLAT-FM 104.1		Houston	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Carlisle	WHYL-FM 102.3		Easley	WDS-C-FM 92.9		Marshall	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Chambersburg	WCHA-FM 95.1		Florence	WELP-FM 103.9		Midland	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Ouasis	WCED-FM 93.1		Greenville	WJMX-FM 103.1		Mt. Pleasant	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Easton	WEST-FM 107.9 WJRH 90.5 WEEF-FM 99.9 WEND 103.9 WMSH-FM 106.7 WJET-FM 103.7 WYFN-FM 99.9 WGET-FM 107.7		Greenwood	WESC-FM 92.5 WFBC-FM 97.7 WMUU-FM 94.5 WCRS-FM 96.7 WLCM-FM 107.1 WLBG-FM 100.5 WVYB-FM 92.1		Odessa	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Edensburg	WJRH 90.5		Laurens-Clinton	WJMX-FM 103.1		Pasadena	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Elizabethtown	WJRH 90.5		Myrtle Beach	WJMX-FM 103.1		Plainview	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Erie	WJRH 90.5		N. Charleston	WJMX-FM 103.1		Port Arthur	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Gettysburg	WJRH 90.5		Rock Hill	WJMX-FM 103.1		San Angelo	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Glenside	WJRH 90.5		Seneca	WJMX-FM 103.1		San Antonio	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Greensburg	WJRH 90.5		Spriartanburg	WJMX-FM 103.1		Santa Fe	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Greenville	WJRH 90.5		Sumter	WJMX-FM 103.1		Sinton	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Grove City	WJRH 90.5		Hot Springs	WJMX-FM 103.1		Temple	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Harrisburg	WJRH 90.5		Sioux Falls	WJMX-FM 103.1		Texarkana	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Havertown	WJRH 90.5		Bristol	WJMX-FM 103.1		Tyler	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Hazlet	WJRH 90.5		Chattanooga	WJMX-FM 103.1		Victoria	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Jenkintown	WJRH 90.5		Cleveland	WJMX-FM 103.1		Waco	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Johnstown	WJRH 90.5		Collegedale	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lancaster	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lebanon	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lewisburg	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lewiston	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lock Haven	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Martinsburg	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Meadville	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Media	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Montrose	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
New Kensington	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Tarentum	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Oil City	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Palmyra	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Philadelphia	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Havertown	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Hazlet	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Jenkintown	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Johnstown	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lancaster	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lebanon	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lewisburg	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lewiston	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lock Haven	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Martinsburg	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Meadville	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Media	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Montrose	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
New Kensington	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Tarentum	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Oil City	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Palmyra	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Philadelphia	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Havertown	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Hazlet	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Jenkintown	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Johnstown	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lancaster	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lebanon	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lewisburg	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lewiston	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Lock Haven	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Martinsburg	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Meadville	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Media	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Montrose	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
New Kensington	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford	WRVA-FM 94.5 WRNL-FM 102.1 WDBJ-FM 94.9 WLRJ 92.3							
Tarentum	WJRH 90.5		Cookeville	WJMX-FM 103.1		Wichita Falls	KFMN 99.3		Stauford								

# WHITE'S RADIO LOG

Location	C.L.	Mc.
<b>WISCONSIN</b>		
Appleton	WLFM	*91.1
	WAPL-FM	105.7
Chilten	WHKW	*89.3
Colfax	WHWC	*88.3
Deafield	WHAD	*90.7
Eau Claire	WIAL	94.1
	WEAU-FM	100.7
Fort Atkinson	WFAW	102.3
Green Bay	WBAY-FM	101.1

Location	C.L.	Mc.	Location	C.L.	Mc.	Location	C.L.	Mc.
Greenfield Twp.	WWCF	94.9	Monroe	WEKZ-FM	93.7	<b>PUERTO RICO</b>		
Highland	WHHI	91.3	Mt. Horeb	WFMK	92.3	Arecibo	WNIK-FM	106.3
Highland Twp.	WWSA	*89.9	Neillsville	WCCN-FM	107.5	Aguadilla	WABA-FM	100.3
Janesville	WCLO-FM	99.9	Platteville	WSUP	*89.5	Bayamon	WRSJ-FM	100.7
Kenosha	WLIP	95.1	Racine	WRJN-FM	100.7	Carolina	WVOZ-FM	107.7
La Crosse	WHLA	90.3	Rice Lake	WFNY	92.1	Fajardo	WMDD-FM	96.5
	WVLA	93.3	Ripon	WJMC-FM	96.3	Guayama	WRRF-FM	106.9
Madison	WHA-FM	*88.7	Sauk City	WCWC-FM	95.9	Mayaguez	WJEB-FM	99.1
	WIBA-FM	101.5	Sparta	WVLR	97.7	Ponce	WLEB-FM	101.9
	WMFM	104.1(s)	Stevens Point	WCOV-FM	96.1		WIPB-FM	93.3
	WRVB-FM	102.5	Superior	WSPT-FM	97.9		WIAC-FM	102.3
Marinette	WHMD	*91.5	Tomah	WWJC-FM	105.1		WITA-FM	93.7
Marshfield	WDLB-FM	106.5	Watertown	WTMB-FM	98.9		WOLA	105.7
Merrill	WLIN	100.7	Wausau	WTTN-FM	104.7	<b>VIRGIN ISLANDS</b>		
Milwaukee	WFMR	96.5	Wausau	WAUK-FM	106.1	St. Croix, Christiansted	WVI-FM	99.5
	WMIL-FM	95.7	Wausau	WHRM	*91.9	Christiansted, St. Croix	WVI-FM	99.5
	WISN-FM	97.3	Wauwatosa	WRIG-FM	101.9			
	WRIT-FM	102.9	West Bend	WTOS	103.7			
	WMKE	102.1	Whitewater	WBKV-FM	92.5			
	WQFM	93.3	Whitewater	WSUW	91.7			
	WTMJ	94.5	Wisc. Rapids	WFRH-FM	103.3			
	WBON	107.7	<b>WYOMING</b>					
	WEMP-FM	99.1	Cheyenne	KVWO-FM	106.3			
	WUWM	*89.7						

