THE OFFICIAL SHORTWAVE DXers GUIDE

COMPLETE WHITE'S RADIO LOG AM-FM-TV-SHORTWAVE

JAN 23

By the Editors of ELEMENTARY ELECTRONICS

SHORTWAVE UPDATE

ACTION BAND BONANZA

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Seller

New technology gets the ones that got away

Digital dials brighten your shack

OSLSmove up to the rare ones

Be a shortwave pathfinder

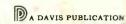


Fight fires with your local force

Tune in the sound of the sirens

Ride the bridge of a Coast Guard cutter





The chances are excellent that...

You have a talent other people are willing to pay for!

You're "handy" around your house, have the ability to fix things, and "make them work right"...that's why there may be a rewarding career for you in Electronics.

A career in Electronics?

Absolutely. Because you're interested in *things*. How they work. Why they work. How to take them apart and put them back together. Plus . . . you've got a head for detail work.

Your chances are excellent

With the right kind of specialized technical training, you can have a

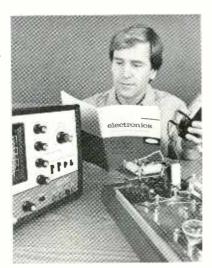
challenging, financially rewarding future waiting for you in Electronics. Think of the career opportunities . . . computers, aerospace, 2-way radio communications, radio/TV broadcasting, medical electronics, to name just a few.

And, surprisingly, you don't need a college degree! All you need to do to qualify for one of these exciting career fields is to build upon the technical aptitude you already have . . . just put your hands and your head to work with a CIE Electronics career course.

You learn by doing

The CIE method of instruction is the refinement of over 40 years of Electronics, independent home-study experience. It works. And you don't need *any* prior electronics experience. A CIE *career* course can take you from ground zero right up to training in Lasers, Microminiaturization, Radar Analog Computers, and various applications in Communications.

In some CIE courses, you'll perform "hands-on" experiments and tests with your own CIE Experimental Electronics Laboratory. And, if TV technology and digital Electronics are your main interest, you can select from several courses that involve working with and



troubleshooting a TV. (And the TV is yours to keep, too!) This combination of "head and hands" learning locks in your understanding of the crucial principles you'll use on-the-job in your new career. But, don't kid yourself...

Electronics is not an "easy" science and CIE courses are not "snaps." Subject matter is technical, thorough, and challenging. It has to be. We're training you for a *career*. So the presentation of ideas is logical, written in easy-to-understand language . . . you progress step-by-step, at your own pace.

CIE Education by mail

There is no need to "go back to the classroom" with CIE. Because you

learn at *home* or where ver else is convenient. You keep your present job and income. No cross-town commutes. You decide when and where you study best.

Your eventual success . . at CIE and in your electronics career . . . will be determined by your own motivation and self-discipline. You *can* do it. And CIE can show you how.



Patterns shown on TV and oscilloscope screens are simulated.

If you want a career in servicing two-way radio communications equipment ... you'll have to get a First or Second Class FCC Radiotelephone License.

One good way to prepare for your license exam is a specialized home-study course from CIE...*the FCC License school.*

There's a gigantic potential market out there for communications equipment service skills. (For example, there are about 4 million mobile transmitters that are licensed by the FCC.) And that's just the beginning. Radio systems are also used in air and railroad traffic control; police, fire-fighting, and rescue vehicles; ship-to-shore communications; dispatching of fleet vehicles, such as taxis and trucks; assigning field service specialists; security networks; satellite communications; and many other new and growing applications. But before you can start a career servicing any radio system, you must have at least a Second Class FCC Radiotelephone License.

How CIE Can Help You

We've been helping people prepare for the government-administered FCC License examinations since 1934. Our record speaks for itself: in continuing surveys, nearly 4 out of 5 CIE graduates who take the exams get their FCC Licenses. No wonder the people who know us best think of us as "the FCC License school."

CIE independent study courses combine the necessary FCC License preparation with a thorough education in electronics technology. In fact, one course . . . "FCC License and Communications". . . includes that in-depth instruction plus intensive training in the specific career skills needed to maintain and repair two-way FM radio equipment. In addition, CIE offers five other career courses which include FCC License preparation. Some even provide valuable "hands-on" training with professional equipment such as a solid-state oscilloscope, a Zenith color TV, and a color bar generator.

Learning New Skills Is No Picnic

But, don't kid yourself. You really have to want success if you're going to build your skills properly. CIE independent training is no snap even with our Auto-Programmed® Lessons. It takes work and it takes time. But when you make it, the rewards can be worth it all.

So, if communications troubleshooting looks like the career field you want ... and want it enough to roll up your sleeves and work for it ... let us know.

Send for CIE's FREE School Catalog
Mail the card or coupon or write and mention the
name and date of this magazine. We'll send you a

copy of CIE's FREE school catalog — plus a complete package of independent home-study information. For your convenience, we'll try to have a representative contact you to answer your questions. Mail the card, coupon, or your letter to: CIE, 1776 East 17th St., Cleveland, OH 44114.

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communications







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THE STAFF

Editor-in-Chief and Electronics Group Coordinator Julian S. Martin, KGK3915

Managing Editor
Alan H. Rose, K2RHK

Technical Editor
Neil Shapiro, WB2KQI, KAFA7222

Communications Editor
Don Jensen

Citizens Band Editor Kathl Martin, KGK3916

Workbench Editor
Hank Scott

Art Director Ralph Rubino

Assistant Art Director Augustus Ginnochio

Cover Art Director Irving Bernstein Art Assistants Caroline Imparato Bob Modero Michael Vessio

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Advertising/Research Associate

Jyll Holzman, KAKZ1490

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Assistant Production Manager
Mary Carfagno

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Director
Don Gabree

Subscription Circulation & Marketing Director Robert V. Enlow

Instruments Division Manager
Wilfred M. Brown

Director of Market Development James C. Weakley

President and Publisher Joel Davis

Vice President and General Manager Leonard F. Pinto

Vice President and Treasurer Victor C. Stabile, KBP0681

COMMUNICATIONS WORLD is published semi-annually by Davis Publications, Inc. Editorial and business offices: 229 Park Avenue South, New York, New York 10003. Advertising offices: New York, 229 Park Avenue South, 212-OR 3-1300; Chicago, 520 N. Michigan Ave., 312-527-0330; Los Angeles: J. E. Publishers' Rep. Co., 8732 Sunset Blvd., 213-659-3810.

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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, artwork, or photographs. All contributions should be addressed to the Editor-in-Chief, COMMUNICATIONS WORLD, 229 Park Avenue South, New York, New York 10003.

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Canadian AM Stations by Location

Canadian AM Stations by Call Letters
Canadian FM Stations by Location

Canadian FM Stations by Call Letters

Worldwide Shortwave Stations

Candian TV Stations by Location

New Products

Blackjack Progam

RCA lets you play Blackjack with its Studio II home TV programmer. The programmer is a combination video game and educational device which can be used with any size black-and-white or color TV set. It has five games built into the console and employs plug-in solid state cartridges for additional add-on games. The built-in games are: Freeway, Addition, Bowling, Patterns and Doodles. The new plug-in cartridge offers Black-jack. In Blackjack the action and excitement of Las Vegas casinos are programmed onto the home TV screen.



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Players are staked with 200 dollars and can bet up to 10 dollars per hand. In trying to beat the computer, who is the dealer, players are offered the chance to "hit" (request another card), "stick" (stay with the cards they have) or "double down" (double their bet but get just one more card). Optional retail price of RCA's Studio II is \$149.95. The add-on Blackjack cartridge is optionally priced at \$19.95. For further information, write to Joe Searfoss, RCA Distributor and Special Products Division, Deptford, NJ 08096.

Triggered Sweep 5-in Oscilloscope

The EICO Model 480 Oscilloscope offers DC to 10 MHz bandwidth, AC and DC Coupling, 11 position calibrated attenuator, 10mV/cm sensitivity, and pushbutton operation. For the service shop, electronics lab or production facility, you'll find more than sufficient vertical deflection sensitivity, horizontal sweep



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speeds and bandwidth response for testing color or black-and-white TV receivers and any other electronic equipment. All circuits are on four P/C boards for ease in servicing. Controls are human engineered and are grouped functionally. They are color-coded for quick identification and easy use. The custom-molded

bezel is ideal for camera mounting. A built-in TV sync separator makes troubleshooting on solid state TV receivers a snap. Frame of line triggering is selected automatically by the scope in conjunction with sweep speed setting. Problems are quickly located and identified, thanks to the calibrated time base. A fully-regulated power supply provides stable voltages regardless of line and load fluctuations, and a calibration voltage of 0.2 volts peak-to-peak square wave is available for probe (the EICO Model LCD-10X), a high-impedance probe that minimizes circuit load during test. Suggested user net is \$425.00. For further information, write to Mark Ehren, EICO Electronic Instrument Co., Inc., 283 Malta Street, Brooklyn, NY 11207.

Crimp It Terminals

Quality Terminals, a national distributor of electro-connective parts, offers a useful selection of 240 of the most-used, insulated, color-coded, crimpable, solder-less terminals, together with a combination wire stripper/crimping tool and a heavy-duty, 25-drawer steel parts cabinet. All for \$24.95 plus \$3.00 shipping



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and handling. Tool and terminals are first quality and American made. Selection of terminals consists of 9 sizes of ring type, 8 sizes of fork tongue, 3 sizes of butt splices and male and female quick disconnect in various sizes. For further information, contact Quality Terminals, 368 Hillside Avenue, Needham, MA 02192.

Breadboard

The A.P Breadboard II offers a distribution system consisting of three distribution strips, two levels of printed circuits and three front-mounted binding posts. Each distribution strip has three colorcoded buses (red, black, blue) which are internally connected to the corresponding color binding post. The black buses and binding posts also are connected to the ground plane on the back of the Breadboard. The new Breadboard II has 3208 solderless plug-in tie-points on a universal .1-in. x .1-in. diameter. No special patch cords are required, and it comes fully assembled. This new version of Breadboard II will replace the earlier version, and has a matrix that is comprised of 2,776 tie-points (512 terminals with 5 points each and 54 terminals with 4 points each) while the distribution (Continued on page 6)

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DRAKE SPR-4	
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MODEL 150-299



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SPECIFICATIONS

Range: 10 to 1,000 MHz Impedance: 50 ohms DC Input*: 20 VDC 50 ma

Gain**: 14 db

Flatness: ± 1 db (Ref. 500 MHz) Operating Temperature: -25 to

+70°C

Noise Figure: 9 db VSWR Output: 2.0

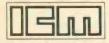
Output capability for -60 db near intermodulation distortion: 100 MV

"WIII operate 12 to 24 VDC with some loss

in characteristics.

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*consideration of noise and flatness.

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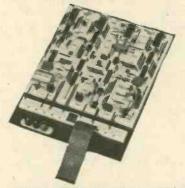
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matrix provides 432 tie-points (3 buses or 48 points on each of three strips). The Breadboard II retails for \$126.00. For further information, write to A P Products, 72 Corwin Drive, Box 110, Painesville, Ohio 44077.

Digital Multimeter Checker

Said to be the first digital multimeter calibrator for under \$300.00, the Gary Model 120 DMM Calibrator checks out for only \$34.95. With the Model 120, all ohms ranges of the typical digital multimeter may be checked, with values ranging from 100 ohms to 1 megohm. Accuracies on these ranges varies from under 0.1% to under 0.3%. The Model 120



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also has a precision voltage standard built in and produces three output voltages of 100 mV, 1.00 volt, and 10.00 volts. These ranges are sufficient for checking the three lowest ranges of the typical digital multimeter. Accuracies range from up to 0.02% to about 0.2% depending upon range selected. The Model 120 also may be used to check VOMs, VTVMs, DPMs, etc. For further information, contact Gary McClellan and Co., Box 2085, 1001 W. Imperial Hwy., La Habra, CA 90631.

Turn Burglars Off

One of the simplest, most effective devices to keep burglars away has been introduced by Mountain West Alarm Co. of Phoenix, Arizona. The Guardian Switch turns lights, radios, tape recorders, etc. "on" and "off" to make your home or business appear to be occupied when you are away. Simply connect P10 switch to lamp, radio or whatever appliance to be used. Select the time pattern desired (3 available), plug into wall out-



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let and the Guardian is set. Darkness automatically triggers activity according to the duration and pattern selected. Can also remain in an inoperative state during daylight hours. Unit priced at \$21.95. Excellent protection for a minimum cost. For more information, contact Mountain West Alarm Supply Co., Box 10780, Phoenix, AZ 85064.

For West Coaster

Now you can install an electronic seismic device that registers unusual vibrations in buildings, above the normal motion caused by weather and traffic, to give an early warning signal of an earthquake. The Seismolert sends out a shrill constant alarm when building vibrations register displacements of 1/100 of an inch. Often earthquakes begin with small foreshocks and there are many seconds and even minutes available to seek safety before the large shocks register. The system is made of totally solid-state American-made components and works without AC line voltages, using only lowvoltage DC current with UL approved adapter. The patented device uses 25 cents of electricity per month and the Seismolert also has a battery system that will take over instantaneously in case of power failure. The system can be wired to include additional alarms and



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to cut off gas and electricity when the alarm sounds. For the seismic hobbyist there are models which record the intensity number and draw charts of the shock waves. The unit is portable and can be moved to any location. It comes complete and ready for installation, which takes less than five minutes and requires no special tools. Price is \$89.95 for the Model #SML-2E. Models with utility regulation and charts are available for prices up to \$199.95. For more information, write to Seismotronics Corp., 7001 Dublin Blvd., Dublin, CA 94566.

Digital Bathroom Scale

Heath Company has a new digital bathroom scale for the weight watcher. The GD-1186, called "Digi-Scale," has a large LED electronic digital readout that is visible from as far away as ten feet. The new scale is far more precise than most conventional scales since no springs.



CIRCLE 31 ON READER SERVICE COUPON

weights or pins are employed. Solidstate circuitry and a strain-gauge transducer element such as that used in electronic laboratory-quality scales insures excellent precision. The "Digi-Scale" weighs to 300 pounds, and reads out in 2/10ths of a pound increments. A zeroing feature permits adjustment for weighing small items. Extra cable supplied with the kit allows the readout to be mounted at eye level on a wall or any handy surface. The GD-1186 operates on six conventional "C" cells (not included). It is housed in a handsome cast-aluminum platform with burl-grained vinyl insert. For more information about the "Digi-Scale," which is mail order priced at \$99.95 kit form and \$139.95 assembled, write for a free catalog to Heath Company, Dept. 350-390, Benton Harbor, MI 49022.

Two Metal Detectors

Edmund Scientific is offering a new and greatly improved metal detector for just \$39.95. Fully transistorized, it is 30% more sensitive than comparable models in its price range. Ideal for the beginner who is concerned with quality, it packs the power demanded by the professional. Called the Edmund TR Earth Challenger, it offers all of the sensitivity and depth of the transmitter/receiver circuit and has the capability to locate a penny down to six inches. Lightweight (2 lb., 6 oz.) and perfectly balanced, the new TR Earth Challenger's pole is con-



structed of rugged aluminum with a blue finish. Other features include an electronic housing and a six-inch search coil completely waterproofed in molded ABS plastic. It also comes with a 9 V transistor battery which will last about 50 hours. A deluxe version of the TR Earth Challenger is also available for \$59.95. It comes with a telescopic shaft adjustable to 44-in. and is of all metal construction—yet it weighs just 2 lb., 6 oz. Another outstanding feature is a 10-turn metal/mineral tuner. Both of these fine-quality metal detectors can be ordered

by mail—TR Earth Challenger (stock no. 80,262) \$39.95 Ppd.; Deluxe Earth Challenger (stock no. 80,251) \$59.95 Ppd. from Edmund Scientific, 7782 Edscorp Bldg., Barrington, NJ 08007.

Powered Loudspeaker

Advent Corporation's new Powered Advent Loudspeaker is a biamplified, two-way acoustic suspension speaker system that uniquely combines wide range, tonal accuracy, compact size, and extraordinary high acoustic output. It provides the range and tonal balance associated with the New Advent Loudspeaker, along with the acoustic output associated with far larger, multiple-driver speaker systems. The dimensions of the Powered



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Advent Loudspeaker are 28%-in. H x 14%-in. W x 11%-in. D. Suggested retail price is \$499.95. For further information, write to Advent Corp., 195 Albany Street, Cambridge, MA 02139.

DR22 Receiver

Fully Synthesized General Coverage Receiver from McKAY DYMEK



FEATURES

- Shortwave, CB, ham radio, ships at sea, overseas phone calls, etc.
- Hi Fi, SWL, commercial, industrial and government uses.
- High level RF front end for excellent intermodulation rejection and sensitivity.
- Crystal filters in first and second IF amplifiers, ceramic filter in third IF.
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- Built in power supply for 110-120 or 220-240 VAC switchable, 50-60 Hz.

- Low Phase Noise Synthesizer
- Solid state, phase locked, digital synthesis tuning.
- Extreme ease of tuning at all frequencies.
- No mechanical tuning dial error or backlash.
- Switch selectable 4 or 8 kHz RF bandwidth.
- Built in monitor speaker with external speaker connectors.
- Switchable impulse noise limiters for AM and SSB.

SPECIFICATIONS

- Frequency coverage: 50 kHz to 29.7 MHz continuous. Digital synthesis in 5 kHz steps, fine tune for ±5 kHz.

 Reception modes: AM, upper sideband, lower sideband, CW.
- 1 Sensitivity for 100 kHz 200 kHz 300 kHz-29.7MHz 10 dB S + N/N: CW. SSB 10 นุง 2.0 นง 0.5 นุง AM 30 นุง 6.0 นุง 1.0 นุง
- Selectivity: -3dB@±2kHz or±4kHz,and -60dB@±5kHz or±6kHz
- Dimensions & Wt.: (W x D x H) 17.5 x 14.5 x 5.1 Inches. Shpg. Wt. 19 lbs. (8.7 Kg)
- Frequency stability: Within ± 40 Hz in any 8 hour period at a constant ambient of 25C, after 30 minute warm up.
- Circuitry: 43 integrated circuits, 18 transistors, 16 FETs and 54 diodes.



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VOW.

Communications Desk

The Telco communications console, known as the Comm-Sol Model CS-50, is the answer to the space problem for all communications enthusiasts. It provides the user with an area for all of his communications equipment, and at the same time, serves as an attractive piece



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of furniture that blends with your home's decor. Completely conceals all the equipment when not in use and prevents unauthorized use. Comm-Sol's modular concept and construction allows additional units to be arranged attractively to provide all the work, storage and functional space you desire. Easy to assemble and install, no specal tools needed, and can be assembled with only a dime. All holes are predrilled and specially reinforced with metal in all areas of stress. Finished in rich walnut veneer. Sells for \$139 95 For additional information, write to Telco Products Corporation, 44 Seacliff Ave., Glen Cove, NY 11542.

Burn-Out Proof DC Power Supply

A new DC power supply designed for CB service application, designated Model 244 Mobil/Comm Power Supply, offers features of value to CB service technicians. The fully-adjustable voltage range of 10.5 to 14.5 VDC is accurately metered on large 21/2 inch meter with the calibrated standard 13.8 volt setting clearly indicated. Full adjustability and 0.5% regulation permits duplication of actual storage-battery operating conditions such as low-voltage and overvoltage operation. Continuous-duty three ampere output is protected against short circuits by fold-back current limiting. Even dead shorts will do no damage. An additional advantage of fold-back current limiting is that during high current-load conditions that may exist in malfunc-tioning transceivers, the power supply will not shut off, but, automatically reduce the current output to a relatively safe level. When the meter switch is in the AMPS position the output current is indicated with 3% accuracy. After the



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short circuit is removed the unit returns to normal operation, no fuse to replace, no circuit breakers to reset. The Hickok Model 244 Mobil/Comm Power Supply is available now at Hickok distributors for \$125.00. For further information write to Hickok Electrical Instrument Company, 10514 Dupont Avenue, Cleveland, OH 44108.

Aircraft Clock/Timer

If you're into flying, you may want to assemble a low-cost, five-function aircraft clock/timer kit by Heath. The 01-1154 has two digital LED displays that show various timing functions. The upper display shows GMT/ZULU time. The lower display shows any one of four time functions selected by the pilot; local time; 24-hour timer for total trip time; and a preset alarm time for fuel management or check point notification. The displays dim automatically for night flying. The 01-1154 mounts in a standard 31/8-in. instrument panel cutout. It is



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FAA/PMA approved and meets all DO-160 requirements. Mail-order priced at \$149.95. For further information, write for a free copy of the latest Heathkit catalog: Heath Company, Benton Harbor, MI 49022.

AM/FM Stereo Receiver

Sony's new STR-2800 receiver features 20 watts per channel, minimum RMS at 8 ohms from 20 Hz to 20 kHz with no more than .5% total harmonic distortion. Intermodulation distortion is also .5%. The amplifier is direct coupled for high stability, wide frequency response, and low distortion. The tuner affords clear FM reception: 50 dB of quieting is reached with only 50 uV of input in stereo; ultimate signal-to-noise is a very quiet 68 dB. Selectivity is 50 dB, capture ratio 1.5 dB, and separation 35 dB (at 1 kHz). Price is \$240.00. For more information, write to Sony Corporation

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of America, 9 West 57th St. New York, NY 10019.

Preamp/Amplifier

Dynaco/Dynakit has introduced a new moderately-priced integrated preamp/amplifier, the SCA-50, which offers a number of features. The unit is available assembled or in kit form. As a kit, it is extremely easy to assemble, requiring only simple tools and a few evenings work. Most circuitry is factory-wired on printed circuit boards, and pre-tested. It



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is rated at 25 watts continuous average power output per channel. Both the tone control and preamplifier circuits use low voltage regulated power supplies so that AC line fluctuations will have no effect on audio performance. In the amplifier section, the output circuit is full complementary symmetry and the bias supply thermally tracks the output transistors. This cuts down on notch distortion-that type of distortion which many believe is the source of transistor sound. The SCA-50 has a price of \$249.00 for the factory-assembled unit and \$149.00 for the kit. Detailed information is available from Dynaco/Dynakit, Box 88, Cole Road, Blackwood, NJ 08012.

Negative Air Ionizer

A negative Air lonizer is being offered by Edmund Scientific, Barrington, NJ, Some believe that when the number of negative ions are increased in the atmosphere, contaminated air is subjected to a disinfecting process. Although Edmund has gathered material on the subject. the company makes no claim as to the medical effectiveness of the negative air ionizer. However, they are interested in the findings of experimenters. Researchers point out that ions are electrically charged particles that fill the air around us and, because of the effects of the solar rays, these atoms constantly gain and lose electrons. When they gain an electron, they become negative ions and have negative electrical charges. A lost electron forms a positive ion with a positive charge. A Reader's Digest article in October 1960 (limited research at that time) pointed out that negative ions might relieve depression and pains from burns. In biorhythm analysis, some researchers think it works to offset "low"

cycles. Edmund's Negative Air Ionizer is a table-top model that emits a faintly sweet odor charged with negative air



CIRCLE 53 ON READER SERVICE COUPON

ions (does not emit ozone). It measures 6¾ x 3½ x 6½-in. and uses 110 VAC. The Negative Air Ionizer is priced at \$99.95 Ppd. (stock no. 72,280) and is available by mail from Edmund Scientific Co., 555 Edscorp Bldg., Barrington, NJ 08007.

Minicassettes

The 3M Company has introduced its first Norelco/Philips compatible minicasette, featuring Scotch brand Master low noise, high output tape. The Scotch brand RD-30 minicassette is available in audio and office products outlets. The cassettes have the exclusive tensilized polyester backing with "Posi-Trak" coating, a sonically sealed precision shell, sensing foil for end of tape audible alert, and Scotch brand Master low noise, high output tape. The minicassettes work in any machine using the rim/spindle drive



CIRCLE 72 ON READER SERVICE COUPON

Norelco/Philips format, and are built with tight specifications. Both sides of the minicassettes have permanent brown and tan labels with space for indexing. Each minicassette is in an album type clear plastic box with a reversible index card. Scotch RD-30 minicassettes are blister packed two to a card and have a suggested retail price of \$7.99. The back side of the card indicates other minicassette recorder brands compatible with the Scotch RD-30 minicassette. Get details from 3M Company, Scotch Tape, P.O. Box 33600, St. Paul, MN 55133.

(Continued on page 118)

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Got a question or a problem with a project—ask Hank! Please remember that Hank's column is limited to answering specific electronic project questions that you send to him. Personal replies cannot be made. Sorry, he isn't offering a circuit design service. Write to:

Hank Scott, Workshop Editor COMMUNICATIONS WORLD 229 Park Avenue South New York, NY 10003

Play It Safe

Hank, if you had to run a power line from your house to the garage, a distance of twelve feet, would you use an underground cable or overhead cable?

-L. T., Los Angeles, CA

I go either way your local electrician
decides to go. Running outdoor power
lines is for the pro and dont you forget it.

Simpler Than You Think

I have an automatic drip coffee pot that works fine. My problem is that I took it apart looking for the heater timer and found nothing. How come?

-L. K., Troy, NY Because it has none. To start the coffee maker, you pour in a measured amount of water into a reservoir. The water is channeled by gravity to a tank heater which boils (perks) the water up a shaft to the drip spout over the drip-type coffee pot. Be sure to turn the unit on after the water is in the reservoir or the tank heater will burn out! This action continues until all the water is gone which will cause the tank heater to overheat. Before damage is done, a thermostat disconnects the tank heater circuit from the power line. A warming element, in the meantime, is on providing heat to keep the coffee warm for use anytime. The heat from the warmer prevents the thermostat from cooling and recycling the tank heater. See-no timer, but adjusted thermostats that control the

It's Basic

heating current.

What do you mean by GOSUB in computer language?

-B. D., Fargo, ND

Typically, a Basic computer program may read 110 GOSUB 340. This means, at this point in the program, it is addressed to go to a sub-routine beginning at line 340. When the sub-routine is completed, the program will return to line 111, or whatever line number appears immediately after line 110. Since there are so many repetitions operations, the GOSUB instruction saves valuable memory program space.

Too Much Help

I have a Drake SSR-I shortwave receiver and an International Crystal Co. BAX-I Boradband Amplifier. My problem is that the RF amplifier rejects all strong stations near the selected frequency but amplifies harmonics or other garble not found within 100 kHz. The pre-selector is tuned properly. The antenna is the required length for that meter band. But on CB (27 MHz) the amplification is fine. All connections possible are soldered or tightly connected. Could you help?

-D. M. B., San Rafael, CA

Maybe you're getting too much help from the BAX-1 preamplifier! Replace both input and output capacitors with gimmick capacitors. These capacitors are simply two insulated wire leads wrapped around each other. The number of wraps increases the capacitance. Start very small and slowly increase the capacitance of one and then the other and note the affect. See if it helps. The BAX-1 is a broadband RF amplifier because it is untuned. Thus, image frequencies will be amplified (the harmonics will not affect the operation). Your only possible solution is to build a tuned preamplifier circuit.

Book Buff

Hank, where can I get a project book on R/C devices to control appliances around the house?

—B. S., Dayton, OH
Write to Tab Books, Blue Ridge Summit, PA 17214 and Howard W. Sams and
Co., Inc., 4300 W. 62nd St., Indianapolis,
IN 46268 Ask for their complete book
catalogs. You'll find what you need plus
lots more.

Welcome to the Hobby

Hank I'm a beginner and only received one issue up to now on my three-year subscription. I'd like to get into BCB DXing and would like to know what kind of antenna I should use.

-M. A., Norwalk, CA

If you are getting started in BCB DXing, I suggest two things immediately.
First, start logging all the stations you
can receive with whatever you have available. Listen in the early evening, late at
night and early morning, especially just
before, during and after sunrise and sunset. Gain listening experience. Second,
start reading everything you can find that
covers the subject. As for your antenna,
for a start use what you have. If you
must, run a long-wire antenna. Any size is
good (25 feet is super for a beginner).

Down With TV

I read your piece in the Spring/Summer 1977 COMMUNICATIONS WORLD about FM DXing, and have a comment to make. In your article, you said that you can hook your FM to the TV antenna, and try DXing. Well, if you do try this while someone is watching TV, you will get an electrical hum, which will greatly interfere with DX.

S. S., Hammond, IN Something is wrong! First off, using proper TV and FM set couplers, you should not experience the trouble you talk of. Also, the TV set may be producing interferring signals which is undesirable and unfortunate in this instance. Just turn the TV set off.

Buy Your Way Out!

I'd like to add a phase-lock-loop circuit to my FM receiver to make it sound better. Have you the plans, Hank?

-D. H., Brooklyn, NY
If you ask the question, you better not
do it. You'll need engineering background
and a lab full of alignment tools. Buy a
new receiver and save money and time.

Looking for Help

A Schematic diagrams and service information on specific radio and TV sets are available at a nominal charge. Supreme Publications is offering to promptly mail service material on almost any television, radio, or stereo. They are able to supply such information from their own service manuals, from their extensive files of factory data going back to the 1920's, and from manuals of other publishers. The charge is \$1.50 and up, and the usual charge is \$2.50. "Each request for material is a challenge to us," James Lynch, manager of Supreme Publications said to me, "And while most items can be easily and quickly filled, at times our Mr. Beitman (who has been connected with diagrams and servicing for 40 years) spends an hour to find a hard one. It's fun, so he says." It is good to know that there is a large organization ready to supply service material on a radio or a TV set you may find hard to repair and for which you do not have a diagram and other helpful service data. Write Supreme Publiactions, 1760 Balsam Road, Highland Park, IL 60035 and tell them Hank Scott sent you.

Tune, not Trim!

How do I trim my antenna coax to reduce VSWR? I'm new to 2-way personal communications. -D. N., Bed Springs, NE

You cannot tune the antenna system by trimming the coax cable. Coaxial cable construction, especially the spacing between inner conductor and shield, imparts an impedance, expressed in ohms. This impedance, 52 ohms for RG-58/U and RG-8/U, holds throughout the cable, no matter what its length. If both ends of the cable are attached to 52-ohm loads (the transceiver and antenna) the VSWR will be very low. If the VSWR is high in your antenna system, look to reducing it by tuning the antenna. Remember, you'll never get a 1:1 ratio. Just tune for minimum.

Not a Bad Idea

My dad says that if everyone had to get a Ham license before going CB, there woud be no problems. What's your opinion, Hank?

—B. T., Baton Rouge, LA If everyone had a Ham license, there'd be no CB, just one big Ham fraternity.

It's Closer Than You Think

I was told to connect the hood of my car to the car frame via braided cable. I've looked in local parts stores and can't find any. What do I do?

-E. M., Spring Glen, NY
Interconnecting large metal parts of the
car to each other is a good idea for reducing electrical noise and providing a better
ground plane. The hood, in particular,
should be so connected to shut in ignition
noises. If you can't buy copper braid wire

(Continued on page 116)

COMMUNICATIONS WORLD/1978

- -1978 Edition

ARK AND BRIAN ARE SWLs, shortwave listeners. Robin and Gary are BCBers. Bill listens to the utility stations, the so-called utes. Margaret is an action band monitor on the VHF and UHF bands And Roger prowls the TV and FM channels.

It doesn't really matter what they call themselves-SWL, DXer, monitor or whatever-they all are happily engaged in one of the most fascinating hobbies around, communications listening.

Mark and Brian both tune the shortwave frequencies, normally considered to lie between 1605 kilohertz and 30,-000 kilohertz or, if you prefer, 30 MHz. But the sort of stations they search for and the reasons they hunt them do differ.

Bill also does his tuning in the same shortwave range. But he does not chase after the broadcast type stations-those with programs of news, music, entertainment and the like-as do Mark and Brian. Bill enjoys listening to the "working" stations, mostly two-way communications operations, point-to-point transmissions, military and commercial aeronautical stations, ship-to-shore radio and many more.

Margaret also prefers the two-way communications stations, but she favors the very high frequencies (VHF) from 30 to 300 MHz, and the ultra high frequency (UHF) ranges above 300 MHz. This is the radio land of police and fire department communications, but a lot

more as well.

Robin-sure, girls don't have to take a backseat to the guys in this listening hobby-and Gary do their listening on the regular AM medium wave band, sometimes called the broadcast band or BCB, between 540 and 1600 kHz. But, like Mark and Brian, Robin and Gary each have their own favorite type of station targets.

Finally, there's Roger, also a fan of the VHF and UHF frequencies, who monitors for "beyond-normal-range" FM and TV signals.

Communications listeners all! Our seven friends, and many more thousands of you out there, readers of COMMUNICATIONS WORLD have discovered that it is a fascinating and enjoyable pastime, sometimes educationalbut don't let that scare you off-and sometimes exciting, but always fun!

Mark, our SWL (shortwave listener), is in his late teens, a senior in high school. Eight months ago, on little more than a whim, he took about \$50 from his savings account and purchased portable transistorized receiver. When Mark bought the set he really was interested in a radio that would pull in his favorite FM "rocker" while he was soaking up some sun on the beach at Lauderdale.

But, he soon discovered there was a band on his Japanese-made portable marked "SW," for shortwave. He tuned around and found stations broadcasting in English. They were stations in the Netherlands, in South Africa, Australia, and in Quito, Ecuador. Mark tuned in these stations, listened, and stayed tuned. He became a shortwave program listener, an SWL as some hobbyists define those with Mark's special inter-

He discovered some far out programs. There was humor as wild as Monty Python, such as the Royal Canadian Air Farce, aired by a Canadian SW station. Then there were the weekend Scandinavian humor shows, from Radios Sweden and Finland that sometimes used language he thought he'd never hear on any radio station!

There were music programs. There was music of all types, from rock and

reggae to jazz and truly authentic folk selections.

Mark's dad had always complained he couldn't really get all the news he wanted on the "boob tube." Now he slips into Mark's bedroom during the early evening to tune in the British Broadcasting Corporation's shortwave "Radio Newsreel" program, one of the best and most balanced newscasts on the air.

Both Mark and his dad are hooked on their listening hobby!

Brian is a little older than Mark. He, too, tunes the shortwave bands but his motivation is considerably different than Mark's. There apparently is a bit of the "hunter" in Brian. He really isn't into shortwave listening for the program content. Oh yes, he does have a favorite program or two that he listens to regularly. But most of the time, Brian is combing the shortwave frequencies looking for the distant station, the hard to hear station, the obscure little broadcaster that is tough-to-tune. Brian is a DXer!

DX is a term that has been around for decades, originating, it seems, with the early radio amateur. To the hamsand to hobby listeners who don't transmit themselves-DX is distance. A DX station, at least originally, was a distant radio station. But DX has come to mean more than distance, for there are some very powerful, very easy to hear

stations that are on the opposite side of the globe. A DX station on the shortwave bands is challenging and toughto-log. It may be a toughie because it is far away, or because it is so low powered, or, for whatever reason, it is difficult

Often a DX station is not received well. That's not surprising, of course, considering the qualifications noted in the last paragraph. So, the programming heard is probably not heard well, or clearly. In fact, chances are great that the programs aren't even in English.

Brian has learned a smattering of foreign languages, just enough to help him to identify those static-ridden, faltering DX signals. He has learned something about radio propagation, the natural phenomena that make it possible for a signal from a station thousands of miles away to come skipping in to be snared by his antenna and transformed in his medium-expensive communications receiver into an audio signal.

Brian has heard stations in over 100 different countries and dreams of that day, years hence, when his country heard total reaches the magic 200 fig-

Following another longtime custom of DXers, Brian notes what he hears and how well, reports this information by letter to the various stations he logs, and collects the verifications (QSL) letters and cards the stations send back to

Brian is hooked on the listening hobby, and probably will be a "victim" of the DX "bug's" bite for the rest of his

Robin and Gary also listen for the so-called broadcast stations-broadcast, in hobby jargon meaning those that air regular programs. They, however, tune the stations on the regular medium wave band, good old 540-1600 kHz AM radio.

Robin is a college coed. In the language of the hobby, she is a domestic BCBer, meaning that she tunes U.S. and Canadian medium wave outlets. She started in the hobby, like Mark, quite by accident when she was in high school. One autumn evening, driving

PHOTOS WANTED!

Would you like to see your photo in COM-MUNICATIONS WORLD? Okay, then, send us a nice clear photo of you and your DXing equipment. Any sharp photo will do, but we prefer to see you at your rig. Along with the photo, please tell a little about you and your DXing activities and interests. Also, please identify the make and type of the receiver and other equipment shown in the photograph. Sorry, we can't return photographs.

home in her fathers car, she reached over to tune in the car radio to some other station. Finding a solid signal, not far below the "9" mark on the dial, she stopped the random tuning. Dixieland jazz, really good Dixieland, she thought. A half dozen minutes later, the announcer came on, noting that the music was being broadcast live from Preservation Hall. Not long after came the station identification for WWL, New Orleans.

It came as a real surprise to Robin that she-tooling along a Pennsylvania highway-could listen to a station in Louisiana. Always a bit of a sucker for geography in school, Robin dug the idea that she could travel-well, sort of-by radio waves to all corners of the U.S.

In the three years she has been seriously hunting the domestic BCB stations on medium wave, Robin has heard nearly 400 different broadcasters, from Massachusetts to southern California, from Savannah to Seattle, to say nothing of dozens of Canadian broadcasters. Some of them are the big 50,000 watt clear channel outlets, such as her first and still favorite, WWL. Others are lower powered 10 kilowatters, or 5,000, 1,000 or even 250 watt stations.

Robin could have, like other domestic BCBers, gone in for collecting QSLs from those stations she hears. Robin, however, is on a budget while she is away at school, so she doesn't spend her dough on postage stamps. She gets permanent "proof" of her loggings with her cassette recorder, getting those identification (ID) announcements on tape. That way she can relive the thrill of hearing that local station in southern Georgia, that dinky 250 watt broadcaster in a town of 2,500 souls, signing off on one of the normally noiseplagued "graveyard" frequencies.

FREQUENCY VS. WAVELENGTH

Many beginning SWLs are confused about the terms "frequency" and "wavelength." Both are ways of expressing the same essential information about where to tune for a station. Wavelength (measured in meters) refers to the length of a particular radio wave. Frequency (measured in kilohertz or Megahertz—1,000 kHz) describes the number of times per second that the wave "vibrates." These are the formulas for converting one to the other.

> 300,000 WAVELENGTH IN METERS = . Frequency in kHz 300,000 FREQUENCY IN KHZ = _ Wavelength in meters



"Your magazine 'pushed' me into DXing and now it is my favorite hobby!" That's the word from Richard Levesque, an 18year-old assistant manager of a department store in Sept Iles, Quebec, Canada. This compact but well equipped set up of Richard's includes a Radio Shack Realistic DX-160 (bottom) and a Realistic SX-190 (on top of the DX-160).

Gary is a grandfather, but, like Robin he tunes the 540-1600 kHz BCB frequencies too, and has been doing that for the last 40 years. He is 62 and took an early retirement from the hardware store he ran for years. Sold the business to his son, he did. That means he finally has more free time to enjoy his radio hobby, a hobby which started long ago in 1927.

Sure, Gary started out like Robin, way back then. He tuned the domestic stations, totaled up maybe 2,000 different stations logged over those many years. He knows other old timers who've heard more U.S. and Canadian outlets and he knows he probably could have doubled that tally of 2,000 stations if he hadn't veered off in another direction back in 1959.

That was the year he heard his first trans-Atlantic BCB station. It was a kick to hear stations across country, but Gary found it an even bigger charge to hear an AM outlet from across the ocean! That first logging was a BBC station, and was followed by others; Rome, Monte Carlo, Germany, Portugal, Spain, other Europeans, north Africans and, naturally, plenty of stations in Central and South America.

His equipment is good. He knows that. He tunes his foreign DX with a receiver that twenty years ago cost him \$400. He also knows that it is still a good rig and that he could sell it for \$350 today, two decades after it came

FIXED CIRCUIT FREQUENCIES

The fixed circuit point-to-point stations are assigned by the International Telecommunications Union to a number of specific shortwave bands, some of which are shared with other types of services. The following bands are, theoretically, reserved for fixed circuit communications: (Frequencies in kHz)

4000-4063	9775-10000	15450-16460
5060-5450	10100-11175	17360-17700
5730-5950	11400-11700	18030-20000
6765-7000	11975-12330	21750-21850
7300-8195	13360-14000	22720-23200
9040-9500	14350-15000	24000-25000

And the following bands are shared with other types of radio services.

1605-2065	4438-4650	25000-25600
2105-2850	4750-5060	26100-28000
3155-3400	21850-22000	29700-30000
3500-4000	23200-24000	

off the electronic assembly line.

Gary is a DXer of the BCB medium waves. He has logged 66 countries in, over, around or through the everpresent welter of interference from other stations—what DXers call QRM.

That's not a bad record, he admits, for a guy—though he uses the term "old geezer"—living in southcentral Illinois. If only he had lived, all those years, in an Atlantic coastal state, such as Massachusetts or Maryland, he thinks. What more could I have heard? But then, he realizes he might not have managed to log a half dozen New Zealand AM stations and the one on Tonga Island

Gary, like Robin, is hooked on the medium wave brand of communications

listening!

Bill is 43 years old and, like Gary, he's a grandpop. He married at 21, just three years after he enlisted in the U.S. Navy. He spent 20 years in the service, about 11 years of his duty in radio communications.

A couple of years back, he came ashore to stay, retiring as a chief petty officer. He bought a home in one of the San Diego suburbs and settled down with his wife to some stay-at-home civilian life. His oldest daughter got married and, just last month, had a "junior operator" with a good loud signal but not much modulation.

Electronics is still Bill's game. He has a small TV repair shop. He doesn't make a fortune, but then he doesn't really work too hard at it. Any earnings augment his Navy pension. You might think that after all those years in Navy communications, Bill would have had enough of that sort of thing, but no! His hobby is utility (or ute) DXing.

Bill is really interested in just about any kind of communications traffic he can hear on his shortwave receiver. He long ago learned CW, International Morse Code, so he can "read" the limited amount of that sort of traffic on the bands. For the most part, though, the signals Bill hears mostly are SSB, that's single sideband. The SSB signals that Bill tunes are readily understandable, because his equipment is designed to "straighten out" the Donald-Ducklike garbled sound.

As an old Navy man, Bill still enjoys listening to the military communications between shore stations and Navy and Coast Guard vessels at sea. He also monitors the many smaller private boats that cruise about the southern California coast for pleasure. Bill's also into monitoring the ground to air, and vice versa, communications from some of the trans-Pacific jet flights.

He was hooked on communications at 17 when he first attended a Navy electronics school. He's still hooked on radio as a hobby today.

Margaret started out, like so many

WHERE TO DX FOR WHAT

There are three very broad categories of stations. There are the broadcast stations, which air progams of infomation, entertainment and music to general audiences. Then there are the radio amateurs, hobbyists who operate in two-way communication on the shortwave and higher frequencies. Everything else falls into a grab bag called utility communications, which cover the whole range of services from longwave ship-to-shore to aeronautical VHF signals, point-to-point transatlantic phone calls to radioteleprinters, to name but a few types.

kHz	Type of DX	kHz	Type of DX	
Below 540	Utility, broadcast	10000-11700	Utility	
540-1605	Broadcast	11700-11975	Broadcast	
1605-1800	Utility	11975-14000	Utility	
1800-2065	Amateur, utility	14000-14350	Amateur	
2065-2300	Utility	14350-15100	Utility	
2300-2500	Broadcast, utility -	15100-15450	Broadcast	
2500-3200	Utility	15450-17700	Utility	
3200-3400	Broadcast, utility	17700-17900	Broadcast	
3400-3500	Utility	17900-21000	Utility	
3500-3900	Amateur, utility	21000-21450	Amateur	
3900-4000	Amateur, Broadcast, utility	21450-21750	Broadcast	
4000-4750	Utility	21750-25600	Utility	
4750-5060	Broadcast	25600-26100	Broadcast	
5060-5950	Utility	26100-26960	Utility	
5950-6200	Broadcast	26960-27230	Amateur, CB	
6200-7000	Utility	27230-28000	Utility	
7000-7100	Amateur	28000-29700	Amateur	
7100-7300	Amateur, broadcast	29700-30000	Utility	
7300-9500	Utility	Above 30000	Utility, amateur,	
9500-9775	Broadcast		broadcast (TV, FM)	
9775-10000	Broadcast, utility			



other radio hobbyists today, in CB, citizens band radio. She barely pushed the microphone button; she got a bigger kick out of just putting on her "ears" and monitoring the passing parade as it rolled along Interstate 55, not far from her home.

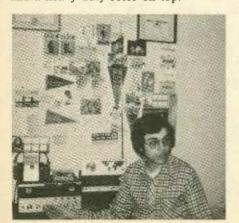
One of her friends suggested that she might enjoy listening in to the VHF and UHF public service bands, especially for the police signals. So she bought a scanner receiver, installed it in her kitchen and-presto-became a VHF/UHF monitor.

Margaret concedes she's a "bit nosy" and likes to know what's going on out there in her community, though she's usually to be found around her home. She doesn't feel things are passing her by when she's there monitoring-well, everything from the local fuzz and fireladdies to the taxies and highway department crews. Sure, a lot of it is dull and repetitious, but she just ignores that as she goes about her housework, her ears peeled for the out-of-the-ordinary bit of traffic on her scanner mon-

Margaret is, without a doubt, hooked on another aspect of the radio listening

Again we come to Roger, who is a college prof and a snow-band DXer. Roger, to put it more formally, favors TV, and to a lesser extent, FM DXing. When others are out barbecuing in the backyard on an early summer evening, Rog sits in front of his aging Zenith 17-inch screen-he feels it is more sensitive for TV-DX purposes than some more modern sets-staring at a snowylooking picture, or one with flashing black "bars" across the screen. He's hoping, of course, that he will get just a glimpse or so of the station's identification panel. That signal coming through on channel 2, could it be KPRC-TV in Houston, a thousand miles away?

It's easy to spot Roger's house as you drive down the street. His is the one with the 60-foot TV tower, a rather impressive mess of aluminum tubing and a heavy duty rotor on top.



He has already logged-with photos he made of the ID panels to prove itsome 130 different TV stations from over half the States and five Canadian provinces. He also has received Mexican stations and a Cuban TV outlet as

His friends can't understand how he can bring in all those distant signals on television, and the FM band as well. Roger says it is more a matter of knowing what to look and listen for, and being patient, than it is elaborate equipment. Nonetheless, Roger is planning to install a parabolic "dish" type antenna so he can really chase after the UHF TV outlets.

No question about it, like Mark, Brian, Robin, Gary, Bill and Margaret, ol' Roger TV Codger (as his friend knowingly call him as they tap their foreheads and shake their heads) is hooked on this communications monitoring hobby!

Maybe you recognize yourself in one or a composite of several of these DXing characters. Or maybe you're just getting started in the listening hobby, are getting your feet wet in one aspect and have just learned that there are other angles that could be fun to ex-

It could also be that you've picked up this issue of Communications World at your friendly neighborhood news stand just because the title, our cover illustration, or something, caught your eye. If so, maybe you don't know the first thing about this communications listening hobby-but you think you might like to learn.

Hopefully, this issue of COMMUNICA-TIONS WORLD will have something for you . . . and you . . . and you. In this, and subsequent issues of CW, we'll try to help the inexperienced listener get started, and suggest to the experienced listener how he can get more enjoyment from this DXing game.

If there are so many different aspects to the DX listening hobby that are interesting, why do some people limit themselves to just one of those angles? A good question.