## Canadian AM Stations by Location

Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.	Location	C.L.	Kc.
Abbotsford, B.C.	CFVR	1240	Gravelbourg, Sask.	CKCM	620	Oakville, Ont.	CHWO	1250	Simcoe, Ont.	CKTS	900
Altona, Man.	CFAM	1290		CJCN	680	Orillia, Ont.	CFOR	1570	Smiths Falls, Ont.	CFRS	1560
Amherst, N.S.	CKDH	900		CFRG	710	Oshawa, Ont.	CKLB	350	Smithers, B.C.	CFBV	1230
Amos, Que.	CHAD	1340		CFGR	1230	Ottawa, Ont.	CBQ	910	Sorel, Que.	CJSO	1320
Antigonish, N.S.	CJFX	580	Guelph, Ont.	CJOY	1460		CBQF	1250	Stratford, Ont.	CJCS	1240
Barrie, Ont.	CKBB	950	Halifax, N.S.	CBH	860		CFRA	580	Steinbach, Man.	CHSM	1250
Bathurst, N.B.	CKBC	1360		CHNS	960		CKPY	1440	Stephenville, Nfld.	CFSX	910
Belleville, Ont.	CJBO	800		CHNX	630	Dwen Sound, Ont.	CKPM	1440	Sudbury, Ont.	CFBR	550
Blind River, Ont.	CJNR	730		CHNC	920	Parry Sound, Ont.	CFOS	560		CHNO	900
Brampton, Ont.	CHIC	790	Hamilton, Ont.	CHML	1000	Peace River, Alta.	CKAR-I	1340		CHLN	550
Brandon, Man.	CKX	1150		CKOC	950	Pembroke, Ont.	CKYL	610	Summerside, P.E.I.	CJRW	1240
Brantford, Ont.	CKPC	1380		CHIQ	1280	Peterborough, Ont.	CHOV	1350	Swift Current, Sask.	CKSW	1400
Bridgewater, N.S.	CKBW	1000	Hauterive, Que.	CHLC	580	Peterborough, Ont.	CKOK	800	Sydney, N.S.	CB1	1140
Brookville, Ont.	CFJR	1450	Huntsville, Ont.	CKAR	630		CHEX	980		CJCB	1270
Cabano, Que.	CJAF	1240	Hull, Que.	CKCH	970	Pointe Claire, Que.	CKPT	1420	Terrace, B.C.	CFTK	590
Calgary, Alta.	CBR	1010	Inuvik, N.W.T.	CHAK	860	Portage La Prairie, Man.	CFMX	920	Theftford Mines, Que.	CKLD	1320
	CFAC	960	Joliette, Que.	CKRS	590	Port Albeni, B.C.	CJAV	1240	Thomson, Man.	CHTM	610
	CFCN	1060	Jonquiere, Que.	CKRS	590	Port Arthur, Ont.	CFPA	1230	Trois-Rivières, Que.	CHLN	550
	CHOR	810	Kamloops, B.C.	CFJC	910	Prince Albert, Sask.	CKPR	580		CKOT	1510
Callender, Ont.	CKXL	1140	Kelowna, B.C.	CKOV	630	Prince George, B.C.	CKPG	550	Timmins, Ont.	CFCL	620
Campbell River, B.C.	CFCH	600	Kenora, Ont.	CJRL	1220	Prince Rupert, B.C.	CFPR	860	Toronto, Ont.	CKGB	680
	CFWB	1490	Kentville, N.S.	CKEN	1350	Quebec, Que.	CFM	980		CFBR	1010
Campbellton, N.B.	CKNB	950	Kingston, Ont.	CFRC	1490		CHRR	800		CHUM	1050
Camrose, Alta.	CFW9	790	Kirkland Lake, Que.	CJKL	560	Quesnel, B.C.	CKCV	1280		CKJC	860
Causapeau, Que.	CJBM	1450	Kitchener, Ont.	CKR	1490	Red Deer, Alta.	CKRD	850	Trail, B.C.	CJAT	610
Charlottetown, P.E.I.	CFCY	630	Kitimat, B.C.	CKTK	1230	Regina, Sask.	CKB	540	Truro, N.S.	CKCL	600
Chatham, Ont.	CFCO	630	Langley, B.C.	CJJC	850		CFME	1300	Val d'Or, Que.	CKVD	1230
Chicoutimi, Que.	CBJ	1580	La Sarre, Que.	CKLS	1240		CFME	1300	Vailleyfield, Que.	CFV	1370
	CJMT	1420	La Tuque, Que.	CFLM	1240		CFMR	980	Vancouver, B.C.	CFBU	590
Chilliwack, B.C.	CHWK	1270	Leamington, Ont.	CJSP	710	Richmond Hill, Ont.	CFGM	1310		CFUN	1410
Churchill, Man.	CHFC	1230	Lethbridge, Alta.	CHCC	1090	Rimouski, Que.	CJBR	900		CHQM	1320
Cobourg, Ont.	CHUC	1450		CJOC	1220	Riviere du Loup, Que.	CJFP	1400		CJGR	600
Corner Brook, Nfld.	CBY	990	Lindsay, Ont.	CKLY	910	Roberval, Que.	CHRL	910	Verdun, Que.	CKVL	850
	CFGB	570	Middleton, N.S.	CKAD	1490	Rouyn, Que.	CKRN	1400	Vernon, B.C.	CJIB	940
Cornwall, Ont.	CFML	1110	Lloydminster, Alta.	CKSA	1080	Ste. Anne de la Pocatiere, Que.	CHGB	1310	Victoria, B.C.	CFAX	1070
	CJSS	1220	London, Ont.	CFPL	960	St. Boniface, Man.	CKSB	1050		CJVI	900
Courtenay, B.C.	CFCP	1440	London, Ont.	CKSL	1410	St. Catharines, Ont.	CKTB	610	Victoriaville, Que.	CFDA	1380
Cranbrook, B.C.	CKEK	570	Malone, Que.	CKBL	1250	St. Hyacinthe, Ont.	CKBS	1240	Ville Marie, Que.	CKVM	710
Dartmouth, N.S.	CFDR	790	Medicine Hat, Alta.	CHAT	1270	St. Jean, Que.	CHRS	1090	Ville St. Georges, Que.	CKRB	1460
Dauphin, Man.	CKDM	730	Midland, Ont.	CKMP	1230	St. Jerome, Que.	CKJL	900		CJWA	1240
Dawson Creek, B.C.	CJDC	1350	Moncton, N.B.	CKBA	1300	Saint John, N.B.	CBN	1110		CHOW	1470
Drumheller, Alta.	CJDB	910	Mont Laurier, Que.	CKCW	1220	St. John's, Nfld.	CBN	640	Welland, Ont.	CHOW	1470
Drummondville, Que.	CHRD	1340	Montmagny, Que.	CKBM	1490		CBN	640	Weyburn, Sask.	CFSL	1340
Dryden, Ont.	CKDR	900	Montreal, Que.	CFB	690		CBN	640	Whitehorse, Y.T.	CFWH	570
Duncan, B.C.	CKAY	1500		CFB	690		CBN	640	Williams Lake, B.C.	CKWL	1240
Edmonton, Alta.	CBX	740		CFB	690	St. Joseph d'Alma, Que.	CFGT	1270	Windsor, N.S.	CFAB	1450
	CFRN	1260		CFB	690	St. Thomas, Ont.	CHLO	680	Windsor, Ont.	CBSE	1550
	CHED	630		CFB	690	Sackville, N.B.	CBA	1070		CKLW	800
	CHFA	680		CFB	690	Saint John, N.B.	CFBC	930		CKWX	580
	CJCA	930		CFB	690		CHSJ	1150	Wingham, Ont.	CKNX	920
	CKUA	580		CFB	690		CFB	930	Winnipeg, Man.	CBW	990
Edmundston, N.B.	CJEM	570		CFB	690		CFB	930		CJOB	680
Estevan, Sask.	CJSL	1280		CFB	690		CFB	930		CJQM	1470
Flin Flon, Man.	CFAR	590		CFB	690		CFB	930		CKRC	630
Fort Frances, Ont.	CFQB	800		CFB	690		CFB	930		CJQM	1470
Fort Simpson, N.W.T.	CFMR	1490		CFB	690		CFB	930		CKY	580
	CKNL	560		CFB	690		CFB	930		CJCY	920
Fort St. John, B.C.	CJXL	800		CFB	690		CFB	930		CKOX	1340
Fort Williams, Ont.	CBZ	970		CFB	690		CFB	930		CJLS	1340
Fredericton, N.B.	CFNB	550		CFB	690		CFB	930		CFYK	1340
	CFTJ	1110		CFB	690		CFB	930		CJGX	940
Galt, Ont.	CBG	1450		CFB	690		CFB	930			
Gander, Nfld.	CFGB	1340		CFB	690		CFB	930			
Goose Bay, Nfld.	CFHF	1450		CFB	690		CFB	930			
Granby, Que.	CFHP	1050		CFB	690		CFB	930			
Grande Prairie, Alt.	CFGP	1050		CFB	690		CFB	930			
Grand Bank, Nfld.	CJOX	710		CFB	690		CFB	930			
Grand Falls, Nfld.	CBT	540		CFB	690		CFB	930			

## Canadian FM Stations by Location

Location	C.L.	Mc.	Location	C.L.	Mc.	Location	C.L.	Mc.	Location	C.L.	Mc.	
Belleville, Ont.	CJBQ-FM	97.1	Kitchener, Ont.	CKRC-FM	96.7	Red Deer, Alta.	6KRD-FM	98.9				
Brandon, Man.	CKX-FM	96.1	Lethbridge, Alta.	CHEC-FM	100.9	Rimouski, Que.	CJBR-FM	101.5			CHFI-FM	98.1
Calgary, Alta.	CHFM-FM	95.9	London, Ont.	CFPL-FM	95.9	Saint John, N.B.	CFBC-FM	98.9			CHUM-FM	104.5
Cornwall, Ont.	CJSS-FM	104.5	Montreal, Que.	CBF-FM	95.1	Saskatoon, Sask.	CFMC-FM	103.9			CJRT-FM	91.1
Edmonton, Alta.	CFRN-FM	100.3		CBM-FM	100.7	Sault St. Marie, Ont.			Vancouver, B.C.		CKFM-FM	99.9
	CJCA-FM	99.5		CFQ-FM	92.5						CBU-FM	105.7
	CKUA-FM	98.1		CJFM-FM	95.9						CFQM-FM	103.5
Halifax, N.S.	CHNS-FM	96.1		CJMS-FM	94.3	Sherbrooke, Que.	CJIC-FM	100.5			CKLG-FM	99.3
Hamilton, Ont.	CHML-FM	95.3		CKGM-FM	97.7	St. Catharines, Ont.	CHLT-FM	102.7	Verdun, Que.		CKVL-FM	96.9
Kamloops, B.C.	CFFM-FM	98.3	Oshawa, Ont.	CKLB-FM	93.5				Victoria, B.C.		CFMS-FM	98.5
Kelowna, B.C.	CJOV-FM	104.7	Ottawa, Ont.	CBO-FM	103.3	St. Norbert (Winnipeg), Man.	CKTB-FM	97.7	Windsor, Ont.		CKLW-FM	93.9
Kentville, N.S.	CKWM-FM	97.7	Port Arthur, Ont.	CFMO-FM	93.9				Winnipeg, Man.		CJOB-FM	97.5
Kingston, Ont.	CKRC-FM	91.9	Quebec, P.Q.	CKPR-FM	94.3	Sydney, N.S.	CFMW-FM	98.3			CKQM-FM	94.3
	CKLE-FM	99.5		CHRC-FM	98.1	Timmins, Ont.	CJCB-FM	94.9			CKY-FM	92.1
	CKWS-FM	96.3				Toronto, Ont.	CKGB-FM	94.5				
							CBC-FM	99.1				

## World-Wide Short Wave Stations

**T**he World-Wide short wave stations section of *White's Radio Log* is, as its name implies, a *log*, that lists stations actually monitored by listeners in the United States, Canada and overseas. It is *not* intended to be a listing of *all* shortwave transmitters, licensed as such listings contain numerous inactive transmitters, and low powered stations which are rarely heard by DX'ers. The stations listed here, therefore, are those most often reported and consistently heard during the past few months. Many have been monitored by DX CENTRAL, the official RADIO-TV EXPERIMENTER monitoring post in New York City.

Because of the fact that this log represents actual monitoring reports rather than data taken from published program schedules received from the stations, you may find that frequencies (and operating times) given here differ from *official listings*. This is because foreign short-wave stations frequently operate several kilocycles away from their assigned (and announced) frequencies. In addition, the schedules of these stations are often changed and the changes are not published in the schedules until many months later. We feel that the type of log which *White's Radio Log* is presenting represents a very realistic picture of the current status of short-wave broadcasting, and is something which cannot be obtained elsewhere.

**For the DX'er.** If you care to roam the bands for DX, we present here some information which will be of invaluable use to you in tracking down DX stations.

Although the current radio propagation conditions have made the high frequency bands (11 and 13 meter bands) relatively poor for DX'ers, the other bands are generally good during certain periods of the year.

As a general rule, the following bands are "hot for DX" during the daily and seasonal times indicated:

- 60-meter band=Winter nights.
- 49-meter band=Winter nights.
- 41-meter band=Winter nights.
- 31-meter band=Nights, all year.
- 25-meter band=Nights, all year.
- 19-meter band=Days all year, and Summer nights.
- 16-meter band=Days, all year, and Summer nights.
- 13-meter band=Days, all year.
- 11-meter band=Days, all year.

**More on QSL's.** In a recent issue of RADIO-TV EXPERIMENTER we discussed the collecting of QSL cards from broadcasting stations, one of the finer aspects of the art of DX'ing. When our issue came out we received considerable mail asking about the possibilities of QSL cards from *non-broadcasting* radio stations, such as hams, police, ships, etc.

Ham stations generally swap QSL cards with each other after a "contact," and a good percentage of ham operators will also QSL a monitoring report if they find it useful. The addresses of ham operators may be obtained from *The Radio Amateurs Callbook* which may be purchased at Ham radio stores or by mail from any of the major parts supply houses.

Police stations, ships, and other "odd ball" stations sometimes QSL, but generally they will ignore your report unless you include with it a prepared QSL card (stamped, too) which they can sign and return to you without much bother. The radio-telephone stations frequently heard with test tapes on single-sideband are tough to QSL because they prefer to keep their transmissions as un-

# WHITE'S RADIO LOG

publicized as possible. However, a nice letter may get results.

Citizens Band operators will frequently QSL SWL reports, but finding their addresses is a problem because of the absence of adequate callbooks. Each month there is a listing of about 1000 CB operators in *59 Magazine*, which is available on many newsstands throughout the United States and Canada.

In our listings, a station or frequency marked with an asterisk (\*) indicates a non-broadcast station or frequency. This might include aeronautical, maritime, military, or other type of transmission, either in regular AM or single sideband (SSB). In instances where many non-broadcast stations use the same frequency, we have given you a clue as to the type of stations to be found there, rather than pin down only one station.

**Let Us Know.** Listeners are invited to submit their loggings to us for publication in the Shortwave section of *White's Radio Log*. Be sure to include the following information for each station you report: approximate frequency, callsign and/or station name, city and country, and time heard in Eastern Standard Time, 24 hour clock. Address your reports to: DX CENTRAL, *White's Radio Log*, c/o RADIO-TV EXPERIMENTER, 505 Park Avenue, New York, N. Y. 10022, U.S.A.

**Time To Listen.** All times shown in *White's Radio Log* are in the 24 hour EST clock system. For example, 0800 is 8:00 AM EST, 1200 is noon EST, 1800 is 6 PM EST, and so on. For conversion to other time zones, subtract 1 hour for CST (0800 EST is 7 AM CST), 2 hours for MST, 3 hours for PST.

The following abbreviations are used in

our listings: BC—Broadcasting Company, Corporation, or System; E—Emissora; R—Radio or Radiodiffusion; V—Voice or Voz.

**TNX.** We are indebted to the following DX'ers who added their loggings to those of DX CENTRAL, the official RADIO-TV EXPERIMENTER monitoring station in New York City, to bring you this month's listings:

- Doug McKirahan, Oak Park, Ill.
- Chris Thompson, Rexdale, Ont.
- Carl Dyrnavich, Riverdale, Ill.
- Steven & Larry Levine, West Hartford, Conn.
- Phyllis J. Kline, Coventry, R.I.
- Terry Silvernail, Lake Worth, Fla.
- Ronald Tlachac, Marshfield, Wisc.
- Jess Dyer, Dearborn, Mich.
- Steve Wilkes, Dallas, Tex.
- Frank Priore, College Pt., N.Y.
- Julian Sienkiewicz, Brooklyn, N.Y.
- Robert D. Fontaine, Natick, Mass.
- Doris Lautrisi, West Warwick, R.I.
- Bruce Zuckerman, Clark, N.J.
- H. Handrei, Burnaby, B.C.
- James Palmer, Deer Park, N.Y.
- Noel M. Moss, New York, N.Y.
- Tom Kneitel, New York, N.Y.
- David Wynn, Elysburg, Pa.
- Philip A. Jones, Whittier, Calif.
- John T. Casey, Charlestown, Mass.
- Alan Statman, Caldwell, N.J.
- Wade M. Smith, Wayne, Pa.
- S. Leo Bance, Norwalk, Calif.
- Ira Schultz, White Plains, N.Y.
- Edward T. Zebrowski, Holyoke, Mass.
- Darrel Bender, Camp Hill, Pa.
- Lud Elliman, Damariscotta, Me.
- Alfred H. Howe, Candor, N.Y.
- Karl Simmons, Jacksonville, Fla.
- Allan Cunningham, Willowick, Ohio
- L. Bruce Meyer, Portland, Ore.
- Jon B. Elso, Manchester, Mass.
- Rick Slattery, Miami, Fla.
- Frank J. Miller, Hampstead, Md.
- Dale Koby, Van Nuys, Calif.
- John J. Herro, Glenview, Ill.
- Dave Schmidt, Green Ridge, Pa.
- Andrew G. Rekey, Chicago, Ill.
- Steve Congdon, East Homer, N.Y.
- Roger Camire, Manchester, N.H.
- F. R. Lane, Wellesley, Mass.
- Richard G. Abrams, Norwalk, Conn.
- Marian K. Ely, Delray Beach, Fla.
- Townsend F. Groce, Coatesville, Pa.
- Bruce Robertson, West Hill, Ont.

## Short-Wave Listings

Kc/s	Call	Name	Location	EST	Kc/s	Call	Name	Location	EST
2355	—	Zambia BC	Lusaka, Zambia	0005	3315	—	R-TV Francaise	Ft. de France, Martinique	0530
3240	—	R. Brazzaville	Brazzaville, Congo	0000	3356	—	R. Bechuanaland	Gaberones, Bechuanaland	1000
3250	ELWA	R. Village	Monrovia, Liberia	1645					
3270	—	Zambia BC	Lusaka, Zambia	0005					