In part it is unanswerable. Who really knows why one activity turns someone on, but leaves another "cold."

The Receiver. There's another factor involved as well. It involves the

A wall full of pennants and QSL cards grace this listening post in Medicine Hat, Alberta, Canada. They belong to Dwayne Janke, who says he is mainly a shortwave broadcast DXer, but does some medium wave, amateur band and VHF monitoring as well. He uses the popular DX-160 receiver, and an Admiral portable.

equipment needed to get involved in one type of communications monitoring or another. Many beginning listeners choose a multi-band portable receiver as their first "rig." There are several reasons for this choice, not the least of which is the price. A factor to consider in selecting a multi-band portable is that, for relatively little money, you can get a receiver that will allow a sampling of various types of listening; shortwave, medium wave BCB, VHF public service bands, FM broadcast. Understandably. these are compromise receivers. As a beginning listener starts to discover which particular aspect of the hobby most interests him, he will begin to consider more specialized listening gear.

If his fancy turns to SWLing, he may, in turn, turn to a fancy SW communications receiver. Communications receivers, especially designed for SW DXing, being at something under \$200 and they can run into the multi-thousand dollar range. Long time DX fans know that a receiver costing between about \$300 and \$600 will turn up almost anything they could ever hope to hear-assuming the reception conditions are right. This does not mean, it should be noted, that it is possible to hear any and every station in the world operating on the SW frequencies. It means that it is unlikely that you will hear anything on a \$3,000 set that you could not also hear with a \$600 communications receiver.

A communications receiver may or may not be the ideal choice for the medium wave BCB fan. Some sets that are tops for SW are downright mediocre in performance on the MW band. Some BCBers favor older vintagecirca 1960-SW sets that also cover the medium wave bands, and there are those who find relatively inexpensive TRF (tuned radio frequency) models just what they're looking for. Even an aging console radio, hauled down from its attic storage place, dating from the 1930s or 1940s can do a fine job of bringing in those domestic AM signals.

An FM DXer who really gets into his hobby will probably invest in one of the really top quality, sensitive and selective FM tuners available through Hi-Fi dealers. TV fans can find some specialized equipment available, manufacturers who are more involved in peddling studio-quality monitoring gear to television stations than in sales to home viewers. There are also quality lines of commercially available TVs that are used by many TV DX enthusiasts. These are usually coupled with elaborate FM and TV antennas, heavy duty rotors and high towers.

Equipment for monitoring the very and ultra high frequency public service bands is a whole new ballgame! When one talks about going "beyond" the

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ABBREVIATONS USED BY DXERS

A	announcer, approximate	FE	Far Eastern	QRM	any interfering station or
abt	about	FF	French, French speaking		man-made static
AC	alternating current	FM	frequency modulation	QRN	atmospheric interference or
addr	address	f/i	fade in		noise
AFC	automatic frequency control	f/o	fade out	QSB	fading
AFRTS	American Forces Radio TV	freq	frequency	QSL	verification
ALKIS	Service Service				
400		f/up	follow-up (second reception		reply to
AGC	automatic gain control		report sent when initial	QTH	location
AM	amplitude modulation	0.0	report is unanswered)	R	radio
ANARC	Association of North	GC	Great Circle	rag	magazine
	American Radio Clubs	GCP	Great Circle Path	rcd, rcvd	received
ancr	announcer	GMT	Greenwich Mean Time	rcyr	receiver
anmt	announcement	1 14 1	(Universal Time)	re	concerning
ann	announcement	gov	government	Re	report
ant	antenna	GSTQ	God Save the Queen (British	Red.	Rediffusion
approx	approximate		national anthem)	Rel.	religious
AP	A Portuguesa (Portuguese	gud	good	RF	radio frequency
	national anthem)	har	harmonic	Rp	return postage
AVC	automatic volume control	het	heterodyne	rpt	report
BBC	British Broadcasting Corp.	hi		RRI	Radio Republik Indonesia
		111	expression of humor or		
BC, Bc	broadcasting		laught <mark>er</mark>	RTTY	radioteletype
BCB	broadcast band (540-1600	hg, HQ	headquarters	RVOG	Radio Voice of the Gospel
	kHz medium waves)	hrd	heard	RX, rx	receiver
BCC	Broadcasting Corporation	ID	identification	S	unit of signal strength
	of China	IDed	identified	SASE	self addressed envelope with
bestr	broadcaster	IF	intermediate frequency		stamp affixed used for
BFO	beat frequency oscillator	info	information		replies
Br	British	IRC	International Reply Coupon	sched	schedule(d)
		irreg	irregular	scope	oscilloscope
CAM	Central America(n)	IS	interval signal	sez	says
CARACUL	Cadena Radial Colombiana	ITU	Interval signal	shud	should
	(radio network)			sig	signal
CBC	Canadian Broadcasting Corp.	4.7	Telecommunications Union	SINPO	signal reporting code
CE	chief engineer	JJ	Japanese, Japanese-speaking	sked	schedule
cfm	confirm (verify, QSL)	kc, kc/s	kilocycles per second (same		
ck	check		as kHz)	s/on	sign on
cl	close (sign off)	kHz	kilohertz	s/off	sign off
c/1	call letters	kw	kilowatt	Sp	Spanish language
cland	clandestine	L	language	SS	Spanish, Spanish-speaking
comcl	commercial	LA	Latin America(n)	stn	station
condx	conditions	Igd	logged	Superhet	superheterodyne receiver
CP	Caixa Postal (post office box	LV	La Voz de (common Spanish	Svc	service
OI .	in Portugues)		station identification. The	SW, sw	shortwave
one			Voice of)	SWBC	shortwave broadcast
cps	cycles per second			SWL	shortwave listener
CQ	general call requesting	IvI	level	SWLing	shortwave listening
	contacts, used by hams	LW	long wave, long wire antenna	TC, t/ck	time check
c/s	cycles per second	mb	meter band	t/i	tune in
ctry	country	MC, MC/s	megacycles per second (same	t/0	tune out
cw, CW	continuous wave (Morse code)		as MHz)	tnx	thanks
CX CV	conditions	ME	Middle East(ern)	tx	transmitter
dB	decibel (unit of sound	MHz	megahertz	UDX	utility (station) DX
uD	measurement)	mni	many		
DC		MW	medium wave	unid	unidentified
	direct current	MWBC	medium wave broadcast	unk	unknown
de DF	from direction finding	mx	music	urs	yours
	- Contract of the contract of	NA	North America(n)	V	varies as to time or frequency
DSB	double sideband	NAf	North Africa(n)	V/C	verification card
DU	Down Under (Australia,	Nac.	nacional (Spanish for	verie	verification
DV	New Zealand)	.440.	national)	v/I	verification letter
DX	long distance reception	not	network	vert	vertical antenna
DXer	one who listens for distant	net		VF0	variable frequency oscillator
	stations	nil	nothing	v/s	person signing verification
Ea	east	nr		vy	very
EE	English, English language	nx	news	WCNA	West Coast North America
EN	English language	OM	Old Man (a male)	wk	week, work, weak
Eng.	engineer	pgm	program	wrp	weather report
equip	equipment	POD	path of darkness	WX	weather
-	and	pop	popular (music)	xmsn	transmission
exc	except, excellent	PP	Potruguese, Portuguese-	xmtr	transmitter
	experimental		speaking	xtal	crystal
	fine	prop		YL	girl or unmarried woman
	Foreign Broadcast		please	Z	Zulu (or GMT) time
. 510	Information Service	PTP	point-to-point (type of utility		best regards, or more
	official US monitoring	FIF		, 0	generally, goodbye
	agency)	QRA	transmission) address	88	love and kisses
	agonoj,	UNA	addicas	00	10 TO AITU NISSES

relatively limited capabilities of a multiband AM-FM-VHF tunable portable, it means investing in yet another receiver. This involves at least a moderate outlay of cash.

This is one reason why listeners tend to emphasize one or another aspects of the listening hobby. It can be mighty expensive to purchase the several receivers necessary to seriously tackle the various types of signals on the various radio frequency bands.

For the VHF-UHF monitor, the passage of time and the development of new listening gear has helped to cut the expense. Not too many years ago, for

instance, the fellow who wanted to monitor stations in the low and high VHF ranges, plus those on the UHF action bands had to buy three separate receivers! Then came the development of the crystal controlled scanner receiver, first a single bander, then double band model for low and high VHF reception. Finally, the tri-band VHFlow, VHF-high and UHF crystal scanner came along.

What is a crystal controlled receiver? It uses precision-ground pieces of quartz crystal, one for each frequency you want to tune. The tuning is controlled by the frequencies of the specific crystals you install in your monitoring receiver, be it four, eight or sixteen different VHF and/or UHF channels.

What is a scanner? It is a type of crystal controlled receiver that electronically and continuously switches from one channel to the next, sweeping across the available crystal controlled channels until it comes to one on which there is a transmission. The set then locks in on that channel for as long as the transmission lasts. When it ends. the set continues to scan the four, eight, sixteen, maybe twenty available channels looking for another signal on which to "fix".

The scanning circuitry makes it possible to maintain a regular radio watch on a series of desired frequencies, knowing that when there is "traffic" on any one of them, the receiver will automatically find it and stay tuned to that signal. A crystal scanner very probably will have individual "lock out" switches. Switched out, it means the scanning squence will "skip" this particular channel. Switched in, the scanning pattern would include that channel.

Why would you want to lock out one or more specific frequencies?

Well, here's an example. The U.S. Weather Service operates, in most areas of the country, a continuous transmission of up-to-the-minute weather information. Depending on your local, this 24-hour-a-day radio weather 'cast will be heard on either 162.40 or 162.55 MHz VHF.

Since it operates continuously, a scanner monitoring receiver would permanently "lock in" this signal and you wouldn't be able to scan the other crystal frequencies. You could, of course, remove the Weather Service frequency crystal from your set, but then you'd have to do without the useful weather info. All you want to door need to do with a scanner with the channel "lock out" feature-is to temporarily switch out that crystal position until you actually do want weather information.

More sophisticated scanners also have circuitry designed to allow you to choose a priority channel. With such a designated channel, the receiver will automatically "cut" to that frequency whenever there is a signal present, regardless of the normal sequence of scanning or whatever might be transmitted on any other channel at the time.

MAJOR FOREIGN AIRLINES

Airline Aeroflot Aerolineas Argentinas Air Afrique Air Canada Air France Air India Alitalia Allegheny Ansett **Austrian Airlines** Avianca Br. European Airways (BEA)

Br. Overseas Airways (BOAC) Br. West Indian Airways Canadian Pacific Airlines Civil Air Transport (CAT)

Cruzeiro Ceskoslovenske Aeroline Cubana

EI AI Ethiopian Air Lines Finnair Garuda Iberia

Irish International Japan Air Lines (JAL)

Nationality U.S.S.R. Argentina Ivory Coast

France India Italy U.S.A. Australia

Canada

Austria Colombia England England

Trinidad

Canada Taiwan Brazil Czechoslovakia

Cuba Israel Ethiopia Finland Indonesia Spain

Ireland Japan

Airline KLM (Royal Dutch) Sitlines Linea Aerea Nacional (LAN) Lloyd Aereo Boliviano (LAB)

Lloyd Aereo Paraguayo Loftleidir (Icelandic Airlines) LOT (Polish State Air Lines)

Lufthansa Mexicana Olympic Airways

Philippine Air Lines Quantas Empire Airways Royal Air Cambodge

Royal Air Lao Royal Air Maroc Sabena

Scandinavian Airlines

Swissair Syrian Arab Airlines

TAN Airlines TAP (Transportes Aereos Portugueses

TEAL (Air New Zealand)

Thai Airways Varig VIASA

Yemen Airlines

Nationality Holland Chile Bolivia

Paraguav Iceland Poland

W. Germany Mexico Greece

Philippines Australia Cambodia

Laos Morocco Belgium

Denmark, Norway, Sweden Switzerland Syria

Honduras Portugal

New Zealand Thailand Brazil Venezuela

Yemen



Gary Ladd of Sugar Notch, PA, started listening to shortwave in December 1976. To date he has heard stations in 23 countries using his Radio Shack Science Fair Globe Patrol receiver. Gary says he records "special" programs with his Robert recorder.

Scanners—with their flashing lights or LEDs (light emitting diodes) to indicate the scanning sequence—come in AC-DC models for base or mobile (in-car) use. They're also available in compact, battery-powered pocket sizes. Generally, there are four or six channel crystal controlled channels on the little scanners that can clip on your belt. There are many different makes of pocket-sized scanners on the market, but most are about the size of a business envelope and about an inch and a half thick.

A newer development in the VHF-UHF scanner monitoring receiver line-up is the programmable variety. A programmable scanner is like its older brother, the crystal scanner except—surprise, surprise—it doesn't use crystals. You don't need a bank of crystals to zero in on the exact frequencies you wish to monitor. All the frequencies can be received with specialized circuitry within the receiver and without crystals. The key is a sort of mini-computer—a micro-processing circuit—and something called a phase-lock-loop.

Programmable scanners presently cost about twice as much as comparable crystal controlled scanning receivers. It is reasonable to assume that over the next several years the prices will drop with competition and increased manufacturing outputs. The programmables are, surely, the wave of the future in the VHF-UHF monitor receiver field.

Just as there have been technological breakthroughs in the very and ultra high frequency monitoring equipment, the past two years have seen some great changes in the shortwave receiver marketplace. It was just a couple of years ago, veteran readers of COMMUNICATIONS WORLD will recall, that we were bemoaning the fact that the SW marketplace seemed to be drying up.

Yes, the nationwide chain of Radio Shack stores sold a very popular moderate priced receiver, the DX-150 series, which was supplanted by the DX-160 models. Heath marketed several receiver kits, such as the SW-717, still selling for a sub-\$100 price. Drake, in Miamisburg, Ohio, sold its more expensive receivers, the R4B, now the R4C, and the very popular SPR-4. There were a few other sets on the market for the SWL, but not many.

There was a plethora of portable solid-state receivers, most of them imported from the Orient, which included shortwave coverage. There are still many of these multi-band portables on the market today. Some are inexpensive and some are quite expensive. They have been popular with beginning SWLs because they are often popularly priced—in blunter terms, cheap! While many SW listeners still use these transistor-

ized SW portables and manage to hear quite a few international shortwave broadcasters, the sets have some major deficiencies.

First, they usually come up short in terms of selectivity. Selectivity is the ability of a receiver to "separate" signals on adjoining frequencies. A receiver that lacks selectivity is one that is somewhat hard to tune. In a crowded band there will be much mutual interference. Basically, only the strongest stations will be heard with any clarity at all.

Secondly, these simple portables have only mediocre frequency "readout." With one of these receivers it can be very difficult to "read" the frequency to which the dial is set. It may be difficult to determine if the station you've tuned is on 11,700 kHz or 11,900 kHz and virtually impossible to distinguish between the frequencies of stations on, say, 9,600 and 9,620 kHz. For serious DXing of any sort on the shortwave frequencies, the ability to determine frequencies as close as 5 or 10 kHz is an absolute necessity.

Beginning early in this decade, some important changes began appearing in portable type receivers able to cover at least some of the shortwaye frequencies.

The first of the "new" portables, the first such set that could actually be used for DXing, was the Barlow-Wadley XCR-30. It utilized new circuitry designed by D. T. L. Wadley, a British electronics engineer. The Wadley circuit previously had been available only in the ultra-sophisticated Racal receivers made in Great Britain. The Barlow-Wadley receiver was manufactured in South Africa and limited numbers were imported into the United States by Gilfer Associates Inc.

The major "plus" for the B-W XCR-30 was that it offered what was considered remarkable frequency "readout" for a portable. It was possible to hit a frequency, by reading the dial, to an accuracy of about plus or minus five kilohertz! However, the Barlow-Wadley costs about \$270 in the U.S. today and is not an inexpensive receiver.

About 1974, Japanese electronics manufacturers found themselves with production facilities in excess of their needs. Apparently, a decision was made to manufacture large numbers of rather inexpensive portable receivers that would stress the shortwave coverage, rather than consider it as just one minor feature of a multi-band set as had previously been the case.

So, the Japanese factories began turning out portable SW sets in large numbers. The technology was not that of the advanced Barlow-Wadley receivers, but it was recognized that a receiver with decent frequency readout accu-

racy was a must. The Japanese solved the problem with existing technology and a mechanical approach. Because of mass production, the price dropped. Because of massive sales promotion in Japan, literally millions of young people became turned on to SWLing.

Naturally, this flood of shortwave portables washed into the U.S. and Canada, in time. The first of this wave, the Panasonic RF-2200 came ashore in late Spring of 1977. It had two features to recommend it: It could deliver frequency readout accuracy to about plus or minus five kilohertz, and in highly competitive sales markets, its price was as low as \$115 or so.

Next into the North American SWL market was the SONY ICF-5900, a somewhat similar receiver in design and price. It too could provide plus or minus five kilohertz frequency readout.

Neither receiver, of course, could match the overall performance of the regular communications receivers costing several times as much. Nonetheless, they are a big improvement, a big improvement on the comparably priced multi-band portables of the past.

On the other hand, the Wadley design that rocked the SW marketplace with the Barlow-Wadley XCR-30, was picked up by other manufacturers. First came the SSR-1, dubbed the "Sir-One" by listeners, manufactured by the R. L. Drake Co., a popular new receiver with good frequency readout and many other features at a not expensive price, under \$300.

Next there was the entry of Yaesu-Musen, a Japanese firm, the FRG-7 model, affectionately called the "Frog-Seven." This has been a tremendously popular set for its frequency readout capabilities, and sub-\$300 price. The FRG-7 has also been included in the Sears-Roebuck "wish-book" catalogue, the first honest-to-goodness communications-type shortwave receiver marketed by a non-electronics seller in decades!

One of the most widely used receivers in the world in past years was the 9R59 model manufactured in Japan and marketed outside the U.S. under the tradename Trio. It was sold in the U.S. by the Lafayette Radio Electronics Corp. under Lafayette's own model number. It was supplanted in more recent times by first the QR666 receiver, and later by the R-300, under the Kenwood name. The latter is a conventionally designed shortwave receiver with main tuning and bandspread, selling for about \$240.

What all this has meant is that, as we go into 1978, shortwave listeners have a greater selection of receivers in the \$100 to \$300 price range than they have had in years! That is very good news!





CUBA ON MEDIUM WAVE

All broadcasting in Cuba is under central governmental control, although there are various national and regional networks, such as Radio Rebelde, Radio Liberacion, Radio Progreso, Reloj Nacional, Radio Revolucion and more. La Voz de Cuba is a music, news and commentary program aired for about five hours a day on many Cuban stations. This is a list of the more powerful Cuban medium wavers.

kHz	Call	City	kHz	Call	City
550	CMAN	Pinar del Rio	760	CMCI	Havana
570	CMHI	Santa Clara	780	CMJN	Camaguey
590	CMW	San Antonio de las Vegas	7 90	CMCH	Havana
600	CMKV	San German	820	CMCA	Havana.
630	CMHQ	Santa Clara	840	CMH	Santa Clara
640	CMQ	Havana	870	CMDN	Guantanamo
660	CMHG	Santa Clara	880	CMAF	Pinar del Rio
670	CMKP	San Pedro de Cacocum	910	CMFA	Camaguey
690	CMBC	Havana	950	CMBF	Havana
700	CMJT	Ciego de Avila	980	CMCK	Havana
720	CMGN	Colon	1010	CMKM	Holguin
730	CMKJ	Holguin	1060	CMBQ	Havan
740	CMJL	Camaguey	1220	CMGY	Perico
			1250	CMHS	Caibarien

THE MARKETPLACE

Want more information about the equipment mentioned? Here are some of the names and addresses of manufacturers and sellers of receivers. DRAKE, R. L. Company, 540 Richard Street, Miamisburg, OH 45342

GILFER ASSOCIATES Inc., P.O. Box 239, Park Ridge, NJ 07656

The veteran DXer looking for the highest performance and willing and able to pay a steeper price does not have such a selection. Longtime favorites, Drake's SPR-4 (dubbed the "Spur-Four") and its latest entry in the R4 series originally created for the amateur radio market, the R4C, remain very popular. But in U.S.-made expensive DXing receivers, the next step upward is into those sets in the "over-\$1,000" category. Experienced SWBC DXers also have been favoring the military surplus Collins receivers, the R388s, the R390s and the R390As, plus some civilian models made 20 or more years

ago by Hallicrafters, Hammarlund and National.

Hallicrafters, by the way, once was the name in domestic shortwave receiving gear. That longtime firm, located in a suburb of Chicago, gave up the SW receiver game and sold its valued name to another manufacturer. This firm is returning to the market with the Hallicrafters WR-100, another inexpensive receiver.

In the near future-though I understand none are available Stateside as I write this-you may be seeing another Japanese receiver import, the Sanyo 8880. It is said to be not unlike Panasonic's RF-2200 in its design. There are fairly solid rumors that Yaesu-Musen will be developing a "big brother" to its popular FRG-7, which probably will sell for \$150 to \$200 more, but will be a very definite upgrade. And I await with interest a new type receiver, the ITT CD-108 which, according to the early descriptions I've received, has digital input tuning-you dial in the frequency numbers you want and the proper frequency comes up. Sounds interesting.

Electronic frequency readout of one sort or another is what receiver purchasers have been looking for for many a moon. Electronic readout? Well if your set is tuned to, say, 6,177 kHz, you know it because four little illuminated numerals read 6-1-7-7! Electronic digital readout has been available to CBers and FM stereo enthusiasts for some time. In the world of shortwave it has been available only on the very, very expensive sets.

Some add-on digital readout units are now on the market, and more will be available in the coming months. The price for such "outboard" frequency counting devices looks to be in the \$150 to \$200 range. That may be a reasonable price to pay to upgrade an aging set that originally cost \$500. Or you may find it a worthwhile addition to a shortwave receiver that costs in the neighborhood of \$300 or so. But, until prices drop, there may not be much demand for a \$175 add-on to a receiver that cost less than that to begin with.

One of the more exciting bits of news is the expected entry-perhaps by the time you read this-of Panasonic's RF-2800 receiver. It is similar to the model RF-2200, with one major change. The new Panasonic has a built-in digital electronic frequency readout and it sells, or will, for a moderate price. At this writing there are educated guesses that the price will come in at between about \$200 and \$250.

If this receiver is as successful as it would seem, look for other manufacturers to follow suit with the little red frequency numbers!

Also on the market are some innovations in commercially built shortwave antennas for SWLs. Several of these, such as the Slinky dipole-which as you might have guessed, looks a lot like the



"They call me Nick the Greek," is the way Nicos Nestoros, Old Tappan, NJ, began his letter to CW. "I'm an old DXer from London and a newcomer to the States. I listen to the shortwave bands every night and am enjoying every minute of it." Nick's pride and joy is his Barlow-Wadley XCR-30 receiver, though other gear by Panasonic, Heathkit, Royce and Realistic can be found in his listening post.



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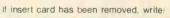
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children's springy toy that flops down the stairs—by Telectron Corp., and the Japanese-made RAK Industries "active antenna"—handled by Gilfer Associates Inc., seem ready made for the SWL with limited antenna space.

For the potential buys or SWLing and VHF/UHF monitoring gear, the marketplace is, indeed, shaping up!

Alexander's Ragtime and Other Bands. Okay, so I lied about Alex. But, bands, the other kind of bands, are very important to the hobby listener.

Stations, you see, are not just scattered randomly across the entire radio spectrum. By international agreement and national assignments, different classes of stations are located in certain, limited ranges of frequencies. These ranges are called bands.

There is a medium wave broadcasting band, a series of bands for the shortwave broadcasters, specific frequency areas for radio amateurs, maritime operations, overseas airline traffic and many more, all in the shortwave region.

On VHF and UHF there are still more bands that will be of interest to the high freq. freaks. We've looked at them very briefly in the discussion on monitoring receivers. Now, let's look at those VHF and UHF bands more closely to see where they are located in the frequency spectrum and the sorts of stations that inhabit those bands.

The very high frequencies begin at 30 MHz, just above the shortwaves and, of course, the 40 CB channels, but 30 MHz is a purely arbitrary boundary. There isn't a noticeable difference between the way in which radio waves propagate-travel from transmitter to receiver-on, say 25 MHz than there is on 30 or 35 MHz. In practice, we can think of some stations in the 25-30 MHz range as being "almost" VHF. Up on the top end, the dividing line between VHF and UHF is 300 MHz. That leaves a lot of frequency territory in between, some 265 or 270 MHz worth of wide open radio spaces.

There are a number of different



	AERO FREQUENCIES (kHz) FOR				
	MAJOR WORLD A	IR ROUTE AREAS			
North Atlantic	S. America (east)	North Pacific	Far East		
2868 8854	2910 8847	2910 13264	2868 8868		
2931 8889	3404.5 8872	5589 17909	2987 13288		
2945 8910	5566.5 11327	8938	5624 13312		
	5581.5 13320		5645 17965		
	5582 17916.5	Central E. Pacific	8840		
5610 13328		3467 8930.5	0040		
5624 13352	8845.5	5551.5 8931	Middle Peek		
5638 17966.5	S. America (west)	5554 11299.5	Middle East		
5673	2889 8826	5603 13304.5	3404 8847		
	4696 11343	6679.5 13334.5	3446 10009		
South Atlantic	6666	8875 13336	5603 13336		
2875 8882	0000	8879.5	6624		
3432 10049	Europe	Central W. Pacific			
6597 13344	2910 8875		Africa (east)		
6610 17946.5	3467 8930.5		2966 8959		
	4689 8931	4675 11303	3481 10025		
Caribbean	5554 8871	5505 13296	5505 13280		
2875 6561	6568 11303	6631. 17909	6540 13336		
2952 6568	6582	South East Asia	6561		
2966 8840	0002	2987 8882			
5484 8959	South Pacific	5673 10049	Africa (west)		
5568 10017	2945 8847	8837 13344	3411 8826		
6540 11343	5638 13304	8868 17946 5	5519 13304		

bands in the VHF spectrum. Best known are those used by our domestic television and FM stations; TV channels 2 through 6 use video and audio channels between about 55 and 88 MHz while the FM broadcasters fill in the blanks from 88 to 108 MHz. The high band TV channels 7 through 13 operate, video and audio, between about 175 and 215 MHz.

One of the least know bands is the aircraft band between 108 and 135 MHz.

Action in the Air. The aircraft VHF band is used by private, commercial and military aircraft on domestic flights. Overseas flights use a number of frequencies in the shortwave range, which is better suited to long-haul transmission.

Stations in this aeronautical service use amplitude modulation, the well-known AM mode, whereas the other public service bands make use of the FM, or frequency modulation, transmission mode. This means that if you have a VHF/UHF scanner monitor, it is probably not useable for receiving these aero signals on 108-135 MHz. For starters, your best bet is probably to invest in a relatively inexpensive tunable aircraft band receiver. Some multi-band portables have this special

"In the four years that I've been an SWL, I've logged a total of 43 stations in 40 different countries." That's the record of Larry Simms, Plaquemine, LA. "I have also done extensive DXing in the medium wave band." Larry's equipment is a Realistic DX-160 receiver, a General Electric AM-FM and a Realistic CB transceiver.

coverage feature.

The aircraft band is used for aero navigation and communications. The lower ten megahertz, 108 to 118 MHz are used for aircraft control purposes. This is where you can hear the Automatic Terminal Information Service (ATIS) transmissions, broadcasting airport weather and other information. The remainder of the aircraft VHF band is used for communications, mostly ground-to-air and air-to-ground. This can include Air Traffic Control (ATC), Airport Ground Control, Unicom (aero advisory stations), Multicom, and various other types.

ATC stations probably are not unknown to moviegoers who have seen one or more of the recent aircraft "disaster" flicks. The Air Traffic Control operators manage, sometimes unbelievably, to keep all the various flights from smashing into each other in the crowded airlanes. Direction of "close in" airport traffic is the work of the RAPCON, Radar Approach Control stations. In

LONGWAVE BEACONS IN THE USSR

City-	Identifier (Call)	kHz
Birobdizhan	BB	272
Baku	BK	218
Kazan	KZ	200
Kharkov	KH	385
Kiev	KI	209
Leningrad	LD	236
Leningrad	LD	200
Makhachkala	MK	313
Minsk	MS	281
Novosibirsk	NV	272
Omsk	OK	245
Saratov	ST	340
Sverdlovsk	SV	227
Tbilisi	TB	191
Voronezh	ŽH	254
1010110211		

many cases, they can be identified by the word "Approach" in their station identifier. The frequencies used by ATC stations are between 118 and 121.4 MHz.

At a major airport, such as New York's Kennedy, Chicago's O'Hare, Los Angeles International or any of the other biggies, there is a lot of radio traffic on the frequencies between 121.6 and 121.95 MHz, the Airport Ground Control frequencies. This is the spot to find the instructions for aircraft on the ground, those inbound and being directed to a vacant terminal gate, and those outbound, being steered to the appropriate taxiway.

Unicom and Multicom stations, used at landing fields which have no control towers, are aircraft advisory operations and plane-to-plane communications. They use frequencies between about 122 and 123 MHz.

One frequency that is usually dead is 121.5 MHz. This is the international aeronautical emergency channel and when you do hear something here it will often be a "Mayday" emergency call from an aircraft in trouble. Other sections of the aircraft band used for ground-to-air and vice versa ATC operations are 123.6 to 128.8 and 132.05 to 135.95 MHz.

If you live within 25 miles or so of a major airport, you're apt to find a lot of radio traffic on these bands. Much of it is, admittedly, very routine, but if you're turned on by the same sort of thing I am, just the everyday comings and goings of the big jetliners is exciting.

On the other hand, if you live beyond the range of the VHF signals originating at the larger airports, you can still hear the occasional overhead traffic of the DC8's, the 727's, 707's and 747's. Overhead may be a deceptive term. When an aircraft is flying at 40,000 feet, its signal may get out 150 to 200 miles.

Besides, not too many places are beyond the range of the small local type airports. There you may hear communications from private aircraft, the Cesnas, the Pipers and the rest. Less traffic to hear, probably, but still interesting for the VHF fan who can tune the aircraft band.

VHF monitors, however, seem to flock to the so-called public service bands—some people, and in fact, receiver dial markings encourage it, call them "police bands." It is true that this VHF range is where you can find much of the police radio communications, but there is so very much more to hear than just police calls. Still, it is probably true that the lure of actually monitoring police signals first brings people to the VHF/UHF bands.

There are two of these public service COMMUNICATIONS WORLD/1978

bands in the VHF range. One is at the bottom end of the range, 30 to 50 MHz—though we may bend things a bit downward to consider some of the listening targets just a bit lower than 30 megahertz. And this is known—are you ready for a shocker?—to monitoring fans as the VHF low band.

Not surprisingly, the other VHF public service band is called the high band. It covers the frequencies from 150 to 175 MHz.

The low band is not quite as crowded as it once was. Being "almost" shortwave, signals tend to "get out" a reasonable distance—a reasonable distance by VHF terms, that is. Base stations you may hear 50 or 60 miles from the transmitter, with perhaps a 20 mile

average range for mobile units in vehi-

If you're familiar with CB, you're also probably familiar with the phenomenon called skip. Normally the signals on CB, and more so on the VHF and UHF frequencies, are limited to the electronic "line-of-sight" from the transmitting tower to the receiving antenna. Occasionally, especially during the warmer months, during sporadic and transitory changes in the ionosphere, the bands of gases that circle the earth outside the atmosphere, these radio signals bounce back to the ground, hundreds or thousands of miles beyond normal range. The signals come "skipping" back to earth, bouncing off an electronic "mirror' in the sky. During

TUNING THE POINT-TO-POINT

This is a selected list of fixed circuit PTP stations operating on shortwave frequencies.

This is a selected list of fixed circuit PTP stations operating on shortwave frequencies.					
Country	Station Ownership	Freq. (KHz)			
Afars & Issa	PTT Service Radioelectrique	17,610, 19,545			
Albania	Ministry of Communications	7,790, 7,850			
Algeria	Ministry of PT	7,885, 16,165			
Australia	Australian Overseas Telecommunications	8,789.5, 10,420			
Austria	Austrian Post and Telegraph	6,787, 13,848			
Bahamas	Bahamas Govt. Telecommunications	4,825, 6,838			
Barbados	Cable and Wireless W. I. Ltd.	10,115, 16,072.5			
Belgium	Brussels Post, Telephone and Telegraph	7,927, 14,360			
Brazil	EMBRATEL	11,670, 16,340			
Burma	Posts and Telegraph Dept.	20,460			
Cameroun	Int. Telecom. of Cameroun	7,870, 15,832			
Canada	Canadian Overseas Telecom. Corp.	12,265, 13,745			
Canary Islands	Compania Telefonos Nac. Espana	10,690, 13,560			
Central Af. Rep.	France Cables et Radio	11,160, 15,530			
Ceylon	Overseas Telecom. Service	9,050, 10,485			
Chad	France Cables et Radio	11,608, 14,747			
Chile	ENTEL	13,520, 15,640			
Denmark	Director General of Post & Telegraph	7,652, 11,460			
Ecuador	Empressa Nac. de Telecommunicationes	15,610			
Falkland Is.	Cable and Wireless Ltd.	24,145			
Gambia	Cable and Wireless Ltd.	13,797			
Germany, West	Deutsche Bundespost	10,850, 16,430			
Guam	RCA Global Communications	10,621			
Honduras	Tropical Radio Telegraph	6,905, 11,190			
Hungary	Minister of Posts	6,390			
lraq	Director Gen. of Postes, Telegraphs	18,898			
Italy	Italia Cable	10,135, 16,395			
Ivory Coast	Soc. Telecom. Int. de la Cote d'Ivoire	12,115, 16,380			
Jamaica	Jamaica Int. Telecom. Ltd.	5,205, 9,396			
Japan	Kokusai Denshin Denwa Ltd.	10,660, 15,700			
Kenya	East Af. External Telecom. Co.	10,730, 15,547			
Kuwait	Kuwait PTT	7,699, 11,576			
Lebanon	Societe Radio Orient	8,090, 13,445			
Liberia	Liberian Telecomm. Adm.	10,730, 13,935			
Martinique	French Telecomm. Service	17,565			
Mexico	Mexican Post, Telephone, Telegraph	7,350			
Netherlands	Netherlands Post and Telecomm.	8,160, 14,500			
New Zealand	New Zealand Post Office	18,770, 20,725			
Nicaragua	Tropical Radio Telegraph	5,735			
Pakistan	Pakistan Telephone and Telegraph	20,936			
Rhodesia	Rhodesian Post Office	18,690			
Saudi Arabia	Ministry of Communications	9,867, 11,417			
Senegal	France Cables et Radio	20,327			
Sierra Leone	Sierra Leone Telecommunications	17,655			
South Africa	South African Post Office	6,770, 9,048			
Spain	Compania Telefonos Nac. Espana	10,120, 19,030			
Sweden	Swedish Telecommunications	16,052, 22,930			
Switzerland	Swiss Telephone and Telegraph	19,585			
U.S.S.R. Zambia	Ministry of Communications Post Office Telecommunications	13,710, 16,325 20,261			





FOREIGN MEDIUM WAVE DX'ING-WHEN TO TUNE

Station Location	Eastern North Ameirca	Western North America
Central America	year around, winter best	year around, winter best
Caribbean area	year around, winter best	year around, winter best
South America (Northern) (Southern)	year around, winter best spring, summer, fall	year around, winter best
Australia/New Zealand	spring, fall	spring
Asia	fall	fall, winter
Europe	fall, winter	winter
Africa (Northern) (Southern)	fall, winter spring	winter unlikely

TV CHANNELS	AND	FREQUENCIES
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The state of the s				
Channel	Video/Audio Freq. (MHz)	Channel	Video/Audio Freq. (MHz)	
2	55.250/59.750	7	175.250/179.750	
3	61.250/65.750	8	181.250/185.750	
4	67.250/71.750	9	187.250/191.750	
5	77.250/81.750	10	193.250/197.750	
6	83.250/87.750	11	199.250/203.750	
		12	205.250/209.750	
		13	211.250/215.750	

The UHF TV channels begin at Channel 14 (471.250/475.750 MHz) and continue with audio and video channels six megahertz apart up to Channel 83 (888.250/889.750 MHz). Many other countries not only use different transmitting standards (positive or negative video modulation, number of scanning lines, channel width, etc.), but also have a different channel arrangement. In the United Kingdom there are 14 VHF TV channels running from 45 000 MHz to 216.250 MHz. In much of Continental Europe there are 12 channels, 48.250 to 229.750 MHz. France has 11 channels from 52.400 to 201.700 MHz. Italy, Russia, Morocco, Australia, New Zealand and Japan all have their own "channels" to add to the confusion. So if you plan to travel abroad, forget about taking your American made portable TV with you!

these times stations far beyond normal' range will be heard.

Swing Low. If the low band is used by mobile units in your area you should be able to determine this rather easily. The mobile low band VHF operations will use a whip-type antenna somewhat longer than four feet.

This is a VHF band favored by various State Police departments across the country. The reason is clear. More so than metropolitan police forces, the state troppers have to cover many miles



of roads and need radio communications with a longer range. To improve matters, some operations use repeater stations on hilltops or other high points.

You can also find, on the VHF low band, fire service communications and various types of business radio. The same sorts of public service users and business radio operations can be found on the VHF high bands . . . only there are more of them.

The frequencies between 150-175 MHz are really loaded with various sorts of stations. The tipoff here, when you observe a passing mobile unit, again is the antenna. Sometimes the antenna will be about three feet in length, with a loading coil at the base. Or it could be a foot-long wire in a different configuration.

Honest-to-goodness, distant, skip signals are out this far up in the VHF band, in most cases. But other types of

"I really like the magazine," says 15-yearold Mark Vincent of Lockney, TX. I subscribed to another magazine for a year but you have to be an electronics genius to understand it. It doesn't have any value to the SWL." Mark uses a Realistic DX-160 and a Mosley SWL7 antenna for his SWLing. Glad we've been of help, Mark.

propagational conditions can cause reception from well beyond your local, normal range.

Most police stations except in the largest cities, can be found in the VHF high band frequencies. In the major cities, where there is a big demand for VHF frequencies, the band from 150-175 MHz became overcrowded. As a result, the FCC turned to the UHF frequencies "upstairs" between 450 and 470 MHz.

The higher the frequency, the shorter the range of the signal, under normal circumstances. To help correct the limited range problems on UHF, many users make use of repeater stations. Police departments especially use this technique. Various repeater transceivers automatically pickup the lower powered, weaker signals from the squad cars in the streets and retransmit them using higher power and base station antennas. This means that the police band monitor can hear both sides of the traffic, both base and mobile stations. This is not always possible on the VHF channels where repeater units are not as common.

In ten of the largest cities in the United States, even the channels in the 450-470 MHz UHF bracket are starting to fill up. So here, the Federal Communications Commission (FCC) opened up additional frequencies in the so-called Television T band, some unused television channels located from 470 to 490 MHz. In addition, to provide more UHF band space, an extended frequency area has been made available to some public safety type stations. This extended UHF band runs from 490 to 512 MHz.

After 512 MHz, where do we go? Apparently the future will find a new frequency frontier around 900 MHz. For now, though, there seems to be no readily available monitoring gear for this far-out frequency band. It probably doesn't matter much yet, there just aren't more than a handful of stations operating on 900 MHz.

Here's All the Action! What's to hear on these VHF and UHF bands? Let's take a look at the various types of stations using these frequencies and some of the places where you may find them hanging out.

POLICE, 37.02-37.42 MHz, 39.02-39.98 MHz, 42.02-42.94 MHz, 44.62 -46.02 MHz, 72.02-76.00 MHz. 154.650 - 156.210 MHz, 453.050 -453.950 MHz, 458.050-458.950 MHz, 460.025 - 462.975 MHz, 465.025 -465.500 MHz, 467.950-467.975 MHz, 470.512 MHz.

33.42-33.98 FIRE DEPARTMENT. MHz, 45.88-46.50 MHz, 72.00-76.00 MHz, 153.770-154.445 MHz, 166.250 MHz. 170.150 MHz, 453.050-453.950 MHz, 458.050-458.950 MHz, 460.575 -460.625 MHz, 465.575-465.625 MHz, 470.000-512.000 MHz.

In the United States there presently are nearly 40,000 police communications stations licensed, with an additional 20,000 licensed to fire departments. There also are about as many Special Emergency Radio Service stations, about 20,000, which include ambulance and rescue squad operations, hospital communications, paramedics, with voice and telemetry channels for radioing a victim's vital signs back to a hospital physican for diagnosis and prescription of treatment.

SPECIAL EMERGENCY RADIO. 33.02-33.10 MHz, 38.64-35.68 MHz, 37.90 -37.98 MHz, 43.64-43.68 MHz, 45.92-45.96 MHz, 46.00-46.04 MHz, 47.42-47.66 MHz, 72.00-76.00 MHz, 150.775-150.790 MHz, 152.007 MHz, 155.160-155.400 MHz, 157.450 MHz, 162.662 MHz, 458.025-458.175 MHz, 460.525-460.550 463.000-MHz, 463.175 MHz, 465.525-465.550 MHz, 468.000-468.175 MHz.

In addition to the police, fire and emergency public service stations on VHF and UHF, there are many other types of agencies and firms using these channels. Here are some of them:

BUSINESS AND INDUSTRIAL STATIONS: 30.58-33.44 MHz, 151.655-151.955 MHz, 451.000-452.000, MHz, 460.650 -462.450463.300-465.000 MHz, MHz, 471.162-472.987 MHz.

RADIO COMMON CARRIER AND MOBILE TELEPHONE: 35.00 MHz, 152.030-152.210 MHz, 152.510-152.810 MHz, 454.000-455.000 MHz, 459.025-459.350 MHz.

RADIO PAGING: 35.22, 35.58, 43.22, 43.58 MHz, 462.750-462.975 MHz. VEHICLE TOWING: 150.815-150.965

MHz, 452.050-452.950 MHz. 43.70-TRUCK COMMUNICATIONS: 44.60 MHz, 159.495-160.200 MHz, 452.050-452.950 MHz.

TAXICABS: 152.270-152.450 MHz, 157.530-157.710 MHz.

RAILROADS: 160.215-161.565 MHz. MARITIME COMMUNICATIONS: 156. 275-157.025 MHz, 156.800 MHz is the International Distress and Calling Frequency.

PRESS AND MEDIA: 161.640-161.760 MHz, 173.225-173.375 MHz.

REMOTE BROADCAST PICKUPS: 25.87 -26.47 MHz, 450.050-451.000 MHz. HIGHWAY MAINTENANCE: 47.40 MHz, 150.950-151.130 MHz. FORESTRY SERVICES: 151.145-151.

475 MHz.

FOREST PRODUCTS INDUSTRY: 48.56-49.58 MHz.

UTILITY COMPANIES: 37.44-37.86 MHz, 47.77-48.54 MHz, 152.870-153.725 MHz.

PETROLEUM INDUSTRY: 25.02-25.32 MHz, 30.58-33.40 MHz, 48.56-49.58 COMMUNICATIONS WORLD/1978

MHz.

CLASS A CITIZENS BAND: 462.550-462.725 MHz.

Those are some of the broad fre-

quency areas where you can find different types of action band VHF and UHF stations. For specific frequencies used in your community you may have

WHERE TO SEND THOSE RECEPTION REPORTS

Afghanistan Algeria Argentina Australia Austria Bangladesh Belgium

Bolivia Botswana Bulgaria

Burma Byelorussian SSR Canada

China Costa Rica Cuba Czechoslovakia

Colombia

Denmark Ecuador Egypt Ethiopia Finland

Germany, Dem. Rep. Germany, Federal Rep. **Great Britain** Guatemala Haiti Honduras. Hungary India Israel Italy Ivory Coast Kuwait Liberia Lithuanian SSR Mexico Nepal New Zealand Nigeria Norway Pakistan

Peru **Philippines** Poland Portugal Rumania Saudi Arabia

South Africa Spain Sri Lanka Sweden Switzerland Tahiti Tanzania Togo Turkey Uganda Ukranian SSR USA

Vatican Windward Islands Yugoslavia Zaire

Zambia

Radio Afghanistan, P.O. Box 544, Kabul Radiodiffusion-Television Algerienne, 21 Boulevard des Martyrs, Algiers Radiodifusora Argentina al Exterior, Sarmiento 151, Buenos Aires Radio Australia, Box 4826, G.P.O., Melbourne, Victoria 3001 Austrian Radio, Technical Dept., P.O. Box 200, A-1043 Vienna Radio Bangladesh, 20 Green Rd., Dacca 5

Belgian Radio and TV, International Service, QSL Bureau, P.O. Box 26, B-1000

La Cruz del Sur, CP75, Cajon 1408, La Paz Radio Botswana, P.O. Box 52, Gaberones Radio Sofia, 4 Bd. Dragan Tsankov, Sofia

Burma Broadcasting Service, Prome Road, Kamayut P.O., Rangoon Radio Minsk, 4 Krasnaya St., Minsk, U.S.S.R. Radio Canada International, P.O. Box 6000, Montreal H3C 3A8

Radio Sutatenza, Apt. Aereo 7170, Bogota Radio Peking, Peking

TIFC, Faro del Caribe, Apartado 287, San Jose Radio Havana Cuba, P.O. Box 7026, Havana Radio Prague, Prague 2

Radio Denmark, TV-Byen, DK-2860 Soborg, Copenhagen HCJB, La Voz de los Andes (Voice of the Andes), Casilla 691, Quito Radio Cairo, P.O. Box 566, Cairo

Radio Voice of the Gospel, ETLF, P.O. Box 654 Addis Ababa Radio Finland, Foreign Relations Dept., Finnish Broadcasting Co., Ltd., Helsinki 26

Radio Berlin International, Nalepastrasse 18-50, Berlin 116 Deutsche Welle, Voice of Germany, P.O. Box 344, Cologne 5 British Broadcasting Corp., Box 76, Bush House, Strand, London TGNA, Radio Cultural, Aparatado 601, Guatemala City 4VEH, La Voz Evangelique, Boite Postale 1, Cap Haitien La Voz Evangelica, HRVC, Apartado 270, Tegucigalpa Radio Budapest, Brody Sandor 5-7, Budapest VIII

All India Radio, External Services, Box 500, New Delhi 1 Israel Broadcasting Authority, P.O. Box 1082, Jerusalem RAI, Italian Radio and TV, Caselle Postalle 320, Rome Radiodiffusion-TV Ivorienne, Boite Postale 2261, Abidjan Kuwait Broadcasting and TV Service, P.O. Box 397, Kuwait Radio Station ELWA, Box 192, Monrovia

Radio Vilnius, 49 Konarsky St., Vilnius USSR Radio Mexico, Apartado 20100, Mexico City 21, D.F. Radio Nepal, Oepartment of Broadcasting, Kathmandu Radio New Zealand, P.O. Box 2396, Wellington Voice of Nigeria, Broadcasting House, Lagos Radio Norway, Bj. Bjornsons Plass 1, Oslo Radio Pakistan, 71 Garden Rd., Karachi Radio del Pacifico, Apartado 4236, Lima Far East Broadcasting Co., Box 2041, Manila Polish Radio, P.O. Box 46, 00-950 Warsaw Radio Portugal, Rua do Quelhas 21, Lisbon

Radio Bucharest, P.O. Box 111, Bucharest Broadcasting Service of the Kingdom of Saudi Arabia, Box 2476, Riyadh,

Kingdom of Saudi Arabia Radio RSA, P.O. Box 4559, Johannesburg Radio Nacional Espana, General Yague 1, Madrid 20 Sri Lanka Broadcasting Corp., P.O. Box 574, Colombo 7 Radio Sweden, S.10510, Stockholm 1, Sweden

Swiss Broadcasting Corp., Overseas Service, CH-3000, Berne 16 Radio Tahiti, Boite Postale 125, Papeete Radio Tanzania, P.O. Box 1178, Dar es Salaam Radiodiffusion du Togo, Boite Postale 434, Lome

Radio Ankara, Genel Mudurlugo, Mithat Pasa Caddesi 37, Ankara Radio Uganda, P.O. Box 2038, Kampala Radio Kiev, Radio Centre, 26 Kreschatik, Kiev, USSR

Armed Forces Radio TV Service, Office for Information for the Armed Forces, AFRTS, Washington 20305

KGEI, La Voz de la Amistad, Friendship Station, Redwood City, Calif. Voice of America, c/o Frequency Division, Washington 20547 WYFR, 290 Hegenberger Rd., Oakland, Calif. 94621 WINB, P.O. Box 88, Red Lion, Pa. 17356

Vatican Radio, Vatican State Radio Grenada, P.O. Box 34, St. George's, Grenada R. Belgrade, External Broadcasting, 2 Hilendarska, Belgrade

La Voix du Zaire, Boite Postale 3171, Kinshasa Zambia Broadcasting Service, P.O. Box RW 15, Lusaka



to scout around a bit, ask someone who is actively monitoring the bands in your area, check with a dealer in your town who sells monitoring receivers.