Kc/s	Call	Name	Location	EST	Kc/s	Call	Name	Location	EST
3620	HC2KH	R. el Sagrario	Guayaquil, Ecu.	2300	6145	DMQ6	Deutsche Welle	Cologne, W. Germany	2000
3704	CR6RD	R. Clube do Huambo	Huambo, Angola	0100	6150	HCEM4	R. Costa Azul	Portoviejo, Ecuador	2320
3910	—	Far East Network	Tokyo, Japan	0400	—	—	R. Bucharest	Bucharest, Rumania	1730
3980	—	R. Commercial	Sa da Bandeira, Angola	0030	—	—	R. South Africa	Capetown, S. Africa	2200
<b>60 Meter Band—4750 to 5060 Kc/s</b>									
4750	HC8K2	R. El Mundo	Guayaquil, Ecuador	2200	6160	—	R. Algiers	Algiers, Algeria	1530
4765	—	R. Brazzaville	Brazzaville, Congo	0000	6185	LLI	R. Norway	Oslo, Norway	0000
4770	ELWA	R. Village	Monrovia, Liberia	1720	6190	—	R. Bucharest	Bucharest, Rumania	1730
—	HCMX4	R. Cenit	Portoviejo, Ecuador	2320	6195	—	R. Burundi	Usumbura, Burundi	0000
—	—	R. Comercial	Sa da Bandeira, Angola	0030	6202	TJJCv	R. Atenas	Atenas, Costa Rica	1800
4780	YVLA	V. de Carabobo	Valencia, Venezuela	2120	6210	—	R. Tabriz	Tabriz, Iran	1320
—	HCLCI	R. Atahualpa	Quito, Ecuador	2320	6540	—	R. Pyongyang	Pyongyang, N. Korea	0310
4795	CP73	R. Nueva America	La Paz, Bolivia	2050	6610	—	R. Atlantico	Las Palmas, Canary Is.	1400
4810	HCFA4	V. de Manabi	Portoviejo, Ecuador	0100	7090	—	R. Tirana	Tirana, Albania	0135
4850	—	Mauritius BC	Forest Side, Mauritius	0800	<b>41 Meter Band—7100 to 7300 Kc/s</b>				
4861	OAZ4T	R. Chanchamayo	La Merced, Peru	1930	7105	—	R. Brazzaville	Brazzaville, Congo	0000
4867	HJFV	R. Neiva	Neiva, Colombia	2330	7113	—	Gorovit Vilnus	Vilnus, Lithuanian SSR	1800
4870	—	R. Cotonou	Cotonou, Dahomey	1630	7125	—	R. Warsaw	Warsaw, Poland	0130
4890	YVKP	R. Tropical	Caracas, Venezuela	1900	7130	BED7	V. Free China	Taipei, Formosa	1030
4911	—	Zambia BC	Lusaka, Zambia	0245	7135	—	R. Tehran	Tehran, Iran	1830
4913	HCMJ1	R. Gran Colombia	Quito, Ecuador	0030	7145	—	R. Warsaw	Warsaw, Poland	1630
—	VTW2	R. Tarawa	Tarawa, Gilbert & Ellice Is.	0230	7150	—	R. Comercial	Sa da Bandeira, Angola	0030
4916	—	R. Trebol	Zaruma, Ecuador	2230	7160	—	R. Moscow	Moscow, USSR	1500
4921	OBX7H	Ondas del Titicaca	Puno, Peru	2130	7170	CR6RD	R. Clube Huambo	Huambo, Angola	0100
4923	HCQR1	R. Quito	Quito, Ecuador	0030	7170	—	Nat'l BC Service	Leopoldville, Congo	2300
4926	EAJ206	R. Ecuatorial	Bata, Sp. Guinea	1640	7185	—	Gorovit Vilnus	Vilnus, Lithuanian SSR	1800
4940	YVMO	R. Lara	Venezuela	1930	—	—	R. Thailand	Bangkok, Thailand	2315
4943	HXCZI	R. Nacional	Quito, Ecuador	2030	7195	—	R. Bucharest	Bucharest, Rumania	1730
4970	—	R. Mogadiscio	Mogadiscio, Somalia	1415	7200	—	R. Belgrade	Belgrade, Yugoslavia	1330
5020	YVLK	R. Rumbos	Caracas, Venezuela	2200	7220	—	R. Australia	Melbourne, Australia	1030
—	—	R. Cronos	Barquisimeto, Venezuela	1930	7225	—	R. Bucharest	Bucharest, Rumania	1430
5035	—	R. Bangui	Bangui, Centr. Afr. Rep.	1710	7240	—	R. Moscow	Moscow, USSR	0200
5042	CR6RF	R. Clube Benguela	Benguela, Angola	0050	7260	—	R. Moscow	Moscow, USSR	1600
5065	CR6RD	R. Clube Huambo	Huambo, Angola	0100	DMQ7	Deutsche Welle	Cologne, W. Germany	1445	
5075	HJGC	R. Sutatenza	Sutatenza, Colombia	2022	7265	—	R. Lome	Lome, Togo	0700
5095	HJGC	R. Sutatenza	Sutatenza, Colombia	2025	7267	—	R. Addis Ababa	Addis Ababa, Ethiopia	1115
5805	—	R. Sanaa	Sanaa, Yemen	2230	7270	—	R. Warsaw	Warsaw, Poland	0600
<b>49 Meter Band—5950 to 6200 Kc/s</b>									
5950	—	R. Warsaw	Warsaw, Poland	1630	7270	—	R. South Africa	Capetown, South Africa	1150
5960	—	Trans World R.	Monte Carlo, Monaco	1430	7275	—	V. Nigeria	Lagos, Nigeria	0800
5970	—	R. Brazzaville	Brazzaville, Congo	0000	7285	—	R. Warsaw	Warsaw, Poland	0600
—	CKNA	R. Canada	Montreal, Que.	0230	VUD	All India R.	Delhi, India	1345	
5980	—	Lebanese BC	Beirut, Lebanon	0915	—	—	N.H.K.	Tokyo, Japan	0215
5990	—	Malawi BC	Zomba, Malawi	1100	7310	—	Gorovit Vilnus	Vilnus, Lithuanian SSR	1800
5995	—	R. Warsaw	Warsaw, Poland	0600	7340	—	R. Moscow	Moscow, USSR	1440
6000	—	R. Americas	Swan Island	2227	7580	—	R. Pyongyang	Pyongyang, N. Korea	0500
6010	ETLF	R. V. of Gospel	Addis Ababa, Ethiopia	1045	7670	—	Sawt Al Islam	Jedda, Saudi Arabia	1200
6035	—	V. of America	Monrovia, Liberia	1715	9009	4XB31	Kol Zion	Jerusalem, Israel	1545
6050	—	R. Union	Pt. au Prince, Haiti	2100	9360	—	R. Nacional	Madrid, Spain	1520
—	—	R. Moscow	Moscow USSR	1440	9390	—	R. Tirana	Tirana, Albania	1640
6060	—	R. Havana	Havana, Cuba	2100	9410	GRI	BBC	London, England	1330
6065	ZYR3	R. Nacional	Brazilia, Brasil	1800	9455	OAX4W	R. Americas	Lima, Peru	2200
6070	—	R. el Condor	La Paz, Bolivia	1800	9480	—	R. Moscow	Moscow, USSR	0200
6075	DMQ6	Deutsche Welle	Cologne, W. Germany	1445	9485	4VC	R. Commerce	Pt. au Prince, Haiti	2100
6080	—	V. of America	Tangiers, Morocco	1740	<b>31 Meter Band—9500 to 9775 Kc/s</b>				
—	—	R. Stanleyville	Stanleyville, Congo	0015	9505	—	R. Belgrade	Belgrade, Yugoslavia	1030
6090	—	R. Koduna	Koduna, Nigeria	0030	9510	GSB	BBC	London, England	1735
6100	DMQ6	Deutsche Welle	Cologne, W. Germany	2130	—	—	R. Bucharest	Bucharest, Rumania	1430
—	—	R. Belgrade	Belgrade, Yugoslavia	1330	9515	—	R. Kuwait	Kuwait	1615
6109	YYPN	R. Escuelas R.	San Fernando, Venezuela	1930	9525	—	R. South Africa	Capetown, South Africa	0945
6115	—	R. Reloj	Lima(?), Peru	2100	9530	DMQ9	Deutsche Welle	Cologne, W. Germany	1445
6120	HER3	Swiss BC	Berne, Switz.	2015	9540	—	Ankhararai	Ulan Bator, Mongolia	1630
6125	CP15	R. el Condor	La Paz, Bolivia	1800					
6130	LKJ	R. Norway	Oslo, Norway	0700					
6140	TISRHB2	R. Popular	San Jose, Costa Rica	2230					

# WHITE'S RADIO LOG

Kc/s	Call	Name	Location	EST
9545	DMQ9	Deutsche Welle	Cologne, W. Germany	2130
—	—	Lebanese BC	Beirut, Lebanon	0430
9550	LLD	R. Norway	Oslo, Norway	0000
9555	YSS	R. Nacional	San Salvador, El Salvador	2035
9560	—	Gorovit Yerevan	Yerevan, Armenian SSR	1515
—	—	V. of Holy Land	Amman, Jordan	2000
9560	PCJ	R. Nederland	Hilversum, Neth.	1300
9562	OAX4R	R. Nacional	Lima, Peru	2318
9570	—	R. Bucharest	Bucharest, Rumania	1430
—	—	R. Australia	Melbourne, Australia	0230
9575	DMQ9	Deutsche Welle	Cologne, W. Germany	2000
—	—	RAI	Rome, Italy	1410
9580	—	BBC	Nicosia, Cyprus	1315
9590	—	R. Bucharest	Bucharest, Rumania	1730
9600	—	R. Australia	Melbourne, Australia	1430
—	—	R. Moscow	Moscow, USSR	0200
9605	DMQ9	Deutsche Welle	Cologne, W. Germany	1808
9610	LLG	R. Norway	Oslo, Norway	1900
—	OAX8C	R. Nacional	Iquitos, Peru	0600
9625	CKLO	R. Canada	Montreal, Que.	0230
—	FCJ	R. Nederland	Hilversum, Neth.	0900
—	—	Kol Zion	Jerusalem, Israel	1545
9635	—	V. of West	Lisbon, Portugal	1700
9640	—	R. Conakry	Conakry, Guinea Rep.	1700
9640	DMQ9	Deutsche Welle	Cologne, W. Germany	1330
—	—	Trans World R.	Bonaire, Neth. Ant.	1600
9645	TIFC	Faro del Caribe	San Jose, Costa Rica	0800
9651	—	R. Maldive Isl.	Maladive Is.	0230
9660	—	Lebanese BC	Beirut, Lebanon	2330
—	—	R. Nacional de Espana	Tenerife, Canary Isl.	0900
9675	—	R. Warsaw	Warsaw, Poland	0600
9690	—	V. Nigeria	Lagos, Nigeria	0800
9700	—	R. Sofia	Sofia, Bulgaria	1400
9710	—	Far East BC	Manila, Philippines	2100
—	—	R. Moscow	Moscow, USSR	0200
—	LRX2	R. El Mundo	Buenos Aires, Arg.	2350
—	OAX9D	R. Tropical	Tarapoto, Peru	0600
9725	—	N.H.K.	Tokyo, Japan	0455
—	4XB51	Kol Zion	Jerusalem, Israel	1545
9730	—	R. Brazzaville	Brazzaville, Congo	0000
9735	DMQ9	Deutsche Welle	Cologne, W. Germany	0415
9740	—	R. Pakistan	Karachi, Pakistan	1445
9752	—	R. Pyongyang	Pyongyang, N. Korea	0500
9755	ETLF	R. V. of Gospel	Addis Ababa, Ethiopia	1000
9760	TGWB	V. de Guatemala	Guatemala City, Guat.	1740
—	—	R. V. of Vietnam	Hanoi, N. Vietnam	1900
9780	—	R. Moscow	Moscow, USSR	0700
—	—	Windward I. BC	St. Georges, Grenada	1615
9840	—	R. V. of Vietnam	Hanoi, N. Vietnam	2330
9915	VUD	All India R.	Delhi, India	1345
11672	—	R. Pakistan	Karachi, Pakistan	1445

## 25 Meter Band—11700 to 11975 Kc/s

11700	—	R. Moscow	Moscow, USSR	0700
11710	—	R. Australia	Melbourne, Australia	0015
—	—	R. Brazzaville	Brazzaville, Congo	0000
11715	—	R. Australia	Melbourne, Australia	1700
11720	—	V. of Nigeria	Lagos, Nigeria	0800
—	CHOL	R. Canada	Montreal, Que.	1330

Kc/s	Call	Name	Location	EST
11725	—	R. Brazzaville	Brazzaville, Congo	1200
11730	—	R. Tehran	Tehran, Iran	1830
11735	—	R. Belgrade	Belgrade, Yugoslavia	1030
11738	XEMP	La Charita del Cuad.	Mexico, D.F., Mexico	1600
11740	—	Far East BC	Manila, Philippines	2100
—	CEI174	R. Nuevo Mundo	Santiago, Chile	1900
11755	ETLF	R. V. of Gospel	Addis Ababa, Ethiopia	1330
—	—	BBC	London, England	1735
11760	—	R. V. of Vietnam	Hanoi, N. Vietnam	1900
11765	—	R. Sofia	Sofia, Bulgaria	1400
—	—	R-TV Francaise	Paris, France	1330
11785	DMQ11	Deutsche Welle	Cologne, W. Germany	1445
11790	—	AFRTS	Los Angeles, Calif.	2120
11795	DMQ11	Deutsche Welle	Cologne, W. Germany	0415
—	—	R. Berlin Int'l Nat'l BC Svce.	Berlin, E. Germany	1100
—	—	—	Leopoldville, Congo	2300
—	YDF3	R. Repub. Indonesia	Djakarta, Indonesia	1200
11800	—	R. Nac. de Espana	Tenerife, Canary Is.	1900
—	—	R. Ceylon	Colombo, Ceylon	2030
11805	ZYZ36	R. Globo	Rio de Janeiro, Brazil	1850
—	—	Lebanese BC	Beirut, Lebanon	1500
11810	—	R. Bucharest	Bucharest, Rumania	1730
11815	ZYW24	R. Brazil Cent.	Rio de Janeiro, Brazil	0400
11820	—	R-TV Ivoirienne	Abidjan, Ivory Coast	0745
11825	BED69	V. of Free China	Taipei, Formosa	1030
11830	—	R. Moscow	Moscow, USSR	0200
11835	—	R. Algiers	Algiers, Algeria	1530
—	4VEH	V. Evangelique	Cap Haitien, Haiti	1700
11840	—	R. V. of Vietnam	Hanoi, N. Vietnam	2300
—	—	R. Australia	Melbourne, Australia	1930
—	—	V. of West	Lisbon, Portugal	1700
11845	—	R-TV Francaise	Paris, France	1330
11850	LLK	R. Norway	Oslo, Norway	0700
—	—	Ankhararai	Ulan Bator, Mongolia	1630
—	ZPA3	R. Teleco	Asuncion, Paraguay	1900
11855	—	Sawt Al Islam	Jedda, Saudi Arabia	1200
—	—	R. Paranaense	Paranaense, Brazil	0400
11860	BED45	V. of Free China	Taipei, Formosa	1030
11865	—	R. Havana	Havana, Cuba	2200
11870	—	Nat'l BC Service	Leopoldville, Congo	2300
11875	ETLF	R. V. of Gospel	Addis Ababa, Ethiopia	1200
—	—	R. Soc. de Bahia	Bahia, Brazil	0400
11880	XEH11	R. Comerciales	Mexico D.F., Mexico	1710
11885	ORU	R-TV Belge	Brussels, Belgium	1615
11900	—	V. of Nigeria	Lagos, Nigeria	0800
—	—	R. S. Africa	Capetown, S. Africa	0500
11920	DZF2	Far East BC	Manila, Philippines	0330
11930	—	R. Moscow	Moscow, USSR	0700
—	—	Windward I. BC	St. Georges, Grenada	1710
11935	—	Lebanese BC	Beirut, Lebanon	1830
—	—	R. Brazzaville	Brazzaville, Congo	1330
11940	—	R. Japan	Tokyo, Japan	0115
—	—	R. Bucharest	Bucharest, Rumania	1730
11945	MCO	BBC	London, England	0955
11950	PCJ	R. Nederland	Hilversum, Netherlands	1030
11965	DMQ11	Deutsche Welle	Cologne, W. Germany	1020
11970	PCJ	R. Nederland	Hilversum, Netherlands	1300
11975	—	R. Brazzaville	Brazzaville, Congo	0600
—	—	R. Peking	Peking, China	0700
12095	G.R.F.	BBC	London, England	1300
14530	—	R. Pyongyang	Pyongyang, N. Korea	2000
15050	—	R. Peking	Peking, China	2000
15060	—	R. Peking	Peking, China	0700
15070	GWC	BBC	London, England	1735
15095	—	R. Peking	Peking, China	0700