There also are some specialized books and lists that include specific information on frequencies and services operating in various communities. You might look into the POLICE CALL directories which are marketed by the Radio Shack stores around the country. Other specialized VHF and UHF frequency lists are marketed by Communications Research Bureau, Box 56, Commack, NY 11725, and Handler Enterprises, P.O. Box CC, Northfield, IL 60093. A self-addressed envelope sent to either or both should bring you a leaflet listing the frequency materials available.

Shortwave Bands. Next we head downward in frequency, down below 30 MHz into the shortwave range. Strictly speaking, the shortwaves-officially the high frequencies (HF)-run from 3 to 30 MHz (equivalent to 3,000 to 30,000 kHz, since kilohertz tends to be the preferred term on SW). But in practice, DXers arbitrarily assume that the shortwave frequencies start at about 1605 kHz, just above the regular AM medium wave band. Between 30,000 and 1605 kHz there are an even dozen shortwave broadcast bands, each one only a couple of hundred kilohertz wide.

VHF and UHF stations are stacked up on their various channels like cordwood, because the range of each is normally quite limited and interference from other stations tends to be only a small problem—with a quality receiver-on the VHF/UHF public service bands.

An entirely different situation obtains on the dozen shortwave bands. The total number of frequencies available for SW broadcasting comes up short when compared to the number of shortwave transmitters on the air. But, because SW signals travel thousands of miles around the earth, there often is considerable co-channel and adjacent frequency in-



terference among shortwave broadcasting stations.

Not all broadcasters operate in the 12 SWBC bands, of course. There are some, especially stations in the U.S.S.R., China, North Korea, Vietnam and parts of Latin America, which operate outside the regularly defined bands. In recent years there has been a growing trend by some of the major Western broadcasters to set up shop on out-of-band frequencies too. It appears that the practice of operating outside the SW bands may be a case of staking out frequency territory in anticipation of band changes which may result from the worldwide frequency use planning of the World Administrative Radio Conference (WARC) to be held in Switzerland in 1979.

Let's take a look at the shortwave broadcast bands.

ELEVEN METERS-This band, at the high end of the shortwave range, covers the frequencies from 25,600 to 26,-100 kHz. As with most of the higher 'shortwave frequencies today, there is less activity by international stations on this band than there was a few years ago, or will be a few years hence, when the sunspot count is high. In periods of low sunspot count, there isn't much activity. While you might hear one or two broadcasters, for all intents and purposes, forget about 11 meters for a couple of years.

THIRTEEN METERS-Things are a bit better here, between 21,450 and 21,750 kHz. There are a few more stations on these frequencies than on 11 meters, but it, too, will not become a good hunting ground until the sunspot count increases in a couple of years. This is a daylight band. Don't bother tuning here during the darkness hours. When it is "open" there's not much interference from other stations, which can make for some nice clean reception.

SIXTEEN METERS—Only 200 kilohertz of SWLing space here, between 17,700 and 17,900 kHz. This is another band for daytime listening. The stations that transmit on these frequencies are, for the most part, the big international broadcasters-not as many of them as there was when the sunspots were

"I've been DXing about eight years and am primiraly interested in the utilities and aircraft bands." That is the word from CW reader David McLaren, Rock Falls, IL. To scan the aero band from 118-128 MHz, Dave uses (upper left) a Regency TME-8A aircraft band scanner. He also uses two Bearcat VHF-UHF scanners. "I wish your CW would come out every month, instead of every six months," says David.

TIME AND FREQUENCY STATIONS

This is a selected list of some of the standard time and frequency stations operating in the world. A number of them use common frequencies such as 2.5, 5, 10, 15, 20 MHz, hence only unusual conditions will allow them to be heard through the U.S. stations, WWY, Ft. Collins, CO and WWYH in Hawaii. Others use different frequencies. Only a few operate 24-hours a day, as do WWV, WWVH and the Canadian station, CHU.

	CALL	FREQUENCY
LOCATION	LETTERS	(KHz)
Chavannes, France	FFH	2,500
Lidice, Czechoslovakia	OMA	
Ft. Collins, CO	WWV	
Kauai, Hawaii	HVWW	
Rugby, Gt. Britain	MSF	
Osterloog, W. German	DAN	2,614
Kiel, W. Germany	DAO	2,775
Podebrady, Czechoslovakia	OLB5	3,170
Dixon, CA	NPG	3,268
Ottawa, Canada	CHU	3,330
Nauen, E. Germany	DIZ	4,525 5,000
Torino, Italy	JJY	5,000
Koganei, Japan Moscow, USSR	RAT	
Tashkent, USSR	RCH	
Olifantsfontein, S. Africa	ZUO.	
Ft. Collins, CO	WWV	
Kauai, Hawaii	WWVH	
Caraças, Venezuela	YVTO	6,100
Lyndhurst, Australia	VNG	7,500
Guam, Marianas	NPM	8,150
Elmshorn, W. Germany	DAM	8,638
Shanghai, China	BVP	9,368
Koganei, Japan	JJY	10,000
Buenos Aires, Argentina	LOL	
Olifantsfontein, S. Africa	ZUO	10.004
Irkutsk, USSR Pontoise, France	RID	10,004 10,775
Balboa, Canal Zone	FTK77 NBA	11,080
Lyndhurst, Australia	VNG	12,000
Annapolis, MD	NSS	12,135
Shanghai, China	XSG	12,875
Rio de Janeiro, Brazil	PPR	13,105
Ottawa, Canada	CHU	14,670
Novosibirsk, USSR	RTA	14,996
Buenos Aires, Argentina	LOL	15,000
Ft. Collins, CO	- WWV	
Kauai, Hawaii	WWVH	
Koganei, Japan	JJY	
Rio de Janeiro, Brazil	PPR	17,194
Ft. Collins, CO	VWW	20,000
Kauai, Hawaii	WWVH	22 502
Lualualei, Ha <mark>waii</mark>	NPM	22,593

active, but still, considerably more action than the two bands "above."

NINETEEN METERS-These SW frequencies, 15,100 to 15,450 kHz, make for good listening during the daylight hours (particularly during the afternoons before the sun sets where you live) when the Africans come through in numbers. It can hold up into your evening when Australia, China and other distant locations can be heard.

TWENTY-FIVE METERS-This is another of the bands largely occupied by the big broadcasters. It covers the frequencies from 11,700 to 11,975 kHz. But there are some stations, in Latin America for instance, which broadcast to domestic audiences with lower power, on the 25 meter band frequencies. As mentioned, the high shortwave bands provide best reception during the day. As we slide lower in frequency, we find the bands "open" when its dark,

"closed" when daylight arrives. Twenty-five meters is something of a transitional band, with reception over a long haul possible during daylight and into the evening as well. Late at night the signals on "25" fade and disappear.

THIRTY-ONE METERS—This band runs from 9,500 to 9,775 kHz, but there are stations that spill over into the out-of-band regions at either end. For North American SWLs, particularly those living east of the Rockies, this band may well be the best spot on the shortwave dial to find foreign SWers broadcasting in English, during those evening hours before your local midnight. The major European broadcasting stations in particular, those with a definite interest in reaching English-speaking listeners in the U.S. and Canada can be found on 31 meters in abundance.

FORTY-ONE METERS-This band-7,100 to 7,300 kHz-is shared with radio amateurs. The band is not used by broadcasting stations in this hemisphere, but there are many broadcasts directed to our part of the world from Europe, Africa and elsewhere. So the bands "open" when it's dark, meter band and the overseas SW broadcasters usually wind up causing each other interference. There are some hopes that the WARC-79 frequency conference will straighten out this mess and tuck the broadcasters and the hams neatly in their own separate bands. This is a band that is essentially a night

range, although reception is still likely for some hours before sunset and after sunrise in the morning.

FORTY-NINE METERS—This is one of the most crowded in the shortwave spectrum. It includes the frequencies between 5,950 and 6,200 kHz. It is especially jam-packed with signals because it is used by both the powerful international broadcasting stations, plus a great many local services in Latin America, Africa and Asia. This band opens up in the late afternoon, becomes a hotbed of radio-activity during the evening hours before quieting down late at night and into the wee hours. Signals from Asia and the Pacific begin to come in pre-dawn and the band holds up until a little after sunrise.

SIXTY METERS-The frequencies from 4,750 to 5,060 kHz comprise the first of three so-called Tropical bands. These frequencies are not used by the major foreign broadcasting SW outlets. Most of the signals-and there are plentyare from the smaller stations. They come from the Tropical regions of South America, Africa, Asia, Oceania, etc.-whose programs are intended for their domestic audiences. Powers are low, compared to the powerful international broadcasting transmitters. Signals, as a result, tend to be harder to log. English language programming is rather uncommon, but you'll hear loads of Spanish, some French, and scores of other tongues from Swahili to pidgin

English.

SEVENTY-FIVE METERS-This band, 3,900 to 4,000 kHz, is like 41 meters, parts of it are shared with the radio amateurs. There is a small segment which is used for international broadcasting-though over rather short paths, normally-in Europe and Africa. Outside this 50 kHz slot between 3,950 and 4,000 kHz where a few major broadcasters operate, there are domestic type shortwave outlets in Latin America, Africa, Oceania, Asia. But, there are not really that many SWBC stations here on "75." Despite the limited number of big international broadcasters-Switzerland and Germany's Deutche Welle among them-75 meters is considered another of the Tropical bands. It is, certainly, of use to SWLs only during the darkness hours, shortly before and shortly after sunset and dawn respectively.

NINETY METERS—This, another of the Tropical bands, is home to many, many shortwave stations broadcasting from the equatorial belt to listeners in their own home countries. The type of local and regional broadcasters operating on 90 meters, those frequencies from 3,200 to 3,400 kHz, are similar to those on 60 meter band. Along with 60 meters, the 90 meter band is a favorite of serious DXers who are actively hunting the low powered, difficult to hear SW stations of the world. Like 60 and 75 meters, this band is also a place

LANGUAGES OF THE WORLD

These are the major languages heard on shortwave and the countries in which they are the primary or a major language.

Arabic
Algeria
Bahrain
Egypt
Iraq
Jordan
Kuwait
Lebanon
Libya
Morocco
Qatar
Saudi Arabia
Southern Yemen
Syria
United Arab Emirates

English
Australia
Barbados
Bermuda
Canada
Fiji
Ghana
Gt. Britain
Guyana
Hong Kong
India

Zanzibar

Jamaica New Zealand Nigeria Philippines Seychelles Singapore United States Windward Islands

French

Afars and Isas Algeria Belgium Burundi Cambodia Cameroun Cent. Af. Rep. Chad Comoro Is. Congo Dahomey (Benin) France Gabon Guadeloupe Guiana, Fr. Haiti **Ivory Coast** Laos Malagasy Rep.

Mali

Martinique Mauritania New Caledonia Reunion Is. Rwanda Senegal Tahiti . Upper Volta Zaire

Portuguese Angola Azores Cape Verde Is. Brazil Guinea (Bissau) Portugal Sao Tome Spanish Argentina

Spanish
Argentina
Bolivia
Canary Is.
Colombia
Costa Rica
Cuba
Dominican Rep.
Ecuador
El Salvador
Guatemala

Guinea, Equatorial Honduras Mexico Nicaragua Panama Paraguay Paru Philippines Spain Chile Venezuela Uruguay

German Germany, East Germany, West Austria Switzerland

Chinese China Hong Kong Singapore Taiwan Swahili Burundi Kenya Rwanda Somali Rep. Tanzania



to hunt from around your local sunset to dawn, it's another night band.

ONE-HUNDRED-TWENTY METERS—This band, 2,300 to 2,500 kHz, is the lowest of the dozen shortwave broadcasting spots. There are, frankly, few stations operating here. They are normally very tough to hear. Some SWLs have never heard a foreign shortwave voice on 120 meters. But there are some in Central and South America, and in the Pacific area, that operate way down here. It is the last of the Tropical bands and it is strictly for nighttime reception.

DX On the Medium Waves. So far I've delved into the UHF and VHF, and the HF or shortwave bands. Below the HF shortwaves are the MF, medium frequency channels. These are usually referred to as the medium waves, or the broadcast band. These are the frequencies of your normal, everyday AM radio band between 540 and 1600 kHz. This band is a very good spot to begin DXing, although many newcomers to the hobby never think of the good ol' AM frequencies as the DX hunting grounds they really are.

One reason the MWs are useful to the starting listener goes back to the equipment. You can get your feet wet even before you buy your first communications receiver. To begin with, almost any sort of radio that can bring in these AM signals will do. Later, if you wish, you can invest in listening gear that can tune in the shortwaves or VHF and UHF frequencies.

There are many stations to tune for on the medium wave BCB. Many distant stations, even cross-country broadcasters, are easy to hear, even for the newcomer to the listening hobby. Yet others are a real test of DXing ability. There are about 5,000 medium wave stations operating in North America. A look at the listings in White's Radio Log, at the back of this magazine, will give you an idea of the vast potential for BCB listeners. I can tell you flat out, you'll never hear all of them—but it is fun trying!

BCB'ers call the thousands of U.S. and Canadian outlets the "domestics." Don't get the notion that listening to these domestic outlets is a snap. Oh sure, the first 100 or so stations you hear on the medium wave frequencies may come quickly. You can probably log some twenty different states and several Canadian provinces without much difficulty and with the expenditure of relatively little listening time. But, after the first 100, the rest come progressively slower, are harder to hear. Each new station you hear makes the next one even harder to hear. But that is the challenge of the pastime.

You may already have realized that stations in the United States, Canada and Mexico, plus some other areas of the world, operate on frequencies that are 10 kHz apart, from 540 to 1600 kHz. These stations in the U.S. and Canada vary in transmitting power from 250 watts-less in some rare circumstances-to a maximum of 50,000 watts. There are some low powered, 20 watt, Canadian unmanned relay transmitters and a handful of Mexican outlets that run 100 or 150 kilowatts of power, two or three times as powerful as the strongest Canadian or American outlet on MW.

Between 540 and 1600, the medium wave band, there are some 107 different North American frequency channels. These are divided into three basic categories.

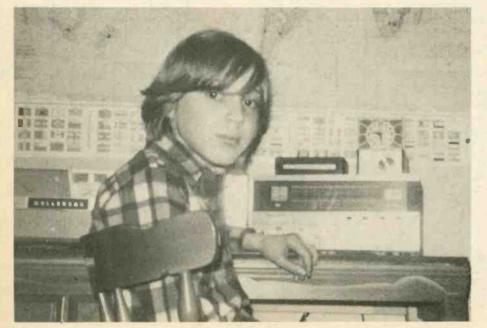
The easiest to tune, because interference is minimal, are the clear channels. There are 60 different frequencies designated as clear channels in North America. On most of these frequencies the "primary" station is in the United States. On some, the main station is located in Canada, Mexico or the Caribbean Islands. Though called clear channel, most so-called clear channel stations are not completely free of at least some co-channel interference. Secondary stations are permitted to operate during the day, or with restrictive transmission patterns that protect the primary stations.

A second basic category of frequencies is the regional channel. There are 41 regional channels, each with about 25 to 50 different stations, in various parts of North America. These secondary regional stations are limited to 5,000 watts power. Many of them broadcast only during the daylight hours.

The smallest category of frequencies are the local channels. There are only six local frequencies-1230, 1240, 1340, 1400, 1450 and 1490 kHz. These are used by a large number of local, low powered stations, each designated to provide radio coverage for a small area. Though there are only a half dozen such local frequencies, nearly a quarter of all stations in the U.S. are assigned to one of these frequencies, something like 175 or so assigned to each. Low power? Yes, and many of them are restricted to daytime broadcasting only. To reduce interference, directional antenna patterns are usually required.

At night, when medium wave signals reach out thousand of miles, the local channels become a mass of confusion with scores of different signals mixing it up. It becomes a bedlam with, perhaps, one station popping out of the mess into audibility for a short while, then replaced by another, or perhaps, long periods when all you can hear is just unintelligible noise. It is tough, challenging and, yes, a gamble to listen on these few frequencies. It is no wonder these half dozen local frequencies are called, by veteran BCB DXers, the "Graveyard" channels.

number still a few years away. While the shortwave 11 meter band is of not much use to SWLs these days, there is still very good long haul BCB DX to be heard.



A Realistic DX-160 brings the shortwave signals into this listening post in Palmyra, NJ. The owner of this setup is Charles M. Young. Charles notes that he uses a longwire antenna and records his better catches on a Wollensak reel-to-reel recorder.

The Luck of BCB DX. There are natural laws that govern the best times to listen for medium wave DX signals. But there are some man-made decisions that also can influence when you tune in.

Many stations in North America reserve the early hours on Monday mornnings for equipment maintenance and testing. In the case of stations that normally broadcast 24 hours a day, these Monday morning hours may be the only time during the week when they vacate their channels. When they are off the air, it may be possible to hear other stations that are normally covered over by the dominant outlet.

Veteran BCB medium wave listeners know that early Monday morning, between about midnight and dawn local time, is a good time to look for the harder-to-hear signals on frequencies normally "covered" by other broadcasters. If you'd like dramatic proof of the benefits of Monday morning listening, try staying up late two days in a row, post-midnight Sunday morning and then the same period the next morning. You'll note how much "quieter" Monday morning is, noticeably less interference on some channels as the usually heard powerhouses are silent while their engineers tackle the routine upkeep chores.

To maximize the potential of these Monday morning "shots," some DX clubs arrange with various hard-to-hear domestic MW stations to conduct special transmissions for listening fans during these hours. These Courtesy Programs are scheduled for quiet Monday mornings when listening chances are optimum.

Many stations conduct two other types of special transmissions, sometimes on the quieter Monday morning periods. One is called the frequency check. The FCC requires stations to operate on precise frequencies varying not more than plus or minus 20 Hz! To make sure they stay legal, stations arrange with commercial monitoring stations to check their transmitting frequencies at regular intervals. Usually these frequency measurements are made during those hours when interference from other stations is at a minimum.

Stations do conduct on-the-air equipment checks, special transmissions when station engineers can play around with their transmitters to make sure they are operating properly. Naturally, these equipment tests are not during the regular broadcasting schedule and are often carried out during the deadof-night periods.

All of these special transmissions at off-hour times can help a medium wave listener pull in domestic catches he might not otherwise be able to log.

It is true that many BCB listeners concentrate on the U.S. and Canadian

"domestic" stations, at least at first. But it is, most definitely, possible to hear foreign stations on the medium wave band—and I don't mean just Mexican and Cuban stations.

Of course you can hear Mexican and Cuban outlets on the 540-1600 kHz broadcast band. These outlets, very probably, will be the first "foreign" DX you hear on medium wave. With the exception of a handful of super-powered Mexican stations just south of the border, which frankly sound little different from the English-speaking domestic outlets, those stations program in Spanish. With some practice and experience, you'll find it isn't really too hard to pick out some identifications. You don't have to be fluent in Spanish, but a high school Spanish class, or one teach-yourself-a-language those books can't do any harm.

Next, once the mere idea of listening to a Spanish-speaking station doesn't frighten you off, expand your Latin listening efforts. You'll find stations from further south in Central America, outlets in Costa Rica, Nicaragua, El Salvador, Guatemala. Then there are a number of rather easily heard outlets in northern South America, in Venezuela and Colombia. You'll find, no doubt, the powerful missonary station of Trans World Radio on 800 kHz, on the island of Bonaire in the Netherlands Antilles, just off the South American coast. There are also stations in the Caribbean besides Cuba, outlets in Jamaica, Puerto Rico, Bahamas and the Leewards and Windwards groups.

Early evenings, if you live along the east coast, or perhaps after local midnight in the midwest, you might hear some of the more powerful Euro-

AERONAUTICAL BEACONS

This is a selected list of air beacon stations operating in the long wave frequency range below the 540-1600 kHz medium waves. These stations broadcast their identifying call letters continuously in Morse Code to assist pilots in determining position and flight direction.

kHz	Call/Identifier	Location
206	QI	Yarmouth, Nova Scotia, Canada
210	NVO	Buenos Aires, Argentina
216	CLB	Carolina Beach, N.C.
224	QM	Moncton, New Brunswick, Canada
245	AN	San Diego, Cal.
248	6YM	Montego Bay, Jamaica
251	ZQA	Nassau, Bah <mark>amas</mark>
27 8	FLW	Milwaukee, Wis.
283	GRA	Graciosa, Azores
290	M	Limon, Costa Rica
291	MH	Brooklyn, N.Y.
292	MPQ	Maiquetia, Venezuela
323	TAB /	Port of Spain, Trinidad
328	PJG	Willemstad, Curacao
341	TCE	Tice, Fla.
344	ZIY	Grand Cayman Island
359	DO	Kansas City, Mo.
362	LIA	Lima, Ohio
365	FAR	Fargo, N.D.
369	ZDX	Antigua, W.I.
370	CMM	Camaguey, Cuba
371	JF	New York, N.Y.
375	NQB	Canal Zone
379	SP	Springfield, III.
382	XU	London, Ontario, Canada
387	SPP	San Andres Island, Colombia
388	BD	Windsor Locks, Conn.
394	OO	Oshawa, Ontario, Canada
395	PAL	El Palomar, Argentina
396	LJ	Lajes, Azores
401	LA	Lafayette, Ind.
-526	UP	Ottawa, Canada

pean medium wavers! Yes, that's right,

AM Propagation. If you've never really thought about your regular AM receiver's medium wave band as a spot to listen for DX signals, it may be because you never were aware of when to tune. There are three basic cycles of radio frequency propagation that should be considered when you plan your BCB medium wave listening times. First is the daily cycle. You've probably noted it already, but if you have not, it is this: Medium wave signals travel best, thanks to skywave propagation, at night. During the transition periods from dark to light (dawn), and light to dark (dusk), this sort of reception is enhanced.

Remember that several thousand stations in this country are authorized only during the daytime. Since it gets darker earlier to the east of your location—wherever that may be—you can hear daytime-only stations signing off, then other stations on the same shared frequencies further west as the frequencies begin to have less interference. Late at night, as your local stations sign off for the night, look toward the west for those that are still transmitting. About dawn, try for stations to the east of your location as they sign on for a new day's broadcasting.

The annual variation is a second cyclical factor to consider. Medium wave DX conditions are better in winter than in summer. Distant reception on the broadcast band, as I've noted, is largely a nighttime phenomenon winter is best as there are fewer hours of daylight then and static levels are low-

Finally, there is the sunspot cycle, The number of sunspots, those eruptions on the sun's surface that cause heavy solar radiation which affects the "reflective" ionospheric layers, varies over a number of years, roughly 11 years. A high sunspot count improves reception on the highest shortwave bands, as already noted. A low sunspot count means better distant medium wave reception. The current sunspot



count remains quite low with the peak transatlantic BCB DX is not at all impossible.

What makes that phenomenon possible is the fact that while North American area stations are assigned to frequencies a neat ten kilohertz apart, on even multiples of ten kilohertz, such as 650, 660, 670, 680 kHz, this is not true for the European and African stations. They are located 8 or 9 kHz apart. This means that most of their channels are on "odd" spots between the North American broadcasters. For example, probably the best chance to hear an African MWer is on 764 kHz, between 760 and 770 kHz "domestics." The station here, sometimes audible with Arabic "chanting," is located in Dakar, Senegal.

These channels, in the cracks between the even-tens of the U.S. and Canadian outlets, are called "split frequencies" by BCBers. It takes a rather selective receiver to do the trick of splitting off enough of the interference on either side, but it does make transatlantic medium wave DX hunting interesting.

West Coast listeners will find their best opportunities for foreign DX among the Asian and Pacific area broadcasters. The Soviet Far East outlets, the North Koreans and some mainland Chinese stations can be downright powerful on the west coast. Better catches are BCB stations in Australia, New Zealand and Pacific Islands like Tonga and Tarawa.

All right, all right, it is true that it is a lot tougher to hear most transatlantic and transpacific DX stations on the medium wave broadcast bands than it is to hear a potful of domestic broadcasters. But it can be done. A beginner can log ten or fifteen different countries without a great deal of difficulty, if he is willing to tackle a few of the stronger Spanish-speaking stations.

There are quite a few experienced listeners who log 30 to 50 different MW countries. And a few top-hands have managed to bring in over 100 countries on the BCB! Now that is really a feat! But it is further proof that the medium waves are worth your listening efforts, that it is, like the UHF, VHF and SW, a band worth reckoning with.

Karl Tripp, Binghampton, NY, says his Lafayette HA-163 receiver, shown beneath a prized pennant sent him by Springbok Radio, South Africa, is "not a DX machine." But, whatever Karl wants to term his receiver, it is doing the job for him. "I have now logged 50 countries with English broadcasts, including, just recently, the Voice of Indonesia."

Specifics At Last. So far we've considered the equipment needed and available on the market, the gear you need for hobby listening. And we've scanned the bands in a general way, noting where they are, from the medium waves to the UHF range, and the sorts of stations that hang out in each of the various bands.

Now it is time to open the COMMUNICATIONS WORLD mailbox and find out, specifically, what it is that you, out there in Readerland, are hearing, or in some cases, what you would like to hear

That brings us to a letter from Bobby Joe Preston from Big D-Dallas, Texas.

"I've been an SWL for a few months," comes B. J.'s mild complaint, "and I've heard about 20 different countries on SW. Can you give me some tips on how to log some more stations? Come on now, Don, nothing super tough, huh!"

Now, Bobby Joe, you know I wouldn't sandbag you with toughies. These babies are all possible—and they shouldn't be tough at all.

First, though, I don't know which countries you've already logged among your 20. I can make an educated guess, based on what most other SWLs hear when they start out. And I'll bet I won't miss more than a couple on your countries heard list!

I suspect you've already notched the two English-speaking North American countries, the U.S. (Voice of America) and Canada (Radio Canada International). (Yes, I do know that Canada is a bilingual country with French spoken by a very sizable minority of Canadians, so please no chiding letters from north of the border.) Elsewhere in our hemisphere, I'll bet you've notched stations in Ecuador, Netherlands Antilles (Trans World Radio, Bonaire), and Cuba. Also, in Europe, England's BBC, the Soviet Union's Radio Moscow, plus, probably, outlets in the Netherlands, West Germany, Switzerland, Czechoslovakia, Bulgaria, Hungry and Rumania. That makes 14. Two Africans which I suspect are on your "logged countries" list would be South Africt and Egypt. I'd round out your 20 nations with Israel, Australia, perhaps Mainland China and Japan. Oh yes, there are a number of possible substitutes, maybe a couple of additional Europeans in place of the Asians, for instance. But that brings us to your question, where next?

For you, Bobby Joe, and others who are in about the same situation, looking 21 to 50, here are some specific targets to shoot for. In terms of difficulty, they range from lead pipe cinches to "not-too-tough."

Also be aware of the fact that this manuscript is being written some

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months before you read these pages. Shortwave frequencies used by stations can change with the passage of time. Schedules also can vary. So it is possible that some of these stations will operate on different channels when you look for them. If you fail to find the stations where I list them, tune around a bit in that, or other SW bands. Schedules are less subject to change than frequencies. With some luck and a little persistance, you'll probably locate the stations' new channels.

Now, to the country-logging hints: FRANCE—Radio France International has English language programming in its Paris Calling Africa segment, which is widely heard in North America none-theless. Frequencies to try, around 1600 GMT and later, are 11,845, 15,200 or 21,580 kHz.

ALBANIA—This is the unreconstructed communist voice in Europe. Radio

Tirana's dreary programs in English are easily logged on 7,300 kHz from 0130 sign on. That time, like all times listed here, is in Greenwich Mean Time (GMT).

PORTUGAL—Radio Portugal in Lisbon is the station here. The time is 0300 GMT and the frequency to try is 11,-935 kHz.

spain—Espana shares the Iberian peninsula with Portugal. It also has its government-operated shortwave voice, Radio Nacional de Espana. RNE's English service, the Voice of Spain, can be heard on 11,880 kHz, 9,360 kHz or 6,065 kHz during the early evening hours in North America.

ITALY—Try for the English programs from Italy's RAI in Rome on 9,575 kHz at 0100 GMT.

sweden-Radio Sweden has some of the liveliest programs on shortwave radio. Look for this one at 2300 GMT on 9,695 and 11,705 kHz. The broadcasts are in English at that time.

DEMOCRATIC REPUBLIC OF GERMANY

-This is the official name for what is
often called East Germany. The station
here is Radio Berlin International. This
station signs on in English, directed to
North American audiences, at 0130
GMT on 6.075 kHz.

BELGIUM—Belgian Radio and TV Las a rather abbreviated English language schedule. Look for the Brussels Calling program in English at 0015 GMT on 9,730 kHz.

VATICAN—The international voice of Catholicism is Vatican Radio. It can be heard in English at 0100 GMT on frequencies of 5,995 and 9,605 kHz.

GREECE—This country is a lot easier to hear than it once was. The Voice of Greece has English news at 0015 GMT on 9,760 and 11,730 kHz.

NORWAY-From the Land of the Mid-

WORLD TIME BY COUNTRIES

To compute the time anywhere in the world, add (+) or subtract (—) the number of hours indicated to or from GMT. Figures in parentheses indicate daylight savings time during the particular country's summer months.

Afghanistan	+41/2	Czechoslovakia	+1	Malagasy Rep.	+3
Alaska		Dahomey (Benin)	+1	Maldive Is.	+51/2
Juneau	-8	Denmark	+1	Mali	0
Anchorage	-10	Ecuador	-5	Mauritania	Ö
Aleutians	-11	Egypt	+2(+3)	Martinique	_4
Albania	+1		+2(+3) -6	Mauritius	+4
Algeria	0	El Salvador	-6 +3	Mexico	-6
Argentina	-4(-3)	Ethiopia		Monaco	+1
Ascension Is.	0	Falkland Is.	-4(-3)	Mongolia	+8
Australia		Fiji Is.	+12	Morocco	0
Eastern	+10	Finland	+2	Mozambique	+2
Central	+91/2	France	+1	Nepal	+5.40
Western	+8	Gabon	+1	Neth. Antilles	_4
Austria	+1	Gambia	0	New Caledonia	+11
Azores	-1	Germany	+1	New Guinea	+10
Bahamas	-5	Ghana	0	New Hebrides	+11
Bahrain	+4	Gilbert Is.	+12	New Zealand	+12
Belgium	+1	Great Britain	+1	Nicaragua	-6
Bermuda	_4	Greece	+2	Niger	+1
Bolivia	-4	Guam	+10	Nigeria	+1
Botswana	+2	Guatemal?	-6		+1
Brazil		Haiti	-5	Norway	
Eastern	-3(-2)	Hawaii	-10	Pakistan	+5
Central	—4(—3)	Holland	+1	Panama	-5
Western	—5(—4)	Honduras	—5(—6)	Paraguay	-4
Brunei	+8	Hong Kong	+8(+9)	Peru	-5
Bulgaria	+2	Hungary	+1	Philippines	+8
Burma	+61/2	Iceland	-1(0)	Poland	+1
Burundi	+2	India	$+5\frac{1}{2}$	Portugal	+1
Cambodia	+7	Indonesia		Qatar	+4
Cameroun	+1	West	+7	Reunion Is.	+4
Canada		Central	∔ 8	Rhodesia	+2
Atlantic	—4(—3)	East	+9	Rumania	+2
Eastern	_5(_4)	Iran	$+3\frac{1}{2}$	Rwanda	+2 +2 +9
Central	—6(—5)	Iraq	+3	Ryukyu Is.	+9
Mountain	—7(—6)	Israel	+2	Sabah (Malaysia)	8
Pacific ·	<u>_8(_7)</u>	Italy	+1(+2)	Sarawak (Malaysia)	+8
Yukon	—9(—8)	Ivory Coast	0	Senegal	0
Canary Is.	0	Japan	+9	Seychelles	+4
Cape Verde Is.	-2	Jordan	+2	Sierra Leone	0
Cent. Afr. Rep.	+1	Kenya	+3	Singapore	+71/2
Chad	+1	Korea	+9	Solomon Is.	+11
Chile	_4	Kuwait	+3	Somali Rep.	+3
China	. 0	Laos	+7	South Africa	+2
West	+6	Lebanon	+2	Spain	+1
East	+8	Liberia	+33/4	Sri Lanka	+51/2
Colombia	-5	Luxembourg	+1	Sudan	+2
Cook Is.	—10½ —6	Libya	+2	Surinam	-31/4
Costa Rica Cuba	_b _5	Malawi		Sweden	+1
Cyprus	+2 +2	Malaysia	+2 +7½	Switzerland	+1
Cyptus	T2	malayəfa	-112	Syria	+2(+3)

night Sun come the programs of Radio Norway. On Sundays, 0000 GMT, tune the English Norway this Week program on 11,860 kHz.

FINLAND-Another of the Nordic countries is represented on shortwave by Radio Finland. English can be heard at 1600 GMT on 11,755 kHz.

INDIA-The government-controlled radio in this country is called, not surprisingly, All India Radio. You can hear an English newscast at 2200 GMT on 11,740 kHz.

IRAQ-From Aladdin's land comes Radio Baghdad, which has English programming at 1930 GMT and later, on 9,745 kHz.

NIGERIA-The Nigerian Broadcasting Corp. station at Lagos has English news at 0500 GMT on 4,990 kHz. There are other times and frequencies but this home service schedule may be a bit more challenging. You don't want things too easy, right?

KUWAIT-Radio Kuwait, from the oilrich country on the Arabian Gulf, has a couple of hours of English programs daily around 1800-2000 GMT on an out-of-band frequency, 12,085 kHz.

MALTA-They call this transmitter on the Mediterranean Island, Cyclops. It is used by several major broadcasting organizations, including West Germany's Deutsche Welle. You can hear DW on 9,590 kHz at 0130 GMT.

PAKISTAN-Radio Pakistan uses an out-of-band frequency, 11,640 kHz for English language programming to Europe. Look for this one around 2115 to 2145 GMT.

PHILIPPINES-There are several stations in the Philippines, a government outlet, a VOA relay base and two stations with religious orientation. One, of the latter is Radio Veritas which has English programs at 1400 GMT on 9,645 kHz.

TURKEY-Radio Turkey is a nice easy catch for most listeners. Try 9,515 kHz at 2200 GMT for English.

NORTH KOREA-Radio Pyongyang is the station in this Asian country. There are many frequencies and many hours, but why not 11,780 kHz from 1000 GMT sign on?

NEW ZEALAND-Of course all programs here are in the English language. Radio New Zealand can be heard during the 0400-0700 GMT period on 11,705 kHz.

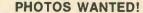
PAPUA NEW GUINEA-There are a number of different outlets of the National Broadcasting Commission of Papua New Guinea. Your best chance of logging this country is on 4,890 kHz between, say, 0900 and 1200 GMT.

ARGENTINA-Aadiodifusora Argentina al Exterior, perhaps better known by its abbreviated form, RAE, pronounced "rye," has an English schedule at 2300 GMT on 11,710 kHz.

CHILE-Radio Nacional's Voice of Chile has English programs at 1000 GMT on 9,565 kHz.

ANTIGUA-The situation on Malta is more or less duplicated on this Caribbean Island; a powerful new shortwave transmitter is used by several large international broadcasters. In this case, the station is shared by Great Britain's BBC and the German Deutsche Welle. You can find the BBC on 6,175 kHz at 0230 GMT, or DW at 0130 GMT on 6,040 kHz.

VENEZUELA-Radio Nacional, the government outlet in Caracas, unlike virtually all of the other Venezuelan stations, has a bit of English. Look for



Would you like to see your photo in COM-MUNICATIONS WORLD? Okay, then, send us a nice clear photo of you and your DXing equipment. Any sharp photo will do, but we prefer to see you at your rig. Along with the photo, please tell a little about you and your DXing activities and interests. Also, please identify the make and type of the receiver and other equipment shown in the photograph, Sorry, we can't return photographs.

this station at 2300 GMT on 15,400 kHz.

GUATEMALA-Best way to hear Latin American stations in English is to hunt out the ones that are operated by religious organizations. In Guatemala, the best chance is Radio Cultural, TGNA, 3,300 kHz at 0300 GMT.

HAITI-English religious programming can be heard from Radio 4VEH, Cape Haitien, Haiti, on 11,835 kHz at 2300-0000 GMT.

HONDURAS-And last but not least we have La Voz Evangelica, HRVC, which has English around 0300 GMT on 4,820 kHz.

So, Bobby Joe, there are some SW stations, most transmitting in English, that can take you from your present 20 countries heard to a half a hundred nations in your DX log book. Hopefully, the info will also be of assistance to other readers who have asked for a list of stations they can tune on shortwave frequencies.

More Letters. Alfred Fant Jr., Austin, TX, passes along some info for COMMUNICATIONS WORLD Readers which he received from the Radio Nederland frequency office.

"It concerns their single sideband (SSB) transmissions to Bonaire and Madagascar relay stations. These transmissions of their "New Block" program are as follows: 0530-0745 GMT on 7,742 kHz, 1530-2120 GMT on 13,-803 kHz, 2120-0015 GMT on 10,735.5 kHz, 0015-0300 GMT on 7,742 kHz, all broadcast from Hilversum for pick up at Bonaire in the Netherlands Antilles. Then, there are 0645-1350 GMT on 19,713 kHz, 1350-1550 GMT on 17,442 kHz, 1550-1655 GMT on 13,-545 kHz, 1655-2150 GMT on 10,302 kHz, all directed to the Madagascar relay station of Radio Nederland at Talata."



Paul Gee, Listowel, Ontario, is 15 and an active DXer and CBer. His CB activitiesknown as General Radio Service (GRS) in Canada-have brought him a prized QSL, a letter from the former First Lady, Betty "First Mama" Ford. Paul also actively DXes the shortwave and medium wave bands.

Alfred continued that some readers of CW might want to try to hear these transmissions.

Many thanks, Alfred. Not too many listeners are familiar with these point-to-point "feeder" services of international broadcasters, so perhaps some further explanations are in order.

In recent years a number of major shortwave broadcasters, in order to get better coverage for their programs, have made use of overseas relay stations, closer to their target areas. I've mentioned several of them already, those shared by the BBC and Deutsche Welle, and some other broadcasters, at Malta and Antigua. DW also has relays in Rwanda, Africa, in Portugal, and, soon, in Sri Lanke, the former Ceylon. The BBC has relay stations on Ascension Island, Malaysia (soon to be replaced by Singapore), Cyprus and elsewhere.

Radio Moscow has relay stations all over the vast reaches of the Soviet Union. Radio Peking's broadcasts are relayed by transmitters in Albania. The VOA has its various relay bases around the world, from Greece to the Philippines and Radio Nederland has its own relay stations on Madagascar and on Bonaire in the Western Hemisphere.

While many programs can be taped and flown to the overseas relay station for retransmission, this is clearly impractical for newscasts and other programs where timeliness is important.

So, the stations produce the newscasts or other programs in their main studios. Then point-to-point utility stations beam these programs to the far distant relay station. There they are picked up, recorded and retransmitted some time later.

Most of these point-to-point program "feeders" use a transmission mode known as single sideband (SSB).

Single sideband is a special form of voice transmission. While the signal is amplitude modulated, the radio-frequency carrier and half of the voice modulation are suppressed, leaving a single sideband of signal. The majority of amateur radio operators and many point-to-point type utility shortwave transmissions make use of SSB for a couple of very good reasons. SSB is efficient because it only takes up half the bandspace of a normal double sideband AM signal. Secondly, for a given amount of power, a SSB signal is about eight times as effective as a normal AM transmission. If your receiver is designed for SSB reception, tuning these signals is as easy as flipping a switch. If it is not, then reception on an older type receiver without built-in SSB tuning provisions, will make the single sideband signal sound garbled. Some have described it as "Donald Duck" radio.

What is needed to make a SSB signal

FIXED CIRCUIT FREQUENCIES

The fixed circuit point-to-point stations are assigned by the International Telecommunications Union to a number of specific shortwave bands, some of which are shared with other types of services. The following bands are, theoretically, reserved for fixed circuit communications: (Frequencies in kHz)

4000-4063	9775-10000	15450-16460
5060-5450	1010 0 -11175	17360-17700
5730-5950	11400-11700	18030-20000
6765-7000	11975-12330	21750-21850
7300-8195	13360-14000	22720-23200
9040-9500	14350-15000	24000-25000

And the following bands are shared with other types of radio services.

This builds are chared that eather types or radio contribute.				
1605-2065	4438-4650	25000-25600		
2105-2850	4750-5060	26100-28000		
3155-3400	21850-22000	29700-30000		
3500-4000	23200-24000			

intelligible again is to artificially replace, in the receiver, the missing carrier. The suppressed half of the modulation is just a mirror image of the half you are receiving. So, it turns out, you really don't need that part of the missing signal, just the carrier wave.

If your receiver is not designed for SSB reception, but has a beat frequency oscillator (BFO) control (marked simply "CW" on some older models), switch it on. Tune the SSB signal for maximum strength. Adjust the BFO control until the voice becomes intelligible. It is a technique that takes a bit of playing around with until you get the hang of it. After that you should be able to tune in SSB signals without too much trouble.

Reader Fant has listed some of the Radio Nederland "feeder" frequencies. Here are some feeder links on shortwave used by some of the other major broadcasters to feed programs to their distant relay stations. You might like to look for them too. Voice of America—6,873, 7,651, 10,454, 14,526, 18,275 kHz; British Broadcasting Corp.—7,747, 9,410, 12,179, 15,907 kHz; Radio Moscow—6,890, 7,540, 9,210, 15,780 kHz; Deutsche Welle—5,195, 15,475, 18,645 kHz.

The Keyboard Frequencies. Now a letter from Michael D. Schoenfuss of Abbotsford, WI: "I'd like to see more articles on where to get such devices as RTTY (radioteletype receiving equipment), Morse Code deciphering equipment which would give a print-out, on paper, for Morse CW signals being received, and any similar equipment for unusual modes of transmission.

"I've noticed that in your last few copies of CW you've mentioned the

WHERE TO DX FOR WHAT

There are three very broad categories of stations. There are the broadcast stations, which air progams of infomation, entertainment and music to general audiences. Then there are the radio amateurs, hobbyists who operate in two-way communication on the shortwave and higher frequencies. Everything else falls into a grab bag called utility communications, which cover the whole range of services from longwave ship-to-shore to aeronautical VHF signals, point-to-point transatlantic phone calls to radioteleprinters, to name but a few types.

kHz	Type of DX	kHz	Type of DX
Below 540	Utility, broadcast	10000-11700	Utility
540-1605	Broadcast	11700-11975	Broadcast
1605-1800	Utility	11975-14000	Utility
1800-2065	Amateur, utility	14000-14350	Amateur
2065-2300	Utility	14350-15100	Utility
2300-2500	Broadcast, utility	15100-15450	Broadcast
2500-3200	Utility	15450-17700	Utility
3200-3400	Broadcast, utility	17700-17900	Broadcast
3400-3500	Utility	17900-21000	Utility
3500-3900	Amateur, utility	21000-21450	Amateur
3900-4000	Amateur, Broadcast, utility	21450-21750	Broadcast
4000-4750	Utility	21750-25600	Utility
4750-5060	Broadcast	25600-26100	Broadcast
5060-5950	Utility	26100-26960.	Utility
5950-6200	Broadcast	26960-27230	Amateur, CB
6200-7000	Utility	27230-28000	Utility
7000-7100	Amateur	28000-29700	Amateur
7100-7300	Amateur, broadcast	29700-30000	Utility
7300-9500	Utility	Above 30000	Utility, amateur,
9500-9775	Broadcast		broadcast (TV, FM)
9775-10000	Broadcast, utility		

shortwave utility stations, many of which use SSB or AM. But there are many utility transmissions on shortwave using RTTY and CW, and equipment for those forms of transmission is usually hard for the average DXer to find."

You've raised an interesting subject or two, Mike. CW is not that exotic. There are hundreds of thousands of ham radio operators and many SWLs who have learned the code. There are, as Mike notes, many interesting utility type communications stations that are still using Morse.

RTTY, of course, requires special gear. There has been a spurt of interest recently among shortwave listeners, following on the heels of radio amateurs who have been hot for RTTY for quite a while. There are a number of very good how-to-do-it books and articles published for ham radio operators on radio teletype operation. These should also prove useful to the more technically minded SWL interested in tuning in, for instance, the RTTY radio newswire transmissions on shortwave.

A more recent development in RTTY, which in time will probably replace the long standard teletype-writers with their paper roll printouts, or the still older paper tape prints, is the video display terminal or VDT.

The VDT is a television-like device that shows the text of the RTTY message in electronic characters on a video tube screen. Letter by letter, line by line the message comes across, rolling upward a line at a time as the screen is filled.

I saw a demonstration of a new video terminal RTTY not long ago and, frankly, I was fascinated by it. Amateur radio magazines have many ads for RTTY gear of various sorts. You might write to Gilfer Associates Inc., P.O. Box 239, Park Ridge, NJ 07656, for more information on the complete

RTTY VDT package I recently saw demonstrated. The price, in very round figures, at this writing was around \$500

At the moment, RTTY gear is probably not for the fellow who feels comfortable only with a piece of equipment he has to plug into a wall socket and turn on, and the price is not for everyone. The interest in RTTY is thus undoubtedly limited, but if there is more interest in this subject, I'll get into it to a greater extent in future issues of COMMUNICATIONS WORLD.

Other Lands, Other Waves. The next letter on the pile is from David Pristupa, Saskatoon, Sask., Canada, who says he recently came from Italy and Greece. David says he is more at home listening to Canadian and American broadcasting now than he was in either Italy or Greece.

"I was confused," he says. "Tell me where I can get a log that gives power, frequency, etc., for the stations in Italy and Greece. In Athens all the AM stations simulcast on FM. In Italy there are AM powerhouse stations with 150,000 watts, and other stations with only 250 watts. If you're an FM fan, hold your hat! In many parts of Italy 88-108 MHz is saturated with stations, hundreds of them."

Well, David, as I noted earlier, there are some considerable differences, especially in frequency, between North American and European medium wave stations.

First to your question about a source for information about foreign stations, one of the best sources is the World Radio TV Handbook, the so-called "Bible" of DXers and SWLs. This 500-plus page book is loaded with information about stations, schedules, transmitter powers, addresses, frequencies and much more. It covers the world medium and shortwave picture, plus FM and TV.

The book costs about \$11 in the U.S. and is published annually, available in about February of each year.

The volume lists four Canadian sources: Burnill's Book Shop, 100 Yonge St., Toronto 1, Ontario; Murray's Books 1966 Ltd., 856 Granville St., Vancouver 2, B.C.; Payette Radio Ltd., 730 St. James St. West, Montreal 3, Quebec; and W. H. Smith and Son (Canada) Ltd., 113 Merton St., Toronto 7, Ontario.

There are two listed U.S. sources: Gilfer Associates Inc., P.O. Box 239, Park Ridge, NJ 07656; and Glen Mueller, Billboard Publications Inc., 2160 Paterson St., Cincinnati, Ohio 45124. Some DX clubs also handle the World Radio TV Handbook (WRTH). The book is the source of the following information on Italian and Greek broadcasters

The government broadcasting network in Greece is the Hellenic Radio TV, with three major medium wave AM stations in Athens, carrying the National, Second and Third Programs respectively. There are another ten MW outlets elsewhere in the country relaying those programs. These are of lower power. There are an additional 12 medium wave stations belonging to the Greek Armed Forces, and there are several private broadcasters. The U.S. American Forces Radio and TV Service has three low powered MW outlets for our servicemen serving in Greece.

Something like 17 FM outlets broadcast in stereo, as you surmised, David. Yes, they do simulcast the MW Third

Program, according to WRTH.

Your observations concerning Italian broadcasting are, indeed, accurate. On medium waves there are more listed broadcasting outlets than I care to count, ranging from the super-powered Second Programme channel on 845 kHz, in Rome, to the flea-watt local outlets.

The Italian FM scene is unreal! Besides these hundreds of FM outlets that are licensed and legal, via the DX grapevine I'm told that there are many home-brew, low powered, illicit (or semi-licit, perhaps) FM pirate stations.

Yep, Dave, I can understand why Canadian and U.S. broadcasting is so much easier to understand!

COMMUNICATIONS WORLD has thousands of readers in the United States and Canada, but, did you know that we have a goodly number of overseas read-



Murray Hutton, Listowell, Ontario, Canada, has the "lazy man's" answer to DXing . . . keep your receiver within arm's reach of your bed! But 16-year-old Murray is definitely not asleep on the job. He has confirmed over 50 medium wave stations.

ers as well? We have received letters from readers from Germany to Australia, from the Marshall Islands in the Pacific to Portugal.

I'd like to share one of the interesting letters we've received here at CW from overseas readers. It coms from Vivencio D. Flores II of Bacolod in

the Philippines:

"Over here I've had good reception of the powerful broadcasters you mentioned, such as the Voice of America from our local relay, the BBC, Radio Australia, Radio Japan and a host of others here in the Far East. Even WWVH in Hawaii comes in strong and clear on 10 and 15 MHz almost any time of the day.

"My location is on a small sockshaped island called Negros in the Central Philippines, also called the Visayas region. I am in a coastal city named Bacolod, located on the northwest side of the island.

"The receiver here is a very old RCA AC-DC set with a 150 foot long wire. Just to show you how old this radio is, the cabinet looks like the front of a school bus! (With apologies to the designer!) It covers the broadcast band MW, and 6 to 18 MHz shortwave. It has adequate sensitivity and selectivity characteristics.

"By the way, to know more about the hobby, I am interested in corresponding with fellow SWLs. It would be nice to get to know about what is what on the other side of the planet. Thus, I'd appreciate it very much if you could plug into a short note in a future issue of COMMUNICATIONS WORLD. I'll be looking forward to reading future issues of your splendid magazine!"

Thanks so much, Vivencio! Now normally we don't get involved in arranging SWL penpal connections, but if some of you readers would like to exchange SWL observations with Vivencio, you can write him at P.O. Box 154, Bacolod, Negros Occ., Philippines 6001.

While I'm at it, I'd like to urge other overseas readers to drop a note to CW. We'd all like to know about you, your listening gear and what SWLing or other forms of DX listening are like where you live.

Short question-short answer.

Steve Parham, Greensboro, N.C., asks for the address of the AFRTS, American Forces Radio and Television

The address, Steve, is AFRTS, Office of Information for the Armed Forces, OASD (PA), Washington, DC

Also in search of an address is Mike Waddingham, Sherwood Park, Alberta, Canada. Mike needs the address of Trans World Radio on Bonaire in the

DX CLUBS YOU CAN JOIN

One of the best ways of learning all about DXing, and keeping up to date on the rapidly changing world of DX, is to join one or more of the fine DXing clubs. The following clubs are affiliated with the Association of North American Radio Clubs (557 North Madison Ave., Pasadena, CA 91101.) There are eleven Member clubs in North America, each covering one or several aspects of the DX hobby. In addition, ANARC has seven regional and special interest clubs and one affiliate council. When you write to either ANARC, or one of the member or associate DX clubs, be sure that you encose a self-addressed, stamped envelope for their reply. ANARC and all the listed clubs are non-profit hobby clubs.

ANARC MEMBER CLUBS

American Shortwave Listeners Club, 16182 Ballad Lane, Huntington Beach, CA

Covers shortwave, utilities, QSL's, time index, for beginners to advanced DXers. Bulletin published monthly. Annual dues, \$12. Sample bulletin, \$1.00.

Canadian International DX Radio Club, 169 Grandview Ave., Winnipeg, Manitoba, R26 OL4, Canada.

Covers shortwave, mediumwave, utilities, FM/TV, CB and amateur (Ham) bands. Bulletin published monthly. Annual dues, \$9.00. Sample bulletin 25 cents.

International Radio Club of America, P.O. Box 26254, San Francisco, CA 94126. Covers medium wave BCB only, domestic and foreign DX. Bulletin published 34 times per year. Annual dues: \$12.00 per year. Sample bulletin 50 cents.

National Radio Club, P.O. Box 32125, Louisville, KY 40232.

Covers mediumwave BCB only, domestic and foreign DX, technical articles, members' musings (discussion). Magazine published 32 times a year. Annual dues, \$15.00. Sample magazine, 50 cents.

Newark News Radio Club, P.O. Box 539, Newark, N.J. 07101.

The pioneer All Wave DX Club in North America, founded in 1927. Covers, SW, MW. FM/TV. utilities, CB and Amateur (Ham) bands. Bulletin published monthly. Annual dues: \$13.00. Sample bulletin, \$1.00.

North American Shortwave Association, P.O. Box 13, Liberty, IN 47373.

Covers shortwave only including technical and DX articles with SW Logs. Bulletin published monthly. Annual dues, \$13.00. Sample copy, \$1.00.

Ontario DX Association, Apt. 1910, 1202 York Mills Road, Don Mills, Ontario, M3A 1Y2, Canada.

Covers shortwave and medium wave. Annual dues, \$10.00 for adults, \$7.00 for students. Bulletin published monthly. Sample bulletin, 50 cents.

Radio Communications Monitoring Association, P.O. Box 4563, Anaheim, CA 92803. Covers VHF and UHF public service and aircraft bands including police, fire, utilities, marine, weather and aircraft bands. Bulletin published monthly. Annual dues, \$6.00. Sample bulletin, 25 cents.

SpeeDX, P.O. Box E. Elsinore, CA 92330.

Covers shortwave and utility bands. Bulletin published monthly. Annual dues, \$12.00. Sample bulletin, \$1.00 or six International Reply Coupons overseas. Series of Basic Information Pamphlets on shortwave antennas, how to verify stations, basic propagation, etc. available to non-members on receipt of large size, stamped and self-addressed envelope. Overseas, 2 I.R.C.'s.

United World Radio DX Club, P.O. Box 1075, Elizabethtown, TN 37643. Covers shortwave, mediumwave, utilities, and Amateur (Ham) bands. Monthly bulletin published. Annual dues, \$10.00. Sample bulletin, \$1.00.

Worldwide TV-FM DX Association, P.O. Box 202, Whiting, IN 46394.

Covers TV, FM, and VHF-UHF radio only, technical articles, photos, reception listings. Magazine published monthly. Sample magazine, \$1.00.

Association of North American Radio Clubs (ANARC), 557 North Madison Ave., Pasadena, CA 91101.

Confederation of DX hobby organizations in United States and Canada. Monthly Newsletter published. Annual subscription, \$2.50. List of ANARC Member and Associate Clubs available upon receipt of a large size, stamped, self-addressed envelope. Overseas, 3 I.R.C.'s.

In addition to the above member clubs, ANARC has seven special interest and regional clubs plus one affiliate council.

ANARC ASSOCIATE CLUBS

Brooklyn DX Club, 1137 East 12th St., Brooklyn, N.Y. 11230.

Handicapped Aid Program (HAP), 27 Cleveland Ave., Trenton, N.J. 08609.

Canadian Handicapped Aid Program (CHAP), Rural Route 3, Colborne, Ontario,

Longwave Club of America, 8422 Crane Circle, Huntington Beach, CA 92646. Miami Valley DX Club, c/o Jack Wyatt, 170 Notre Dame Ave., Dayton, Ohio 45404.

Minnesota DX Club, 5212 Drew-South; Minneapolis, MN 55410. University of Manitoba DX-SWL Club, Room 517, Box 131, University Centre, Winni-

peg, Manitoba, R3T 2N2, Canada.

Woodfield International DX Club, P.O. Box 95073, Schaumburg, IL 60195.

European DX Council, P.O. Box 25-03-25, D-4630, Bochum, 25, Federal Republic of Germany. (Affiliate Council). EDXC is the European counterpart of ANARC and represents European DX Clubs.



Netherlands Antilles.

"I need to know where I can send my reception report," says Mike.

The address couldn't be easier: Trans World Radio, Bonaire, Netherlands Antilles. Now if you want to phone 'em. the number is 8800 on Bonaire, but I'm afraid I can't help with the area code!

OSLs, OSLs! Reception reports. That's a subject I'll deal with in a future issue of CW. For our newer readers, however, many listening hobbyists enjoy collecting QSL or vertification cards or letters. These are written statements from various broadcasters confirming that the listener has, in fact, heard their stations.

The listener logs a certain station, notes its frequency and the time and date of his reception. He sends this information to the station involved along with enough details about what he heard to establish that he did, indeed, hear that station. Often listeners will comment on the programs they heard, tell something about themselves, their listening interests and favorite programs. Finally, they will politely request that their report of reception be answered and confirmed as correct with a vertification card or letter.

Many SWLs have collected such QSL vertifications from over 100 countries; a few from more than 200 countries. Medium wave BCB listeners also are into the vertification collecting end of the hobby.

One of these fellows is Terence J. Receveur of Port Alberni, B.C., Canada. Terence suggests:

"How about publishing an interview with a broadcast band vertification signer? It would be interesting to find out just what they look for in a reception

report and what they like to hear from listeners."

With that suggestion I went to a broadcast band vertification signer to get the answer.

I spoke to Gerry L. Dexter, who is program director of WMIR, 1550 kHz. Lake Geneva, WI, a more or less typical small town station, running 1,000 watts of power daytime only.

Gerry is more than just a verie signer; he is, himself, a DX listener with well over 20 years experience in the hobby. So he knows the vertification business from both sides.

First of all, Gerry points out that there are some basic differences in the attitudes of shortwave and domestic medium wave stations. Generally, the major international broadcasting stations on shortwave are actively seeking listeners and are anxious to receive letters regarding their programs. As a result, these big SW outlets are usually good repliers to reports of reception from SWLs.

Domestic medium wave stations exist for a different purpose. They usually are not especially interested in knowing that they are being heard halfway across the nation. Their job is to bring programs, and their commercial messages, to regular, local or regional, listening audiences.

Thus, when a U.S. or Canadian medium wave, station staff member replies to a report it should be considered a real favor to you, the listener. Such replies are sent as a courtesy and a goodwill gesture. Some BCB MWers verify reports only sporadically, or perhaps only very rarely!

To verify a report, Dexter observes, the listener should have enough pro-

Call Location 4632.5 7RA20 Algiers, Algeria Helsinki, Finland OGX FSB53 Paris, France Stockholm, Sweden SHX Wieshaden Germany DHA33 West Wickham, England GMP Beirut, Lebanon 6792 ODW21 Paris, France FSB54 Tel Aviv, Israel 4XP40 Utrecht, Netherlands PDB2 Brussels, Belgium ONA20 7532 Oslo, Norway LIP27 Paris, France FSB55 Rome, Italy IUV81 Vienna, Austria OEQ Zurich, Switzerland HEP CS166 Lisbon, Portugal 9200 Paris, France FSB56 Rabat, Morocco CNT XJE57 Altamont, Canada 10390 Copenhagen, Denmark OWS4 Madrid, Spain EEQ Paris, France FSB57 PYZ2 Rio de Janeiro, Brazil 3VA Tunis, Tunisia Ankara, Turkey 14817.5 TCC2 **YV23** Caracas, Venezuela Buenos Aires, Argentina AYA48 Ottawa, Canada XJD48 Bogota, Colombia 18380 Mexico City, Mexico Paris, France FSB60 Teheran, Iran

INTERPOL FREQUENCIES

gram detail to establish he actually did hear the station in question.

19360

FSB62

What sort of detail?

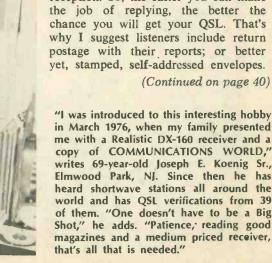
Manila, Philippines

Paris, France

"Well, a list of song titles heard is of little help in checking a listener's report," says Dexter. "A detail that can immediately establish a report is correct is the name of a local advertiser and the time of his commercial spot heard; or local news items or an announcers' name, these provide proof of reception. With such solid items, a few minutes of logging is enough and, in fact, far better than a half hour tuning with no definite details reported.

"Also, most smaller stations and many big ones have limited time to devote to replying to listeners' reports of reception. So, the easier you can make the job of replying, the better the chance you will get your QSL. That's why I suggest listeners include return postage with their reports; or better yet, stamped, self-addressed envelopes.

(Continued on page 40)





copy of COMMUNICATIONS WORLD," writes 69-year-old Joseph E. Koenig Sr., Elmwood Park, NJ. Since then he has heard shortwave stations all around the world and has QSL verifications from 39 of them. "One doesn't have to be a Big Shot," he adds. "Patience, reading good magazines and a medium priced receiver, that's all that is needed."



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"Another thing, if you live in a different time zone, convert your report into the local time at the station, and note that fact. It will save time for the station staffer in checking out your report for accuracy."

All right, BCB fans, there are a few tips on how to QSL the medium wave stations from one of those fellows who signs the veries. Good advice!

Nothing but good vibes in this letter from Gary Rafe, Buffalo, NY.

"I'd like to thank you for all the DX information. In this day of the continuously mounting CB mumbo-jumbo, I find it a pleasure to be able to read about my hobby on a regular basis."

Gary notes for the benefit of other listeners who collect items other than QSLs from SW stations, that free stickers are available from SBC, Switzerland; Radio Nederland; ORF, Austrian Radio; and Radio Nacional de Brasilia.

Cockpit DX. "One afternoon I listened to longwave and logged the call signs and approximate frequencies of 22 stations. I think these were aircraft beacons. How can I find out where these signals are coming from?"

That question concerning a type of DXing I haven't discussed thus far in

HIGHWAY CREWS

Whether they are plowing the snow off the roads in Idaho or painting a stripe down the center of a Florida highway, the municipal, county and state road crews maintain radio contact with their supervisors back in the highway garage. Here are some of the VHF and UHF frequencies used by highway maintenance crews; frequencies in MHz:

VHF Low Band	VHF High Band
37.900	151.025
37.940	151.040
37.980	151.055
45.720	151.070
45.760	151.085
45.840	151.100
47.020	151.115
47.040	151.130
47.060	151.205
47.080	151.460
47.100	156.060 156.225
47.120	
47.140	156.240 156.950
47.160 47.180	156.990
47.200	157,290
47.220	159.045
47.260	159.075
47.280	159.120
47.300	159.180
47.320	159.195
47.340	HHE Dood
47.360	UHF Band
47.380	452.850
47.400	453.450
	453.975
	458.050

this issue of CW, comes from Robert Rosenbaum of Rochester, NY.

And yes, Bob, it is very likely that the signals you heard were aerobeacons. These radio beacon signals are used by aircraft to navigate and plot their positions. Most beacons use Morse Code and repeat their call sign identifiers over and over. These longwave beacon signals can be heard over a range of several thousand miles.

A trick to try if you're only a novice when it comes to "reading" the CW code transmissions is to record the signal at "fast" speed on a dual-speed reel-to-reel recorder. Then play it back at "slow" speed. The Morse signals then are much easier to "read."

There are two sources for information on radio beacon stations, Bob. A publication called *Location Identifiers* is available from the U.S. Government Printing Office, Washington, D.C. 20402, and lists aerobeacons of the world. Canadian aerobeacons are listed in Radio Aids to Air *Navigation*, available from the Receiver General of Canada, Publishing Division, Information Canada, Ottawa, Canada.

More Questions. Mrs. Mary Ziegler of Telford, PA, writes that she recently purchased her first shortwave receiver but does not have a great deal of time for listening.

"For that reason," she says, "the 'search' method for locating stations is not too practical for me. Can you direct me to some publication that has a good, accurate frequency/time world program schedule, preferably by city or country. The only book I have was printed in 1973 and, by trial and error, I have found that it is badly outdated."

There are, Mrs, Ziegler, a couple of different answers I could give, not being precisely certain just what you are looking for.

If you are looking for a schedule of specific programs, a sort of "TV GUIDE" for shortwave broadcasts, you're out of luck. A few years back, a fellow in Texas tried to start such a magazine that contained lists of actual programs scheduled for a number of the major international shortwave broadcasting stations.

Unfortunately, after a couple of issues, the magazine vanished and has not been heard from since. I know I never received a refund for the balance of my subscription.

Maybe, just maybe, this sort of program guide to SW will be feasible some day. To be of any real use, it should probably be published weekly, as are the TV publications. That is a rather awesome task to contemplate. But, who knows . . .

But if you're talking about when and where to tune for a particular station, that sort of information is, indeed, available. Hopefully, Mrs. Ziegler, the list of countries and stations, with some frequencies and times to tune, that I included in this COMMUNICATIONS WORLD, will be of some help. You also will find much useful data of that sort in the volume, World Radio TV Handbook mentioned earlier in this issue.

But one of the very best ways to keep current on what is what and when on shortwave radio is by joining one of the fine radio hobby clubs in North America. And that brings us to several other letters received here at CW.

Here are two:

"I was wondering if there are any shortwave listening clubs to join?"

-Philip Poukish, South Williamsport, PA

"I'm a seventh grade student and I'm really found of shortwave radio. But I'm confused as to how I could get into a SW club."

-Thomas Cuilla, Stoneham, MA
Yes, indeed, there are shortwave listening clubs. There are also clubs that
specialize in other aspects of the listening hobby, MW BCB listening, longwave, TV and FM DXing, monitoring
the VHF-UHF bands and logging the
various shortwave utility transmissions.

The major DXing hobby clubs are affiliated with an umbrella-type organization known as the Association of North American Radio Clubs (ANRC).

If you are interested in learning more about the various clubs affiliated with ANARC, learning about their monthly or more frequent-bulletins packed with information about when and where to listen, drop a note to Dave Browne, executive secretary. Tell Dave that you'd like a copy of the ANARC List of DX Clubs. Be sure to send along a large sized business envelope, stamped and self-addressed. If you live in Canada, send 13 cents in unused Canadian stamps with our name and address. Outside of North America send along three International Reply Coupons, available at your post office. We have also published an abridged list right here in CW.

Requests go to Association of North American Radio Clubs, 557 North Madison Ave., Pasadena CA 91101.

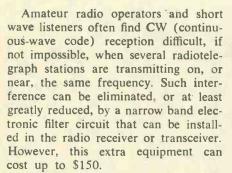
Regardless of what type of equipment you use, which type of radio monitoring your prefer, one of the wisest moves you can make is to join a good DXing club.

Time now to close the lid on COM-MUNICATIONS WORLD mailbox for this time. Let's hear from you and, while you're at it, why not send along your photo. I'd like to se you and your listening equipment setup, and so would the rest of the CW readers.

LOW-COST FILTER IMPROVES CODE RECEPTION

A few snips of aluminum and an old reed make headphones into high quality filter.

by George X. Sand



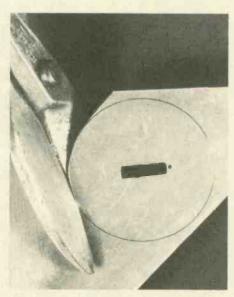
What You Need. A mechanical filter that will do the job can be built for \$15, or less. In fact, should you already own a pair of earphones—the old-fashioned kind with metal diaphragms—and have access to a music store that will sell a used steel reed removed from an accordion (the writer was given his at no cost by such a store) you can build this effective filter for practically nothing.

A low-frequency reed should be used. A 440-Hertz (A) reed will work well. In fact, anything from about 300 to 1000 Hertz will be ok.

Should you have access to a steel (not brass) reed from an old harmonica, that could be used, too.

The removed reed is installed in one earphone of the headset so that it vibrates only when an incoming CW signal sets up a beat note at the reed's resonant frequency. All other interfering signals will automatically be eliminated since they will be of a different beat frequency, and the reed will not respond (audibly) to them.

To Get More Volume. Should you wish to have both earphones of the headset operate in this manner, the matching reed of the same length (they come in pairs in the instrument) must



A thin piece of aluminum is cut to same size disc as the original iron diaphragm of the 'phones. Rectangular center opening is for the iron frequency-resonant instrument reed. Small hole at right of rectangle is for rivet (or nut and bolt) to secure reed.

be installed in the second earphone.

Here's how it's done: Use a pair of tin snips to cut from a thin sheet of aluminum (about 1/32-inch thick) a disc that will replace the earphone diaphragm. At the center of the aluminum diaphragm make an elongated hole that will permit the reed to vibrate freely (see picture) when it is riveted fast at one end of the opening.

In installing the reed it is important that the little strip of steel extend into its opening for the *same* vibrating distance that it did when it was in the musical instrument.

The operation is simple. The alu-

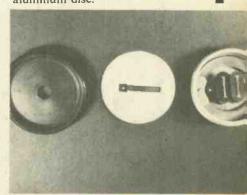
minum diaphragm, being non-ferrous metal, will not be influenced by the magnets in the earphone. Only the reed will vibrate, instead. In use, only the desired CW signal will be heard loudly as the receiver or transceiver is tuned. The resulting silence can be uncanny!

PARTS LIST FOR CW FILTER

Communications-type headphones, 1000ohms or more. (Not stereo headphones, which are all wrong for this project)

which are all wrong for this project).
Steel reed(s) from accordion or harmonica.
One (or two) small rivets of the same size as were used to hold the reed in place in the instrument.

Use These Tools. You'll need a pair of tin snips or metal cutting shears. An electric (or hand) drill, with bits the right size for drilling out the rivet(s) which secure the reed(s) in the instrument will be needed, and you'll find a small square-edge (or triangular) file good for dressing the opening in the aluminum disc.



Original hard rubber cap (left), original magnet and coil assembly (right) and new aluminum diaphragm (center) with steel reed in place.

BREADBOARD/AMER IS A GOLDEN ATTR

One-tube authentic depression-days receiver pulls in plenty of stations.

by Newt Smelser

HE GOLDEN AGE OF RADIO was an era plagued by a depression which was followed by World War II.

Nevertheless, during those troubled times there was plenty of wonderful entertainment available if one could afford to buy a radio, or was clever enough to make a receiver.

The Main Parts. Junked radios had little cash value in those days so it was no trick to beg, borrow, or buy a power transformer out of a used set, a few capacitors (we called 'em condensers) and a "powerful" "Electric Current" No. 27 detector tube. We wound our own coils and winding them was the most intriguing part of the construction. Earphones were usually the hardest part to get. Often it meant mowing a multitude of yards, and moving lots of junk for neighbors to earn the big dollar or so that phones cost. Nonethless many of us managed

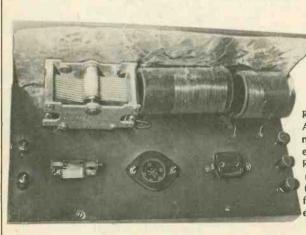
to get the parts and we also managed to make a radio capable of giving us entertainment far greater than anything going on "downtown." Yes, Amos and Andy, Lum and Abner, T. Texas Tyler, Sam Morris, Captain Midnight, Tom Mix, Jack Armstrong, Joe Louis fights, and Roosevelt's fireside chats—they were all great for us, and we will never hear their like again.

You Can Build One Too. If, like many of us, you're hooked on old-time radio, you can tune in AM stations from all over with the Breadboard/AMer. It's a one-tube broadcast-band receiver which uses an old circuit called the regenerative (or simply "regen") which was popular for some time before the superhetrodyne circuit which is universally used today. The superhet was developed by Edwin Armstrong, who by the way originated this circuit, and also later invented FM radio. It's exactly what

boys made during the 30s depression. I rigged this one up a few nights ago, and got stations all over the dial. It is able to drive an old-time high impedance speaker with powerful WWL, New Orleans. For a one-tube set, that is some accomplishment. There are two ways to get into this antique radio project. You can substitute modern parts for those hard to find, or you can make some of the parts and buy the antique parts wherever you can find them

Looking for Collectors, Parts, or Clubs? If you're interested in receiving a list of newsletters, books and other places you can learn about antique radio collectors and clubs, which is a good place to start looking for old sets and parts, send a stamped addressed envelope to "Antique Fact Sheet, ELEMENTARY ELECTRONICS magazine, 229 Park Ave. South, New York, NY 10003, and we will send it to you free of any charge. The Fact Sheet also includes a list of Public Radio and Wireless Museums.

Occasionally at a Goodwill store you will find a 1930s radio for a few bucks that you could afford to buy to get the transformer and No. 27 tube from. And Salvation Army stores often have old radios in the basement that are beyond fixing, and can be had for nearly nothing. Be sure what you buy has a No. 27 tube. It may be labeled 227 or 327, but those are the same tube. While you are at it, be sure to get a socket to match, because you can't cram this oldie into an octal, loctal, miniature, or compactron socket. It must be an old-style, 5-pin socket. For the young, and also

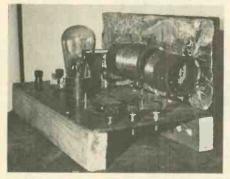


Rear view of the Breadboard AMer shows grid-leak resistor mounted atop capacitor (lower left) next to tube socket, RF bypass capacitor at lower right. Note that right-hand (tickler) coil is rotated from front panel to adjust regeneration (squeal).

oldsters who have forgotten, I have drawn a diagram of how to determine pin numbers on a five pin tube.

If you can't find a 27 tube but happen onto a 37 you can use it off the 110-volt AC line by connecting a 40-watt light bulb in series with it.

The grid leak resistor and capacitor, R1 and C2, may be found on junked old-time radios, or you can use modern counterparts and hide them under the chassis to preserve the antique flavor. Or you can fabricate them. The drawing shows the details. For the grid-leak resistor hide a one-megohm, smallwattage resistor inside a short piece of a clear plastic drinking straw, with black paper surrounding the resistor. Solder the leads to cut pieces of light sheet metal to form ends. The capacitor can be made from four pieces of thin sheet metal, such as tin can metal, two with long projections to bend upward to support the grid leak resistor, and two with shorter projections for the connecting screws. They are separated with pieces



Breadboard AMer with 27 tube in place has tinfoil on rear of front panel to reduce capacitance effect of hand when you tune.

of milk carton material or waxed paper. Screws connect the metal plates of the capacitor to the circuit below the chassis, and the uprights connect the resistor in parallel with the capacitor. Nuts below the chassis connect to wires that lead to pin three of the tube socket on one end and to variable capacitor C1

on the other end. If you decide to use modern components, a one megohm resistor is OK but anything up to four meghohms can be used. A 270 to 470 picofarad (pF) capacitor is fine for C2. Bypass capacitor C3 may also be homemade, like C2. Just add two more plates on the left and two more on the right with appropriate plastic insulation between. You can purchase a 600 pF capacitor for C3 if you prefer. 600 pF is the same as .0006 uF (microfarads).

Making the Coils. The coils are not purchasable items. Use 2-in.-diameter plastic cold water pipe, cutting one 2-in. long for tickler coil L3, and the other piece 3½-in. long for L2 and L1. This plastic pipe can be sawed with a hand saw or hacksaw, and holes in it are easy to make with an icepick or drill. L1 and L2 are close wound, using #20 enameled wire. Smaller wire such as 24 or even 30 may be used with only slight loss of volume. Antenna coil L1 is wound so as to face toward the variable capacitor, with 20 turns, then a tap for ground, and then without a space begin L2 and wind 60 turns. The high end of L2 must be toward the tickler coil, and should end 1/4-in. from that end of the plastic. It is imperative that L2 and L3 be close together. L3, the tickler coil, is 25 turns of the same kind of wire on the 2-in. form.

To make the tickler adjustable use a bolt of sufficient length, ¼-in. in diameter so a standard knob will fit on it. Nuts at A and B lock the coil form and hold it secure. Flat washers at C and E, with a short piece of door spring D between them, hold the coil form rigidly in place as it is turned. Washer F allows slippage against the front panel. Nut G secures the whole assembly. It takes considerable adjusting to get it just right.

Now mount the longer coil form with L1, L2 on it to be the same distance behind the front panel, and as close to L3 as posssible without touching L3, when L3 is rotated. Bolts, spacers, etc.

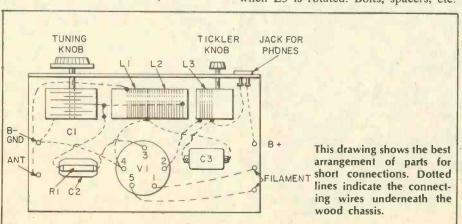
FROM FILAMENT
SUPPLY

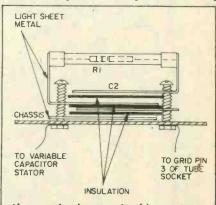
Here are connections for the 27 tube.
Examine the tube and you'll see the

attach L1 and L2 to the front panel.

"plate" is actually a piece of wire mesh.

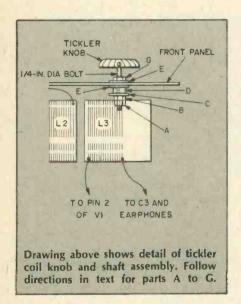
Build the Panel and Chassis. Bakelite would be the ideal material for the panels as it was the standard radio building material in the old days. But it's hard to find. A fair substitute is doubletempered Masonite. And even plywood will do. Paint it black to look good. My Breadboard/AMer was built on masonite panels, but you can use almost anything, certainly including a bread board. Dab black enamel with a cloth on the panels, and while it is tacky hold it high over a gas flame, carefully so as not to set the house afire. This instant drying will give you a dull, Bakelite-like finish, similar to what we boys used to make the radios with. Shiny bakelite can be faked with enamel, sprayed, then and allowed to dry overnight. The front and chassis panels of my Breadboard/AMer 6-in by 12-in., but this is not critical. The wooden bottom supports are 1inchers. None of the wiring is critical, except that the tickler and L2 coils must be close together physically. A sheet of aluminum foil directly behind the front panel will prevent tuning





If you make the capacitor(s) use pieces of metal about 2/3 of an inch square, with insulating material slightly larger.

BREADBOARD



changes when you touch the knobs. Make sure the coil wires do not rub against this shield.

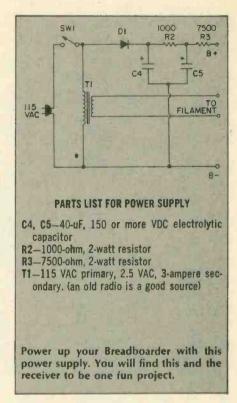
If you are not fortunate enough to find an old 0-100 dial use a more modern pointer type and paint on a scale. Tuning capacitor C1 need not be an oldtimer. Radio Shack 272-1341 miniature variable will work as well, it just doesn't look quite right. Many a

junked 1930 to 1940 radio has a large variable capacitor in it. Use the larger section of two-section superhet types. It will be the correct, 365 pF size.

Your Breadboard/AMer can be connected to power supply, antenna, etc. with five-way binding posts, fahnestock clips, or just plain wire. You could operate this set with batteries, using 22½ volts for the B supply and 3 volts for the heaters with a series resistor of about 0.3 ohms in the heater circuit, but since a 27 tube draws 1.75 amps the A battery would soon give up. It's best to find a junked radio of the proper vintage, very early electric, and use its power supply. As an alternate you could construct the power circuit shown. If you wish to use a more modern tube in the set you can construct it with a 6SF5 instead of the 27. Use an octal socket. Pins 7 and 8 are heaters, 3 is the grid, 5 the plate, and 2 is the cathode. A higher plate voltage can be used with this modern tube, and you'd need a modern heater transformer supplying 6.3 volts at 0.3 amps for the 6SF5.

With a 27 tube set the value of R3 can be determined by experimentation. I use a value high enough that 22 to 25 volts of DC are at the plate of the tube. I put the switch only on the power supply and not at the radio, but you can adapt it several ways.

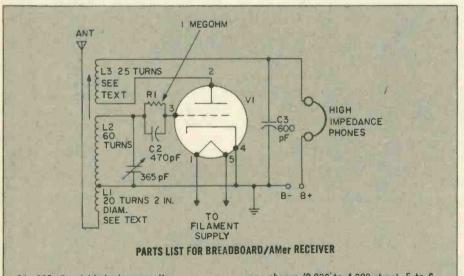
Tuning In Stations. This regenerative radio requires a bit of patience in oper-



ation. A good outdoor antenna is essential, up to 100 foot for good DX reception. Unless you use batteries to power it, no ground is needed as the set grounds through the household power supply. Try the plug in the wall both ways for best reception. As you advance the tickler adjustment the Breadboard/AMer will howl in your ear. Learn to get it just shy of the squeal and you will be amazed at its performance. If you don't get much volume or squeals when the tickler is lined up parallel with the tuning coils, you have the leads on the tickler reversed. The side next to the L2 winding must go to the plate of the tube, and the side out to the right must go to the earphones and bypass capacitor. This makes for greatest squeal. Then back off with adjustment of the tickler knob on the front panel until the squeal just disappears. Lower settings will lower the volume to very loud stations. As with any electrical device, practice safety by unpluging the power supply any time you touch live parts. Cutting some turns off of L2 will allow you to get short wave if you prefer, instead of the regular AM band.

Headphones To Use. We have not yet talked about earphones. You must use high impedance phones, not the 8-ohm ones used with hi-fi sets. 2000 ohms is fine, but 4000-ohm phones are better yet.

So there you have it. With some ingenuity, and an old parts bin you can make a real Depression Era radio.



C1-365-pF variable tuning capacitor

C2-470 to 500-pF capacitor

C3-500 to 600-pF capacitor

R1-1 to 4-megohm, ½ or ¼-watt resistor

V1—Type 27 triode radio tube (see text for sources)

Misc.—Coil forms—2 in. plastic water pipe; 5pin tube socket (antique type); high-impedance phones (2,000 to 4,000-ohms); 5 to 6 feet of #20 enameled wire (#20 preferred, but #22 or #24 acceptable); five binding posts or clips for connecting power, antenna, phones; 'panels (two); 1 in. wood strips for base; nails or wood screws, solder, paint, wire, etc.

Relive the Golden Days of Radio and of MW DXing by building this golden oldie reciever. You can make it look super-authentic following the painting hints given in the text!

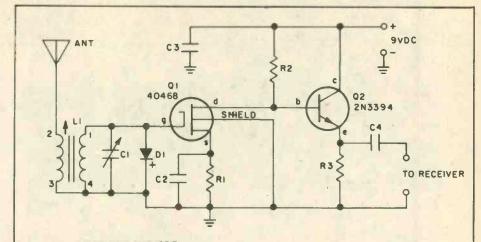
SWL's Super Signal Booster

Super sensitivity is the feature of this two-transistor shortwave preselector. It provides overall gain as high as 40 dB from 3.5-30 MHz.

Diode D1 protects against excess gate voltage caused by nearby transmitters, while Q1 serves as an emitter follower to match the medium output impedance of the FET transistor to the low input impedance of the receiver.

Since Q1 is a MOSFET type with a gate that's very sensitive to static changes, Q1 must be handled with a short-circuit across all leads until just before power is applied. Also, a soldering iron must not be applied to Q1's leads unless they are shorted.

L1's connections are specified in the instructions supplied with the coil. A short length of RG-174U coaxial cable should serve as the connection between the preselector output and the receiver with which the unit is to be used.



PARTS LIST FOR SWL'S SUPER SIGNAL BOOSTER

C1-365-pF tuning capacitor C2, C3-0.05-uF, 25-VDC capacitor C4-470-pF, 25-VDC capacitor

D1-1N914 diode

L1—Antenna coil: 1.7-5.5 KHz use Miller B-5495A, 5.5-15 MHz use Miller C-5495A, 12-36 MHz use Miller D-5495-A

Q1-RCA 40468 FET transistor (Do not substitute)

Q2-2N3394 npn transistor

R1-470-ohm, ½-watt resistor

R2-2400-ohm, ½-watt resistor

R3-4700-ohm, 1/2-watt resistor

Wireless BC Booster

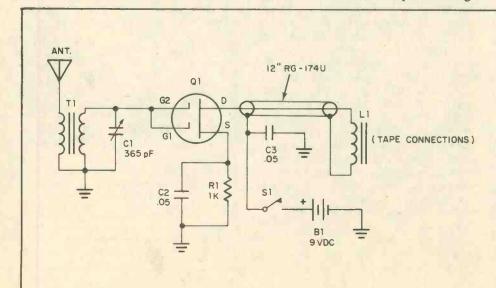
Just about any standard radio can be turned into a DX hound with this easy-to-build wireless broadcast band booster. Transistor Q1 in conjunction with antenna coil T1 provides from 10 to 20 dB extra gain to snare those weak BC stations. The project should be assembled in a metal cabinet as "feedback" from coupling coil L1 to the input will cause oscillation.

Field effect transistor, (FET) Q1

is the type with built-in diode protection so you don't have to worry about strong signals or static discharges

To use the booster, first set C1 to the approximate frequency of the desired station-C1 is supplied with a calibrated dial. Place coil L1 parallel to the rod antenna inside the radio. L1 can be taped to the back of the radio. Turn the radio on and tune in the desired station; then peak the signal with C1. C1 can also be used to reject excessively strong signals which might be interfering with the desired station. You cannot, however, reject a station close to, or on the same frequency as the desired station.

The antenna can be any length of wire from 3 feet or longer. If you use a metal cabinet connect the antenna into the circuit through an insulated binding post.



PARTS LIST FOR **WIRELESS BC BOOSTER**

B1-9-volt transistor battery C1-365-pF tuning capacitor

(Radio Shack 272-1341 or equiv.)

C2, C3-0.05-uF disc capacitor L1-Loopstick coil (Radio Shack 270-1430)

Q1-FET, RCA 40822, 3N187, or equiv.

R1-1000-ohms, 1/2-watt resistor

\$1—Spst slide or toggle switch

T1-J. W. Miller A-5495A antenna coil

Misc.-Co-axial cable, cabinet



<u>This Piggyback SWL</u>

Add 20 dB of valuable signal-grabbing power

by Herb Friedman W2ZLF

ACK BEFORE EVERYTHING came in transistorized subminiature packages, virtually all serious SWLs and radio amateurs used a preselector ahead of the main receiver. No, not a preamplifier, we said a preselector. A preamplifier simply provides amplification, usually over a broad range of frequencies. With early single-conversion receivers, and the new solid-state high performance, budget-priced, single-conversion receivers, a preamplifier amplifies the image signal interference along with the desired signal. But a preselector, that's a whole 'nother thing. A preselector is a tuneable, high-Q preamplifier that passes only the desired signal frequency, and usually provides considerable attenuation at the image frequency.

Unfortunately, preselectors have so much gain and sensitivity they had to be built like the Rock of Gibraltar in a cabinet almost as large as the rock itself

FROM SW ANTENNA BPI POWER SWITCH SI

Plastic cabinet may be used but the front

panel should be aluminum or other metal.

Input (BP1) and output (J1) cohnections

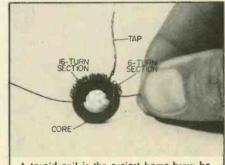
in order to avoid self-oscillation. Many preselectors were as large as the boat anchors we used to call receivers, so like those old tube-type boat anchors, the preselector went the way of the Dodo.

But a preselector can still give a receiver a good solid kick in the antenna terminals, often digging out signals where you thought none existed. And the preselector can still reduce image interference in those inexpensive solidstate receivers that have terrific sensitivity and great stability, but poor image rejection because they're only singleconversion. What's that? You've got no room for a big boat anchor? Who mentioned anything about size? Using upto-date technology and components, the same as you've got in that new receiver, you can build a rock-stable preselector that's got more selectivity than those old monsters, will work off an ordinary transistor radio 9-volt battery (or a lightweight line-powered supply) and will provide enough extra front-end selectivity to practically squash image interference in single-conversion receivers. Best of all, you can make the whole thing so small it can be glued right to the back of a sub-miniature tuning capacitor-hence the name-"Piggyback Preselector." The unit shown in the schematic and photographs provides from two to three Sunits extra sensitivity (about 12 to 20 dB extra gain), depending on the particular receiver it's used with.

The Design. Input coil L1 is homebrewed on a toroid form. Since toroids have exceptionally high Q the input tuning is razor sharp—sharp enough to attenuate the image frequencies. In fact, if this unit is tuned to 10 MHz while the receiver is tuned to 20 MHz virtually no signal will pass through the preselector into the receiver. On the other hand, when the preselector is tuned to the desired frequency it can really snatch signals up out of the noise level

Don't worry about static signals blowing Field Effect Transistor Q1 because it's a special type with built-in protection diodes from the gates to the source and drain. In normal operation the diodes are inactive, and Q1's input impedance is extremely high and does not load down L1. Transistor Q2 acts as a matching device and power amplifier, providing a low impedance output for the input of the associated receiver.

Both L1's input impedance and the preselector's output impedance have been adjusted so the unit delivers good performance with every combination of antenna and receiver. While it might be



A toroid coil is the easiest home-brew because neatness doesn't count. If the turns aren't spaced just so, or the turns unwind a bit as you make the coil, it won't make any difference. Just spread the turns so they take up about one-half of the form. Don't spread turns to take up entire form.

must be kept apart.

Preselector Will Make You a Pro in One Evening

possible to get slightly improved overall performance by specific tailoring of the input and output for a given antenna type and receiver, we make no recommendations and suggest you build the model as described with no changes or substitutions. Only if you cannot obtain the specified Q1 should you try a substitute, and a 40673 is suggested. The 40673, however, might require some experimentation with the values of R1 and R2. The correct values provide approximately 5 mA to Q1 and 1 mA to Q2. Bear in mind, however, that we suggest the unit be assembled exactly as described.

The unit shown covers the SWL frequencies from approximately 5 to 21 MHz, actually reaching the top of the 15-meter amateur band. To get optimum coverage of the 15-meter band one turn can be removed from L1 (we'll explain this later). This modification will provide a greater 15 meter adjustment range for tuning capacitor C1.

C1 is a sub-miniature tuning capacitor with a *long shaft* and a plastic dust cover over the stator and rotor plates. (It is available from Radio Shack as No. 272-1341. Do not substitute a similar capacitor that has a calibrated tuning knob and lacks the dust cover. The shaft on the specified capacitor also provides the panel mounting while the dust cover is the support for the rest of the project.)

Construction. We built the entire preselector, except the transistor radio battery which supplies the power, on a special type of perf board which has circles on the back of each hole to facilitate soldering and securing the components in place. We recommend, however, that you make a printed circuit board from the layout shown, unless you are somewhat experienced in point-to-point wiring. The location of the components on the circuit board is shown in another drawing.

You'll have no special assembly problems as long as you follow the parts layout shown in the photographs. The unit will be completely stable and free of birdies and dead spots as long as the input is at one end of the board and the output is at the other end. But if you re-arrange the layout and get the input and output within an inch or so of each other it will almost certainly

oscillate, and fail to work.

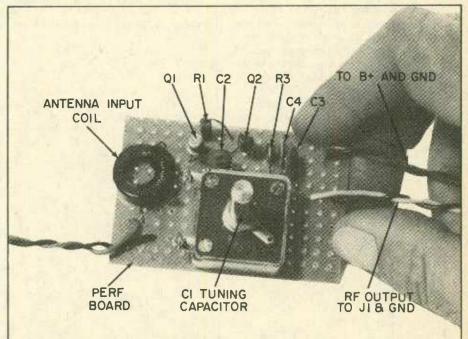
Mark off the approximate location of the tuning capacitor on the circuit board and then complete the board assembly, including the power, input and output wires. These can be about six inches long.

Toroid Assembly. L1 presents no winding problems as even sloppy assembly will work-that's the nice part about toroid coils. Use solid, enameled #24 copper wire to wind the coil. Clamp about three feet of wire in a vise and pull gently on the free end until the wire goes dead slack. By thus taking the spring out of the wire you make it so it won't unwind as you make the coil. Wind six turns, tightly, around the toroid core and bring the end out about two inches. Fold the wire back to the core, forming the ground tap, twist the wires a few times to secure them, and then wind sixteen additional turns in the same direction as the first six. Using a knife or razor, scrape the insulation from the wire ends and the tap. Then tin the wires and the tap with solder. Spread the turns so they are roughly equal-spaced, using about one-half the total core. Do not spread the turns to take up the entire core, as is usually suggested. This time, half way is best.

This coil will give frequency coverage with this tuning capacitor about 5 MHz to 21 MHz-just about to the top of the amateur 15 meter band. If you want to be able to tune through 15 meters with tuning capicitor C1, eliminate one turn of the coil's longer winding—make it 15 turns. Do not make any changes to the initial six turn winding. This is the antenna winding and remains the same.

Board. Construction. Assemble the perf board circuit as shown—everything except C1. Using silicone rubber adhesive such as G.E.'s RTV, cement the circuit board to the back of C1. After the adhesive has set (overnight), connect C1 across L1's secondary. Make certain C1's rotor, which connects to the tuning shaft, is wired to L1's grounded tap. Use an ohmmeter to determine C1's ground (shaft) terminal if you can't tell by looking. But don't guess; if you guess wrong the tuning will change when you remove your hand from the tuning knob.

Okay, it's all wired. What will you do with the piggyback preamplifier? Since the total current drain is about



The completed preselector ready for installation in a cabinet. The circuit board cements to the back of the tuning capacitor. Note that L1 is flat against the board and all wiring to other parts is also installed on the board. Board may be perf-type shown, or, recommended for beginners, the printed circuit type described in text.

PIGGYBACK SWL PRESELECTOR

5 mA you can use an ordinary transistor radio battery for a power supply and shove the whole thing into a plastic utility cabinet as shown. Just as long as the front panel is aluminum (or other metal) a plastic cabinet can be used.