## 19 Meter Band—15100 to 15450 Kc/s

Kc/s	Call	Name	Location	EST	Kc/s	Call	Name	Location	EST
15100	—	R. V. of Vietnam	Hanoi, N. Vietnam	1900	15315	—	R. Bucharest	Bucharest, Rumania	1000
15110	—	R-TV Francaise	Paris, France	0505	15320	CKNC	R. Canada	Montreal, Que.	1330
	ZL4	R. New Zealand	Wellington, N.Z.	2345	15330	—	AFRS	New York, N.Y.	0830
15115	—	R. Peking	Peking, China	0700	15340	—	R. Havana	Havana, Cuba	1800
	HCJB	V. of the Andes	Quito, Ecuador	1530	15350	—	AFRS	New York, N.Y.	0830
15125	—	V. of Free China	Taipei, Formosa	1030	15380	DZF3	Far East BC	Manila, Philippines	1930
	—	V. of West	Lisbon, Portugal	1700	15425	PCJ	R. Nederland	Hilversum, Netherlands	0900
15135	—	V. of Free Korea	Seoul, Korea	0130	15430	—	Far East BC	Manila, Philippines	0730
	—	R. Havana	Havana, Cuba	1550		—	AFRTS	New York, N.Y.	0830
	—	R. Tehran	Tehran, Iran	0300	15440	WRUL	R. N.Y. Worldwide	New York, N.Y.	0700
15140	ETLF	R. V. of Gospel	Addis Ababa, Ethiopia	0815	15445	—	R. Brazzaville	Brazzaville, Congo	1000
	—	V. of America	Okinawa	1930	15448	—	R. Prague	Prague, Czech.	1125
15155	—	R. Havana	Havana, Cuba	1510	15470	—	R. Moscow	Moscow, USSR	0700
	—	R. South Africa	Capetown, S. Africa	0500					
	—	Vatican Radio	Vatican City	0630					
15160	TAU	R. Ankara	Ankara, Turkey	1700					
15165	OZF7	V. of Denmark	Copenhagen, Denmark	0700					
15175	LIM	R. Norway	Oslo, Norway	0700					
15180	—	R. Australia	Melbourne, Australia	0015					
15185	OIX4	Finnish BC	Pori, Finland	0945					
15190	—	R. Brazzaville	Brazzaville, Congo	0600					
15205	DMQ15	Deutsche Welle	Cologne, W. Germany	0415					
15220	—	R. Australia	Melbourne, Australia	0015	17710	DZ16	Far East BC	Manila, Philippines	1930
	PCJ	R. Nederland	Hilversum, Netherlands	1300	17715	—	R. Australia	Melbourne, Australia	1835
15225	—	Swiss BC	Berne, Switz.	0330	17720	—	R. Brazzaville	Brazzaville, Congo	0730
	—	R. Afghanistan	Kabul, Afghanistan	1300	17730	WRUL	R. N.Y. Worldwide	New York, N.Y.	1000
15240	—	R. Sweden	Stockholm, Sweden	0900	17840	WRUL	R. N.Y. Worldwide	New York, N.Y.	1100
	—	R. Australia	Melbourne, Australia	1700	17845	WRUL	R. N.Y. Worldwide	New York, N.Y.	0745
	—	R. Belgrade	Belgrade, Yugoslavia	1030	17750	—	Austrian Radio	Vienna, Austria	0200
15250	—	R. Bucharest	Bucharest, Rumania	1000	17810	—	Austrian Radio	Vienna, Austria	0400
15255	—	V. of Nigeria	Lagos, Nigeria	0800	17820	—	R. Australia	Melbourne, Australia	0015
15275	DMQ15	Deutsche Welle	Cologne, W. Germany	1020	17820	CKNC	R. Canada	Montreal, Que.	1330
15280	—	R. New Zealand	Wellington, N.Z.	2345		TAV	R. Ankara	Ankara, Turkey	0915
15270	—	Trans World R.	Nonaire, Neth. Ant.	1830	17825	LLN	R. Norway	Oslo, Norway	0700
	—	R. Clube de	Lourenco Marques, Mozambique	1130	17830	—	Swiss BC	Berne, Switz.	0330
	—	R. Havana	Havana, Cuba	1610	17840	—	R. Australia	Melbourne, Australia	1430
15300	—	BBC	London, England	1015		—	R. Sweden	Stockholm, Sweden	0900
	GWR	Far East BC	Manila, Philippines	1815	17855	—	AFRTS	New York, N.Y.	0830
	DZH9	—	Stockholm, Sweden	0900	17875	—	R. Japan	Tokyo, Japan	1600
15305	—	Swiss BC	Berne, Switz.	0330	17890	BED40	V. of Free China	Taipei, Formosa	1030
	—	—	—	—		HCJB	V. of the Andes	Quito, Ecuador	1530
	—	—	—	—	17910	—	R. Ghana	Accra, Ghana	0945
	—	—	—	—	18195	—	R. Pyongyang	Pyongyang, N. Korea	0100
	—	—	—	—	21470	GSH	BBC	London, England	1015
	—	—	—	—	21500	—	R. Brazzaville	Brazzaville, Congo	0600
	—	—	—	—	21540	—	R. Ghana	Accra, Ghana	0945
	—	—	—	—	21590	—	R. Pakistan	Karachi, Pakistan	0345
	—	—	—	—	21730	LLQ	R. Norway	Oslo, Norway	0700

16 Meter Band—17700 to 17900 Kc/s

17710	DZ16	Far East BC	Manila, Philippines	1930
17715	—	R. Australia	Melbourne, Australia	1835
17720	—	R. Brazzaville	Brazzaville, Congo	0730
17730	WRUL	R. N.Y. Worldwide	New York, N.Y.	1000
17840	WRUL	R. N.Y. Worldwide	New York, N.Y.	1100
17845	WRUL	R. N.Y. Worldwide	New York, N.Y.	0745
17750	—	Austrian Radio	Vienna, Austria	0200
17810	—	Austrian Radio	Vienna, Austria	0400
17820	—	R. Australia	Melbourne, Australia	0015
17820	CKNC	R. Canada	Montreal, Que.	1330
	TAV	R. Ankara	Ankara, Turkey	0915
17825	LLN	R. Norway	Oslo, Norway	0700
17830	—	Swiss BC	Berne, Switz.	0330
17840	—	R. Australia	Melbourne, Australia	1430
	—	R. Sweden	Stockholm, Sweden	0900
17855	—	AFRTS	New York, N.Y.	0830
17875	—	R. Japan	Tokyo, Japan	1600
17890	BED40	V. of Free China	Taipei, Formosa	1030
	HCJB	V. of the Andes	Quito, Ecuador	1530
17910	—	R. Ghana	Accra, Ghana	0945
18195	—	R. Pyongyang	Pyongyang, N. Korea	0100
21470	GSH	BBC	London, England	1015
21500	—	R. Brazzaville	Brazzaville, Congo	0600
21540	—	R. Ghana	Accra, Ghana	0945
21590	—	R. Pakistan	Karachi, Pakistan	0345
21730	LLQ	R. Norway	Oslo, Norway	0700

**DF for CB**

*Continued from page 100*

it is mounted on. The sensitivity difference can be handled by rotating the car: First, a fix would be taken from a parked vehicle. Then, the car would be turned around 180 degrees. The side that produces the higher of the two signal levels is the direction of the unknown signal. Note that only the vehicle is moved, not the DF loop. Once the loop has been adjusted for bearing (minimum signal) it is not touched, only the car is moved.

Of course, DF'ing is easier if two stations use the well known triangulation method. One DF takes a bearing and plots the pointer bearing on the map. The second DF located some distance from the first takes its bearing and its pointer bearing is entered on the

map. At the intersection of the two lines drawn through the DF pointers lies the "lost station".

When triangulation cannot be used, and when you don't feel like jockeying the car around, you can use the old *S-meter search*. Connect the DF, determine the pointer position, then reconnect the main antenna and drive in the direction indicated by the pointer. If the signal level increases you're headed in the right direction. If the signal level decreases turn around and head in an opposite direction to the pointer.

Whether your CB direction finding purposes be either public service or fun, the Signal Hunter direction finding CB antenna can put a little of the old *zing* back into CB'ing. Priced at \$9.95, the Signal-Hunter is available from electronic distributors such as Lafayette Radio or direct from the manufacturer, Gold Line Co., Dept. 756, Muller Avenue, Norwalk, Conn. 06852. ■



# LITERATURE LIBRARY

Numbers in heavy type indicate advertisers in this issue. Consult their ads for additional information.

## ELECTRONIC PARTS

1. This catalog is so widely used as a reference book, that it's regarded as a standard by people in the electronics industry. Don't you have the latest *Allied Radio* catalog? The surprising thing is that it's free!
2. The new 516-page 1965 edition of *Lafayette Radio's* multi-colored catalog is a perfect buyer's guide for hi-fiers, experimenters, kit builders, CB'ers and hams. Get your free copy, today!
3. *Progressive "Edu-Kits" Inc.* now has available their new 1965 catalog featuring hi-fi, CB, Amateur, test equipment in kit and wired form. Also lists books, parts, tools, etc.
4. We'll exert our influence to get you on the *Olson* mailing list. This catalog comes out regularly with lots of new and surplus items. If you find your name hidden in the pages, you win \$5 in free merchandise!
5. Unusual scientific, optical and mathematical values. That's what *Eamund Scientific* has. War surplus equipment as well as many other hard-to-get items are included in this new 148-page catalog.
6. Bargains galore, that's what's in store! *Poly-Paks Co.* will send you their latest eight-page flyer listing the latest in merchandise available, including a giant \$1 special sale.
7. Whether you buy surplus or new, you will be interested in *Fair Radio Sales Co.'s* latest catalog—chuck full of buys for every experimenter.
8. Want a colorful catalog of goodies? *John Meshna, Jr.* has one that covers everything from assemblies to zener diodes. Listed are government surplus radio, radar, parts, etc. All at unbelievable prices.
9. Are you still paying drugstore prices for tubes? *Nationwide Tube Co.* will send you their special bargain list of tubes. This will make you light up!
10. *Burstein-Applebee* offers a new giant catalog containing 100's of big pages crammed with savings including hundreds of bargains on hi-fi kits, power tools, tubes, and parts.
11. Now available from *EDI (Electronic Distributors, Inc.)* a catalog containing hundreds of electronic items. *EDI* will be happy to place you on their mailing list.
12. VHF listeners will want the latest catalog from *Kuhn Electronics*. All types and forms of complete receivers and converters.

23. No electronics bargain hunter should be caught without the latest copy of *Radio Shack's* catalog. Some equipment and kit offers are so low, they look like mis-prints. Buying is believing.
25. Unusual surplus and new equipment/parts are priced "way down" in a 32-page flyer from *Edlie Electronics*. Get one.
75. *Transistors Unlimited* has a brand new catalog listing hundreds of parts at exceptionally low prices. Don't miss these bargains!

## HI-FI/AUDIO

13. Here's a beautifully presented brochure from *Atec Lansing Corp.* Studio-type mikes, two-way speaker components and other hi-fi products.
15. A name well-known in audio circles is *Acoustic Research*. Here's its booklet on the famous AR speakers and the new AR turntable.
16. *Garrard* has prepared a 32-page booklet on its full line of automatic turntables including the Lab 80, the first automatic transcription turntable. Accessories are detailed too.
17. Two brand new full-color booklets are being offered by *Electro-Voice, Inc.* that every audiophile should read. They are: "Guide to Outdoor High Fidelity" and "Guide to Compact Loudspeaker Systems."
19. A valuable 8-page brochure from *Empire Scientific Corp.* describes technical features of their record playback equipment. Also included are sections on basic facts and stereo record library.
20. Tape recorder heads wear out. After all, the head of a tape deck is like the stylus of a phonograph, and *Robins Industries* has a booklet showing exact replacements. Lots of good info on how the things are built, too.

22. A wide variety of loudspeakers and enclosures from *Utah Electronics* lists sizes shapes and prices. All types are covered in this heavily illustrated brochure.
24. Here's a complete catalog of high-styled speaker enclosures and loudspeaker components. *University* is one of the pioneers in the field that keeps things up to date.

26. When a manufacturer of high-quality high fidelity equipment produces a line of kits, you can just bet that they're going to be of the same high quality! *H. H. Scott, Inc.*, has a catalog showing you the full-color, behind-the-panel story.

27. An assortment of high fidelity components and cabinets are described in the *Sherwood* brochure. The cabinets can almost be designed to your requirements, as they use modules.
28. Very pretty, very efficient, that's the word for the new *Betacon* intercom. It's ideal for stores, offices, or just for use in the home, where it doubles as a baby-sitter.

30. Tone-arms, cartridges, hi-fi, and stereo preamps and replacement tape heads and conversions are listed in a complete *Shure Bros.* catalog.

## TAPE RECORDERS AND TAPE

31. "All the Facts" about *Concord Electronics Corporation* tape recorders are yours for the asking in a free booklet. Portable battery operated to four-track, fully transistorized stereos cover every recording need.
32. "The Care and Feeding of Tape Recorders" is the title of a booklet that *Sarkes-Tarjian* will send you. It's 16-pages jam-packed with info for the home recording enthusiast. Includes a valuable table of recording times for various tapes.
33. Become the first to learn about *Norelco's* complete Carry-Corder 150 portable tape recorder outfit. Four-color booklet describes this new cartridge-tape unit.
34. The 1964 line of *Sony* tape recorders, microphones and accessories is illustrated in a new 16-page full color booklet just released by *Superscope, Inc.*, exclusive U.S. distributor.
35. If you are a serious tape audiophile, you will be interested in the new *Viking of Minneapolis* line—they carry both reel and cartridge recorders you should know about.

## HI-FI ACCESSORIES

76. A new voice-activated tape recorder switch is now available from *Kinematix*. Send for information on this and other exciting products.

39. A 12-page catalog describing the audio accessories that make hi-fi living a bit easier is yours from *Switchcraft, Inc.* The cables, mike mixers, and junctions are essentials!

## KITS

41. Here's a firm that makes everything from TV kits to a complete line of test equipment. *Conar* would like to send you their latest catalog—just ask for it.
42. Here's a 100-page catalog of a wide assortment of kits. They're high-styled, highly-versatile, and *Heath Co.* will happily add your name to the mailing list.

43. Want to learn about computers the easy way? Brochure from *Digital Electronics* describes its line of transistorized kits.

44. A new short-form catalog (pocket size) is yours for the asking from *EICO*. Includes hi-fi, test gear, CB rigs and amateur equipment—many kits are solid-state projects.

#### AMATEUR RADIO

45. Catering to hams for 29 years, *World Radio Laboratories* has a new FREE 1965 catalog which includes all products deserving space in any ham shack. Quarterly fliers, chock-full of electronic bargains are also available.

46. A long-time builder of ham equipment, *Hallcrafters* will send you lots of info on the ham, CB and commercial radio-equipment.

#### CITIZENS BAND SHORT-WAVE RADIO

48. *Hy-Gain's* new 16-page CB antenna catalog is packed full of useful information and product data that every CB'er should know about. Get a copy.

49. Want to see the latest in communication receivers? *National Radio Co.* puts out a line of mighty fine ones and their catalog will tell you all about them.

50. Are you getting all you can from your Citizens Band radio equipment? *Amphenol Cadre Industries* has a booklet that answers lots of the questions you may have.

52. If you're a bug on CB communications or like to listen in on VHF police, fire, emergency bands, then *Regency Electronics* would like to send you their latest specs on their receivers.

53. When private citizens group together for the mutual good, something big happens. *Hallcrafters, Inc.* is backing the CB React teams and if you're interested in CB, circle #53.

54. A catalog for CB'ers, hams and experimenters, with outstanding values. Terrific buys on antennas, mikes and accessories. Just circle #54 to get *Grove Electronics* free 1964 Catalog of Values.

55. Interested in CB or business-band radio? Then you will be interested in the catalogs and literature *Mosley Electronics* has to offer.

Also see Item 46.

#### SCHOOLS AND EDUCATIONAL

56. *Bailey Institute of Technology* offers courses in electronics, basic electricity and drafting as well as refrigeration. More information in their informative pamphlet.

57. *National Radio Institute*, a pioneer in home-study technical training, has a new book describing your opportunities in all branches of electronics. Unique training methods make learning as close to being fun as any school can make it.

36. Prepare for a wide choice of careers with industrial organizations. Send for *Coyne Electronics Institute's* booklet on resident training.

59. For a complete rundown on curriculum, lesson outlines, and full details from a leading electronic school, ask for this brochure from the *Indiana Home Study Institute*.

60. Facts on accredited curriculum in E. E. Technology is available from *Central Technical Institute* plus a 64-page catalog on modern practical electronics.

61. *ICS (International Correspondence Schools)* offers 236 courses including many in the fields of radio, TV, and electronics. Send for free booklet "It's Your Future."

#### ELECTRONIC PRODUCTS

62. Information on a new lab transistor kit is yours for the asking from *Arkay International*. Educational kit makes 20 projects.

66. Try instant lettering to mark control panels and component parts. *Data's* booklets and sample show this easy dry transfer method.

64. If you can use 117-volts, 60-cycle power where no power is available, the *Terado Corp.* Tray-Electric 50-160 is for you. Specifications are for the asking.

67. "Get the most measurement value per dollar," says *Electronics Measurements Corp.* Send for their catalog and find out how!

#### TELEVISION

70. The first entry into the color-TV market in kit form comes from the *Heath Company*. A do-it-yourself money saver that all TV watchers should know about.

73. Attention, TV servicemen! *Barry Electronics* "Green Sheet" lists many TV tube, parts, and equipment buys worth while examining. Good values, sensible prices.

72. Get your 1964 catalog of *Cisin's* TV, radio, and hi-fi service books. Bonus—TV tube substitution guide and trouble-chaser chart is yours for the asking.

29. Install your own TV or FM antenna! *Jefferson-King's* exclusive free booklet reveals secrets of installation, orientation; how to get TV-FM transmission data.

#### SLIDE RULE

74. Get your copy of *CIE's (Cleveland Institute of Electronics)* 2-color data sheet on their electronics slide rule and information on their free "Auto-Programmed" 4-lesson instruction course.

#### TOOLS

78. Xcelite's Allen type hex screwdrivers reach where wrenches won't go. Bulletin N763 tells about fixed handle screwdrivers, detachable hex blades, pocket roll kits.

Radio-TV Experimenter, Dept. LL-756  
505 Park Avenue, New York, N. Y. 10022

Please arrange to have the literature whose numbers I have encircled sent to me as soon as possible. I am enclosing 25¢ (no stamps) to cover handling charges.



	1	2	3	4	5	6	7	8	9	10	11	12	13
	14	15	16	17	18	19	20	21	22	23	24	25	26
	27	28	29	30	31	32	33	34	35	36	37	38	39
	40	41	42	43	44	45	46	47	48	49	50	51	52
	53	54	55	56	57	58	59	60	61	62	63	64	65
	66	67	68	69	70	71	72	73	74	75	76	77	78

I am a subscriber

Indicate total number of booklets requested

NAME (Print clearly) \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP CODE \_\_\_\_\_

## Back to Gauges

*Continued from page 65*

(T) or R10 (P) for full scale deflection.

4. Use R4 (T) or R11 (P) to shift meter range for upper and lower limits: for temperature circuit with thermistor,  $77^\circ = 1000$  ohms and  $400^\circ = 12.4$  ohms; for water temperature unit  $100^\circ = 380$  ohms and  $240^\circ = 80$  ohms; and for the pressure circuit, 0 lbs. = 80 ohms and 80 lbs. = 9.1 ohms.

5. Remove temporary potentiometer and connect the temperature and pressure sensors in the circuit.

**Sensing Units.** The oil pressure sensing unit is available from Mercury Comet dealers for \$3.55, while the water temperature unit is a Chevelle part, obtainable from Chevrolet dealers for \$2.95.

The oil pressure sender unit can be installed in place of the low oil pressure light or a tee fitting can be made up, as shown in the installation photograph, to accommodate both units. A support bracket will be needed if the new assembly extends out from the original connection. The water temperature sending unit can also be installed in place of the hot engine sensing switch. Do not install both temperature units at the same point by means of a tee as they will read erratically due to poor water flow.