If you don't like using battery power you can use a slightly larger cabinet and assemble the power supply shown in the schematic. But remember, you only need a 5-mA capacity, so keep T1 small. If you end up using a standard filament transformer for T1 the cost might exceed several years' supply of batteries.

Final Connections. Use some kind of coaxial output connector for J1. Even a standard phono jack can be used. Use coaxial cable such as RG-58 or RG-59 between the preselector and receiver and keep it as short as possible.

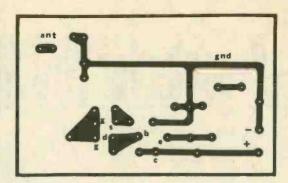
If you have a longwire or random antenna use 5-way binding posts for the input (remember, the antenna post must be insulated from the panel). If you have a coaxial antenna system eliminate the ground binding post and substitute a coaxial connector for BP1. This connector can also be the phono type.

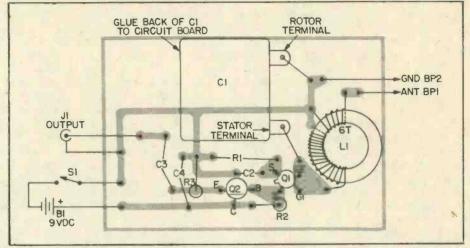
Calibrate! The tuning is so sharp the preselector must be tuned near the desired frequency or you might not hear anything at all in the receiver. Use whatever calibrations on the panel you find necessary to put the preselector tuning inside the ballpark.

After a signal is tuned in on the receiver, peak it with the preselector. If the receiver has an antenna trimmer or tuning control make certain you also peak the signal with the trimmer.

If some local signals come in strong enough to overload the unit, just detune it slightly to reduce its sensitivity and get rid of the overload.

Full-size layout for printed circuit board (foil side up) is shown here.





If you use the printed circuit board shown above you can locate the various components on the board by means of this drawing. Parts side is shown.

PARTS LIST FOR PRESELECTOR POWER SUPPLY

C5, C6-1000 uF 15 VDC capacitor R4-1500 ohms, ½-watt resistor

SRI through SR4—Silicon rectifier bridge, 50

T1-Power transformer 12-VAC secondary

PARTS LIST FOR SWL PRESELECTOR

B1-9VDC transistor radio battery

BP1, BP2-5-way binding posts

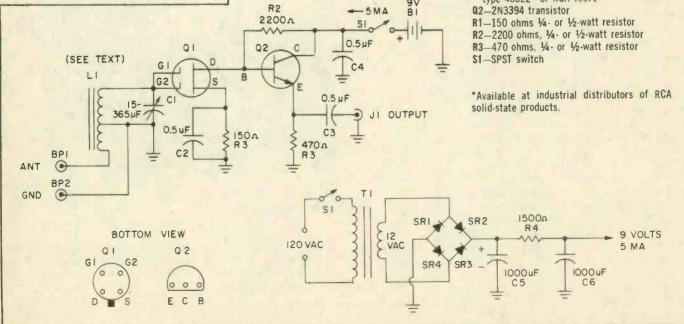
C1-365 pF subminiature variable tuning capacitor

C2, 3, 4-0.01 or 0.5 µF ceramic disc capacitors, 100 VDC

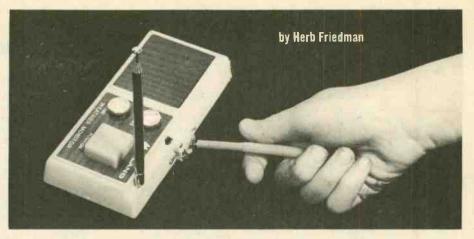
J1-Phono input jack

L1—Amidon T68-2 toroid coil form, \$1.75 postpaid from Amidon Associates, 12033 Otsego St., No. Hollywood, CA 91607.

Q1—FET with internal protective diodes, RCA type 40822* or RCA-40673*



HIGH BAND MONITOR



Getting bored by the temp-humidity index? Slide an inexpensive weather monitor up or down for some exciting signal hunting!

BECAUSE they're priced so low, generally from \$10 to \$20, the "weather monitor" has been a hot gift item for the electronics experimenter, so you probably have one. Tuning the weather station frequencies of 162.40 and/or 162.55 MHz, these small, inexpensive radios are supposed to keep you up to date on the latest weather conditions. But as you've probably discovered yourself, unless you're a boat owner with need for tide and sea conditions, you get a more up-to-date report from your local news station—AM or FM.

Also, reception is probably not all that great. The recommended receiver sensitivity for weather station reception is 0.6 uV for a 50-mile range, and these inexpensive weather receivers can't get anywhere near this kind of sensitivity...

But there's no need to let an unused weather receiver sit on the shelf. Fortunately, very few models use crystal control tuning, and they are easily converted to a police or fire monitor, or even a sound channel receiver for the higher VHF TV stations. But remember, there won't be any super-sensitivity. TV stations might be received some 30 or 40 miles from the transmitter, but you'll have to be within 2 miles or so of the average police or fire transmitter to pick them up. If you live near an airport you might get coverage of the aircraft frequencies above 108 MHz, but with sharply reduced sensi-

The weather monitors are generally similar in electronic design, though the packaging might be anything from a cube to a desk-top pen holder. The circuits are bare-minimum superhet receivers with a local oscillator tuned over a limited range by a panel control. Generally, there are two panel controls, one for volume and one for fine tuning. The fine tuning knob might have calibrations for both weather frequencies, or no calibration at all. It doesn't make

any difference as long as the local oscillator is tunable.

To change the weather monitor tuning range, all you need do is connect a small external trimmer capacitor across the oscillator tuning capacitor—the fine tuning control. The value of capacitor will determine which frequencies are tuned. Keep in mind that as you tune lower in frequency the sensitivity is sharply reduced, particularly below about 160 MHz. A capacitor with a maximum value of 7 pF will get you down to the police/fire frequencies. A 60 pF maximum trimmer will get you about to the top of the FM band, but tuning will be extremely critical and sensitivity will be very low.

A 60 pF trimmer will also get you some of the TV sound carriers above 162 MHz. How can you receive signals above 162 MHz if the tuning range is lowered? Simple. The harmonics of the local oscillator are used to receive the TV stations. For example, if you lower the monitor's oscillator to, say, 100 MHz, the oscillator's harmonic output is also 200 MHz, and a very weak 300 MHz. (The monitor's front end appears to pass the frequencies above the design-range, 162 MHz, with greater sensitivity than lower frequencies.)

Tear It Down. To experiment you must first get the circuit out of its cabinet. Keep in mind these weather monitors are inexpensive and designed to be assembled quickly by unskilled workers. Don't go looking for tricky or difficult assembly sub-systems. Generally, one or two screws are all that's holding the cabinet together. If necessary, unsolder the speaker wires, battery wires and on-off switch wires, and remove the circuit board from the cabinet. Locate the trimmer capacitor used for the fine tuning and its two solder terminals. Solder a 3-in. length of solid, insulated wire to each terminal.

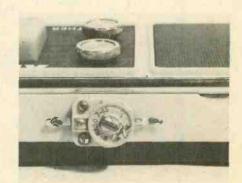
Check how the board fits the cabinet and mark the outside of the cabinet nearest the fine tuning. Drill two small. holes at the mark and then install a trimmer capacitor on the cabinet near the holes. Or, you don't have to secure the trimmer if you feel you will experiment with different capacitor values, but it will be difficult to tune the stations with a "floating" trimmer. You can't hand-hold the trimmer because the capacitance from your hand will affect the tuning adjustments.

Slip the wires from the fine tuning control through the holes you've drilled in the cabinet and seat the circuit board. Then reassemble the monitor.

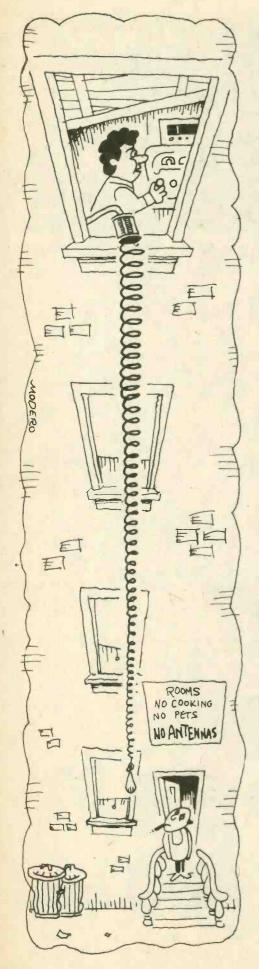
Connect the wires protruding through the cabinet to the trimmer capacitor using the shortest possible leads (cut off the excess).

That's the whole bit. Use an insulated alignment-type screwdriver to adjust the trimmer. You'll probably be able to tune a few TV stations immediately. Tuning police/fire calls or anything else will be more difficult because transmissions in these services are short and fast. You can preset the tuning by using a signal generator or a well calibrated grid dip oscillator.

Remember, this is a fun project. Don't hope for more than acceptable reception. But then who knows, you might be able to tune your favorite TV channel and keep track of the program while working in your shop.



Install a small trimmer on the cabinet at a point just outside the internal trimmer.



DX with BOINGER

F you're an apartment-dwelling DXer, you've no doubt had your share of the age-old antenna hassle. Sad to say, few landlords sympathize with a shortwave listener's need for a good skyhook.

For those of you whose nerves are just about shot from the continual carping about your antenna ("... that confounded wire of yours was crudding-up Kung Fu last night!"), the "Boinger" will bring fast relief.

What's The Boinger. Simply put, it's an inconspicuous canned antenna that'll sit on your windowsill, drawing about as much attention as yesterday's newspaper. Fact is, people just don't notice this little marvel. That's the beauty of it! But at the push of a button, this DX-dangler literally springs into action for you, as it accordions out to a fullyexpanded shortwave longwire antenna. "Boinger" will be music to your ears. That's the sound made by the key to this antenna, a super-long spring. And as it unravels, it'll also unravel your aerial problems. And when you're ready to call it quits for an evening, just a few turns of the crank retracts the Boinger back into the hardly-noticeable case, ready for another day. It's been suggested we call this unit the "Candestine" (clandestine can antenna), since it does incorporate a bit of the old cloak-and-dagger. Call it what you may, it works in even the most impossible



If you decide to solder the leadin wire to Slinky, use an X-rated iron—something that really gets hot. Slinky can draw away lots of heat before the solder flows.

antenna conditions.

How It Works. Our Boinger is essentially an end-fed helically-wound longwire. The only big difference between it and the longwire most SWLs use is that it is vertically-oriented.

How do you find helically-wound wire? Believe it or not, the first place to check is in Junior's toy-box! Or, head for the local five-and-ten and ask for "the spring that walks down stairs by itself." Right—a "Slinky!"

Since the coil is vertical, gravity will help pull it down for you. Rigging it to a fishing reel will take care of pulling it back up again. You don't have to be 20 stories up to take advantage of this antenna since the helical winding allows you to pack tremendous wire length into a short distance.

How To Build It. You'll need the following items, all of which shouldn't run more than \$6 to \$10:

Slinky. Actually it's a highly stretchable coil which folds down to only a few inches, but can stretch clear across the street.

Tin can to house the spring, about four-inches in diameter by five-inches deep. A salted peanut tin is perfect.

Some odds and ends from your fishing gear—a handful of lead weights, and a fishing reel with heavy-duty line. Now don't panic, the cheapest reel available will do. We've seen, and used in our own Boinger, a plastic reel that goes

Canning Slinky after it is fixed to a wood insulating block. Here author is checking clearance of block and Slinky from can's inside.



Here's how you can lick the no-antenna-on-the-roof edict landlords use to torture SWLers—by Ralph W. Perry

for about \$3.

½-in. conduit pipe cut to the length you need. Aluminum electrical conduit is easy to bend, and you'll need a screwend adaptor to secure it to the can. If you use iron pipe, it can be threaded at the can end, but it's hard to bend. However, elbow pieces are available. Look at ½-in. copper tubing. It's easy to work with and can be soldered to the tin can.

Miscellaneous hardware: clamps, screws, and a piece of ½-inch-thick wood to fit in the can.

Construction. Solder an insulated leadin wire to the top end of the Slinky coil—or secure it with a machine screw. Any way you do it is okay so long as it's mechanically secure. Be sure not to let the antenna leadin wire contact the can or the conduit.

The conduit pipe serves double-duty in the Boinger. It is both the support for the unit and the feeder channel for the fishing line that controls the antenna's ups-and-downs. Bend the pipe into a flattened-out Z, with the center strut at right angles to the ends. Then, lay the pipe down flat and bend one end so it points straight up.

Put the wood-coil assembly into the can, and drill a hole through both, big enough for the pipe to fit through. Slip the end of the pipe (the end you made the last bend in) through the hole in the top of the can and through the

wood, clamping both below and above with epoxy glue or threaded pipe and nut so it is solidly joined. Slip the wire through a hole in the can top, and tape it along the length of the pipe. It's a good idea to liberally apply putty or silicone sealer to the can top to seal the cracks—the Boinger will withstand some pretty rough weather.

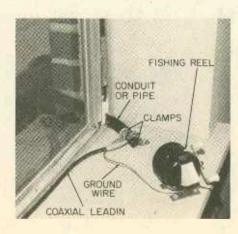
Now, thread the fishing line into the

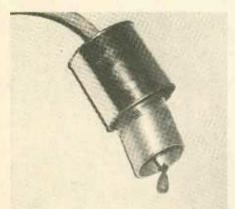
Now, thread the fishing line into the far end of the pipe and pull it through the coil. Make a cross-hatch with two wires across the *bottom* loop of the Slinky (opposite end from the solder), and tie the fishing line, along with a few weights, here.

Mount the fishing reel on your inside window sill, and bolt the pipe to the outside wall. Depending upon the type of window, you may have to cut a small piece of glass out of the corner to feed the pipe through. We found that closing the window on the pipe and then trimming a wooden "stopper" to size for the crack is one good way.

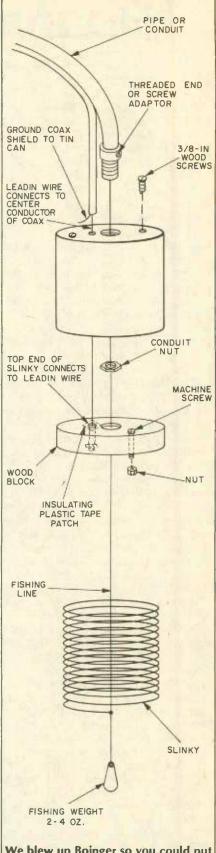
Attach the leadin wire to your receiver and let out some line on the reel. Boing! Gravity and the weights will stretch out your mini-antenna as far as you need. When you're finished, the coil will reel up and fit neatly in the can. Paint it a dull black, draw as little attention as possible when you install it and, believe it or not, you'll be surprised when nobody notices all the trouble you've gone to!

The finished setup may look a bit weird to the SWL's XYL, but that is the price she must pay to keep the OM at home evenings. Heavy wire running left and down is a shielded coax cable used as the leadin, and thinner wire running left is ground lead.





Boinger is finished and ready for installation. Outside world look out! A coat of black paint will keep down reflections and neighbor's questions. Keep in mind the SWLer's code, "Out of sight, out of mind!"



We blew up Boinger so you could put it together. Electrical connection of Slinky to antenna leadin wire should be insulated from tin can and pipe or conduit.

Beat the Antenna Spiral

These low-cost antenna shortcuts get results.

by Lennie Loeb

BEGINNERS to the shortwave listening (SWL) hobby have no difficulty in obtaining good receivers, either budget jobs or gold-plated specials, when starting their first listening shack. Putting up antennas is their downfall.

Antenna theory is beyond the grasp of most novices. It is very complex at the beginning and rapidly becomes incomprehensible as different antenna types are introduced. So, why not take a shortcut approach to your first antenna installation. Get your new receiver pulling weak signals as you pile up listening hours with exotic DXing. What about antenna theory? It'll come if you work at it by reading theory books, but in the meantime here are three recorded case histories to low-cost antenna shortcuts which may be profitable.

Case No. 1—The Dangler. Harry is a youngster I met while giving a talk to the local high school student body during Science Fair Week. Harry was fascinated by the idea of English language newscasts from far-away places, so he bought a Realistic DX-160 receiver and set up a listening corner in his upstairs room in his folks' Colonial-style house. For an antenna, he dangled an odd length of wire out the window, letting it drop to the ground. The BBC and Radio Moscow came in fine except on rainy nights. In fact, it was a rainy evening when he rang my doorbell for help.

Harry's long wire was long and that's all it had going for it. It was vertically polarized (wrong) by hanging down and shorted out to ground (not good either) on damp nights. What Harry needed was a length of wire extended from the window to a distant pole, outbuilding, garage, or tree. In Harry's case, some sturdy trees outlined the houses's property line and he could run a 60-foot antenna with no difficulties. The antenna pointed due North-West and in his area of the U.S. was able to pull in Europe, North Africa, and the Near East with ease. Here's how we went about licking Harry's problem.

First, I told Harry that a good longwire antenna should be at least 30 to 100 feet long for good reception performance on 2 to 30 megaHertz (MHz). As mentioned earlier, a 60-foot run was possible. A sturdy tree was selected because it hardly swayed in strong winds at the 20-foot level where the antenna would be secured. Some slack (one foot of droop) was left in the antenna to compensate for tree sway and strong winds. Harry's antenna details can be seen in Fig. 1.

Antenna wire and antenna long wire kits are available everywhere. Harry actually used the Radio Shack shortwave antenna kit (278-758) which consists of 75 feet of bare copper antenna wire, 50 feet of lead-in wire, four insulators, and instructions. Harry had no trouble at all getting the antenna up.

Harry was a little smarter than me. He remembered to protect against lightning. Since shortwave lightning arrester kits are usually not available locally, Harry made do with lightning arrester parts made for TV. The parts available from Radio Shack include the arrester (15-911), ground rod (15-530), 40 feet of aluminum wire (15-035), and other small parts. The TV arrester has two screw-tight terminals with star washers for the 300-ohm TV line, however Harry only used one for his antenna and the other was left unused. The whole lightning installation bit came to about \$5.00. That's cheap. To bring the antenna lead-in into the house, Harry used a "Wall-Thru" tube (Radio Shack 15-1200).

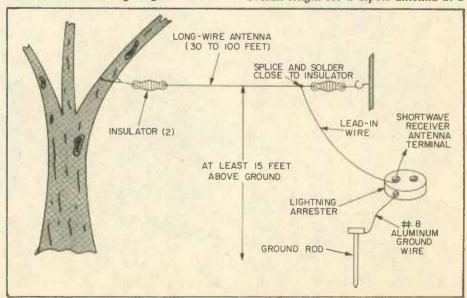
Now I don't see much of Harry. Maybe once in a while he's at the Pizza joint with a date, but you can be sure Harry's getting a lot of DXing and veries every week.

Case No. 2—The Specialist. I've known Mort for over 20 years. We knocked about through high school and

somehow the paths of our lives are forever crossing. At one such juncture, Mort invited me to his home to see his new shortwave listening shack which sported a brand-new freshly assembled Heath GR-78 receiver. The GR-78 is a hot receiver. Unfortunately, I couldn't say the same for Mort's antenna. Mort was always inclined to specialize, and he had rigged up a dipole antenna with 300-ohm TV antenna lead-in wire, Mort wanted to log the 41-meter band and found it offered poor reception in his area. Besides, the noise was too high. He was asking, if not pleading, for advice.

First of all, I told Mort that dipole antennas are cut to exact dimensions for specific frequency bands as shown in Fig. 2. The dipole consists of a wire of a specific length which is cut in half. At the mid-point and both ends, each half of the wire is insulated from each other and insulated from ground. The lead-in cable from the antenna is actually two wires, and it's best to use a 73-ohm coaxial cable (coax) because it is inexpensive and commonly available. Without getting into theory, let me say that a 73-ohm coax lead-in cable "matches" a dipole antenna with less signal loss than does a 300-ohm TV twin-lead cable. On the design board. dipoles have a 75-ohm impedance and match pretty well into 73-ohm coaxes. The 300-ohm cable Mort was using was

The equation for determining the overall length for a dipole antenna at a



given frequency is determined by dividing the given frequency in kiloHertz into the number 468,000. Or, as seen in the text books:

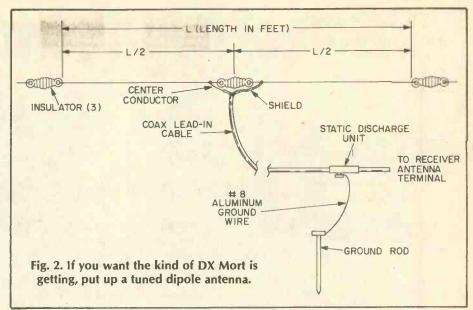
$$L = \frac{468,000}{f}$$

Where L is the overall length of the dipole in feet and f is the desired reception frequency in kiloHertz (kHz). I computed the overall length for dipole antennas to receive the international shortwave broadcast bands using the mid-frequencies of each band and listed them in a table that appears on this page.

When buying materials for a dipole antenna, wire and insulators are the same type as required for the long wire antenna. The lead-in coaxial cable should be RG-59/U or RG-11/U, each of which exhibits 73-ohms impedance. Stay away from unknown coax types or those with different impedances (ohms). As a guide, a table given on this page lists commonly available coax cables and their impedances. Any coax exhibiting an impedance in the 70's is good for the purpose. Let price dictate your selection.

I did not forget the lightning arrester in Mort's antenna. At the window, out of reach of the rain, I installed a Radio Shack coax static discharge unit (21-1049). This gadget requires PL-259 connector on the coax lead-in cable.

Dipole Overall Length for the Shortwave Broadcast Bands Mid-Length Frequencies Frequencies (feet-Band (kHz) (kHz) inches) 2397.5 195-2 120 2300-2495 90 3200-3400 3300 141-10 3800-4000 75 3900 120-0 4750-5060 4905 95-5 60 77-0 6075 49 5950-6200 41 7100-7300 7200 65-0 9500-9775 31 48-7 9637.5 25 11700-11975 11837.5 39--6 19 30-8 15100-15450 15275 16 17700-17900 17800 26 - 321450-21750 13 21600 21-8 Coax Lead-in Cable Cable Type **Typical Ohms RG-11/U** 75 RG-59/U 73 75 **RG-59A/U** RG-59B/U 75 75 F-11/U F-59/U



It's worth the trouble. A grounding screw on the connector attaches to the grounding wire and ground rod. An ounce of prevention can save your home.

A dipole has some bonuses. For example, a dipole works equally as well on frequencies three times the designed frequencies. Thus, a 41-meter band dipole which will pull in 7100-7300 kHz signals will also receive 21300-21900 kHz which covers the 13-meter band. Or, if there is sufficient space to string a 195-ft. antenna for the 120 meter band (2300-2495 kHz), then you could pull in the 120, 41 and 13-meter bands. Of course, if you want all the shortwave bands, then your best bet is a commercial dipole antenna with built-in wave traps.

Don't see much of Mort anymore except at the supermarket. Seems he's a "stay-at-home" type lately. Happy DXing, Mort.

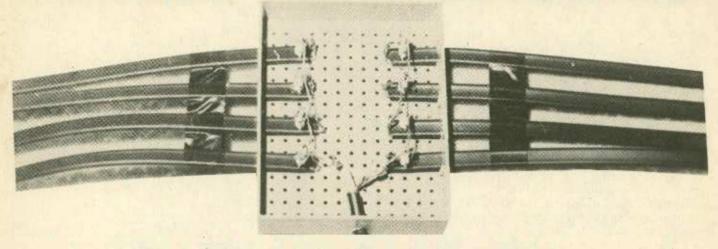
Case No. 3-The Cliff Dweller. Carl is a fun guy to know except when he's upset. For example, Carl drove over on Sunday afternoon to tell me a story he was barely capable of getting out. He had picked up a used Drake SPR-4 receiver at a fantastic price at a flea market and wanted to get involved with DXing in a hurry. It was important to Carl since he teaches French and German, and shortwave DXing would keep his foreign language skills sharp. Unfortunately, Carl lives on the 14th floor of a 24-story apartment house near the city center. His land-(Continued on page 118)

ONE LONG PIECE
OF ALUMINUM FOIL

RECEIVER

Fig. 3 How to install an aluminum foil antenna like the one that set Carl straight.

Mini-Cost Multiband Antenna



Easy-to-build, inexpensive SWL skyhook covers 8 bands!

by Dan Ramsey

EARLY EVERYBODY knows that dollar-for-inflated-dollar your best SWL investment is a good antenna system. But, you ask, what is a really "good" antenna? It's one that's easy to construct, inexpensive to build and will pull in stations on all of your favorite bands equally well without a complicated switching system. And that's a good description of our Mini-Priced Multi-Band antenna system.

For less than \$20 you can construct this simple-to-build and easier-to-operate antenna on even the smallest of lots. With an overall length of less than 80 feet, this home-made DX chaser will hring in each of the seven major international shortwave bands plus CB for fun when nothing else is cooking. A couple of hours on a Saturday afternoon will put it up and you'll soon wonder how you ever eavesdropped the ether without it.

Technically our Mini-Priced Mutli-Band is a resonant dipole antenna with eight different-length half-wave legs and low-loss coax leadin to match. But what makes the system unique is that the antenna needs only 180 feet of popular 300 ohm TV twinlead (lead-in) wire available everywhere. Other easy-to-get parts include a perf-board box to house the center taps, a few solderless terminals to hold things together and 25 to 50 feet of RG-59/U coaxial cable to bring the signal down to your receiver. It's about the simplest, most practical and least costly SWL antenna a hobbyist can build.

Antenna Theory. The resonant-dipole antenna has won universal acceptance,

literally, as SWLers the world over rely on its simplicity and sensitivity It's easy to understand why.

A half-wavelength dipole (cut to half the electrical length of the incoming shortwave, then tapped in the center) offers the advantage of receiving one group of frequencies, or a band, stronger than others striking your antenna at the same time. It is frequency-sensitive. As opposed to the popular longwire, which is a "general" antenna, the dipole is a specialized antenna. It specializes by resonating-being most efficient in receiving a particular band, for which it was designed. It is frequency-selective. And because it is physically little more than a longwire antenna tapped in the center rather than on the end, the dipole is nearly as easy to construct.

However, the dipole does have certain disadvantages. The problem is that, though a dipole is usually most sensitive to whatever signal range you have cut it to receive, its frequency range is rather narrow, and it is much less efficient on outside frequencies than the generalcoverage longwire antenna.

You can turn this fact to your advantage by setting up a resonant half-wave dipole for each of your favorite bands. This will insure that you can listen to any one of these bands with top sensitivity while attenuating signals from outside the band so they don't interfere with your listening pleasure. The bands you'll probably choose are the seven international shortwave bands (49, 41, 31, 25, 19, 16 and 13 meters) plus something just for fun, like eavesdropping on the CBers (11 meters).

So what we've designed is an eightband resonant half-wave dipole antenna. And it's engineered for low cost, selectivity, sensitivity, and efficiency. Now that we've designed our "perfect" antenna, in theory, how can we make it actually fly?

Simple! By using various lengths of 300 ohm TV twinlead wire we can have four parallel sets of double wires that will resonate in the middle of each of the eight bands we've chosen. Why twinlead? It's easy to obtain for one thing. Nearly every town has at least a TV repair shop where you can usually buy twinlead in 50 and 100 foot rolls or cut to specific lengths for about 4 to 9 cents a foot. Also, it offers two insulated antenna wires in one weatherproof package.

When buying your twinlead, you won't want the best, the shielded type, because that would defeat your purpose of getting the signal to the enclosed wire with the least amount of loss. And you won't want a low-grade type either, because of the brittleness of the wire and insulation. About the best wire for a shortwave antenna is 7-strand number 20 or 22 wire. And the better-grade foam-insulated TV twinlead is made up of 7x22 copper wire. Perfect! It's highly-conductive, weatherproof, self-supporting and inexpensive.

Let's go back to resonance. Engineers have come up with a simple formula that will help you decide what length you will want to cut each of your antennas to in order to make them resonant (most sensitive to one frequency

range) half-wave dipoles. The formula

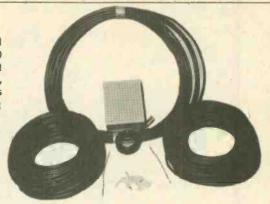
 $\frac{468}{\text{F (MHz)}} = \frac{1}{2} \text{ wavelength.}$

which means: one-half a wavelength is equal (electrically) to the magic number of 468 divided by the frequency you desire (measured in Megahertz). The answer is in feet. Example: for the 49-meter band (5.95 to 6.2 MHz), use the approximate center frequency (6.075 MHz) in the above formula and you will come up with 77 feet. That's the length of wire you'll need to make your antenna resonant, or most sensitive, to that frequency band. It's a simple process to choose the lengths you'll need for each of the eight shortwave bands we've decided on. (See our Resonant Antenna Table)

Construction. Putting the whole thing together is easy. The 49- and 41-meter band wires will be mated in one twinlead, the 31 and 25 meter bands go in another, 19 and 16 share a twinlead, and 13 and 11 meters take the final length.

Steps: Cut each twinlead to the longer of the two resonant lengths (Cut the 49-41 meter twinlead to 77 feet.). Then figure the difference between the two resonant lengths (41 meters should be 65 feet long, so the difference is 12 feet. Divide the difference by two (answer-6 feet) because you are eventually going to cut the whole twinlead in the center to tap it and will want an equal amount of resonant antenna on each side of the center tap. Come in that distance (6 feet) from each end and snip the bottom wire of the twinlead at that point. Then go to the closer end, cut the bottom wire back, take a firm grip on it and zip it out through the side of the insulation to the point

Basic parts for your Mini-Priced Multi-Band are two rolls of 300 ohm TV twinlead, about 50 feet of coax cable, perf-board box, electrical tape and solderless spring terminals. The two short pieces of rigid wire are used for making the common connections at center of the antenna array.



where it was snipped.

Do this with each of the four twinleads according to the lengths in the Resonant Antenna Table. Remember, if you have purchased your twinlead in two 100 foot rolls to cut the 77 foot and 21-ft. 8-in. lengths out of the same roll.

To make your antenna a dipole you must tap it in the center. This is done by first folding each twin-lead exactly in half and cutting it. With 178 feet of wire all over the floor, you should tape appropriate sections together and label them as they are cut to avoid later confusion. When you lay the antenna system out on the ground it should look like the spread wings of an eagle, tapered inward from top to bottom and with the center tap cuts all meeting in the middle. Now it's time to tie it all together.

Here's where the other parts come in: the perf-board box, the solderless spring terminals, coax cable and the electrical tape.

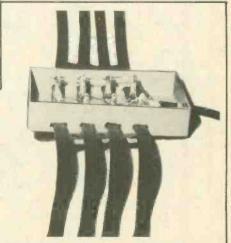
First, open up the perf-board box and lay the gray or perforated section open end up. (You can use a hobby box and a perforated board also, but the Archer brand Experimenter's P-Box, distributed by Radio Shack, has a distinct advantage in that necessary holes can be cut in the gray portion of the box with a hot soldering iron.)

Next, cut four holes in each side of

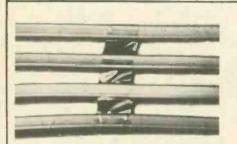
the box for the twinlead, and one at the bottom edge for the coax. Then bring the four half-sections of twinlead into each side of the box, strip all wires back about one inch, make a hole in the center of the insulation another 1/4-in. back for the spring terminals and insert them into the insulation. Next. put the two loose wires from each twinlead into its respective terminal, push the terminal into the correct holes in the perf-board box and connect the terminals on each side with a common wire. Now you have all wires from one side of the box connected commonly, and all wires from the other side connected at another common point.

The next step is to bring the coax cable in from the bottom, connect the center wire to one common set of taps and the outer (shield) braid to the other set. You should spot solder the terminals when you've completed your work to assure a good electrical bond. Close the box and seal it with electrical tape. You're just about finished.

Stretch all of the twinleads out in parallel from the box. Every three feet or so, wrap electrical tape from the top to the bottom twinlead leaving about an



Twin-leads enter box at side—coax exits at bottom. Spring terminals conduct signals, also serve to secure twin-leads.



Short lengths of electrical tape help space out the twin-leads to keep them isolated and to support them in place properly.



After final assembly the perf-board box is closed and sealed with black plastic electrical tape. Coax cable leadin is shown exiting at center front.

Mini-Cost Multiband Antenna

inch between each one. This is done so the top twinleads will support the bottom ones. For further support, use a short cord to tie the top two ½-wave legs together on the outside of the box. This will minimize stress on the top twinlead center connections when it is installed.

The next step is rigging up your antenna. You will need 80 feet of space, lengthwise. A strong nylon cord tied from each end (egg insulators not needed) and to a nearby support will do the trick. Make sure you raise the antenna to a height of at least 20 feet and away from obstacles that would attenuate the incoming signals. The higher it is, the better it will be. Carefully run your coax in to the shack, hook it up and stand back.

Signal Tracing. To see how your Mini-Priced Multi-Band works, let's follow an incoming signal. It hits your antenna along with a hundred others, but your dial is tuned to 9.690 MHz in the 31-meter band. Because signals follow the path of least resistance and because the lowest resistance is between your top wire on the second-from-the-top twinlead and your receiver, that particular signal is chosen. It runs towards the center of your dipole. At the same instant, the identical signal is coming in from the other half of your half-wave dipole and rushes towards the perf-box. They haven't met yet.

Even though you are using what's called 300 ohm twinlead, the actual impedance (resistance of an AC circuit) of each dipole is about 70 ohms as it is in every center-tapped half-wave dipole antenna. (The impedance would be about 300 ohms if the farthest ends of the twinlead were loaded or connected together, but they are not.) And so your 72-ohm coaxial cable is a near-perfect match. The signal again takes the path of least resistance, down the coax to your receiver.

Some inexpensive communicationstype receivers have higher input im-

RESONANT ANTENNA TABLE					
BAND (meters)	FREQ. (MHz)	LENGTH (Ft.)	TRIM (ends)		
49	5.95-6.2	77	none		
41	7.1-7.3	65	6 ft.		
31	9.5-9.775	482/3	none		
25	11.7-11.975	392/3	41/2 ft.		
19	15.1-15.45	303/3	none		
16	17.7-17.9	26+2 in.	21/4 ft.		
13	21.45-21.75	213/3	none		
11	26.965-27.225	17+6 in.	2 ft.		

pedance, but most better-quality communications receivers have an input impedance of about 75 ohms. Again, a very close match for your incoming signal and it rushes into your tubes and/or transistors to be amplified, rectified and certified "good SWLing." No loading coils or bandswitches necessary.

Hints. Remember that the dipole antenna, while able to detect signals from just about any direction, is most sensitive to signals coming in broadside (at right angles) to the antenna. So try, if you can, to run your antenna basically north and south if you want to receive most signals from the east and west.

Another plus for the dipole is its

PARTS LIST FOR MINI-PRICED MULTI-BAND ANTENNA

178 ft. 300-ohm foam TV twinlead 25-50 ft., as needed for lead-in, RG-59U coaxial cable Perfboard box or experimenter's P-box (Radio

Shack 270-105 or equiv.)

Solderless spring terminals Roll electrical plastic tape

You can't listen to all the world if you can't hear all the Bands. Hear all the action with a multi-band dipole antenna!

noise-cancelling characteristic. Each of the ¼-wave legs brings the signal to your receiver as a mirror of the other. One runs down the center wire of the coax and the other moves via the outside coax braid. When they meet in your receiver they mix and cancel much undesired amplitude-modulated impulse noise. Another good reason why the dipole is so popular.

Horizontal and vertical polarization? Don't worry about it! After skipping off the ionosphere a time or two, it doesn't make any difference whether the station sent the signal out with a horizontal or vertical antenna. It's flip-flopped through the atmosphere enough before it gets to you so the signal is virtually

omni-polarized.

While you're installing your Mini-Priced Multi-Band, don't forget the value of an antenna lightning arrester. It may save your receiver from an overload of a few thousand volts. And it doesn't take lightning to make it a useful gadget. It will also discharge the static electricity that can build up on a wire during an electrical storm. It's great insurance!

Long-time SWLers know that one dollar in the antenna system is worth about ten dollars in the receiver. So this less-than-\$20 project may just inflate your shack's value by almost \$200. And that's a good investment in any economy!

POINT-TO-POINT UTILITIES

Country and Frequencies (kHz)

Argentina—6862, 10875, 13382, 15635, 17690, Albania—7790 Algeria—7885 Afars and Issas—19545

Australia—8789, 9230, 10420, 13425, 16010, 19015

Azores—6519, 8694 Barbados—11125, 15930, 19456 Belgium—7927, 10725, 14360, 16287 Brazil—19820, 20720 Cameroun—11617, 15832, 19890

Canary Islands—10690 Ceylon (Sri Lanka)—7820, 11095, 15727, 18445 Chad—11608, 19290

Colombia—9075, 10230, 14575, 22965 Costa Rica—10985, 13380, 17620 Denmark—10420, 11460, 14705, 14785

Ecuador—16610, 19605 Ethiopia—15540, 19045

Finland—14767

France—13535, 14485, 15805, 16398, 18205 Gambia—13797

Germany, East—13375, 20060 Germany, West—10850, 16430, 21780 Greece—7355, 17363 Honduras—6905, 11190

Israel—10305, 11640, 15786, 18350 Italy—10135, 14485, 17408, 18630, 19620

Jamaica—7735, 10355 Japan—13950, 15700, 18725 Kenya—17575, 19630 Liberia—19940, 19980

Malaysia-10444

Martinique—10155, 17565 Mexico—7350, 10565, 17510, 20800 Netherlands—8160, 10735, 18626, 2005

Netherlands—8160, 10735, 18626, 20055 New Zealand—11590, 14780, 18360 Panama—5145, 5765, 9152, 10670 Peru—10970, 14845, 16100 Saudi Arabia—8155, 10405, 11417, 13910,

15603, 18085 Singapore—8169, 13126, 15720 Spain—10120, 11020, 19030 Sweden—16052, 18295 Tahiti—11665, 19305

Turkey—6491 Upper Volta—11095, 18089 USSR—13670, 15440, 16215 Venezuela—11085, 13860, 14385

Yugoslavia—10780, 18542

HEY CABBIE!

	THE CHEBIE	
Freq. (MHz.)	VHF Channel Number	UHF Channel Number
152.270 152.300 152.330	1 2 3	
152.360 152.390 152.420	4 5 6	
152.450 452.050 452.100	7	1 2
452.150 452.200 452.250		3 4 5
452.300 452.350 452.400		6 7 8

COMMUNICATIONS WORLD SPOTLIGHTS



Move your own SWL radio center into the computer age!

Though there has been much talk of personal computers in the sense of two cars in every garage and a computer in the den, until the Radio Shack TRS-80 there was nothing that could be used by someone totally unfamiliar with electronics. If you couldn't tell a Molex socket from a D-connector there wasn't much chance you'd be able to interface (fancy term for interconnecting) the components that go into making up a basic computer system.

The TRS-80, however, is a whole different idea in personal computing. Just push together three common DIN connectors such as you might find in a typical hi-fi system and you have an instant computer system pre-programmed with BASIC.

The TRS-80 consists of three independent equipments. First, there's the computer itself with its associated plugin power supply. Housed in a cabinet approximately 161/2-in. wide x 35/8-in. high x 8-in. deep, with an integral keyboard, the computer has a resident 4K basic, graphics, and 4K RAM (random access memory) which can be expanded to 16K on-board, or 62K with a planned outboard accessory. The back of the computer has DIN connectors for its power supply, the video output (for CRT display), and a tape recorder. The main power on-off switch is located adjacent to the connectors. On the rear left is a cover plate for an expansion port (fancy term for printed circuit connector), and the reset switch that bails you out if your program

bombs and locks the computer into a

The basic computer and its plug-in power supply is priced at \$399.95 (assuming it ever becomes available as a separate item).

The second equipment in the system is a 12-inch video display monitor priced at \$199.95. Front panel operator brightness and contrast adjustments. Unlike the usual video monitor which has a UHF or BNC connector inputand you provide the matching cable and connectors-the Radio Shack video display has a permanently attached input cable with a DIN connector that plugs into the computer.

The final equipment in the package is a Realistic CTR-41 cassette recorder usually priced at \$49.95. It is supplied with signal and control cables that plug directly into the computer. The recorder is used for storing user-programs, or for loading the computer with a program from several program packages available from Radio Shack-among them a payroll program for up to twelve employees, a personal finance program, and a special math education program.

Though the three items individually represent cost of \$649.95, the package price, including a 300 page instruction/ programming manual, is \$599.95.

Why For Me? Many of the uses for a computer such as the TRS-80 are fairly obvious. They're great to keep track of payrolls, do the bookkeeping, balance your checkbook, figure recipe

sizing, stuff such as that. There are, however, a myriad of other uses for an item such as the TRS-80.

You, as a reader of COMMUNICA-TIONS WORLD, may be wondering what it is the TRS-80 can do for you. Well, it could change and improve your hobby in manners which sound almost like science-fiction.

As you on the Shortwave bands know, the broadcasters are constantly shifting their schedules as to Englishlanguage programs, times, even their frequencies. When you pick up a copy of CW you can thumb through and find out what's changed recently, but then you have to try to collate all the changes with your listening habits, logbooks, etc.

Use the TRS-80. All you would have to do is to have a program stored on the tape player which lists all the Shortwave stations you're interested in. Any changes could be entered onto the computer, which would automatically change the stored program. From then on, if you wanted to listen to Radio Sweden, all you'd have to do is to type R. SWEDEN and the computer would give you the latest time, frequency and program schedule you had enterd.

You could also keep your logbook on the computer. Imagine punching in a date reading out exactly what stations you had heard, times and frequencies, if a verie had been sent, a QSL received, and even how conditions had been in general-even if it had all taken place years ago. No more hunting for old, musty logbooks with the advent of the computer age!

How It Works. Let's start with the manual. The final version was not available when this article was prepared. Instead, an abbreviated user's manual, sufficient to get anyone started, was supplied with the first systems. It is literally a work of art. The quality of documentation (another fancy word, meaning instructions and technical information) usually supplied with personal computing equipment is "the

TRS-80 COMPUTER

pits"-abysmal is too good a description. The preliminary instruction manual for the TRS-80, however, is outstanding by any consumer standards. We can only hope the same person prepared the final 300 page manual. The only problem with the manual is that the demonstration "multiplication tables" program has two typographical errors and the program won't run. This is a fun program and will probably be the one you'll try at a Radio Shack store so make the following changes: statement #70 should read "..... GOTO 130"; statement #110 should read ".... GOTO 20". (As we said, this is a preliminary manual.)

To use the computer, just press the power switch. If the screen fills with scrambled alpha-numerics simply press the power switch again and you'll see the word READY. The computer is now ready for use.

If you want to save a program you need only install a good quality audio cassette in the recorder, preset the recorder's controls to record, and enter CSAVE on the terminal. The computer automatically starts the recorder and feeds the program to the tape. Taped programs can be loaded into the computer by entering CLOAD on the terminal. (The computer automatically converts the digital pulses to audio signals for recording and vice versa for loading.)

Radio Shack has announced intentions to make available, at a later time, peripherals for "hard copy" (a printer) and a disc system. By the time you are reading this, one or more accessories might already be available.

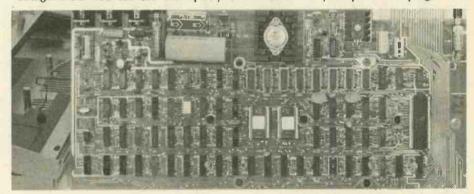
Though the overall concept of the TRS-80 personal computer is good, the 4K basic leaves a bit to be desired. It somewhat limits the potential, primary consumer use of a computer-that of an educational aid. The 4K basic lacks trignometric and transcendental functions, limiting its math level to elementary grades. Junior High and High School would require, at the very least, the trignometric functions. Radio Shack has announced a Level-II BASIC will be made available-which we assume will be essentially some form of 8K BASIC with the trig and transcendental functions.

The BASIC is in plug-in ROM (read only memories) so we assume Level-II BASIC would be installed by simply exchanging one or two ICs. (The computer easily comes apart by removing a few screws.)

The recorder runs at 300 baud, so



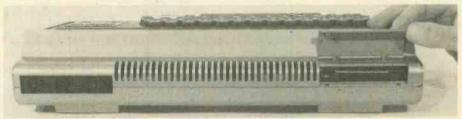
Programs can be recorded on and loaded from a cassette, any high-quality audio tape may be used. The "Game" tape comes with the TRS-80 and includes Blackjack and Backgammon. You can use the tape system to make many of your own programs.



This is the actual computer, just one IC after another. The two large chips in the middle, with the white centers, are plug-in ROMs (Read Only Memories). These are the chips which contain the BASIC language that allows you to "talk" to the computer.



The complete system is small enough to fit on a desk and leave plenty of room for a study area—or a receiver. You can move the video display to a shelf and the computer will take up less space than an open book.



The three DIN connectors on the rear are for the power supply, video terminal and audio cassette recorder. A cover, shown lifted, coneals an expansion port which will be used for future, optional accessories such as magnetic and disk recorders.

saving and loading a user program can take considerable time. One of our programs took almost 8-minutes to save, and 8-minutes to load. Radio Shack undoubtedly used 300 baud in order to utilize an inexpensive audio recorder, but a high speed digital recorder would be preferable. There are indications from Radio Shack that they are planning for high speed mass-data

tape recorders in the near future.

It doesn't matter where your interests lie. The future has arrived in the form of personal computers. Everyone will be using them sooner or later and, if you want to get in on the ground floor, the Radio Shack TRS-80 can serve as an excellent introduction.

For additional information circle No. 32 on the reader's service card.

WHITE'S RADIO LOG

AN UP-TO-DATE DIRECTORY OF NORTH AMERICAN AM, FM, AND TV STATIONS INCLUDING A SPECIAL SECTION OF WORLDWIDE SHORTWAVE STATIONS

U.S. AM STATIONS BY FREQUENCY

Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
540—555.5 KVIP Redding, Calif. 1000 WGTO Cypress Gardens, 5000d WDAK Columbus, Ga. 5000 KNOE Monroe, La. 5000 WLIX Isilp, N.Y. 250d WLIX Isilp, N.Y. 250d WARO Canonsburg, Pa. 250d WYNN Florence, S.C. 250d WYNN Florence, S.C. 250d WARN Canonsburg, Pa. 250d WYNN Florence, S.C. 250d WORL California, 1000d KDL Delta, UT WHIC Richlands, Va. 1000d WYLO Jackson, Wisc. 250d KENI Anchorage AK KOY Phoenix AZ KAFY Bakersfield, Calif. KRAI Craig, Colo. 5000 WYR Orange Park, Fla. 1000d KFM Salina, Kans. 5000d KSD St. Louis, Mo. 5000 KBOW Butte MT WGR Buffalo, N.Y. 5000 KFR Bismarck, N.Dak. 5000 WKRC Cincinnati, Ohio 5000	WWNC Asheville, N.C. WKBN Youngstown, OH 5000r WNAX Yankton, S.Dak, WFAA Dallas-Ft. Worth TX 5000 KLUB Salt Lake City, Utah 5000 KVI Seattle. Wash. WMAM Marinette W1 250r 580—516.9 WBIL Tuskegee AL 5000d KYUK Bethel AK 5000d KYUK Tueson AZ 5000r KMJ Fresno, Callf. 5000 WBO Orlando. Fla. 5000 WBO Orlando. Fla. 5000 WBO Orlando. Fla. 5000 WGAC Augusta, Ga. 5000 WILU Urbana, 111, 5000d KFXD Nampa, Idaho WILU Urbana, 111, 5000d KSAC Manhattan. Kans. 5000 WILU Urbana, 110, 5000d KSAC Manhattan. Kans. 5000 WILU Urbana, 110, 5000d WSAC WASHAND ON HISS. 1000 KANA Anaconda, Mont. 1000d WAGR Lumberton. N.C. 500d WKSK W. Jefferson NC 500d WKSK W. Jefferson NC 500d WKSK W. Jefferson NC 500d WKSK San Juan. P.R. 5000 KOBH Hot Springs, S.Dak. 500d WDE Charleston. W. va. 5000 WCHS Charleston. W. va. 5000 WKYS Charleston. W. va. 5000 WKYS Charleston. W. va. 5000 WKYS Charleston. W. va. 5000	KSJB Jamestown, N.D. WSOM Salem, Ohlo WFRM Coudersport, Pa. WREC Mayaguez, P.R. WREC Memphis, Tenn. KROD EI Paso, TX KERB Kermit, Tex. 1000d KTBB Tyler. Tex. 1000d WVAR Richwood, W.Va. 610—491.5 WSGN BIrmingham AL KAVAL Lancaster, CA KFRC San Francisco, CA WSNG Torrington, CT WIOD Miami. Fla. WYOD Miami. Fla. WOOD WRUS Russeliville, Ky. KDAL Duluth, Minn. WDAF Kansas City, MO KOJM Havre. Mont. WDAF Kansas City, MO KOJM Havre. Mont. WGR Manchester, N.H. KRKE Albuquerque, NM WAYS Charlotte. N.C. WTVN Columbus, Ohlo WIP Philadelphia, Pa. KILT Houston. Tex. KVNU Logan, Utah WSLC Roanoke VA WNLC Roanoke VA KONA Kennewiek WA S000 KONA Kennewiek WA	WQBS San Juan, P.R. 5000 WPRO Providence, R.I. 5000 KMAC San Antonio, Tex. 5000 KSXX Sait Lake City, Utah 1000d KGDN Edmonds, WA 5000d KZUN Opportunity, WA 1000d 640—468.5 KFI Los Angeles, CA 50000 WOI Ames, 10wa 5000d WHLO Akron, OH 1000d WHAD Akron, OH 1000d 650—461.3 KYAK Anchorage AK 50000r KIKK Pasadena, Texas 250d 660—454.3 KFAR Fairbanks AK 10000 WSM Nashville, Tenn. 50000 KIKK Pasadena, Texas 250d 660—454.3 KFAR Fairbanks AK 10000 WSW SON SON 10000 WSW SON 10000 WSW Creenville, S.C. 10000d KSKY Dallas, Tex. 10000d KSKY Dallas, Tex. 10000d KSKY Dallas, Tex. 10000d KSKY Dallas, Tex. 10000d KSH 110000 KSH 1100000 KSH 1100000000000000000000000000000000000
KOAC Corvallis, Oreg. WHAM Bloomsburg, Pa. WPAB Ponce, P.R. WGNG Pawtueket RI KCRS Midland, TX KTSA San Antonio, Tex. WDEV Waterbury, Vt. WSVA Harrisonburg, Va. KARI Blaine, Wash. WSAU Wausau, Wis. 560—535.4 WOOF Dothan AL KVOK Kodiak At KVOK Kodiak At KSEU Yuma, AZ KSFO San Fran, Calif. KLZ Denver, Colo, WIAM Miami, Fia. WIAM Middlesboro, Ky. WGAN Portland, Maine WFAB Frostburg, Md	WRIT LaCrosse, Wis. 590—508.2 WRAG Caroliton AL KHAR Anchorage AK KBHS Hot Springs, AR KFXM San Bernardino, Cal. KTHO South Lake Tahoe, CA KCSJ Pueblo, Colo. WDLP Panama City, Fla. WPLO Atlanta, Ga. KGMB Honolulu, Hawall KID Idaho Falls, Idaho WRTH Wood River, IL WYLK Lexington, Ky WEEI Boston, Mass. WJMS Ironwood, Mich. SUM STON WKZD Kalamazoo, Mich. KGLE Glendive, Mont. WOW Omaha, Nebr. WCAB Rutherfordton, N.C. WGTM Wilson, N.C. S000 WGTM Wilson, N.C. S000 KGTM Eugene, Oreg.	620—483.6 KTAR Phoenix AZ KNGS Hanford, Callf. 1000 KNGS Hanford, Callf. 1000 KSTR Grand Junction. Colo. 5000d WSUN St. Petersburg, Fla. 5000 WTRP LaGrange. Ga. 1000d KIPA Hilo, Hawaii 5000 KWAL Wallace, Idaho 1000 KWAL Wallace, Idaho 1000 KWAL Wallace, Idaho 1000 WTMT Louisville, Ky. 500d WTMT Louisville, Ky. 500d WTMT Louisville, Ky. 5000 WJDX Jackson. Miss. 5000 WHEN Syracuse, N. 5000 WHDR Greensburg, PA 5000d WCAY Cayce, S. C. 5000d WCAY Cayce, S. C. 5000d WRJZ Knoxville, TN. 5000 WRJZ Knoxville, TN. 5000 WYMT Burlington, Vt. 5000 WWN Beckley, W.Va. 1000	KBRW Barrow, AK KNBR San Francisco, Cal. 50000 WWBA St. Petersburg, Fla. 1000d WRNG North Atlarta, Ga. 250000 WCTT Corbin, Ky. 1000
WHYN Springfield, Mass, 5000 WHYN Monroe, MI Springfield, Most Spr	KUGN Eugene, Oreg. 5000 WARM Scranton, Pa. 5000 WMBS Uniontown, PA 1000 KLBJ Austin TX 5000 KLBJ Austin TX 5000 KLBJ Austin TX 5000 KLBJ Austin TX 5000 KLBJ Scranton 5000 KLBJ Scranton 5000 KLBJ Scranton 5000 KHQ Spokane, Wash. 5000 600—499.7 WIRB Enterprise AL 1000d KCLS Fiagstaff AZ 5000 KICS Fiagstaff AZ 5000 KINC Independence, CA 5000 KSXO Redding, CA 5000 KSXO Redding, CA 5000 KIX Ft. Cellins, CO 1000d WICC Bridgeport. Conn. WSNY Jacksonville, FL WTT Cedar Rapids. 1000d WYGC New Orleans, La. 1000d WYGC New Orleans, La. 5000 WYGC Strinton, Maine 5000d WFAC Flint, Mich. 1000 WCVP Murphy, N.C. 5000 WSVP Murphy, N.C. 5000 WSV Winston-Salem, N.C. 5000	WWNR Beckley, W.Va. 1000 WTMJ Milwaukee. Wis. 5000 630—475.9 WAVU Albertville, Ala. 1000d WJDB Thomasville AL 1000d KJNO Juneau AK 1000d KJNO Juneau AK 1000d KVMA Magnolia AR 1000d KLDD Monterey, Calif. 1000 WMAL Washington, D.C. 5000 WSAV Savannah, Ga. 5000 WNEG Toeteo, Ga. 5000 WLAP Lexington, KY 5000 WLAP Lexington, KY 5000 WLAP Lexington, KY 5000 KTIB Thibodaux, La. 500d KTJB Thibodaux, La. 500d KGVW Belgrade, Mont. 5000 KJEA Lovington, N. Mex. 5000 KJEA STORMAN 5000	## WOK Birmingham AL KEOS Flagstaff AZ 1000r KEOS Flagstaff AZ 1000r KEOS Flagstaff AZ 250d KEYT Tueson AZ 250d KAPI Pueblo, Coto. 250d WADS Ansonia, Conn. 250d WADS Ansonia, Conn. 250d KKUA Honolult, Hawali 10000 KBUA Honolult, Hawali 10000 KBUA Honolult, Hawali 10000 KBUA Honolult, Kapi 10000 KTOR Minneapolis, Minn. 500d KTOR Minneapolis, Minn. 500d KTOR Terrytown, Nebr. 1000d KEYR Terrytown, Nebr. 1000d KEYR Terrytown, Nebr. 1000d KEYR Terrytown, Nebr. 1000d KEYR Terrytown, Nebr. 1000d KUSD Vermillion, S.Dak. 1000d KUSD Vermillion, S.Dak. 1000d KUSD Vermillion, S.Dak. 1000d KUSD Vermillion, S.Dak. 1000d KPT Lamesa. Tex. 250 KZEY Tyler, Tex. 250 KZEY Tyler, Tex. 2500 WAGO Oshkosh, Wis. 250d WAGO Oshkosh, Wis. 250d

☐ Abbreviations used in this list: kHz—frequency in kilohertz; MHz—frequency in megahertz; W.P.—power in watts; d—daytime operation only; r-reduced power at night; n—nighttime power; C.L. or Call—call letters or call sign; Chan. or Ch.—TV channel number; †—educational TV station. Wavelength is given in meters. Listing indicates stations on the air as of Oct. 7, 1977.

U.S. AM	STATIONS	BY FREQU	JENCY
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U.S. AM STATION	IS BY FREQUENCY		
Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
700—428.3 KBYR Anchorage AK 1000r WLW Cincinnati, Ohio 80000	WBBM Chicago, IL 5000 WJAG Norfolk, Neb. 1000d KCRL Reno, Nev. 50000 WCKB Dunn, N.C. 1000d WBBO Forest City, N.C. 1000d	WYPO Stroudsburg, Pa. 250d WXEW Yabueca, PR 250d 850-352.7	WCOR Lebanon, Tenn. 500d KALT Atlanta, Tex. 1000d KIKR Course, TX 500d KFLP Floydada TX 250d KCLW Hamilton, Tex. 250d
710—422.3 WKRG Mobile AL KMPC Los Angeles, CA 50000r KERE Denver U 5000	KSPI Stillwater, Okla. 250d WAVA Arlington, Va. 1000d	WYDE Birmingham AL 10000r KICY Nome AK 5000 KGKO Benton AR 1000d KGOE Thousand Oaks, CA 500 KOA Denver. Cole. 50000	KCLW Hamilton, Tex. 250d WODY Bassett, Va. 500d WKDW Staunton, VA 1000d KUEN Wenatchee, Wash. 1000d WATK Antigo, Wis. 250d
KFIA Carmichael, CA WGBS Mlami, Fla. 50000 WUFF Eastman, Ga. 1000d WROM Rome, Ga. 1000d	WTUG Tuscaloosa AL 1000d KCAM Giennatien AK 5000 KCEE Tucson AZ 5000r	WRUF Gainesville, Fla. 5000 WEAT W. Palm Beach, Fla. 1000	910-329.5 KJJJ Phoenix AZ KLCN Blytheville AR 5000d
KEEL Shreveport, La. 50000 WEPA Eupora, MS 500d q WHB Kansas City, Mo. 10000 WOR New York, N.Y. 50000	KOSY Texarkana AR 1000r KXQR Clovis, CA 5000d KHUM Eureka CA 5000d KABC Los Angeles, Catif. 5000	WCUG Cuthbert, Ga. 500d KHLO Hilo, Hawaii Wiv8 Crystal Lake, III. 500d KLEU Waterleo IA 500d	KAMD Camden AR 5000r KMJC El Cajon, CA 1000 KNEW Oakland, Calif. 5000r KOXR Oxnard, CA 5000r
WEGG Rese Hill, N.C. 250d WKJB Mayaguez, PR 5000r WQKI St. Mathews, SC 1000d	WLBE Lessburg, Fia. 5000 WFUN Miami, Fia. 5000 WPFA Pensacola, Fia. 1000d WQXI Atlanta, Ga. 5000 WYNR Brunswick, Ga. 500d	WHDH Boston, Mass. 50000 WKBZ Muskegon, Mich. 1000 WWJC Duluth, Minn. 10000d WMAG Forest, Miss. 10000d KFUO Clayton, Mo. 5000d	KPOF Denver, Colo. 5000 WRCQ New Britain, CT 5000 WPLA Plant City, Fia. 1000d WGAF Valdosta, Ga. 5000
WTPR Paris, Tenn. 250d KGNC Amarilio, Tex. 18000 KURV Edinburg, Tex. 250 WQBX Blacksburg, VA 5000d	WGRA Caire, Ga. 1000d KKON Kealekskua, Hawali 5000 KSPD Boise, Idaho 1000d KBRV Soda Springs, Ida. 5000d	WKIX Raleigh, N.C. 10000 WJW Cleveland, Ohio 10000 KRPT Anadarko, Okia, 1000 WIAC Johnstown, Pa 10000	KBGN Caldwell, Ida. 1000d WAKO Lawreneville, III. 500d WSUI Iowa City, Iowa 5000 KINA Salina, Kan. 500d WLCS Baton Rouge. La. 1000
KIRO Seattle, Wash. 50000 WDSM Superior, Wis. 5000	WRMS Beardstown, III. 500d KXXX Colby, K8 5000d WAKY Louisville, Ky. 5000 WRUM Rumford, Me. 1000d	WEEU Reading, Pa. 1000 WABA Aquadilla, P.R. 500 WIVK Knoxville, Tenn. 50000d WUCR Sparta, TN 250d	WABI Bangor, Maine 5000 WFDF Flint, Mich. 5000
KOTZ Kotzebue AK 8000 KUAI Eleele, HI 5000 WGN Chicago, III. 80000 KDWN Las Vegas, NV 50000r	WSGW Saginaw, Mich. 5000 KGHL Billings, Mont. 5000 WWNY Watertown, N.Y. 1000 WLSV Welisville, N.Y. 1000d WTNC Thomasville, N.C. 1000d	KEYH Houston, TX 10000 WRAP Norfolk, Va. 5000 KTAC Tacema, Wash. 10000	KBIM Roswell, N.M. 5000 WRKL New City, N.Y. 1000d WLAS Jacksonville, NC 5000 KCJB Minot, N.D. 5000
730-410.7 WJMW Athens AL 1000d 5	KFGO Fargo, N.D. 5000 KWIL Albany, Oreg. 1000 WAEB Ailentewn, Pa. 1000 WPIC Sharon, Pa. 1000d	860-348.6 WHRT Hartselle AL 250d WAMI Opp AL 1000d KIFN Phoenix AZ 1000d	WBRJ Marietta, OH 5000d WPFB Middletown, Ohio 1000 KGLC Miami, Okia. 1000 KURY Brookings, Oreg. 1000d
KSUD West Memphis AR 250d WLOR Thomasville, Ga. 5000d KLOE Goodland, Kans. 1000d WFMW Madisonville, Ky. 500d	WEAN Providence, R.I. 5000 WWBD Bamberg-Denmark, S.C. 1000d	KOSE Oseeola AK KWRF Warren AR Z50d KTRB Modesto, Calif. 10000 WAZE Clearwater, Fig. 500d	WAVL Apollo, Pa. 1000d WGB1 Stranton, Pa. 1000 WSBA York, Pa. 5000 WPRP Ponce, P.R. 5000 WORD Spartanburg, S.C. 5000 WORD Spartanburg, S.C. 5000
WMTC Vaneleve, Ky. 1000d KTRY Bastrop, La. 250d WARB Covington, La. 250d WJTO Bath, Maine WACE Chleope, Mass. 5000d	WMC Memphis, Tenn. 5000 KULF Housten, Tex. 5000 KFYO Lubbock, Tex. 5000 KUTA Blanding, Utah 4 W81G Mount Jackson, Va. 1000d	WKKO Cocea, Fla. 1000 WERD Atlanta, Ga. 1000d WDMG Douglas, Ga. 5000d WGOM Marien, Ind. 250d	WEPG S. Pittsburgh, Tenn. 500d KNAF Fredericksburg, Tex. 1000d
WACE Chicages, Mass. 5000d WVIC E. Lansing, Mich. 500d KWRE Warrenton, Ms. 1000d KWOA Worthington, Minn. 1000d KURL Billings, Mont. 500d	WTAR Norfolk, Va. 5000 KGMI Bellingham, Wash. 5000 KJRB Spokane, Wash. 5000 WEAQ Eau Claire, Wis. 5000	KWPC Museatine, lowa 250d KOAM Pittsburs, KS 10000r WSON Henderson, Ky. 500d WAYE Battimore, Md. 1000d WSBS Gt. Barrington, Mass. 250d	KRIO MeAllen, TX 5000 KIKM Sherman TX 1000 KALL Sait Lake City, UT 5000r WNHV White River Jet., Vt.
KDAZ Albuquerque, N.M. 1000d WD0S Oncorta, N.Y. 1000d WFMC Geldebore, N.C. 1000d WOHS Shelby, N.C. 1000d WJYM Bowling Green, OH 1000d	800-374.8 WHOS Decatur AL 1000d	KNUJ New Ulm. Minn. 1000d KARS Belen, NM 250d WEMD Fairment N C 1000d	WRNL Richmond, Va. 5000 WTOY Roanoke, Va. 1000d KORD Pasco, Wash. 1000d KIXI Scattle, Wash. 1000
WNAK Nanticoke, Pa. 1000d	W HOS Decatur AL 1000d WM GY Montgomery AL 1000d KINY Juneau AK 5000 KAGH Crossett AR 250d KYOM Morriton AR 250d KHIS Bakersfield, CA 250d	WYJZ Pittsburgh, PA t000d WTEL Philadelphia, Pa. 10000d WUCR Sparta TN 1000d	WHSM Hayward, Wis. 5000d WDOR Sturgeon Bay, Wis. 1000d 920—325.9
WLIL Leneir, Tenn. 1000d KKDA Grand Prairie, Tex. 500d KSVN Ogden, Utah 1000d WPIK Alexandria, Va. 5000d	KBRN Brighton, Cole. 500d WLAD Dambury, CT 1000d WRKV Rockville, Conn. 1000d W8ST Large FL 250d	W.LBG Laurens, S.C. 1000d KFST Ft. Stockton, Tex. 250d KPAN Hereford, Tex. 250d KSFA Nacogdoches, Tex. 1000d KONO San Antonio, Tex. 5000 KWHO Sait Lake City. Utah	WKYD Andalusia, AL WWWR Russellville AL 1000d KSRM Soldetna. AK 5000 KARN Little Rock AR 5000
WMNA Gretna, Va. 1000d KULE Ephrata, Wash. 1000d WJMT Merrill WI 1000d	WSUZ Palatka, Fla. 1000d WJAT Swainsboro, GA 1000d WKZI Cassy, III. 280d KXIG lowa City, Iowa 1000d WKVE Cave City, KY 250d	WOAY Oak Hill, W.Va. 1000d	KLOC Ceres, Calif. 500d KDES Palm Springs, CA 5000r KVEC San Luís Obispo, Cal. 1000 KLMR Lamar, Colo. 5000
740—405.2 WBAM Montgomery AL 500006 KMEO Phoenix AZ 10000 KBRT Avalen. CA 100000	WSHO New Orleans, La. 1000d WCCM Lawrence, Mass. 1000d KQAD Luverne, Minn. 500d WVAL Sauk Rapids MN 250r	WNOV Milwaukee, Wis. 250d 870-344.6 KIEV Glendale, CA 5000d	WMEL Melbourne FL 1000 WGST Atlanta, Ga. 5000
KCBS San Francisco, Calif. 50000 KSSS Colorado Springs. Colo. 1000 KVFC Cortez, Colo. WSBR Boog Raton. Fla. 1000d	KREI Farmington, Mo. 1000d WTMR Camden, N.J. 5000d KQCV Oklahoma City, OK 800 KPDQ Portland, Ore. 1000d WCHA Chambersburg, Pa. 1100d	KAIM Honolulu, Hawali 5000 WWL New Orleans, La, 50000 WKAR E. Lansing, Mich. 10000d WCHU Ithaca, N.Y. 5000d	WMOK Metropolis, ill. 1000d WBAA W, Lafayette, Ind. 5000 KYFR Shenandoah, IA 1000d WTCW Whitesburg, Ky. 5000d
WKMK Blountston, Fla. 1000d WKIS Orlando, Fla. 5000 KYME Boise, Idaho 500d WVLN Olney, IL 250d	WDSC Dillon, S.C. 1000d WEAB Greer, S.C. 250d WDEH Sweetwater, Tenn. 1000d KDDD Dumas. Tex. 250d	W GTL Kannapolis NC 1000d W H O A San Juan, P.R. 5000 KJIM Forth Worth, TX 250d W FLO Farmyille, Va. 1000d	WBOX Bogalusa, La. 1000d KTOC Jonesbere, La. 1000d WPTX Lexington Park, Md, 5000 WMPL Hancock, Mich. 1000d KDHL Farlbault MN 5000
KBOE Oskafosa, lowa 250d WNOP Newpert, Ky. 1000d WCAS Cambridge, Mass. 280d KBAD Carlebad NM 1000r WGSM Huntington, N.Y. 5000d	WSVS Crewe, Va. 5000d KQIN Burien, Wash. 5000d WKEE Huntington, W.Va. 5000d	880—340.7 KRVN Lexington, NE 50000 WCBS New York, N.Y. 50000	KWAD Wadena, Minn. 1990 KWK St. Louis, MO KWYS W. Yellowstone, Mont. 1990 KORK Las Vegas, Nev. 3000 KOLO Rene. Nev. 5000d
WMBL Morehead City, N.C. 1000d WPAQ Mount Airy, N.C. 10000d	810-370.2 KGO San Francisco, Calif. 50000	WRRZ Clinten, NC 1000d WRFU Worthington, Ohio 5000d 890—336.9	WTTM Trenton, N.J. 1000 WKRT Cortland, N.Y. 1000
WYCH Chester, Pa. 1000d 1000d WIAC San Juan, P. Riee 10000 WBA, W Barnwell, S.C. 1000d WIRJ Humbolt, Tenn. 250d WBGY Tullahoma, TN 250d KTRH Houston, Tex. 50000	KWSR Riffe, Colo. 1000d WBLW Royston, Ga. 250d WATI Indianapolis, Ind. 250d	WLS Chicago, III. 50000 WHNC Henderson, N.C. 1000d KBYE Okla. City, Okla. 1000d	WGHQ Kingston, N.Y. 5000d WIRD Lake Placid, N.Y. 5000d WBBB Burlington-Graham. N.C. 5000d WPTL Canton, N.C. 5000d
KTRH Houston, Tex. 50000 KCMC Texarkana, Tex. 1006 WBCI Williamsburg. Va. 5004 WRNR Martinsburg WV 1000d WB00 Baraboo, Wis. 2504	WYRE Annapolis, Md. 250dd WSJC Magee, Miss. 500do WJPW Rockford, Mish, 500dd KCMO Kansas City, Mo. 500dd KAFE Santa Fe N M 5000d	900—333.1 WATV Birmingham AL 1000d WGOK Mobile AL 1000d	WMNI Columbus, Ohio 1000 KGAL Lebanon, Oreg, 1000 WKVA Lewistown, Pa, 1000 WJAR Providence, R.I. 5000 WTND Orangeburg, S.C. 1000d
750—399.8 KFQD Anchorage AK 50000r	WGY Schencetady, N.Y. 50000 WKBC N. Wilkesboro, NC 10000 WCEC Rocky Mount, N.C. 10000 WEDO McKessport, Pa. 10000	WOZK Ozark AL 1000d KFRB Fairpanks AK 10000 KHOZ Harrison AR 1000d KBIF Fresno, Calif. 1000d KGRB West Covins. CA 500d	KKLS Rapid City, SD 5000d WLIV Livingston, Tonn. 1000d KELP El Paso, Tex, 1000 KYXX Odessa, TX 1000r
WSB Atlanta, Ga. WBMD Baltimera, Md. 1000d KMMS Grand Island, Neb. 10000d WHEB Portsmouth, N.H. 1000d KSEO Durant, Okla, 250d	KBHB Sturgis, SD. 5000d WMTS Murfreesbore, TN 5000d WPED Crezat, VA 500d	WJWL Georgetown, Uel. 1000d WSWN Belle Glade, Fia. 1000d WMOP Geata, Fia. 1000d WJTH Calhoun, GA	KTLW Texas City, Tex, 1000d KVEL Vernai, Utah 5000d KITN Olympia, WA KXLY Spokane, Wash.
KSEO Durant, Okia, 250d KXL Portland, Oreg, 50000d WPDX Clarksburg, W.Va. 1000d	WDMP Dodgeville. Wis. 1000d WJJQ Temahawk, WI	WEAS Savannah, Ga, 5000d KSGL Wichita, KS WF1A Louisville, Ky. 1000d	WMMN Fairmont, W.Va. 5000 WOKY Milwaukee, Wis. 10000
KFMB San Diego, Cal. 5000 KGU Honolulu, Hawali 10000 WJR Detroit, Mich. 50000 WCPS Tarboro, N.C. 1000d	WAIT Chicago. III. 5000d WIKY Evansville, IN 2500d WOSU Columbus, Ohio 8000d WBAP Ft. Worth, Tex, 50000	WLSI Pikeville, Ry. KREH Oakdale, La. 250d WKXA Brunswick, ME 1000d WLMD Laurel, Md. 1000d WATC Gavlord, Mich. 1000d	WJBY Gadsden, AL 5000d KTKN Ketehikan AK 5000r KAPR Douglas, AZ 2500d KAFF Fiagstaff AZ 5000d
WORA Mayaguez, P.R. 5000 770—389.4	830—361.2 KIKi Honolulu, Hawaii 10000	KTIS Minneapolis, Minn. 1000d WDDT Greenville, Miss. 1000d KFAL Fulton, Me. 1000d KJSK Columbus, Nebr. 1000d WBRV Boomville, N.Y. 1000d	KHJ Los Angeles, Calif. 5000 KEWQ Paradise, CA 5000 KIUP Durango, Cole. 5000 WHD Mifford, Del. 5000 WHAN Haines City, Fla 5000
KTWG Agana, Guam KUOM Minneapelis, Mine. 58004 WCAL NorthBeld, Minn. 50004 WEW St. Louis, Mo. 10004	WCCO Minneapolis-St. Paul, Minn. 50000 KBOA Kennett, Mo. 1000d WNYC New York, N.Y. 1000d	WKAJ Saratoga Springs. N.Y. 250d WKIK Granite Falis, N.C. 500d WAYN Rockingham, N.C. 1000d	W KXY Sarasota, Fla. 1000 W KXY Sarasota, Fla. 1000 W M G R Bainbridge, Ga. 5000 KSEI Pocatello, Idaho 5000
KOB Albuquerque, N.Mex. 50000 WABC New York, N.Y. 50000 KXA Seattle, Wash. 1000d	840-356.9 WMOB Mobile AL 1000d	WNYN Canten, Ohio 500d WFRO Fremont, Ohio 500d WCPA Clearfield, Pa. 1000d	WHON Centerville, Ind. 5006
780-384.4 KNOM Nome AK 10000r	WRYM New Britain, Conn. 10004 WHAS Louisville, Ky, 50000	WFLN Philadelphia, Pa. 1000d WKXV Knoxville. Tenn. 1000d	WFMD Frederick, Md. 5000 WREB Hotyoke, Mass. 5000 WBCK Battle Creek, Mich. 5000

Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
KKIN Aitkin, Minn. 1000d WSLI Jackson, Miss. 5000 KWOC Poplar Bism. Mo. 5000 KYSS Missouls, Mont. 5000d KOSA Ogalisis, NE 500 KOCC Carisbad, N.M. 1000d WWNH Rochester, N.H. 3000	KROF Abbeville, La. 1000d WBOC Salisbury, Md. 5000 WFGL Fitchburg, Mass. 1000 WHAK Regers City, Mich. 5000d KLTF Little Falls, Minn. 5000d WABG Greenwood, Miss. 1000 KFVS Cape Girardeau, Mo. 5000 KFUN Baker. Mont. 50000	KUTI Yakima, Wash. 5000d WHAW Weston, W.Vs. 1000d WCUB Manitowoc. Wis. 1000d WNBI Park Fails. Wis. 1000d WPRE Prairie du Chien, Wis. 1000d	KTNQ Los Angeles, CA 5000 WCIL Carbondale, III. 1000d WPED Peorla, IL 10000d KBCR Raswell, NM 50000 KDKA Pittsbursh, Pa. 50000
WPAT Paterson, N.J. 5000 WBEN Buffalo, N.Y. 5000 WIZR Johnstewn, N.Y. 10000 WSOC Charlotte, N.C. 5000 WITN Washington, N.C. 5000 WEOL Elyria, Ohio 1000 WKY Oklahoma City, Okla, 5000 KAGI Grants Pass, Oreg. 5000	KNES Scottsbluff-Gering, NE 1000r KWYK Farminton, N.Mex. 1000d WEAV Plattsburg, N.Y. 5000 WFTC Kinston, N.C. 5000 WWST Wooster, Ohio 1000d KGWA Enid. Okla. 1000	990—302.8 WEIS Centre AL 250d WWF Fayette AL 1000d WTCB Fiomaton AL 500d KTKT Tuesen AL 5000r KTYD Santa Barbara. CA 1000d	WBZ Boston, Mass, 50000 KCTA Corpus Christi, Tex. 50000 KANC Anchorage, AK 10 000 WOSO San Juan, PR 10,000 KTWO Casper, WY B0000
KSWB Seaside, Ore. 1000d WCNR Bloemsburg, Pa. 1000d WEKO Cabe Roje, PR 300 KSDN Aberdeen, SD 5000r WSEV Sevierville, Tenn. 5000d KDET Center, Tex. 1000d KLTE Terrell Hills, Tex. 5000 WLLL Lynchburg, Va. 3000d	KLAD Klamath Falls OR 5000d WHYL Carliste, Pa. 5000d WKZA Kane, Pa. 1000d WATS Sayre, Pa. 1000d WBEU Beaufort S.C. 7000d WBMC McMinnville, Tenn. 500d KIMP Mt. Pleasant. Tex. 5000 KGKL San Angelo, Tex. 5000	KLIR Denver, Cole. 1000d WHYY SouthIngton, Conn. 500d WHOD Orlando, Fla. 50000 WDWD Dawson, Ga. 1000d WGML Hinesville, Gs. 250d WGUN Atlanta GA 50000d KPOI Honolulu, HI 990 WGAZ Carthage, III. 1000d	KHUH Honolulu, HI 10000 WHO Des Moines, Iowa 80000 KPBC Dallas, TX 1000d 1050—285.5 WFFS Alexander City, Ala. 1000d WCRI Scottaboro AL 280d
KBFW Bellingham, Wash. 5000d KQ0T Yakima, Wash. 1000d WGNT Huntinton, w.va. 5000 KR0E Sheridan, Wyo. 1000d WLBL Auburndale, Wis. 5000d	WFIR Roanoke, Va. 5000 KALE Richiand, Wash. 1000 WTCH Shawane, Wis. 1009 970-309.1	WITZ Jasper. Ind. 1000d WERK Muncle. Ind. 250d KAYL Storm Lake. Iowa KRSL Russell. Kans. 250d WNNR New Orleans LA 250d KRIH Rayville, La. 250d WRNN Clare. MI 250d WARD Waynesboro, Miss. 1000d	KSOH Little Rock AR 1000 KBBV Big Bear Lake, CA 250d KOFY San Mateo. Calif. 1000d KWSO Wasco. Calif. 1000d WISB Crestview. Fla. 1000d WHBO Tampa, Fla. 250d WAUG Augusta. Ga. 5000d
KMGX Tueson, AZ KFRE Fresne, Calif. 50000 WINE Brockfield, Ceon. 1808d WLQH Chieffand, Fia. 500d WINZ Miami, Fia. 50000 WMAZ Macon, Ga. 10000 KAHN Walpahu, Hawali KMIX Mount Vernen, IL 30000	WERH Hamilton, AL 5000d WTBF Trev AL 5000r KIAK Fairbanks AK 5000 KVWM Show Low AZ 5000d KNEA Jonesbern AR 1000d KUZZ Bakersville, CA 1000 KCHV Coachella, CA 5000r KBEE Modesto, Calif. 1000	KRMO Monett. Mo. 250d WETE Southern Plnes, N.C. 5000d WBTE Windsor NC WIEH Gallipolis. Ohle WTIG Massilion. Ohle KRKT Albany. Ores. 250d WUSC Someract, Pa. WYSC Someract, Pa. WPRA Mayaguez. P.R. 1690	WMNZ Montezuma, Ga. 250d WDZ Decatur, III. 1000d WTGA Plymouth. Ind. 250d KUPK Garden City, Kan. 5000d WNES Central City, Ky. 300d KLPL Lake Providence. La. 250d KLPI Villa Platte. LA 250d WMSG Oakland. Md. 500d WGAY Silver Spring MD 1000d
KIDA Des Moines IA 1000pr WCND Shelbyville, Ky. 250d WIDG St. Ignace, Mich. 3000d WJDR South Haven, Mich. 1000d WCPC Houston MS KSMW Aurora, Mo. KVSH Valentine, Nebr. 5000d WKYK Burnaville, NC 1000ls	WOZN Jacksonville, Fla. 10008 WFLA Tampa, FL WIIN Atlanta, Ga. 50001 WV0P Vidalia, Ga. 50001 KPUA Hilo, Hawali 5000 KAYT Rupert, Idaho WMAY Springfield, III. 1000 WAVE Louisville, Ky. 5000	WLKW Providence. K.I. 50000d WNOX Knoxville, Tenn. 10000d KVAM Memphis, Tenn. 10000d KTRM Beaument. Tex. 1000 KAML Kenedy-Karnes Clv. Tex. 250d KNIN Wichita Falls, Tex. 10000	WPAG Ann Arbor, Mich. 5000d KLOH Pipestone, Minn. 1000d WACR Columbus. Miss. 1000d KMIS Portageville, Mo. 1000d KSIS Sedalla. Me. 1000d WBNC Conway, N.H. 1000d
WFNC Fayetteville NC 500000000000000000000000000000000000	KSYL Alexandria, La. 1000 WCSH Pertland. Maine 5000 WAMO Abordeen, Md. 5001 WESO Southbridge. Mass. 1000d WUPY Ishpeming M1 WKHM Jackson. Mich. 1000 KKAQ Austin. Minn. 5000 WRKN Brandon M1 1000d	WNRV Narrows- Pearlshurg, Va. 5000d WANT Richmond, Va. 1000d WNNO Wiscensin Delis, WI 500d 1000—299.8	WYBG Massena, N.Y. 1000d WHN New York, N.Y. 50000 WFSC Franklin, N.C. 1000d WLON Lincolnton, N.C. 1000d WWGP Sanford, N.C. 1000d WZIP Cincinnail, Ohio KCCO Lawton, Okia. 2500 KFMJ Tulsa, Okia. 1000d
WIPR San Juan, P.R. 10000 WECO Wartburg, TN 10000 KIXZ Amarillo, Tex. 5000 KTON Betton, Tex. 1006d KADO Texarkana, TX 25006 KBRE Cedar City, UT 100001 WNRG Grundy, Vs. 1006 WEOO Smithfield, VA 1000 WFAW Ft. Atkinson. Wis. 5006d WCSW Shell Lake, Wis. 1000d	KOOK Billins, Mont. 5000 KJLT No. Platte, Nebr. 5000d KVEG Las Vegas, Nev. 5000 WWDJ Hackensaek, NJ 8000 KDCE Espanola, N. M. 1000d WEBR Buffalo, N.Y. 5000 WCHN Norwieh, N.Y. 5000 WRCS Ahoskie, N.C. 1000d WWTAY Fargo, N.Dak. 50000	WYOY Huntsville AL 10000d WQTY Mentgomery AL 5000 KMLO Vista. Cat 1000d WYOK Soperton, GA 1000d WYOK Soperton, GA 1000d WCFL Chicago, III. 50000 WREM Jenkins, Ky. 1000d WOOP Danville, KY	KORE Eugene, Ore. 1000d WBUT Butler, Pa. 250d WSKE Everett, Pa. 250d WLYC Williamsport, Pa. 1000d WCGB Pastillo, P.R. 1000d KIXS Killeen TX 280d WJAL Conway, 8C KPXE Liberty, Tex. 250d
950—315.6 WLSQ Montgomery, AL 1000 KRXA Seward AK 1000 KSRM Soldotha AK 5000 KXJK Forrest City AR 5000d KFSA Fort Smith AR 1000c	WARD Ashtabula, Onto 5000 KAKC Tulsa, Okla, 1000 KYTE Portland, OR 5000 WBLF Bellefonte, PA 1000d WWSW Pittsburgh, Pa, 5000	WXTN Lexington, Miss. 5000d KOTD Piattsmouth, Neb. 250d WRNJ Hackettstown, NJ 1000d WIGT Horsehoads, N.Y. 1000d WKBQ Garner, NG 1000d WSPF Hickory, N.C. 5000d KKIM Albuquerque NM 10000d WHTH Heath, Ohlo 250d	KCAS Slaten, Tex. 250d WGAT Gate City, Va. 1000d WBRG Lynchburg, Va. 1000d WCMS Norfolk, Va. 5000d KBLE Scattle WA 5000d WADC Parkersburg, WV 5000d WOKI EAL Clairs, Wis. 1000d WKAII Multane Wis. 1000d
KAHI Auburn, Galif. 50003 KIMN Denver, Colo. 5000 WLOF Orlando, Fla. 50004 WGTA Summerville, Ga. 50004 WGOV Valdesta. Ga. 50004 KBRJ Boles ID 50004 KLER Orofino. Ida. 1000	KIXL Austin, TX 1000d KBSN Grane, Tex. 1000d KNOK Ft. Worth, Tex. 1000d WSTX Christiansted, V.I. 8000 WYPR Danville, Va. 1000d WANV Waynesbero, Va. 5000 WANV Waynesbero, Va. 5000 WWYO Pineville, W.Va. 1000d WHA Madison, Wis. 5000d WAKX Superier, WI 1000d	WIOO Carliste, Pa. 1000 WKYB Hemingway, S.C. 1000dd WGOG Wahaila, S.C. 1000dd KSTA Coleman, Tex. 250d WKDE Altavista, Va. 1000d	WLIP Kenosha. Wis. 250d KWIV Douglas. WY 1000r 1060—282.8 KUPD Tempe AZ KPAY Chice. Calif. 10000 KLMO Longmont. Colo. 100000 WRMF Titusville, FL 10000r
WXLW Indianapolis, Ind. 5000d KOEL Oelwein, Ia. 5000 KJRG, Newton, Kans. 5000 WYWY Barbourville, Ky. 1000d WAGM Presque isle, Maine 5000 WXLN Potomac-Cabin John, WRYT Boeton, Mass. 5000d WRYT Boeton, Mass. 5000d	980—305.9 WKLF Clanton AL WXLL Big Delta, Alaska 100 KFWJ Lake Havasu City AZ 500d KCAB Dardanile AB 1000d	WHWB Rutland, Vt. 1000d WVWI Charlotte Amalle, V.I. 1000 KOMO Seattle, Wash. 50000	WRMF Titusville, FL 10000r WXLX Milledgeville, GA 1000d WKNG i aliapotsa, GA 2500d KBGN Caldwell, ID 1000d WMCL McLeansboro, III. 250d WRHL Koeneile, III. 250d WJKY Jamestown, Ky. 1000d WNOE New Orleans LA 50000r WGTR Natick, Mass. 1000d WHFB Banton Harbor-
WRYT Boston, Mass. 5000d WRYT Boston, Mish. 5000d WRJ Detroit. Mish. 5000d KRSI St. Louis Park, Minn. 1900 WBKH Hattlesburg, Miss. 5000d KLIK Jefferson City, Mo. 5000d KMTX Helona, MT 5000d KMTX Helona, MT 5000d WHFN Myde Park, NY 9000d WHFN Myde Park, NY 9000d WIBX Utlea, N.Y. 5000d WIBX Utlea, N.Y. 5000d WPET Greensburg, N.C. 5000d	KEAP Fresno. Cailf. 500d KFWB Los Angeles, Cailf. 5000 KCTY Salinas. Cailf. 1000d KGLN Glennwood Springs. Coto. 100d WSUB Groton Co. 1000d WSUB Wassington O. C. 5000	KLRA Little Rock AR 10000r KCHJ Delano, CA 5000r KCMJ Palm Springs, CA 1000r KIQI San Francisco, CA 10000d KCMP Brush CO 5000r WCNU Crestview, Fia. 10000d WBIX Jacksonville Beach. Fia. 10000d	WEMB West Branch, MI 1000d WKKQ Hibbing, MN 5000d KFIL Preston, Minn. 1000d WKKQ Hibbing, MN 5000d WKKQ Hibbing, MN 5000d WJLJ Tupelo, MS 250d
WAST Scaeburg, Org. 10004 WYCS Roseburg, Org. 10004 WYCS Barnesboro, Pa. 5004 WYEN Philadelphia, Pa. 5000 WBER Moneks Corner, S.C. 5004 WSPA Spartanburg, S.C. 5004 WSPA Spartanburg, S.C. 5004	WDVH Gainesville, Fla. 5000d WTOT Marianna, Fla. 1000d WB0F Pensacola, Fla. 1000d WL00 Pompane Beach, Ia. 1000d WKLY Hartwell, Ga. 1000d WFLP Reseville, Ga. 500d KUPJ Idaho Falis, Idaho 1000d	WINQ Tamps, Fla. 50000d WGUN Atlants, GA WCSI Columbus, Ind. 5000d KSMN Mason City, Iowa KINO Independence, Kans. 250d WMIL Marion, Ky, KDLA DeRidder, La. 1000d WKQT Garyville, La. 5000d	WQWX Mebane, NC 1000d WAP Menree, N.C. 1000d WLAB 8t, Pauls NC 250d WC0K Sparta, N.C. 250d WQ10 Canton, OH 5000d KYW Philadelphia, Pa. 50000 WALD Watterboro, S.C. 1000d KGFX Plears 80
WAGG Franklin, Tenn. 1000d KDSX Denison-Sherman. Tex. 300 KPRC Houston, Tex. 5000 WXGL Lubbock. Tex. 5000 WXGI Richmond Va. 5000 KJR Seattle, Wash. 5000 WERL Eagle River, Wis. 1000d WKAZ Charlesten. W.Va. 5000 WKTS Sheboygan, Wis. 1000d KMER Kemmerer. Wyo. 1000d	KSG M Chester, III. 1000 WITY Danville, III. 1000 KCIJ Shraveport, La. 250d WCAP Lowell, Mass. 1000d WAOP Otsego, Mich. 1000d WAYL Richfield, MN 5000 WAYL Richfield, MN 5000 WAYF McComb, Miss. 1000d	WS10 Baltimore, Md. 1000d WITL Lansing, M'ch. 5000d WMIN Maplewood MN 250d WMOX Meridian, Miss. 10000 KCH1 Chilleothe, Mo. 250d KXEN Festus-8tt. Louis, WCNL Newport, N.H. 250d WINS New York, N.Y. 50000 WABZ Albermarie, N.C. 1000d	WPHC Waverly, Tenn. 1000d KAMA El Paso, TX 1000d KAMA El Paso, TX 5000d KCLT Lockpart. TX 250d KCLT Lockpart. TX 250d KRWT Winters TX 1000d KRSP Salt Lake City. Utah Juutud 1070—280.2
960-312.3	KMBZ Kansas City, Mo. 5000 KVLV Faiton, Nev. 5000d KICA Clovis N. Mex. 1000 WTRY Troy, N.Y. 5000 WTRY Troy, N.Y. 5000 WAAA WinSaiem, N.C. 1000d WONE Dayton, Ohio 5000	WFGW Black Mountain. WELS Kinston, N.C. 50000d WIO1 New Boston, Ohio 1000d WTGC Lewisburg, PA WHIN Gallatin, Tenn. 1000d WORM Savannah, Tenn. 250d	WAPt Birmingham AL 50000r KNX Los Angeles, Calif. 50000 WANM Taliahassee. FL 10000d WIBC Indianapolis, Ind. 50000 KILR Estherville, Iowa 250d KFDI Wiehlta. Kans. 10000 WSRG Elkton. K
WERC Birmingham AL 5000 KOOL Phoenix AZ 5000 KAYR Apple Valley, Calif. 5000d KNEZ Lompoc, Calif. 5000 KABL Caktand, Calif. 5000 WERD Lake City, Fla. 1000d WJCM Sebring, Fla. 1000d WJCM Sebring, Fla. 5000 WRFC Athens, Ga. 5000 KSRA Salmon, Idaho WOLM E. Moline, Ill. 1000d WST South Send, Ind. 5000	WSIX Nashville, Tenn. 5000 KFRD Rosenberg-Richmond.	KDJW Amarillo, Tex. 5000 KODA Houston TX 8000 KKIK Waco-Marlin, TX WELK Charlottesville, VA 1000r WMEV Marlen, Va. 1000d WPM H Portsmouth, VA 5000 WCST Berkeley Sprgs., W., Va., 250d WSPT Stevens Pt., Wis. 1000d	KHMO Hannibal, Mo. 5000 KERR Polsen, MT 25000r WKMB Stirling, NJ 2500d WKDR Plattesburg, N.Y. 5000d WSCP Sandy Creek-Pulaski, NY 1000d WNCT Greenville, N.C 10000
KMA Shenandoah, Iowa 5000 WPRT Prestonsburg, Ky, 5000d	KVRN Sonora TX 10004 KSCV Richfield, Utah 5000d WFHG Bristol, Va. 5000 WMEK Chase City, Va. 5000	1020—293.9	WKOK Sunbury, Penn. 10000 WMIA Arecibe. P.R. 500 WHYZ Greenville. S.C. 50000d