On automobiles with air cooled engines such as Corvairs, Volkswagens, Porsches, and so on, cylinder head temperatures can be measured by fabricating your own thermister unit as shown in the sensor photographs. Two sensors, one for the left and one for the right head, can be connected to the gauge by means of a s.p.d.t. pushbutton switch.

This optional setup is shown on the schematic diagram. R8 is the additional thermister, and S1 is the necessary switch which is mounted on the meter panel.

**Mounting the Gauges.** The small frontal area of the gauges greatly simplifies mounting. A three-gauge strip type panel formed from 1/16 aluminum, shown in the photograph, can be mounted along the lower edge of the dash panel, or even under the projecting cowl which overhangs the regular instrument cluster. The gauges are mounted on the panel with the bronze spring clips supplied with the gauges. This is one mounting variation. Another is the four-instrument cluster, the construction of which is shown here, which was fabricated to match the padded panel on a Corvair and to place the instruments where they could be easily seen from the driver's seat.

The photographs illustrate the steps in building a panel of this type. A cardboard pattern is cut to conform to the dash contour and from this the hardboard or aluminum panel is cut to shape. The enclosure is formed from do-it-yourself aluminum, and cemented to the panel with epoxy glue. A stiffening bar is riveted in place and a hold down plate is attached with screws. On a Corvair this plate fits below the ash tray opening. A layer of 1/2-inch foam padding is cemented in place and is covered with leather grained plastic.

A triangular pointed punch is used to pierce the metal around the edge and provide sharp points on which to hook the covering. After the covering is stretched and hooked, the points are bent down. A spray coat of auto touch up lacquer will color the enclosure to match the existing dash. The panel face can then be painted a flat black. ■

## Precision RF-IF Oscillator

*Continued from page 104*

quency shift when the output terminals are short-circuited. The results were as follows:

Frequency	Percent Shift
200KC	.017
455KC	.001
4500KC	.0033

With normal output loading, the frequency shift is even less than above.

Effects of battery aging was determined at two frequencies by reducing battery volt-

age with a series resistor. These percentages apply to the case where the battery end-point voltage is 5.75 volts.

Frequency	Percent Shift
200KC	.021
4500KC	less than .001

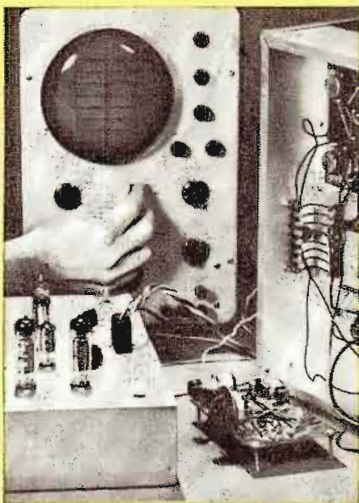
The above tests were based on heterodyne methods of measuring frequency differences against a stable standard. And we must mention for you ultra-accurate measuring buffs that no temperature effects were recorded due to a lack of a controlled oven environment. So to be safe try to do most of your work within a  $32^\circ\text{F}$  to  $132^\circ\text{F}$  temperature range at least! ■

# BUILD, EXPERIMENT, EXPLORE, DISCOVER WITH NRI CUSTOM-DESIGNED TRAINING KITS



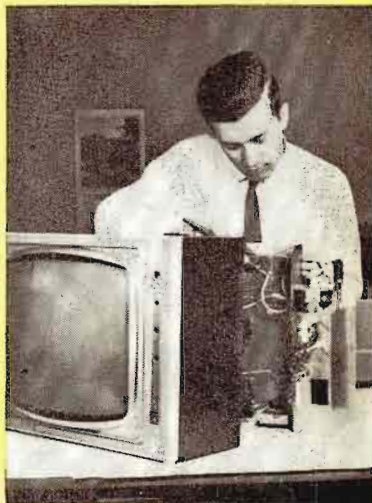
## BUILD YOUR OWN PHONE/CODE TRANSMITTER

This is just one of seven training kits programmed into NRI's Complete Communications course. You get actual practice in building your own crystal-controlled, phone/code transmitter and putting it on the air. You experiment with modulation, "clamping" circuits, key filters, other aspects of commercial transmitter operation. Can be put on the air simply by attaching an antenna and complies with FCC regulations. As with all NRI training kits, you get the most modern features and parts.



## BUILD ACTUAL ANALOG COMPUTER CIRCUITS

Industry, business offices, the government and military all need trained Electronics Technicians. NRI's Industrial Electronics course prepares you. You progress through 10 carefully designed training kits, topping off your practical experience phase of training by experimenting with feedback control systems, analog computers and digital computer elements. You actually solve problems on this analog computer you build yourself. This is the *practical*, fast way to a good paying, career position.



## BUILD A CUSTOM-ENGINEERED TELEVISION RECEIVER

Want to earn \$3 to \$5 an hour in spare time? Want your own part-time or full-time business? In Radio-TV Servicing you learn to install, maintain, service radios, TV sets, hi-fi and stereo, other home Electronics equipment. In your training are eight training kits, including this complete, modern, slim-line TV receiver. You build it yourself, become familiar with components and circuits, learn servicing procedures . . . and earn extra money as you train. National Radio Institute, Washington, D.C.

**SEE OTHER SIDE** ▶

Join the Thousands Who  
Gained Success with NRI



"I am Frequency Coordinator for the 11th Naval District. The course was priceless." J. J. JENKINS, San Diego, Calif.



"Many thanks to NRI. I hold FCC License, am master control engineer with KXIB-TV." R.L. WOOD, Fargo, N.D.



"I am a Senior Engineering Aide. Without NRI I would still be working in a factory at a lower standard of living." D. F. CONRAD, Reseda, Calif.



FIRST CLASS  
PERMIT  
NO. 20-R  
Washington, D.C.

## BUSINESS REPLY MAIL

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

**NATIONAL RADIO INSTITUTE**

**3939 Wisconsin Avenue**

**Washington, D.C. 20016**





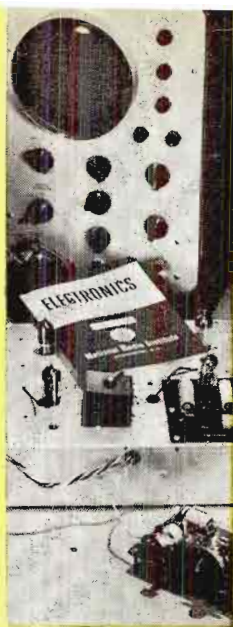
**GET FAST START WITH NEW ACHIEVEMENT KIT**

Delivered to your door—everything you need to make a significant start in the Electronics field of your choice. An outstanding, logical way to introduce you to home-study training. It includes your first set of lesson texts and all the "classroom tools" you need. No other school has anything like the new NRI Achievement Kit.



**ELECTRONICS COMES ALIVE WITH NRI TRAINING KITS**

Nothing is as effective as learning by doing . . . and NRI pioneered the "home lab" technique of training. NRI invites comparison with training equipment offered by any other school. Begin NOW this exciting program of practical learning. Make the skills of the finest Electronic Technicians your own. Mail card below.



**"BITE SIZE" TEXTS PROGRAM YOUR TRAINING**

Certainly, lesson texts are necessary. NRI's programmed texts are as simple, direct and well illustrated as 50 years of teaching experience can make them. They are carefully programmed with NRI training kits to make the things you read about come alive. You experience all the excitement of original discovery.



**HOBBY? CAREER? MAIL CARD NOW TO NRI**

Whatever your need . . . whatever your education . . . there's an NRI training plan to fit your requirements. Choose from three major courses or select one of seven special courses in particular Electronics subjects. Check the postage-free card below, fill in and mail. National Radio Institute, Washington, D.C.

**DISCOVER THE EASE AND EXCITEMENT OF LEARNING ELECTRONICS THE NRI WAY**

**SEE OTHER SIDE**

National Radio Institute, Electronics Div.  
Washington, D.C. 20016

5-105

Please send me your catalog. I have checked the field(s) of most interest to me. (No salesman will call.)

- |  |   |
|--|---|
| <input type="checkbox"/> TV-Radio Servicing      | <input type="checkbox"/> Basic Electronics          |
| <input type="checkbox"/> Industrial Electronics  | <input type="checkbox"/> Electronics for Automation |
| <input type="checkbox"/> Complete Communications | <input type="checkbox"/> Aviation Communications    |
| <input type="checkbox"/> FCC License             | <input type="checkbox"/> Marine Communications      |
| <input type="checkbox"/> Math for Electronics    | <input type="checkbox"/> Mobile Communications      |

Name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Accredited Member National Home Study Council



**PICK THE TRAINING PLAN OF YOUR CHOICE AND MAIL CARD FOR FREE CATALOG**



**OUR 50TH YEAR OF LEADERSHIP IN ELECTRONICS TRAINING**