U.S.	AM	STA	TIONS	BY	FREQU	JENCY
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Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
WFLI Leokout Mountain- Chattanooga, TN WDIA Memphia, Tenn. 50000 KWEL Midland, TX 10000 KWEL Midland, TX 10000 KNNN Friona. Tex. WINA Charlottesville, Va. 5000	KMOX St. Louis, Mo. 50000 WWOL Buffalo, N.Y. 1000d KPNW Eugene, OR 50000 KCLE Cleburne. Tex. 250d WVUV Leone, Am. Samoa 10000	1160—258.5 WJJD Chicago, III. 50000d WBGN Barceloneta PR 1000 KSL Salt Lake City, Utah 50000 1170—256.3	KRMC Midwest City OK KBLY Gold Beach, Ores. 1000d KCGS Salem OR WJUN Mexico, Pa. 1000d WRIB Providence, R.I. 1000d WFWL Camden, Tenn. 250d WCPH Etoyah, Tenn. 1000d
WCIR Beekley, W. Va. 10000 WTSO Madison, Wisc. 10000 1080—277.6 WKAC Athens AL 50000 KANC Anchorage, AK 10000 KSCO Santa Cruz. Calif. 10000	KRDU Dinuba, Calif. 1000 KSDO San Diego. Cai. 50000 WPUL Bartow, Fia. 1000d WLBA Gainesville, GA. 10000d WMGA Moultrie. Ga. 10000 KKEI Kailus, Hawali 10000 WWCM Brazil, Ind. 500d KKSI Mt. Pleasant, IA 1000	WCOV Montgomery AL 10000r KJNP North Pole AK 50000 KCBQ San Diego, CA 50000r KLOK San Jose, CA 50000r KLOK San Jose, CA 10000d KUAD Windsor, Cole. 10000d WSNE Cumming, Ga. 10000d KOHO Honoluiu, Hawali 5000 WLBH Mattoon, IL 50000	KZEE Weatherford TX 500d KVLL Weadville. Tex. 250d WLSD Big Stone Gap, Va. 1000d WFAX Falls Church. Va. 5000d KASY Auburn. Wash. 250d 1230—243.8 WAUD Auburn AL 1000r
WTIC Hartford, Conn. 50000 WVCG Coral Gables, Fla. 50000 WFIV Kissimmee, Fla. 50000 WJOE Port St, Joe, Fla. 10000 WJOE Port St, Joe, Fla. 100000 KJOE Honolulu, HI 50000 WPOK Pontiac, Ill. 100000 WPOK Pontiac, Ill. 100000 WN WI Valparaiso, IN 50000	KLEY Wellington, Kan. 250d WKED Frankfort, KY KWKH Shreveport, La. 50000 WGAR Detroit. Mich. 50000 WGUF Minneapolis, Minn. 50000 WGUF Gulfport. MS 500 KBLR Bolivar, Mo. 250d WNEW New York, N.Y. 50000	K Q K I Bayou Vista, LA 250d K STT Davenport, Iowa 1000 W J M Q Norfolk, M A W J C Orleans, Mass. 1000d K O W O W B W W 1000 K J K J Backson M O 250d W G L N Clinton, N C 1000d K F N W Faren, N D 1000d	WJBB Haleyville AL 1000r WBHP Huntsville AL 1000r WHO D Jackson, AL 1000r WNUZ Talladega AL 1000r WTBC Tuscaloosa AL 1000r KIFW Sitka AK 250 KSUN Bisbee, AZ 1000r KAAA Kingman AZ 1000r
KOAK Red Oak, Iowa 250d WKLO Louisville, Ky. 10000 WOAP Owosso, Mleh. 1000d WEGP Carthage. Miss. 250d KYMN Northfield MN 1000d KGCL East Prairie. Mo. 250d KJEL Lebanes. MO 250d WUFO Amherst, N.Y. 1000d WEWO Laurinburg. N.C. 5000d	WPYB Benson, N.C. 1000d WCBX Eden, N.C. 1000d WJTP Newland, NC 1000d WCTM Eaton OH 250d WASP Brownsville PA 5000d WEEO WANG Gallatin, Tenn. 250d WDTM Selmer, Tenn. 250d KWBY Edna TX. 10000d	WHLW Lakewood. N.J. 8000d WBRW Somerville NJ 500d WWLE Cornwall. N.Y. 1000d WWLE Cornwall. N.Y. 250d KV00 Tulsa. 0kla. 50000 WLEO Pence, P.R. 2500 KPUG Bellingham. WA 10,000r WWVA Wheeling. W.Va. 50000 WLKE Waupun, Wis. 1000d	KRIZ Phoenix AZ 1000r KATO Safford AZ 1000r KINO Winslow AZ 1000r KCON Conway AR 1000r KFPW Fort Smith AR 1000r KBTM Jonesboro AR 1000r KCON Cenway, Ark. 1000 KGEE Bakersfield, CA 1000r KWTC Barstow, CA
WKGX Lenolr NC 1000d WWDR Murfressboro, N.C. 1000d KNDK Langdon, N.D. 1000d WMYR Sldney, 0 250d KWJJ Portland, Oreg. 5000d WEEP Pitsburgh. Pa. 5000d WLEY Cayey, P.R. 250 KRLD Dallas, Tex. 50000 WKBY Chatham, Va. 1000d	KBGM Memphis, Tex. 1000d WRRL Rainelle, WV 1000d WISN Milwaukee, Wis. 50000 1140—263.0 KRAK Sacramente, Calif. 50000 KVLI Lake Isabella CA 500d KNAB Burlingten, Cole. 1000d	1180254.1 WLDS Jacksonville, III. 1000d KOFI Kalispell, Mont. 50000 WHAM Rochester, N.Y. 50000	KIBS Bishop, CA 1000r KXO El Centro, CA 1000r KDAC Fort Bragg, CA 1000r KGFJ Los Angeles, CA 1000r KPRL Paso Robles, CA 1000r KRDG Redding CA 1000r KWG Stockton, CA 1000r KEXO Grand Junction, Colo. 1000 KBRR Leadville, Colo. 1000
WZTQ Hurricane, WV 1090—275.1 KAAY Little Rock AR 50000 KNGR Fortuna, Cal. 10000d KAAT Denver CO 50000d WCMG Jacksonville, FL 1000d	WQBA Miami. Fia. 10000 KGEM Boise, Idahe UUUU WSIV Pekin, III. 5000d WAWK Kendaliville. Ind. 250d KNEI Waukon, Iowa WKCM Lewisport, KY WKCM Haweaville KY JKWM Kentwood, MI 5000d	WAYD Dzark AL 1000d KRDS Tolleson AZ 250 KMCW Augusta, AR 5000r KEZY Anahelm, GA 5000r KNBA Vallejo CA 1000d KADE Bouider, CO 1000d WAVS Ft. Lauderdale FL 5000d WDZY Pine Castle-Sky Lake.	KDZA Puebio, Colo. 1000 KBCR Steamboat Springs, CO KGEK Sterling, Colo. 1000d WINF Manchester. Conn. 1000 WGGG Galnesville, Fia. 1000 WONN Lakeland, Fia. 1000 WMAF Madison FL WSBB New Smyrna Beh Florida 1000
WBAF Barnesville, GA 1000d WCRA Effingham, iii. 1000d WGLC Mendota, III, 250d KHAI Henolulu, Hawall 5000 KFWR Fort Wayne, Ind. 1000d KYDB Sloux Center, Iowa 500d KNWS Waterloe, Iowa 100dd WSLG Genzales, LA 500d WBAL Battimore, Md. 50000	NCIE Southwest City, MO 250d WAKK McComb, MS 500 KPWB Piedmont, Mo. 1000d KLUC Las Vegas, Nev. 10000d WCJW Warsaw, NY 1000d WCLW Mansheld, Ohlo 250d KLPR Oklahoma City, Okla. 1000d WBZY New Castle, Pa. 5000d	FL 1190 WHHL Pine Castle-Sky Leke, FL 2506 WGKA Atlanta, Ga, 10000 WOWO Ft. Wayne, Ind. 50000 WANN Annapolls, Md. 10000d WKDX Fram gham. Mass. 1000d WFUP Bay St. Louis MS 5000d KHAD Desote, M0	WNYY Pensacola, Fia. 1000 WCNH Quincy, Fia. 1000d WJNO West Palm Beach FL 1000d WBLJ Datton, Ga. 1000 WXLI Dublin, Ga. 1000 WFOM Marietta, Ga. 1000 WSOM Savannah, Ga. 1000
WILD Beston, Mass. 1000d WMUS Muskegon, Mich, WIID Garden City, Mich. KEXS Excelsior Springs, KESS Excelsior Springs, KBOZ Bozeman, MT WKTE King, N.C. WBZB Selma-Smithfield, NC	WQII San Juan, P. R. 10000 KS00 Stoux Fails, S.Dak. 10000 WIXC Fayetteville, TN 5000d KBUY Fort Wurn, Tex. 50000 KOHC Mineral Wells, Tex. 250d WRVA Richmond, Va. 50000	KWMB Wabasha, MN 1000d KAYO Kansac City MO 1000d KPAR Albuquerque, N, M, 1000d WLIB New York, NY 10000 WSML Graham, N.C. 300d WIXE Monroe, NG 1000d KEX Portland, Oreg. 80000 WRAI Rio Piedras, P.R. 500 WBMJ San Juan, P.R. 1000C	WAYX Wayeross. Ga. 1000 KBAR Burley, Idaho 1000 KORT Grangeville, Ida. 1000 KRXK Rexburg, Idaho 1000 WJBC Bloomington, III. 1000 WJUA Moline, III. 1000 WHCO Sparta, II. 1000 WJOB Hammond. 1000 WSAL Logansport, Ind. 1000
KTGO Tloss, N.D. 1000d WKFI Wilmington, O H 1000d WKFI San German, PR 250 WMTY Greenwood, SC 1000d WKSP Kingstree, S.C. 500d WENR Englewood, Tenn. 1000d WJKM Hartaville, Tonn. 250d WGOC Kingsport TN 1000d	WGEA Geneva AL 1000d WJRD Tuscaroosa AL 5000r KCKY Coolinge AZ 1000 KXLH North Little Hock AR 5000r KIIS Los Angeles CA 5000r KBAI MOTO BAY. CA 5000d KPLS Santa Hosa. Calif. 5000	KOKK Huron, SD 500d KLIF Dallas, Tex. 50000 WAMB Donelson, Tenn. 230d WHMT Humboldt TN 500d 1200—249.9 WOAI San Antonio, Tex. 80000	WTCJ Telf City, Ind. 1000 WBOW Terre Haute, IN 1000d KFJB Marshelltown, Iowa WHIR Danville, Ky. 1000d WHOP Hopkinsville, Ky. 1000r KLIC Monros. La. 1000 WBOK New Orleans LA 1000r KSLO Opelousas, La. 1000
KACO Bellville, TX 250d KKYN Plainview, TX 1000d KANN Ogden, Utah 1000d KING Seattle, Wash. 5000d WISS Berlin, Wis. 500d	KWBZ Englewood, CO 5000d WCNX Middelstown, Gonn. 1990d WDEL Wilmington, Del. 590d WNDEL Wilmington, Del. 590d WTMP Tamps, Fia. 500dd WTMP Tamps, Fia. 500dd WFPM Fort Valley, Ga. 1000dd WKKN Rockford, II. 500dd WKKN Rockford, II. 500dd WKN Rockford, II. 500dd	1210—247.8 KZ00 Henolulu, Hawail 1000 WILY Centralia, III. 1000d WKNX Saginaw, Mich. 10000d WADE Wadesboro, N.C. 10000d WAVI Dayton, Ohio 250d KGYN Guymen, Okta. 10000	WBME Belfast, Me. 250 WQDY Calais ME 1000r WSJR Madawaska, Me. 1000 WITH Battimore, Md. 1000d WCMD Cumberland, MD WMNB No. Adams. Mass. 1000d WESX Salem. Mass. 1000 WNEB Worcester, Mass. 1000 WGLIZ Grand Ranjds MI 1000
KREX Grand Junction. Ceie. 50000 WHLI Hempstead. N.Y. 100000 WWW Cleveland OH 50000 WGPA Betniehem, Pa. 250d	KKUZ Burlingten, Iowa KWKY Des Melnes, Iowa KSAL Salina, Kans. 5000 WMST Mt. Stering, Ky. WLOC Munfordville, Ky. WJBO Baton Houge, La. 5000 WSKW Skowhegan, ME 5000d WACQ Boston, MA 5000d	WCAU Philadelphia, Pa. 50000 WHOY Salinas, PR 1000 1000 1000 1000 WHOY Salinas, PR 1000d WABF Fairhope AL 1000d KVSA McGahae AR 1000d 10000d 1000d 10000d 1000d 1000d 1000d 1000d 1000d 10000d 10000d 1000d 1000d 10000d 10000d 1000	WIRE Iron RIVER, Mich. 1000d WMPP Lapeer, Mich. 1000 WSOD Sit. Ste. Marie, Mich. 1000 WSTR Sturgis. Mich. 1000 WKLK Clouet. Minn. 1000 KGHS Internat! Falls. Minn. 250 KYSM Mankato. Minn. 1000 KMRS Morris, Minn. 1000
WBCA Bay Minette AL 10000d WBIB Centreville AL 1000d KGFL Clinten, AR KAKA Dermett AR 10,000d KIGI Pasadena, CA KPOP Reseville, Cal. WQYK Yampa FL 10000d WEBS Calhour, Ga. 250d	WCEN Mt. Pleasant. Mich. 1000 KASM Albany, Minn. 1000d KRMS Osage Beach, Me. 1000d KSEN Shelby, Mont. 5000 KUFF Albuquerque. NM 5000r WRUN Utica, N.Y. 5000 WBAG Burlington, N.C. 1000d WGBR Goldsboro. N.C. 5000 WGU Cuyahoga Falls. Ohle	KLIP Fowler, Callf, 250d KIBE Pale Alto, Cal. 5000d KKAR Pomona, Callf, 250d KBNO Denver, CO 1000d KSTC Sterling, CO 1230 WCDQ Hamden, Conn. 1000d WKTZ Arlington FL 5000d WCMQ Klassimee, FL 1000d WCMQ Miami, FL 1000d	KTRF Thief RIv. Falls. Minn. 1000 KWNO Winena, Minn. 1000d WHII Bay Spring, MS 1000d WCWMA Corinth, Miss. 1000 WSO Starkville, Miss. 1000 WAZF Yazoo City, Miss. 1000 KODE Jeplin, Mo. 1000
WMBI Chicago, III, 5000d WHYT NoblesvIIIe, IN 500d WK02 Cadlz, Ky, 1000d WCBR Richmond KY 250d KPAL Pineville, LA 500d WUPE Pittsheld, MA 1000d WUNN Mason, MI 1000d WINL Petoskey, Mish. 1000d WKRA Holly Springs, Miss. 1000d WKRA Holly Springs, Miss. 1000d	WIMA Lima, Ohio 1000d 1000 KNED McAlester, Okia. 1000 KAGO Kiamath Falis, Ores. 5000d KKEY Portland, Ore. 5000d WHON Huntingdon. Pa. 5000d WKPA New Kensington. Pa. 1000d WKPA New Kensington. Pa. 1000d	WQSA Sarasota, FL 10000 WCLB Camilla, Ga. 1000d WPLK Rockmart, Ga. 5000 WSFT Thomaston, Ga. 2500 WLPO LaSalle, III. 1000d WKRS Waukegan, III. 1000d WSLM Salem, Ind. 5000d KJAN Atlantic, Iowa 2500d	KWIX Moberly, Mo. 1000d KBMN Bozeman, MT 1000 KBMN Hardin, Mont. 1000 KXLO Lewistown, Mont. 1000 KCLB Libby, Mont. 1000 KTNC Falls City, NE 500r KHAS Hastlnss, Neb. 1000
WKRA Holly Springs, miss 10006 KG1A Humble City, NM 10006 WMH Aslem, NH 50000 WMSQ Warwiek NY 2566 WBT Charlotte, N.C. 50000 WELX Kenia, Ohio 2566 KEOR Atoka, Okia. 50004 KBND Bend. Ores. 10006	WDIX Orangeburg, S.C. 5000 WTYC Reck Hill, S.C. 1000d WSNW Seneca, S.C. 1000d KIMM Rapid City, S.Dak. 5000d WGOW Chattaneoga. Tenn. 5000 WCRK Morristown. Tenn. 1000 WTAW College Station KCCT CorBus Christi. Tex. 1000d KISO El Paso, TX 1000d	KOUR Independence, lowa 250d KOFO Ottawa, Kans. 250d WFKN Franklin, Ky. 250d WEQO Whitley City, KY 1000d KBCL Shreveport. La. 250d WLBI Denham Springs, La. 250d WSME Sanford. Maine 1000d WBCH Hastings, Mich. 250d WAVN Stillwatter, Minn. 5000d	KLAY Las Vegas, Nev. 1000 KCBN Reno. Nev. 1000 WTSV Claremont. N.H. 1000 WCMC Wildwood, N.J. 1000 KALG Alamagordo. N.M. 1000 KOTS Deming NM KYVA Gailup. N.Mex. 1000 KFVN Las Vegas, N.M. 1000
WJSM Martinsburg, Pa. 1000d WNAR Norristown, PA. 50000d WJP Caguas, P.R. 250 WHIM Providence, R.I. 1000d WSLV Ardmore, Tonn. 1000d WUAT Pikesville, TN 250d KDRY Alamo Heights, Tex. 1000d WZAM Norfolk VA 50,000	KYIL Highland Park, 1ex. 1000d KIBC Midland, Tex. 1000d KSUZ Port Neches, TX 500d KOLJ Quanah, Tex. 500d KQAM San Antonio, TX 1000d KNOI Puliman, WA 1000d KAYO Seattle, Wash. 5000 WABM Churchville, VA 1000d	WMDC Haze/hurst, Miss. 250d KZYM Cape Girardeau, Mo. 250d KBHM Branson. Mo. 1000d KLPW Unlon. Mo. 1000d WLBK Keene, N.H. 1000d WGNY Newburgh, N.Y. 5000d WSOQ N. Syracuse, N.Y. 1000d WKMT Kings Mrn. N.C. 1000d WREV Reidsville, NC. 1000d WEDC Whiteville, N.C. 5000d KDDR Cakes. ND 1000d	WNIA Cheektowaga, N.Y. 500 WENY Elmira, N.Y. 1000 WIGS Geuverneur, N.Y. 1000 WHUC Hudson, N.Y. 1000 WLFH Little Falls, N.Y. 1000 WFAS White Plains, N.Y. 1000 WFAY Asheville, N.C. 1000 WFAI Fayetteville, N.C. 1000 WMFAR High Paint, N.C. 1000
1120—267.7 WUST Washington DC 1009d	WELC Welen, W.Va. 1000d WYNE Appleton, Wisc. 1000 WAXX Chippewa Falle, Wis.	WENC Writeville, N.C. 3000d KDDR Oakes, N.D. 1000d WGAR Cleveland, Ohio 50000 WERT Van Wert, Ohio 250d	WMFR High Point, N.C. 1000 WISP Kinston, N.C. 1000 WNNC Newton, N.C. 1000 WCBT Roanoke Rap., N.C. 1000

Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
WYOW Logan, W.Va. 5000 KAPY Port Angeles. Wash. 1000d WZUU Milwaukee WI 1000d WCOW Sparta, WIs. 5000d KOWB Laramie. Wyo. 5000 WRRA Fredericksted, VI 500d	WRR Dalias, Tex. 5000 KOYL Odessa, Tex. 1000d KBUC San Antonio, Tex. 5000 WEEL Fairfax, Va. 5000 WGH Newport News, Va. 5000 KARY Prosser, Wash. 1000d WSLW White Sulphur Springs, WV	WESR Tasley, Va. 5000d KMBI Spokane, WA 5000d WETZ New Martinsville, W.Va. 1000d WHBL Sheboygan, Wis. 5000 KOVE Lander, Wyo. 5000	WOYL Oil City, PA WHAT Philadelphia. Pa. 1000 WRAW Reading. Pa. 1000 WTRN Tyrone. Pa. 1000 WBRE Wilkes.Barre. Pa. 1000 WWPA Williamsport. Pa. 1000 WUNA Aquadilia. P.R. 250 WOKE Charleston, S.C. 1000
1300—230.6 WBSA Boaz, AL 1000d	WIBA Madison, Wis. 5000	1340—223.7 WKUL Culiman AL 1000r	WRHI Rock HIII, S.C. 1000 WSSC Sumter, S.C. 1000
WTLS Tallassee, AL 1000d WEZQ Winfield AL 1000d KHAC Window Rock AZ 1000r KWCK Searcy, AR 1000d	WENN Birmingham, AL 5000d WAGF Dothan, AL 1000 KAWC Yuma, AZ 500d	WXOR Florence AL 1000r WAMA Selma AL 1000r WFEB Sylacauga AL 1000r KIKO Miami AZ 1000r	KIJV Huron, SD 1000r KTOQ Rapid City, SD 1000 WBAC Cleveland, Tenn. 1000 WKRM Columbia, Tenn. 1000
KROP Brawley, CA 1000r KYNO Fresno, Calif. 5000 MHB Menuocino, CA 5000d KWKW Pasadena. CA 5000r KVOR Colorado Springs, Colo.	KWHN Fort Smith AR 5000 KRLW Walnut Ridge, AR 1000d KHSJ Hemet. Calif. 500d KLAN Lemoore, Calif. 1000d KUDE Oceanside, Calif. 500	KFBR Nogales AZ 250 KPGE Page AZ 1000r KBTA Batesville AR 1000r KZNG Hot Springs AR 1000r KCAT Pine Bluff AR 1000r	WGRV Greeneville, Tenn. 1000 WKGN Knoxville, Tenn. 1000 WLOK Memphis, Tenn. 1000 WCDT Winchester, Tenn. 1000 KWKC Abilene, Tex. 1000
WAVZ New Haven, Conn. 1000 WRKT Cocoa Beach, Fia. 5000 WFFG Marathon, Fia.	KCRA Sacramento, Callf. 5000 KAVI Rocky Ford, Colo. 1000d WATR Waterbury, Conn. 5000 WGMA Hollywood, Fla. 5000	KBRS Springdale, AR 1000r KATA Areata CA KWXY Cathedral City, CA 1000r KMAK Fresno, Calif. 1000	KHLB Burnet TX 1000 KAND Corsleana. Tex. 1000 KSET El Paso, Tex. 1000 KLBK Lubbock, Tex. 1000
WSOL Tampa, Fia. 5000d WMTM Moultrie, Ga. 5000d WNEA Newnan, Ga. 500d	WYOJ Jacksonville, Fla. 5000 WAMR Ventee, Fla. 5000 WHIE Griffin, Ga. 5000d WKAN Kankakee, III. 1000	KDOL Mojave, CA 500r KSFE Needles CA 1000r KORV Oroville CA 1000r KATY San Luis Oblspo, CA 1000r	KRBA Lufkin, Tex. 1000 KPDN Pampa, Tex. 1000 KOLE Port Arthur, TX 1000r
KOZE Lewiston, Idaho 5000 WTAQ La Grange, III. 5000 WFRX W. Frankfort, III. 1000d	KMAQ Maquoketa, Iowa 500d KLWN Lawrence, Kans. 500d	KIST Santa Barbara CA 1000r KOMY Watsonville, CA 1000r KDEN Denver, Coto. 1000	KVIC Victoria TX 250 KMTI Manti, VT WTWN St. Johnsbury, Vt. 1000
WHLT Huntington, Ind. 500d WAAC Terre Haute, Ind. 500d KGLO Mason City, Iowa 5000 WBLG Lexington, Ky, 1000 WIBR Baton Rouge, LA 50001s	WBRT Bardstown, KY 1000d WCLU Covington, Ky, 500d WNGO Mayfield, Ky, 1000d KIKS Sulphur, LA 500	KQIL Grand Junction, Colo. 1000 KVRH Salida, Colo. 1000 WFAN Washington, DC 1000r WNHC New Haven, Conn. 1000	WSTA Charlotte Amalie, V.I. 250 KMTI Manti, UT 1000r WKEY Covington, Va. 1000 WHAP Hopewell, Va. 1000
WIBR Baton Rouge, LA 50001s KFLO Shreveport, LA 500 WFBR Baltimore, MD 5000 WCTN Potomae-Cabin John MD	WICO Salisbury, Md. 1000d WARA Attleboro, Mass. 1000 WILS Lansing, Mich. 5000	WTAN Clearwater, FL 1000 WSLC Clermont FL 250d WROD Daytona Bch., Fla. 1000	WJMA Orange, Va. 1000 KAGT Anatortes, Wash. 1000 KOTY Kennewick, WA 1000 KAPA Raymond, Wash. 1000
WOOD Grand Rapids, Mich. 5000 WQPM Princeton, MN 1000d	WDMJ Marquette, Mich. 1000 WRJW Picayune, Miss. 5000d WKPG Port Gibson, MS 500d	WTYS Marlanna, Fla. 1000 WPBR Palm Beach, FL 1000r WSEB Sebring, Fla. 1000	WWW Wenatchee, WA 1000r WHAR Clarksburg, W.Va. 1000 WEPM Martinsburg, W.Va. 1000
WRBC Jackson, Miss. 5000 KMMO Marshall. Mo. 1000d KBRL McCook. NE 5000d KPTL Carson City, NV 5000r	WVLY Water Valley, Miss. 500d KOZY Grand Rapids MN 5000 KXLW Clayton, MO 1000 KOLT Scottsbiuff, Nebr. 5000	WFSH Valparalso, Fla. 1000 WIGO Atlanta, Ga. 1000 WGAU Athens, Ga. 1000 WBBQ Augusta GA 1000r	WMON Montgomery, W.Va. 1000 WXEE Welch, WV 1000 WLDY Ladysmith, Wis 1000 WRIT Milwaukee, Wis. 1000
WPNH Plymouth, NH 1000d WTNJ Trenton NJ 5000d WOSC Fulton, N.Y. 1000d	KPDD Roswell, NM 1000d 5000d WHHO Hornell NY 5000d WAGY Forest City, N.C. 1000d WCOG Greensboro, N.C. 5000	WGAA Cedartown, Ga. 1000 WOKS Columbus, Ga. 1000 WBBT Lyons, Ga. 1000 WTIF Titton, Ga. 1000 KSKI Halley, Idaho 1000 KAIN Nama, Idaho 1000	KSGT Jackson, Wyo. 1000 KYCN Wheatland, Wyo. 250 KWOR Worland, Wyo. 1000
WQBK Rensselaer, NY 5000d WGRC Spring Valley, NY 5000d WYNG Goldsboro N.C. 1000d	WKRK Murphy, N.C. 5000d WEEW Washington, N.C. 5000d KHRT Minot, ND 2500d	KACH Preston, ID 1000	1350—222.1 WELB Elba AL 1000d
WLNC Laurinburg, N.C. 500d WSYD Mt. Airy, N.C. 5000 WERE Cleveland, Ohio 5000 WMVO Mt. Vernon, Ohio 500d	WHOK Laneaster, Ohio 1000d WOPL Oherlin, OH 1000 KWOE Clinton, Okla. 1000d KATR Eugene, Ore. 1000d	WSOY Decatur, 111. 1000 WJPF Herrin, 111. 1000 WJOL Joliet, 111. 1000 WBIW Bedford, Ind. 1000 WTRC Eikhart IN 1000	WGAD Gadsden AL 5000r WYLS York AL 5000d KLYD Bakersfield, Callf. 1000d KCKC San Bernardino, CA 5000r
KXXO Tulsa, OK KACI The Dalles, Oreg. 1000d KRVB Medford, OR WWCH Clarion, Pa, 500d	WKAP Allentown, Pa. 5000 WGET Gettysburg, Pa. 1000 WKPQ Pittsburgh PA 5000	KROS Clinton, towa 1000 KCKN Kansas City, Kans. 1000	KSRO Santa Rosa, Callf. 5000 KKAM Pueblo, Colo. 5000 WNLK Norwalk, Conn. 1000 WINY Putnam, Conn. 1000d WEZY Cocoa Beach, FL 1000
WHZN Hazleton, Pa, 1000d	WSCR Seranton, Pa. 1000 WUNO Rio Piedras, P.R. 5000 WOIC Columbia, S.C. 5000 KELO Stoux Falls, S.Dak. 5000 WKIN Kingsport, Tenn. 8000d	KSEK Pittsburg, Kans. 1000 WCMI Ashland, Ky. 1000 WBGN Bowling Green, Ky. 1000 WKCB Hindman, KY 1000	W DCF Dade City, FL 1000r WCAI Ft. Myers, Fla. 1000d
WKSC Kershaw, S.C. 500d KOLY Mobridge, S.D. 5000d WMTN Morristown, Tenn. 5000d	WMSR Manchester, Tenn. 5000d KVMC Colo. City, Tex. 1000d KXYZ Houston, Tex. 5000	WNBS Murray, Ky. 1000 WEKY Richmond, Ky. 1000 KVOB Bastrop, La. 1000 KRMD Shreveport, La. 1000	WRWH Cleveland, Ga. 1000d WAVC Warner Robins, Ga. 5000d KTOH Lihue, Hawaii 5000
KVET Austin, Tex. 5000 KKUB Brownfield, Tex. 1000d KLAR Laredo, Tex. 1000	KCPX Salt Lake City, Utah 5000 WCVR Randolph. Vt. 1000d WLGM Lynchburg, Va. 1000d WEET Richmond, VA 5000d	WFAU Augusta, Maine 1000 WDME Dover-Foxereft, ME 1000 WLVC Ft. Kent, ME 250	Clarkston, Wash 5000d WXCL Peoria, III. 1000 WJBD Salem, III. 500d
KKAS Slisbee, Tex. 500d KSTU Logan, Utah 1000 WKCY Harrisonburg, Va. 5000d KMPS Seattle, WA 5000	WRRA Frederiksted, VI KXHO Aberdeen WA 5000r KHIT Walla Walla, Wash, 1000d WFHR Wisconsin Hapids,	WHOU Houlton. Maine 1000 WGAW Gardner, Mass. 1000 WNBH New Bedford, Mass. 1000 WBRK Pittsfield, Mass, 1000	KVRS Rock Springs, Wyo. 1000 KRNT Des Moines, Iowa 5000
WCLG Morgantown, W.Va. 1000d WKLC St. Albans, W.Va. 1000d WLOT Marinette W1 1000d	Wis. 5000	WLEW Bad Axe, Mich. 1000 WLAV Grand Rapids. Mich. 1000 WCSR Hillsdale. MI 1000 WMTE Manistee. Mich. 1000	KMAN Manhattan, Kans. 500d WLOU Louisville, Ky. 5000d WSMB New Orleans, La. 5000 WJEB Gladwin, MI 1000d WHMI Howell, Mich. 500
1310—228.9 WHEP Foley AL 1000d WJAM Marion AL 5000d	WROS Scottsboro AL 1000d KHYT Tucson AZ 500d KVEE Conway AR 500d	WAGN Menominee, Mich. 1000 WMBN Petoskey, Mich. 1000	KCHK New Prague, MN 5000d
	KLUM Lompoc, Cal. 1000d KFAC Los Angeles, Calif. 5000 KLBS Los Banos, Calif. 500d KCLM Redding, Cal. 5000d	KVBR Brainerd, Minn. 1000 KDLM Detroit Lakes, Minn. 1000 WEVE Eveleth, Minn. 1000 KROC Rochester, Minn. 1000	WKCU Corinth, Miss. 1000 WKOZ Kosciusko, Miss. 5000d KCHR Charleston, Mo. 1000d KBRX O'Neill, Nebr. 1000d
KDIA Oakland, Cai. 5000 KTKR Taft, Callf. 1000d KTKR Greeley, Colo. 5000d	WFTP Ft. Pierce, FL 1000r WWAB Lakeland, Fla. 1000d WCVC Tallahasse, FL 5000d	KWLM Willmar, Minn. 1000 WJMB Brookhaven, Miss. 1000 WAML Laurel, Miss. 1000 WKOZ Kosciusko, Miss, 1000d	KDIO Ortonville, MInn. 1000d WCMP Pine City, Minn. 1000d WKCU Corinth. Miss. 1000 WKOZ Kaselusko. Miss. 5000d KCHR Charleston, Mo. 1000d KBRX O'Neili. Nebr. 1000d WLNH Laconia. N.H. 5000d WLNH Laconia. N.H. 5000d WHWH Princeton, N.J. 5000d WGBA Corning. N.Y. 1000d WGBA Corning. N.Y. 5000d WBMS Black Mountain. N.C. 500d
WICH Norwich, Conn. 5000 WKKX Detand FL 5000d WGKR Perry, Fia. 1000d WAUC Wauchula, Fia. 500d	WMLT Dublin, Ga, 5000 WEAW Evanston, III. 5000d	KXEO Mexico, Mo. 1000 KLID Poplar Bluff, Mo. 1000 KSMO Salem, Mo. 1000 KICK Springfield, Mo. 1000	WRNY Rome, N.Y. 500d WBMS Black Mountain, N.C. 500d WHIP Mooresville, N.C. 1000d
WXLL Decatur, GA 500d WOKA Douglas, Ga. 1000d WBRO Waynesboro, Ga. 1000d WZZZ West Point. GA 1000d	WRRR Rockford, III, 1000d WJPS Evansville, Ind. 5000 WTRE Greensburg IN 500d KWWL Waterloo, lowa 5000	KCAP Helena, Mont. 1000 KPRK Llyingston, Mont. 1000 KATL Miles City. Mont. 1000 KYLT Missoula, Mont. 1000	WHIP Mooresville, N.C. 1000d WLLY Wilson, N.C. 1000d KBMR Bismarek ND 10000d WSLR Akron, O. 5000 WCSM Celina, Ohio 500d
KQXE Mesa, AZ KBOK Maivern AR K10T Barstow, Calif. KPOD Crescent City, Calif. KPOD Crescent City, Calif. KPAD Crescent City, Calif. KFKA Greeley, Colo. WICH Norwich, Conn. WKKX Detand FL. WGKR Perry, Fia. WALC Wauchula. Fia. WALL Decatur, GA WOKA Douglas, Ga. WJCL Wauchula. Fia. WALL Decatur, GA WOKA Douglas, Ga. WJCL Wauchula. Fia. WALL Decatur, GA WOKA Douglas, Ga. WJCL Wauchula. Fia. WALL Decatur, GA WOKA Douglas, Ga. WJCL Wauchula. Fia. WHA DOUGlas, Ga. WJCL Wanglas, Ga.	WRAM Monmouth, III. 1000d WRRR Rockford, III. 1000d WJPS Evansville, Ind. 5000 WTRE Greensburg IN 5000 KFH Wichita, Kans. 5000 WYGO Corbin, Ky. 5000d WYGO Corbin, Ky. 1000d WYGO WMOR Morehead, Ky. 1000d WHOT Watham, MA 5000 WHET Watham, MA 5000 WHET Watham, MA 50000 WTRX Flint, Mich. 5000	WEXL Royal Oak, Mich. KVBR Brainerd, Minn. KVBR Brainerd, Minn. KDLM Detroit Lakes, Minn. WEVE Eveleth, Minn. KROC Rochester, Minn. KWLM Willimar, Minn. WJMB Brokchaven, Miss. WAML Laurel, Miss. WAML Laurel, Miss. WKOZ Kosclusko, Miss. WKOZ Heston. WKOZ Hanover, N.H. 1000 WKID Atlantic City, N.J. 1000 WKID Atlantic City, N.J. 1000 KKIT Taos. N.Mex. 250 WKOZ Hanover, N.H. 1000 WMBD Auburn, N.Y. 1000 WKOZ KILK Silver City, N.Mex. 250 WKOZ Hanover, N.M. WKOZ JONO WKOZ HANOVER, MISS. 1000 WMBD Auburn, N.Y. 1000 WKOZ HONOVER, N.Y. 1000 WKOZ HONOVER, N.Y. 1000	NEMR Bismarek ND
WIFE Indianapolis, IN 5000r KFLA Scott City, Kans. 500d WITL Madisonville, Ky. 1000	WHET Waltham, MA 5000 WASA Havre de Grace, Md. 5000d WTRX Flint, Mich. 5000 WLOL Minneapolis, Minn. 5000	KBET Reno, Nev. 1000 WDCR Hanover, N.H. 1000 WMID Atlantic City, N.J. 1000	WZIX York, PA 5000 WWBR Windher, Pa. 1000d WEGA Vega Baja, PR 500 WDAR Darlington, S.C. 1000d
WDOC Prestonsburg, Ky. 5000d KEZM Sulphur, LA 500d KUZN W. Monroe, La. 1000d WLOB Portland, Me. 5000	WFTO Fulton MS 2500d	KHAP Aztec, N.M. 1000 KKIT Taos, N.Mex. 250 KSIL Silver City, N.Mex 1000 WMBO Auburn, N.Y. 1000	WRKM Carthage, Tenn. 1000d KCAR Clarksville, Tex. 500d KTXJ Jasper, Tex. 1000d
WORC Worcester, Mass. 5000 WNIC Dearborn MI 5000 WCCW Traverse City, Mich. 5000d KRBI St. Peter, Minn. 1000d	WJPR Greenville, MISS. 1000 WJDQ Meridian, MS 5000d KUKU Willow Springs, Mo. 1000d WTNJ Trenton, NJ. 5000d KGAK Gallup, N.Mex. 5000 WEVD New York, N.Y. 5000 WEVD New York, N.Y. 5000 WEBO Owego, NY. 5000d WHAD 7 Tray, N.Y. 1000	WENT Gloversyttle- Johnston NY 1000r WKSN Jamestown, N.Y. 250 WLVL Lockport, NY 1000r	KCOR San Antonio, Tex. 5000 WBLT Bedford, Va. 1000d WFLS Fredericksburg, Va. 1000d WNVA Norton, Va. 5000d
WXXX Hattlesburg, Mlss. 1000d KFSB Joplin, Mo. 5000 KEIN Great Fails MT 5000 KGMT Fairbury, Nebr. 500d WJLK Asbury Park, N.J. 1000 WCAM Camden, N.J. 1000d	WWW Havelank N.C. 1000d	WMSA Massena, N.Y. 1000 WALL Middletown, N.Y. 1000 WIRY Plattsburgh, N.Y. 1000 WIRI Lenoir, N.C. 1000	WHNE Portsmouth, VA 5000d WPDR Portage, Wis. 1000d
WJLK Asbury Park, N.J. 1000 WCAM Camden, N.J. 1000d WQTK Parsippany, NJ WYIP Mt. Kisco, N.Y. 5000d	WHOOT Campbell, Ohlo 1900 WFIN Findlay, Ohlo 1900 WKOV Wellston, Ohlo 500d WELW Willoughby, O, 500d KUPL Pottand, OR 5000 WRIE Erie, Pa. 5000 WENA Penuelas, PR 500d WIAT Conway S. 6.	WTSB Lumberton, N.C. 1000 WCBQ Oxford NC 1000r WOOW Greenville, N.C. 1000 WGNI Wilmington, N.C. 1000	WWWB Jasper AL 1000d WLIQ Mobile AL 5000d WMFC Monroeville AL 1000d
WTLB Utics, N.Y. 1000 WISE Asheville, N.C. 5000 WHVN Charlotte NC 1000d	KUPL Portland, OR 5000 WRIE Erie, Pa. 5000 WENA Penuelas, PR 500d WLAT Conway, S.C. 5000	WAIR Winston-Salem, N.C. 1000 KXPO Grafton, ND 1000r WNCO Ashland, O. 1000 WOUB Athens, OH 500r	
WIIK Durnam, N.C. 3000	WEAT Conway, S.C. 5000 WEBC Greenville, S.C. 5000 WAEW Crossville, Tenn. 1000d WTRO Dyersburg, Tenn. 500d	WIZE Springfield, Ohio 1000 WSTV Steubenville, Ohio 1000 KIHN Hugo, Okla. 1000 KOCY Okla, City, Okla, 1000	KFIV Modesto, Cal. 5000 KZIQ Ridgecrest, CA 1000d KGB San Diego, CA 5000r
KNOX Grand Forks, N.Dak. 3000 WFAH Allilance, Ohlo 1000d KNPT Newport, Orep. 5000 WBFD Bedford, Pa. 5000d WGSA Ephrata, Pa. 5000d WNAE Warren, Pa. 5000 WD KD Kingstree, S.C. 5000d WD OD Chattanoga, Tenn. 5000 WD ND Liackson, Tenn. 5000 WBNT Onelda, Tenn. 1000d KYIP Amarillo, Tex. 1000d	WENA Penuelas, PR 500d WLAT Conway, S.C. 5000 WFBC Greenville, S.C. 5000 WARW Crossville, Tenn. 1000d WTRO Dyersburg, Tenn. 500d KMIL Cameron, Tex. 500d KSWA Graham, Tex. 500d KVKM Monahana, Tex. 1000d KVKM Monahana, Tex. 1000d WARA Luray, Va. 1000d WARA Luray, Va. 1000d	KTOW Sand Springs, Okla. 500 KLOO Corvailis, Ore. 1000 KWYR Enterprise, Oreg. 250	W C G L lackson ville, F L 5000 W K AT M I Seach, F la. 5000 W X M G Winter Haven F L 1000d W AZA Bainbridge, Ga. 1000d W AZA Lawrenceville, Ga. 5000 W M AC Metter, Ga. 5000 W Y N Rome, Ga. 5000
WDOD Chattanooga, Tenn. 5000 WDXI Jackson, Tenn. 5000 WBNT Onelda, Tenn. 1000d KZIP Amarillo, Tex. 1000d	WBTM Danville, Va. 5000 WRAA Luray, Va. 1000d WOLD Marign, Va. 1000d	With Lockport, NY 1000 / WMSA Massena, N.Y. 200 / WMSA Massena, N.Y. 1000 / WALL Middlebwen, N.Y. 1000 / WIRY Plattsburgh, N.Y. 1000 WIRY Plattsburgh, N.C. 1000 WTSB Lumberton, N.C. 1000 WCSQ Oxford N. 1000 WCSQ Oxford N. 1000 WGNI Wilmington, N.C. 1000 WGNI Wilmington, N.C. 1000 KXPO Grafton, N.D. 1000 WNCO Ashland, O. 1000 WNTO Sand Springs, Oxla. 1000 KIHN Hugo, Oxla. 1000 KIHN Hugo, Oxla. 1000 KIHN Hugo, Oxla. 1000 KNOY Corvallis, Ore, 1000 KNOY Conselsylite, Pa. 1000 WSAJ Grove City, Pa. 100	WLAW Lawrenceville, Ga. 1000d WMAC Metter, Ga. 500d WIYN Rome, Ga. 500d

Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
WLBK DeKalb, III. WYER Mount Carmel, IL WGFA Watseka, III. KHAK Cedar Rapids, Iowa KBKB Fort Madison, IA KSCJ Słoux City, Iowa KBTO EI Dorado, Kans. WFLW Monticeilo, Ky. KDXI Mansheld, La. KNIR New Iberia, La. KTLD Tallulah, La. WEBB Baltimore, MD WNSR Lynn, MA WKYO Caro, MI WKM Kalamazoo, MIch. KRWC Buffalo MN KKBJ Bemiddi, MN KKBJ Bemiddi, MN KKBJ Bemiddi, MN KKRM Cameron MD KRWC Buffalo MN KKRY Ruddoso, Nbr. WWBY Vineland, N.J. WWBY Conneaut, Ohlo WKOW Conneaut, Ohlo KOHU Hemiston, OR KUIK Hillsboro, Oreg. WILZ McKeesok, Dood KUIK Hillsboro, Oreg. WHA Dodd WYOW Conneaut, Ohlo WWOW Conneaut, Ohlo WWOW Conneaut, Ohlo WHOW Compaul, Ohlo KOHU Hemiston, OR KUIK Hillsboro, Oreg. WILZ McKeesoport, Pa. S000 WCHQ Camuy, PR WCLP Easley, S.C. WCOM WCOM Lancaster, S.C.	KGMS Sacramento, Callf. KTOM Salinas, Cal. KTDM Salinas, Cal. KFLI Walsenburg, Colo. WOWW Naugatuck, Conn. WAMS Wilmington DE WLIZ Lake Worth FL WLCY St. Petersburg, Fla. WAOK Atlanta, Ga. WSIZ Ocilla, Ga. KPOI Honolulu. Hawall WBEL So. Belolt. IiI. WMEE Ft. Wayne IN KCIM Carroll, Ionova KCII Washinston. Ionova KCII	KTUC Tueson AZ KVOY Yuma AZ KVOY Yuma AZ KELD El Dorado AR 1000r KCLA Pine Bluff AR 1000r KRE Berkeley, CA 1000r KRE Berkeley, CA 1000r KREQ Indio, CA 1000r KREY KREY San Luis Obispo, CA 1000r KRIN CANON KRIN CONON KRIN	KBYG Big Spring. Tex. 1000
WELCM Lancaster, S.C. 10000 WBLC Lenoir City, Tenn. 1000 WBLC Lenoir City, Tenn. 1000 KQIZ Amarillo, TX 5000d KQIZ Amarillo, TX 5000d KBUK Baytown, TX 1000 KRYS Corpus Christi, Tex. 1000 KRYS Corpus Christi, Tex. 5000 WBGB Galax, Va. 1000d WBGB Harrisonburg, Va. 5000u KRKO Everett, WA 5000u KMO Tacoma, Wash. 5000u WHO Matewan, W.V. 1000d WMOV Ravenswood, Va. 1000d WGEE Green Bay. WI 1000 WGEE Green Bay. WI 1000 WHSV Viroqua, Wis. 1000d KRKK Rock Springs, WY 1000	KBCH Lincoln City OR	KIGO St. Anthony ID KSPT Sandpoint, Idaho WDWS Champalgn, III. WGIL Galesburg, III. WGL Galesburg, III. WGDZ Evansville, Ind. WGOZ Evansville, Ind. WGOZ Evansville, Ind. KOOG Centerville, Ia. SOO KVPD Fort Dodge, Iowa KVPD Fort Dodge, Iowa KVOE Emporia, Kans. I000 KVPD Hays, Kans. I000 WGYN Cynthiana. Ky. WIEL Elizabethtown. Ky. WFTG Londen, Ky. WFTG Londen, Ky. WFTR Hammend, La. I000 KAOK Lake Charles, 2a. KAOK Lake Charles, 2a. KWLA Many, LA WRDO Augusta. Maine WIOE Biddeford. Maine WMCS Machlas, Me. WWIN Baitimore, Md. WALE Fail River. Mass.	## 1410—212.6 WUNI Mobile AL 5000 WPXC Prattville Al 5000 WZZA Tuscumbla. AL 5000 KTUS Fort Smith AN 1000 KERN Bakersheld, Callf. 8000 KKOL Rompoc, Callf. 8000 KKOL Editor Callf. 8000 KCAL Redlands CA 610. 1000 WPUP Hartford, Colo. 1000 WPUP Hartford, Colo. 1000 WMYR Fort Myers, Fla. 10000 WMYR Fort Myers, Fla. 10000 WMYR Fort Myers, Fla. 10000 WGN Tallahassec. Fla. 5000 WDAX MeRas GA 1000 WHAN Elgin. III. 10000
KAWW Heber Springs AR 1000d KTPA Prescott A 5000d KVPA Prescott A 5000d KVPCO Quiney, Cal. 5000 KEEN San Jose, Calif. 5000 KGEN Tulare, Calif. 1000d WWKE Ocala, Fla. 5000 WCOA Pensacola, Fla. 5000 WCOA Pensacola, Fla. 5000 WLOP Jesup, Ga. 5000 WLOP Jesup, Ga. 1000d WLOP Jesup, Ga. 1000d WLOP Washington, Ga. 1000d WLOV Washington, Ga. 1000d WLOV Washington, Ind. 5000 WLOW WASHINGTON, GA. 1000d KOND Oodge City, Kans. 5000 KINS lota KS WABD Ft. Campbell, Ky. 5000d WGOH Grayson, Ky. 5000d	KFKO Everett, WA 5000 KEZE Spokane, WA 5000d WMTD Hinton, W.Va. 1000d 1390—215.7 WHMA Anniston, AL 5000r KDQN DeQueen AR 500d KAMD Rogers, AR 1000d KGER Long Beach, Calif. 5000 WKFML Denver, Colo. 5000d WAPR Avon Park, Fta. 1000d WAKA Galnesville FL 5000d WINK Americus, Ga. 5000d WTNL Reidsville GA 5000d WYON Chicago, IL 5000 WFIW Fairfield, IL 1000d WJCD Seymour, Ind. 1000d KCLN Clinton, Iowa KCBC Des Moines, Iowa KNCK Concordia, Kans. 5000d	WLLH Lowell, Mass. 1000 WKNR Battle Creek MI 1000 WKNR Battle Creek MI 1000 WKNR Battle Creek MI 1000 WHDF Houghton, MI 1000 WGON MunIsing MI 1000 WSJM Saglnaw, MIch. 1000 WSJM St. Joseph, Mich. 1000 WSJM St. Joseph, Mich. 1000 KEYL Long Prairle, Minn. 1000 WHIP Soneville, MIss. 1000 WHBC Columbus, Miss. 1000 WMBC Columbus, Miss. 1000 WJQS Jackson, Miss. 1000 KJCF Festus, Miss. 1000	WTIM Taylorylle, III. 1000d WAZY Latayette, Ind. 1000d KGRN Grinnell, lowa 500d KCLO Leavenworth, Kans. 5000d KCLO Leavenworth, Kans. 5000d KWBB Wichita, Kans. 5000d WLBJ Bowling Green, Ky. 5000 WLBJ Bowling Ky. 5000d WHAJ Bowling Green, Ky. 5000d WHAJ Borokton, Mass. 1000d WOKW Brockton, Mass. 1000d WOKW Brockton, Mass. 1000d KCFD Litchfield, Minn. 500d KCFD Litchfield, Minn. 1000 WDSK Cleveland, Miss. 1000d WBKN Newton, Miss. 500d KRWB Roseau, Minn. 1000d KRWB Roseau, Minn. 500d KRWC Cuba, MO 1000d KAHL North Platte NB 5000r WHTG Eatontown, N.J. 500d WDOW DUNKIK, N.Y. 1000 WELM Elmira, N.Y. 1000
KAPB Marksville, La, 1000d WDEA Elisworth, Me, 5000 WMHI Braddecks Hts., Md, 500d WZYQ Frederick, MD WXYQ Frederick, MD W MM M Cadillac MI 5000 KSUM Fairmont, MN 1000d KSUM Fairmont, MN 1000d KDAN Minneapolis-1000d KDAN Minneapolis-1000d KDAN Minneapolis-1000d KDAN Minneapolis-1000d KWRT Boonville, Mo, 1000d KWRT Boonville, Mo, 1000d KWRT Bonnille, Mo, 1000d KXLF Butte, Mont. KAWL York, Net N. H. 5000 WKLF Butte, Mont. KAWL York, Net N. H. 5000 WKLF Gastonia. N. C. 5000d WSAP Rochester, N. Y. 5000d KFJM Grand Forks, N. D. 1000d KSJM Grand Forks, N. D. 1000d KSJM Grand Forks, N. D. 1000d WSPD Toledo. Ohio 5000	WANY Albany, Ky. WKIC Hazard, Ky. 5000d KFRA Franklin, La. WEGP Pressue Isle, ME KJPW Waynesboro, MO WCAT Orange, Mass. WCER, Charlotte, Mich. 5000 WCER, Charlotte, Mich. 5000 KAOH Duluth MN 5000 KAOH Duluth MN 5000 KRFO Owatonna, MInn. WROA Gulfport-Blloxl, MS 5000 WTNK Meridian, MS KJPW Waynesboro, Mo. KENN Farmington, N.Mex. 5000 KENN Farmington, N.Mex. 5000 WEOK Poughkeepsle, N.Y. WFBL Syracuse, N.Y. WFBL Syracuse, N.Y. WFBL Syracuse, N.Y. WED Rocky Mount NC WJRM Troy, N.C. WJRM Troy, N.C. WJRM Troy, N.C. WMOO Bellefontaine, Ohlo WMOO MIddlenort-	KSIM Sixeston. Mo. 1000 KTSS Springfield MO 1000 KDRG Deer Lodge MT 1000 KXGN Glendive MT 1000 KARR Great Falls MT 1000 KARR Great Falls MT 1000 KLDW Alliance. Nebr. 1000 KLIN Lincoln. Neb. 1000 KLIN Lincoln. Neb. 1000 KMBI Henderson NV 1000 WRNA Winnemucca NV 1000 WHTL Berlin N.H. 1000 WTSL Hanover, N.H. 1000 WTSL Hanover, N.H. 1000 KTRC Santa Fe, N.M. 1000 KCHS Truth or Consequences, New Mcxlco KTNM Tucumcarl. N.M. 1000 WOND Pleasantville. N.J. 1000 WABY Albany, N.Y. 1000 WSLB Ogdensburg, N.Y. 1000 WSLB Ogdensburg, N.Y. 1000 WBMA Beaufort, N.C. 1000	WEGO Concord, N.C. 1000d WSGC Durham, N.C. 1000d WVGB Shallotte. N.C. 500d KHOL Beulah, N.D 1000d WING Dayton, Ohlo 5000 KPAM Portland OR 5000d WLSH Lansford. Pa. 5000d KQV PIttsburgh, Pa. 5000d WYMB Mannina. S.C. 1000d WYMB Mannina. S.C. 1000d WYMB Mannina. S.C. 1000d KBUD Athens. Tex. 500d KBAN Bowle. Tex. 500d KICH Cleveland, TX 500 KXIT Dalhart. Tex. 500d KKIT Dalhart. Tex. 500d KKIT Odessa. Tex. 1000d KRIG Odessa. Tex. 500d KNAL Victoria, Tex. 500d WIKI Chester, Va. 5000d WRIS Roanoke, Va. 5000d WSCW South Charleston, WV WIZM La Crosse, WI KWY Sherldan, Wyo. 1000
KFJM Grand Forks, N.D. 1000d KVYD Toledo, Ohio KVYL Holdenville, Okla. 500d KAST Astorla. Dreg. 1000d KAST Astorla. Dreg. 1000d WCSC Corry. PA 1000d WFAZ Pottstown, Ps. 1000d WKWC Roarling Spring, Pa. 1000d WIVV Vieques, P.R. 5000 WVFD Wickford, R.I. 5000 WVFD Wickford, R.I. 5000 WOFF Chattanooga. Tenn. 1000d KSUM Fairmont. Tenn. 1000d WOSE Lawrenceburg, Tenn. 1000d WOSE Sogerville, Tenn. 1000d KSUM Fairmont. Tenn. 1000d KSUM Fairmont. Tenn. 1000d WGS Rogerville, Tenn. 1000d KSUM Fairmont. Tenn. 1000d WGS Rogerville, Tenn. 1000d WGS Rogerville, Tenn. 1000d WGS Post. Tex. 1000d KSUM South Hill, Va. 5000d WJWS South Hill, Va. 5000d WJWS South Hill, Va. 5000d WWST Moundsville, WV 5000d WCCN Neillisville, WV 5000d KVWO Cheyenne. Wyo. 1000d	WMPO Middleport- Demeray, 0. 5000d WFMJ Youngstown, 0. 5000 KCRC Enid, 0kla. KSLM Salem, 0reg. 5000 WLAN Lancaster, Pa. 5000 WRSC State College, PA 2500d WISA Isabella, P.R. 1000 WHPB Belton, S.C. 1000d WGSC Charleston, S.C. 5000 KJAM Madison, S.D. 500d WYXI Athens, Tenn 500d WYXI Athens, Tenn 5000 WYXI Athens, Tenn 5000 WTJS Jackson, Tenn, 5000 WTJS Jackson, Tenn, 5000 WKUP El Campo, Tex. 5000 KBLW Logan, UT 50001 WEAM Arilington, Va. 5000 WKUP Keyser, W.Va. 10006 KBLW Logan, UT 5000 WKUP Keyser, W.Va. 10006 KBLW Logan, VT 5000 KBBO Yakima, WA	WSHB Raefard, N.C. 1000 WSIC Statesville, N.C. 1000 WLSE Wallace, N.C. 1000 WHCC Waynesville, N.C. 1000 KEYJ Jamestown, N.Oak, 1000 WPAY Weldon, N.C. 1000 KEYJ Jamestown, N.Oak, 1000 WPAY Portsmouth, Ohlo KWON Bartlesville, Okla, 1000 KNOR Norman, Okla, 1000 KNND Cottage Grove, 0rep, 1000 KJDY John Day, 0re, 1000 WEST Easton, Pa, 1000 WEST Easton, Pa, 1000 WFEC Harrisburg, Pa, 1000 WKBI St, Marys, Pa, 1000 WKBI St, Marys, Pa, 1000 WKBI St, Marys, Pa, 1000 WKAK WIlliamsport, Pa, 1000 WYOZ Carolina, P.R. 500	1420—211,1 WACT Tuscaloosa AL KTAN Sierra Vista AZ 1000r KXOW Hot Springs AR 5000d KPDC Pocahontas AR 1000d KSTN Stockton. Calif. 5000 WLIS Old Saybrook CT WBRD Bradenton, FL WBRD Bradenton, FL WACC St. Augustine, Fla. 5000d WAVO Avondale Estates, Ga. 1000d WAVO Avondale Estates, Ga. WPEH Louisville, Ga. WPEH Louisville, Ga. WLET Toccoa, Ga. KCCN Honolulu, Hawail WIM Murphysboro, IL WIMS Michigan City, Ind. 5000 WJCK Junction City, Kans. 5000 KJCK Junction City, Kans. 5000 KJCK Junction City, Kans. 5000d
1380—217.3 WRAB Arab, AL 1000d WGYV Greenville AL 1000d WYSA Vernon, AL 5000d KZUL Parker AZ 2500d KATO Safford, Arlz. 5000 KDXE N. Little Rock, AR 1000d KKZZ Lancaster GA 1000d	1400—214.2 WMSL Decatur AL WXAL Demopolis, AL WJLD Fairfield AL WFPA Fort Payne, AL WJHO Opelika AL KSEW Sitka, Alaska KCLF Clifton, Ariz. KXIV Phoenix AZ 1000 1000r	WCDS Columbla, S.C. 1000 WGTN Georgetown, S.C. 1000 WKDY Spartanburg, SC KBJM Lemmon, S.D. 1000 WJZM Clarksville, Tenn. 1000 WHUB Cookeville, Tenn. 1000 WKSB Copperhill, Tenn. 1000 WKGAP Maryville, Tenn. 1000 WGAP Maryville, Tenn. 1000 KRUN Ballinger, Tex. 1000	WCTR Ashland, Ky. 5000d WHBN Marrodsburg, Ky. 1000d WVJS Owensboro, Ky. 5000 KFEL Ashlandsburg, Ky. 1000d WBSM New Bedford, Mass. 5000 WBEC Pittsfield, Mass. 1000 WKPR Kalamazoo, Mich. 1000d KTOE Mankato, Minn. 5000 WSUH Oxford, Miss. 1000d

Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
WQRC Vicksburg, Miss. 1000 WiGG Wiggins, Miss. 1000d KBTN Neosho, Mo. 500d	WDOW Dowagiac, MI 1000d WCHB Inkster, MI 1000r KQRS Golden Valley, MN 5000r	KRZY Albuquerque, N.M. 1000 KLMX Clayton, N.Mex. 1000	WEEN Lafayette, Tenn. 1000d KBRZ Freeport, Tex. 500d KBRB Handa Tex. 500d
K 000 Omaha, Nebr. 1000d WASR Wolfeboro NH 2500d KSYX Santa Rosa, N.Mex. 1000d	WRBE Lucedale MS 5000d WSEL Pontotoc, MS 1000d WMVB Millville, N.J. 1000d	KENM Portales, N.Mex. 1000 WCLI Corning, N.Y. 1000 WWSC Glens Falls NY 1000r	KELL Lubbock, Tex. 1000d WACO Waco, Tex. 1000 WPRW Manassas, VA 5000
KSYX Santa Rosa, N.Mex. 1000d WALY HerkImer, N.Y. 1000d WACK Newark, N.Y. 500d WLNA Peckskill, N.Y. 1000d WMYN Mayodan, N.C. 500d	WNYG Babylon NY WJJL Niagara Falls, NY 1000d WSGO Oswego, N.Y. 1000d	WHDL Olean. N.T. 1000 WKIP Poughkeepsie, N.Y. 1000 WKAL Rome, N.Y. 1000 WATA Boone, N.C. 1000	WRAD Radford, Va. 5000 KGAA KIrkTand, WA 5000 KMWX YakIma. Wash. 5000 WBUC Buckhannon, W.Va. 5000d
WGAS S. Gastonia, N.C. 500d WVOT Wilson, N.C. 1000 WHK Cleveland, Unto 5000	WBLA Elizabethtown, N.C. 1000d WBUY Lexington, N.C. 5000 KKXL Grand Forks ND 1000 WHHH Warren, Ohio 5000	WATA Boone, N.C. 1000 WGNC Gastonia, N.C. 1000 WIZS Henderson, N.C. 1000 WHKP Hendersinville, N.C. 1000	WBUC Buckhannon, W.Va. 5000d WRKR Racine. Wi 500d WTMB Tomah WI 1000d
KTJS Hobart, Okla. 1000d KYNG Coos Bay, Oreg. 1000d WCOJ Coatesville. Pa. 5000	KMED Medford, Oreg. 5000 KODL The Dalles, OR 5000	WHIT New Bern, N.C. (000 WFBS Spring Lake, N.C. 1000 KGCA Rugby, N.D. 1000	1470—204.0
WCED DuBols, Pa. 5000 WEUC Ponce, P.R. 1000 WCRE Cheraw, S.C. 1000d	WCDL Carbondale, Pa, 5000d WNPV Lansdale, Pa. 500d WGCB Red Llon, Pa. 1000d WQOK Greenville, S.C. 5000	WJER Dover-New Philadelphia. Ohlo 1000 WMOH Hamilton, Ohlo 1000	WBLO Evergreen AL 1000d KAZM Sedona, AZ 5000d KDEW DeWitt, AR 500d
KABR Aberdeen, S.D. 1000d WEMB Erwin, Tenn. 5000d WKSR Pulaski, Tenn. 1000	WKHJ Holly Hill SC 1000d	WLEC Sandusky. Ohlo 1000 KWHW Altus, Okla. 1000 KGFF Shawnee, Okla. 1000	KUTY Palmdale, Cal. 5000d KNDE Sacramento, Calif. 5000 KSIR Estes Park, CO 1000d
KFYN Bonham, Tex. 250d KLFB Lubbock, Tex. 500d KLUF Lufkin, Tex. 1000	WHDM McKenzle, Tenn. 500d KPUR Amarillo, Tex. 5000 KEYS Corpus Christi, Tex. 1000 KDNT Denton, Tex. 5000	KSIW Woodward, Okla. 1000 KEED Eugene, Ore. 1000 KFLS Klamath Falls OR 1000r	WMMW Meriden, Conn. 1000d WDCL Dunedin, FL 5000d WRBD Pompano Beach, Fla. 5000d
KGNB New Braunfels, Tex. 1000d KPEP San Angelo, Tex. 1000d WWSR St. Albans, Vt. 1000d	KDNT Denton, Tex. 5000 KGVL Greenville, Tex. 1000 KETX Livingston, Tex. 5000d WKLV Blackstone, Va. 5000d	KLBM La Grande, Oreg. 1000 KBPS Portland, Ore. 1000 WWGO Erie, Pa. 1000	WCWR Tarpon Springs FL 5000d WBIT Adel, Ga. 1000d WCLA Claxton, Ga. 1000
WKYY Amherst, VA 1000d WDDY Gloucester, Va. 1000d WKCW Warrenton, Va. 5000d	WOHN Herndon, Va. 1000d KXXR Spokane, WA 5000d WHIS Bluefield, W.Va. 5000	WFRA Franklin, Pa. 1000 WDAD Indiana, Pa. 1000 WPAM Pottsville, Pa. 1000	WRGA Rome, Ga. 5000 WMPP Chicago Heights, IL 1000d WMBD Peorla, III. 5000
KITI Chehalls-Centralia, Wash, 1000d KUJ Walla Walla, Wash, 5000	WAJR Morgantown, W.Va, 5000 WNFL Green Bay, Wis. 5000	WMPT S. Williamsport, Pa. 1000 WMAJ State College, Pa. 1000 WJPA Washington, Pa. 1000	WHUT Anderson, Ind. 1000d KWSL Sioux City, IA 5000 KWAY Waverly, Iowa 1000d
WPLY Plymouth, Wis. 500d	1450—206.8 WDNG Anniston AL 1000r	WCPR Coamo, P.R. 1000 WKRI West Warwick R! 1000d WQSN Charleston, S.C. 1000	KARE Atchison, Kans. 1000 KLIB Liberal, Kans. 1000d WSAC Fort Knox, Ky. 1000d
1430-209.7 WRMG Red Bay AL 1000d WFHK Pall City AL 1000d	WYAM Bessamer AL 1000r WDIG Dothan AL 1000r WFIX Huntsville AL 1000r	WCRS Greenwood SC 1000r WMYB Myrtle Beach, S.C. 1000 WHSC Hartsville S.C. 1000	WFSR Harlan, KY WBFC Stanton KY KTDL Farmersville, La. 1000d
KAMP El Centro, Calif 1000d	WLAY Muscle Shoals AL 1000r KLAM Cordova AK 250 KDAP Douglas, AZ 1000r	KBFS Belle Fourche, S.Dak. 1000 KYNT Yankton, S.D. 1000 WLAR Athens, Tenn. 1000	KLCL Lake Charles, LA 5000 WLAM Lewiston, Maine 5000 WJDY Salisbury, Md. 5000d
KARM Fresno, Calif. 5000 KALI San Gabriel, Cal. 5000 KJAY Sacramento, Calif. 500d KNTA Santa Clara CA 1000	KNOT Prescott AZ 1000r KVSL Show Low AZ 1000r KOPO Tucson, AZ 1000r	WMOC Chattanooga, Tenn. 1000 WDSG Dyersburg, Tenn. 1000 WSMG Greeneville, Tenn. 1000	WTTR Westminster, Md. 1000d WSRO Maribore, MA 1000d WNBP Newburyport, Mass. 500d WKMF Flint, Mich. 6000
KNTA Santa Clara CA 1000 KOSI Aurora, Colo, 5000 WQDI Hemestead, FL 500d WQDD Lakeland FL 5000r	KENA Mena AR 1000r KJWH Camden, Ark. 1000 KYOR Blythe, CA 1000r	WLAF LaFoilette, Tenn. 1000 WGNS Murfreeshoro, Tenn. 1000 KAYC Beaumont, Tex. 1000	WKMF Flint, Mich. 5000 WYYY Kalamazoo, Mich. 500d KANO Anoka, Minn. 1000d WCHJ Brookhaven, Miss. 1000d
WPCF Panama City, Fla. 5000 WGFS Covington, Ga. 1000d WRCD Dalton, Ga. 1000d	KAVA Burney, CA 1000r KOWN Escondido CA 1000r KPSI Palm Springs, CA 1000r	KBEN Carrizo Springs TX 1000r KCT1 Gonzales, Tex. 250 KMBL Junction, Tex. 1000	WNAU New Albany, Miss. 500 KGHM Brookfield, Mo. 500d
WWGS Tifton, Ga. 5000 WVVX Highland Park- Deerfield, IL	KTIP Porterville, CA 1000r KEST San Francisco CA 1000r KVML Sonora, CA 1000r	KCYL Lampasas, Tex. 1000 KAMY McCamey, Tex. 250 KMHT Marshall, Tex. 1000	KTCB Malden, Mo. 1000d WTKO Ithaca, NY 500 WPDM Potsdam, N.Y, 1000d WVBS Burgaw, NC 1000d
WCMY Ottawa, III. 500d WIRE Indianapolis, Ind. 5000 KASI Ames, Iowa 1000d	KVEN Ventura, CA 1000r KOBO Yuba City CA 500r KGIW Alamosa, Colo. 1000	KNET Palestine, Tex. 1000 KSNY Snyder, Tex. 1000 KURA Moab, Utah 1000	WBIG Greensboro, N.C. 5000 WPNC Plymouth, N.C. 1000d WTOF Spruce Plne, N.C. 1000d
KOYY El Dorado; KS 500d WLCB Buffalo, KY 500d WYMC Mayfield KY 1000	KYOU Greeley, Colo, 1000 WNAB Bridgeport, Conn. 1000 WILM Wilmington, Del. 1000	KEYY Provo, UT KDXU St. George UT 1000r WSNO Barre, Vt. 1000 WTSA Brattleboro, Vt. 1000	KVLH Pauls Valley, Okia. 250d KVIN Vinita, OK 500d
KMRC Morgan City, La, 500d WNAV Annapolis, Md. 5000 WTTT Amherst, Mass. 5000d WWEL Medford MA 5000d	WOL Washington, D.C. 1000 WWJB Brooksville, FL 1000 WMFJ Daytona Beach, Fla. 1000 WOCN Miami, Fla. 1000	WFTR Front Royal, VA 1000r WENZ Highland Springs, Va. 1000	WSAN Alientown, Pa. 50000 WFAR Farrell, Pa. 1000
WWEL Medford MA 5000d WION tonia, Mich. 5000d WBRB Mt. Clemens, Mich. 5000d WLAU Laurel, Miss. 5000d	WBSR Pensacola, Fla. 1000 WSPB Sarasota, Fla. 1000 WSTU Stuart, Fla. 1000	WREL Lexington, VA 1000r WMVA Martinsville, VA 1000r WFOG Suffolk, VA 1000r	WWML Portage, Pa. 500d WKCK Orocovis, PR WQXL Columbia. S.C. 5000d WINH Georgetown. S.C. 1000d
KSOA Ava. Mo. 500d KAOL Carrollton, Mo. 500d WIL St. Louis, Mo. 5000	WTAL Tallahassee, Fla. 1000 WGPC Albany, Ga. 1000 WBHF Cartersville, Ga. 1000	KBKW Aberdeen, WA 1000r KCLX Colfax, WA 1000r KONP Port Angeles, WA 1000r KUPY Puyallup, WA 1000r	WEAG Alcoa. Tenn. 1000d WVOL Berry HIII. Tenn. 5000 KRBC Abilene, Tex. 5000
KRGI Grand Island, Nebr. 5000 WNJR Newark, N.J. 5000 WENE Endicott, N.Y. 5000	WCON Cornella, Ga. 250 WKEU Griffin, Ga. 1000 WMVG Milledgeville, Ga. 1000	WPAR Parkersburg, WV 1000r KFIZ Fond du Lac, WI 1000r	KDHN Dimmitt, Tex. 500d KWRD Henderson, Tex. 500d KCNY San Marcos, Tex. 250d
WMNS Morganton, N.C. 5000d WDJS Mt. Olive, N.C. 1000d WRXO Roxboro, N.C. 1000d	WQQT Savannah GA 1000r WVLD Valdosta, Ga. 1000 KVSI Montpelier, Ida. 1000	WRCO Richland Center, WI 1000r KBBS Buffalo WY 1000r	Timberville VA 5000d WTZE Tazewell, VA 2500d
WFOB Fostoria, Ohio 1000 WCLT Newark, Ohio 500d	KYET Payette, Idaho 250 KEEP Twin Falls, Idaho 1000 WKEI Kewanee, III. 500 WFMT Chicago, IL 1000d	1460—205.4	KELA Centralia-Chehalis, Wash, 5000d KSEM Moses Lake, Wash, 5000
KALV Alva. Okla. 500 KELI Tulsa. Okla. 5000 KGAY Salem. Oreg. 5000d WVAM Altoona. Pa. 5000 WNEL Caguas. P.R. 5000	WCVS Springfield, III, 1000 KBFI Bonners Ferry, IN	WFMH Cullman, AL 5000r WPNX Phenix City, AL 5000r KZOT Marianna, AR 500d	KAPS Mount Vernon, Wash. 500d WWHY Huntington, W.Va. 5000d WBKV West Bend, Wis. 1000d
WNEL Caguas, P.R. 5000 WBLR Batesburg, S.C. 5000d WATP Marion, S.C. 1000d	WXVW Jeffersonville, Ind. 1000 WASK Lafayette, Ind. 1000 WAOV Vincennes, Ind. 1000	KZOT Marianna, ÅR 500d KCCL Parls, ÅR 500d KTYM Inglewood. CA 5000d KDON Salinas, CA 5000	1480—202.6 WARI Abbeblife, AL 1000d
WBUG Ridgeland, S.C. 1000d KBRK Brookings, S.Dak. 1000d WJBE Knoxviile, Tenn. 1000d	KLWW Cedar Rapids, 1a. 250 KYET Payette, Ida, 250 KWBW Hutchinson, Kans. 1000	KYRE Santa Rosa, CA 1000d KYSN Colorado Springs, CO 1000r	WRTS Bridgeport, AL 1000d WLPH Irondale, AL 5000d WABB Mobile AL 5000
WENO Madison, Tenn. 5000 WWEE Memphis, TN 1000d KSTB Breckenridge, Tex. 1000d	WTCO Campbellsville, Ky. 1000 WWXL Manchester, Ky. 1000 WPAD Paducah, Ky. 1000	WBAR Bartow, FL 1000d WZEP DeFuniak Springs. FL 1000d WPDQ Jacksonville, FL 5000	KPHX Phoenix, AZ 1000d KTHS Berryville, AR 1000 KWUN Concord CA 500d
KEES Gladewater, Tex. 1000d KCOH Houston, Tex. 1000d KLO Ogden, Utah 5000	W 100 Campbensvine, Ky. 1000 W 200 M 200 M 200 W 200 W	WPDQ Jacksonville, FL 5000 WDYX Buford, GA 5000d WPNX Columbus, GA 5000r WROY Carmi, IL 1000d WIXN Dixon, IL 1000d	KRED Eureka CA 5000r
WKDH Ashland, VA 1000 WKEX Blacksburg, Va. 1000d WDIC Clineho, Va. 1000d KBRC Mt. Vernon, Wash. 5000	WLKN Lincoln, Me. 1000 WRKD Rockland, ME 1000r WXIV South Paris ME 1000r	WKAM Goshen, IN 1000r	KWIZ Santa Ana, CA 5000r KSEE Santa Marla. Calif. 1000 KPUB Pueblo. Colo. 1000d WKND Windsor. Conn. 500d WAPG Areadla FL 1000d
KBRC Mt. Vernon. Wash. 5000 WEIR Welrton. W.Va. 1000 WPEV Beaver Dam. WI 1000d WRDN Durand, WI 1000d	WTBO Cumbertand, Md. 1000 WTHU Thurmont, Md. 500 WMAS Springfield, Mass. 1000 WATZ Alpena Township,	WOCH North Vernon. IN 1000d KSO Des Moines, IA 5000 KKOY Chanute. KS 1000d WRVK Mt. Vernon, KY 500d WXOK Baton Rouge, LA 5000r	WGNE Panama City Beach, Fla. 500d
1440-208.2	WHTC Holland Mich 1000	WXOK Baton Rouge, LA 5000r KBSF Springhill, LA 1000d WEMD Easton MD 1000r	
WHHY Montgomery, AL 5000r KSGR Scottsdale, AZ 5000d KHOG Fayetteville AR 1000d	WMIQ Iron Mtn., Mich. 250 WIBM Jackson, Mich. 1000 WKLA Ludington, Mich. 1000	WBET Brockton, Mass. 5000 WBRN Big Rapids, Mich. 1000d WPON Pontiac. Mich. 1000	WYZE Attanta, Ga. 50000 WRDW Augusta, Ga, 5000 KOFE St, Maries ID 1000r WGSB Geneva, III. 1000 WJBM Jerseyville, III, 500d WTH Terre Haute, Ind, 5000 WRSW Warsaw IN KLEE Ottumwa, Jowa 5000 KREA Mission Kan. 1000
KOKY Little Rock AR 5000d KVON Napa, Cal. 5000	WNBY Newberry, Mich. 1000 WHLS Port Huron. Mich. 1000 KATE Albert Lea. MN 1000 KBUN Pemidli. MN 1000r	KDWA Hastings, Minn. 1000d KDMA Montevideo, Minn. 1000d	WRSW Warsaw IN 1000r KLEE Ottumwa, Iowa 5000 KBEA Mission, Kan. 1000
WBIS Bristol, Conn. 5000 WAYK Lehigh Acres, Fia. 5000	KBMW Breckerridge, MN 1000r WELY Ely, MN 1000r KCI.D St. Cloud MN 1000r	WCIS Moss Point, MS 500d KIRL St. Charles, Mo. 5000d KRNY Kearney, Nebr. 5000d	KBEA Mission, Kan. 1000 KLEO Wichita, Kans. 5000 WKOA Hopkinsville, Ky. 1000d WNKY Neon, Ky. 1000d
KPHU Kryerside, Carif. 1000 KUHL Santa Maria, Cai. 1000 WBIS Bristol. Conn. 5000 WAYK Lehigh Acres, Fla. 5000 WAJL Winter Park, FL 1440 WWCC Bremen. Ga. 10000 WGIG Brunswick. Ga. 5000 WVMG Cochran GA 10000		WIJZ Mt. Holly, N.J. 5000d	WNKY Neon, Ky. 1000d WTLO Somerset, Ky. 1000d KCKW Jena, La. 500d KANV Jonesville, La. 500d KANY Jonesville, La. 1000d
WRAJ Anna. IL 500d	WNAT Natchez, MS 1000r WROB West Point, MS 1000r KFTW Fredericktown, Mo. 1000	WVOX New Rochelle, N.Y. 500d WHEC Rochester, N.Y. 5000 WAKS Fuguay-Varina, N.C. 1000d	KJOE Shreveport, La. 1000d WSAR Fall River, Mass. 5000 WMAX Grand Rapids, Mich. 5000d WIOS Tawas City-E. Tawas,
WDDC Danie II 1000d	KOKO Warrensburg, Mo. 1000	WAKS Fuguay Springs, NC 5000 WRKB Kannapolis, N.C. 500d WMMH Marshall, N.C. 500d	WSDS Ypsilanti, Mich. 500d KAUS Austin, Mich. 1000
WPGW Portland, IN 500d KCHE Cherokee, Iowa 500d KEWI Toneka KS 5000r	KXXL Bozeman, Mont, 1000 KXXL Bozeman, Mont, 1000 KDDI Great Fails MT 1000r	WPVL Painesville, OH 1000r	WECP Carthage, MS 250d KPIA Ironton, MO 5000d
WBGR Parts KY 1000d WEZI Williamsburg, KY 1000d	KYCK Wolf Point, Mont. 1000	KELR El Reno. Okia. 500d WMBA Ambridge, Pa. 500d WCMB Harrisburg, Pa. 5000	KDRO Sedalia, Mo. 1000 KGCX Sidney, Mont. 5000 KLMS Lincoln, Nebr. 1000
WJBQ Westbrook-Portland,	WKXL Concord, N.H. 1000	WERA San Sehastian, P.R. 500	
WNRC Worcester MA 5000r WBCM Bay City, Mi 1000r	WFPG Atlantic City, N.J. 1000 WCTC New Brunswick, N.J. 1000	WDOG Allendale, S.C. 1000d WBCU Union, S.C. 1000 WJAK Jackson, TN 1000d	WADR Remsen, N.Y. 5000d WWKO Fair Bluff, N.C. 1000d

Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
WAME Charlotte, N.C. WYRN Louisburg, N.C. WMSJ Sylva, N.C. WMSJ Sylva, N.C. WHBC Vadklaville, N.C. WHBC Canton, Ohlo WCIN Clielmatl, Ohlo WTRA Latrobe, Pa. WISL Shamokin, Pa. WISL Shamokin, Pa. WISL Shamokin, Pa. WISL Shamokin, Pa. WISL Caguas, P.R. S000 WSHP Shippensburg, Pa. WMDD Fajardo, P.R. KSDR Waterton, S.D. WJFC Jefferson City, Tenn. WMQM Memphis, Tenn. WMQM Memphis, Tenn. WMQM MEMPHIS, Tenn. WISL Smithville, Tenn. WJLE Smithville, Tenn. WJLE Smithville, Tenn. WAAN Waynesboro TN. IODOD WARN WAAN TO Tex. KLVL Pasadena, Tex. KAPE San Antonio, Tex. KAPE San Antonio, Tex. KONI Spanish Fork, Utah	KYNN Omaha, NE WBEX Chillicothe, Ohio WJMO Cleveland Mghts, O. 1000 WOHI E. Liverpool OH WMOA Marietta, Ohio WMRN Marlon, Ohio KOKC Guthrie, OK KBIX Muskogee, Okla, KBKR Baker, Oreg. KRNR Roseburg, Oreg. KRNR Roseburg, Oreg. WESB Bradford, Pa. WJNL Johnstown PA WJDL Lancaster, PA WBCB Levittown, Pa. WMRF Lewisten, Pa. WMGC Medaville, Pa. WMGC Medaville, Pa. WNDT Wellsbero, Pa. WYDZ Carolina PR 1000 WYDZ Carolina PR 1000 WZBS Pense PR 1000 WGCD Chester, S.C.	WLKM Three Rivers, Mich. WKPO Prentiss, Miss. KCCV Independence, Mo. KEMM Marshfield Mo. KTTT Columbus, Nebr. WRAN Dover, N.J. WIIC Salem, N.J. WIIC Salem, N.J. WEG Rose Hill, NC WYRU Red Springs NC- WKR Rorwsik, Ohlo WLKR Norwsik, Ohlo KLSR Sallisaw, Okia, WAHT Annville-Cleona, Pa. Sound WYAP Burnestown, S.C. WCPL Pageland, SC WSJW Woodruff, S.C. WSJW Woodruff, S.C. KMSD Millbank, SD WLAC Nashville, Tenn. KAGC Bryan, TX	KRNK Cheyenne. WY 1000d 1540—195.0 WCOX Camden, AL 1000d WANL Lineville AL 1000d KASA Pheenix, AZ 10000d KZRK Ozark, AR 6 KMPG Hollister, Cal. 500 KKAPA Aptos-Capitola, CA 1000d KKAPA Los Angeles, CA 1000d KISA Honolulu HI WSMI Litchfield, III. 1000d WSMI Litchfield, III. 1000d WSMI Litchfield, III. 250d WAD Decatur, Ind. 250d WCDK Martinsville, Ind. 250d KXEL Waterloo, Iowa 50000 KNEX McPherson, Kans. 250d KLKC Parsons, Kans. 250d
WBBL Richmond, Va. WBLU Salem, Va. WBLU Salem, Va. WBLU Salem, Va. WISM Madison, Wis. KBS Buffalo, WY KRAE Cheyenne, Wyo. 1490—201.2 WANA Anniston AL WAIF Decaur AL WAIF Decaur AL WAIF Decaur AL WAIF Decaur AL WAIF OF THE CONTROL	WMRB Greenville, S.C. WBDC Hartsville SC KORN Mitchell, S.Dak. WOPI Bristol, Tenñ. WOXB Chattaneoga. TN WCSV Crossville. TN WJM Lewisburg. Tenn. WDXL Exineton, Tenn. KNOW Austin. Tex. KIBL Beseville TX KBST Big Spring. Tex. KQTY Borger TX KNEL Brady. Tex. KWMC Def Rio. Tex. KYMC Def Rio. Tex. KOX Laredo, Tex. KZDN Littlefield, Tex. Littlefield, Tex. KDOK KYWC Vernon. Tex. KOK Tyler. Tex. KOM KYWC Vernon. Tex. KYMC Oden. KYMC Vernon. Tex. KYMC Oden. KYMC Vernon. Tex. KYMC Oden. KYMC Oden. KYMC Vernon. Tex. KYMC Oden. Lital Double School Composition of the composition	KCTX Childress, Tex 250d KNAM Midland, Tex. 500d KNAM Midland, Tex. 500d KYKR Port Arthur, TX 1000d KYKR Port Arthur, TX 1000d KYKR Port Arthur, TX 1000d KSTV Stephenville, Tex. 250d 1000d KSTV Stephenville, Tex. 250d 1000d KAR Mounttake Torrace, WA 250d KGA Spokane, Wash. 50000 WAUK Waukesha. Wis. 1000d T520—197.4 WAOA Opelika AL 5000d KACY Port Hueneme, CA 50000r WTLN Apopka, Fla. 1000d WIXX Fort Lauderdale, Fla. WGMB Indian Rocks Beach, FL WEXY Oakland Park, Fla. 1000d WXPQ Estonton, Ga. 1000d WXPQ Estonton, Ga. 1000d WXPQ Estonton, Ga. 1000d WXPQ Estonton, Ga. 1000d	WKCB Hindman KY KCTO Celumbia. La. KGLA Gretna LA WDON Wheaton. Md. WSWG Greenwood. MS KBXM Kennett. Mo. WKXR Exeter. N.H. WFTR Albany. N.Y. WYRD East Syracuse. NY WKYK Burnsville. N.C. WIFM Elkins. N.C. WOOZ Whiteville NC WSCO Bucyrus, Ohio WSCO Bucyrus, Ohio WSCO Bucyrus, Ohio WSTC Uhrlehsville, OH WASG Cleveland. Ohio WSTC Uhrlehsville, OH WARD VISTONIO WSTC Uhrlehsville, OH WARD VISTONIO WSCO Philadelphia. Pa. WARD Fitston. PA WARD KNewport, R.I.
K 10 B Petaluma, CA (1000r K 10 B Santa Barbara CA (1000r K 10 B Santa Barbara CA (1000r K 10 B Santa Barbara CA (1000r K 10 C Santa Barbara CA (1000r K 10	WKYT Brattlebere. Vt. 1000 WFAD Middlebury. Vt. 1000 WYKR Wells River. VT 255m WKE Newport. Vt. 1000 WVCZ Culpeper, Va. 1000 WVCZ Culpeper, Va. 1000 WYKR Wells River. VT 1000d WYKR Wells River. VT 1000d KBRO Bremerton. Wash. 1000 KYAC Forks. Wash. 1000 KLOG Kelso. Wash. 1000 KEL Walla Walls. Wash. 1000 WITCS Fairmont. W.Va. 1000 WATCS Beloit, Wis. 1000 WIGM Medford. Wis. 1000 WIGM Medford. Wis. 1000 WIGM Medford. Wis. 1000 WIGM Refore W.V. 1000 WIGM Refore River. WY 500 KUGR Green River. WY 500 KUGR Green River. WY 1000r KUGR Green River. WY 2500 KUGR Trems River. WY 2500 KUGR Trems River. WY 2500	WNMT Garden City, Ga. 1000d WHOW Clinton, III. 5000d WKUV Loves Park, III. 5000d WKVK Knox IN WSVL Shelbyville, Ind. 1000 KSIB Creston, Iowa WHIC Hardinsburg, KY WRS Stanford, Ky. 5000d WKS Stanford, Ky. 5000d WKS Stanford, Ky. 6000d WKS WHO Bel Air, Md. 500d WKJR Brunswlok, Md. 500d WKJR Muskagen Mts., MI 10000d WKJR WGRAM STANGEN MTS. 250d WGLT Ocean City-Somers Pt. N. J. 1000d WKJR WKJR MIGHOLD N. Y. 10000d WKJR WKJR MIGHOLD N. Y. 10000d WKJR WKJR WKJR WKJR WKJR WKJR WKJR WKJR	WBIN Benton, TN WJJT Jelliee, TN WBRY Weedbury TN KGRY Weedbury TN KGBC Galvesten, Tex. KGBC Galvesten, Tex. WRGM Richmend, Va. WRGM Richmend, Va. WKTM Hartferd, Wie. 1000d WKTM Hartferd, CT WKCXI Arvada CO WKLB West Hartferd, CT WKCZ New Smyrna Beach FL WYOU Tampa, Fla.
KCID Caldwell. Idaho 1000 WKRO Cairo IL WDAN Danville, III. 1000 WOPA Oak Park, III. 1000 WOPA Oak Park, III. 1000 WKBV Richmond, IN 1000 WKBV Richmond, IN 1000 WKBV Richmond, IN 1000 WKBV Richmond, IN 1000 KBUR Burlington, Iowa 1000 KBUR Burlington, Iowa 1000 KBUR Burlington, Iowa 1000 KBUR Burlington, Iowa 1000 KBAB Indianola, Ia. 500 KRBAB Indianola, Ia. 500 KKBAB Indianola, Ia. 500 KKAN Phillipaburg, Kans. 1000 KKAN Phillipaburg, Kans. 1000 WKAY Frankfort, Ky, 1000 WKKY Frankfort, Ky, 1000 WKKY Frankfort, Ky, 1000 WKKY Ppaintvillipaburg, Ky, 1000 WKKY Prankfort, Ky, 1000 WKKY Prankfort, Ky, 1000 WKKY Bosalusa, La. 1000 KKUN Burlie, La. 1000 KKUN Burlie, La. 1000 KKUN Ruston, La. 1000 WYOR Portland, Maine 1000 WYOR WATERILL Maine 1000	WYSM Rainsville AL WKAX Russellville, AL WKAX Russellville, AL WKAX Russellville, AL 1000d 1000d 1000d KKRX San Jose, CA WFIF Milford, Conn. WTOP Wasnington, D.C. WKIZ Key West, Fla. WGLL New Port Richey, Fla. 250 WSEM Donalsonville, GA WSEM Sandlala, III. 250d WKR Zinn, IL WSEM Jandalla, III. 250d WKXC Barca, KY KWRG New Rosds, La. 200d KWXC Braca, KY KWRG New Rosds, La. 200d	KMAV Mayville, N.D. 250d WBNO Bryan, Ohio WINW Canton, O. 100dd WINW Canton, O. WKNT Kent, O. 1000d KOMA Okla. City, Okla. KYXI Oregon City. Ore. 1000d WRAI San Juan, P. R. 10000 WTGR Myrtle Beach, SC 5000d WKMG Newberry, S. C. 1000d KCHF Sioux Fails SD 500d WBHT Brownsville, Tenn. 250d WBHT Brownsville, Tenn. 1000d WEXM Jamesville VA 500d 1530—196.1 WAAO Andalusia AL 1000d WHY Moulton AL 1600r KTMN Trumann AR 250d KCAT Pine Bluff, Ark. 250d KCAT Pine Bluff, Ark. 250d KCAT Pine Stuff, Ark. 250d KCAT Pine Stuff, Ark. 250d KCAT Pine Stuff, Ark. 250d KCAT Colorade Springs.	WTHB Augusta, Ga. 5000d WYNX Smyrna, Ga. 10000 WIIL Jacksonville, III. 1000d WCSJ Morris. III. 250d WCPDF Corydon, Ind. 250d WCYL Crawfordsville, Ind. 250 WCTW New Castle, Ind. 250 WCTW New Castle, Ind. 250 WNDI Smilivan, IN 250d KIWA Sheldon, Iowa 500d KEDD Dodge City, Kans. KNIC Winfield, Kan. 280d WGRK Greensburg KY WIRV Irvine, Ky. 280d WRRV Irvine, Ky. 1000d WRRV Baton Rouge, La. 5000d KS MS Shrevsport, La. 5000d WSER Elkton, Mds. 1000d WNTN Newton, Mass. 1000d WNTN Newton, Mass. 5000d WSER Shrevsport, La. 5000d WSER Shrevsport, La. 5000d WSER Shrevsport, La. 5000d KS SS S
WHAY Haverhill, Mass. WM NC Milford, Mass. WN US West Springfield, MA WABJ Adriam, Mich. WI (Manistique Mi WM PX Midfand, Mi WHRC Whitehall, Mieh. KOZY Grand Rapids, Minn. KOZY Grand Rapids, Minn. KOZY Grand Rapids, Minn. KOZY Grand Rapids, Minn. USO WLOX Biloxi, Miss. WLOX Biloxi, Miss. WLOX Biloxi, Miss. WHOC Philadelphia, Miss. WTUP Tupeie, Miss. WTUP Tupeie, Miss. WJFL Vicksburg MS KDMO Carthage, Mo. KDRO Sedalia, Mo. KDRO Sedalia, Mo. KDRO Sedalia, Mo. KDBM Dilion, Ment. 1000 KIDRO Grand Miss. 1000 KDRO Sedalia, Mo. 1000 KDRO Sedalia, Mo. 1000 KDRO Grand Miss. 1000 KDRO Sedalia, Mo. 1000 KDRO Sedalia, Mo. 1000 KDRO Grand Miss. 1000	WORE St. Paul, Minn. WBFN Quitman, Miss. KOFN Doniphan, Mo. WKER Pempten Lakes. WKER Pempten Lakes. WGMF Watkins Glen. N.Y. 250d WLWL Rockingham NC WURL Winston-Salem. NC WGFT Yougstown. OH WGIC Xenia. O. KOKN Pawhuska, OK WMNT Manati. P.R. WEAC Gaffney, S. C. 1000d WEAC Gaffney, S. C. 1000d WEAC Gaffney, S. C. 1000d WTNE Trenten, Tenn. XEGG Merkel. TX KXTO Sherman, Tex. 1000d KAGJ Greenwood. AR	WD 1Z Bridgsport, Conn. 10000d WENG Englawood, Fla. 1000 WCR1 Jacksonvillo, FL 50,000d WTHO Datton, Ga. 10000d WTHO Thomson GA. 10000d WKDC Elmhurst, IL 251 KDSN Denison, lowa 500d KNBN Norton, Kan. 1000d KNBN Norton, Kan. 1000d WCTR Chestertown, MD 250d WCTR Chestertown, MD 250d WYGR Wyoming, MI 500d WYGR WYOMING, Miss. 250d WRPM Poplarvillo, Miss. 250d WRPM Poplarvillo, Miss. 10000d KSMM Shakopee, Minn. 5000d KSMM Shakopee, Minn. 5000d KCRR Bowling Green, Mo. 10000d WCTR Chestertown, Mo. 1530 WCTR Chestertown, Mo. 1530	WSHN Fremont, Mich. WOKJ Jackson, Miss. WSAO Senatebla, Miss. KGMO Cape Girardeau, Mo., 5000d KKJO St. Joseph. Mo., 5000d KKJO St. Joseph. Mo., 5000d KKJS Strings, Neb., 5000d KICS Hastings, Neb., 600d WCGR Canandalgua, N.Y., 1000d WKOT Kingston, NY WKOT Kingston, NY WKOT Kingston, NY WRYM Utica, N.Y., 1000d WYNA Raleigh, N.C. WYNA Raleigh, N.C. WYNA Raleigh, N.C. WYNA Raleigh, N.C. WYGD Winston-Salem NC KQWB Fargo, N.D. WDLR Delaware, Ohlo KMAD Madill, OK KREK Sapulpa, Okla, 500d WLOA Braddock, Pa., 1000d WKTC Towanda, Pa., 500d
W W I L Wilmington, NC W EMJ Laconia, N. H. 1000 W USS Atlantic City, NJ 1000r K RSN Los Aliamos, N. Mex. 1000 K RTN Raton, N. Mex. 1000 W CSS Amsterdam, N. Y. 1000 W CSS Amsterdam, N. Y. 1000 W ETA Batavia, N. Y. 1000 W ICY Malone, N. Y. 1000 W ICY Malone, N. Y. 1000 W OLF Syracuse, N. Y. 1000 W OLF Syracuse, N. Y. 1000 W D UR Ourham, NC 1000 W LOE Eden, N. C. 1000 W LOE Eden, N. C. 1000 W RNB New Bern, N. C. 1000 W RNB New Bern, N. C. 1000 W RNB New Bern, N. C. 1000 W RT Rocky Mount, N. C. 1000 W STP Saliabury, N. C. 1000 W STP CONTROL 1000 K DC C W V W Valdese, N. C. 1000 K DC C C W C W L Wilsplanton, N. C. 1000 K DC C W C W L Wilsplanton, N. C. 1000 K DC C W C W L Wilsplanton, N. C. 1000 K DC C Valley City, N. Dak. 1000	KÖKB Mesa, AZ 10000d KSRW Ontario, Cal. 500d KIRV Fresno, Cal. 500d KIRV Fresno, Cal. 500d KTMW San Rafael, Calif. 1000d KDKO Littleton, Colo. 1000 WNLC New Lendon, Conn. 10000 WKAO Boynton Beach FL WWBC Cocea, Fla. 250d WRGI Marco Island FL WINU Mighiand IL 1000d WRGI Marco Island FL WINU Mighiand IL 1000d WKAI Macomb, Ill. 250d KIFG lowa Fails, lowa KANS Larned, Kan. 600d KANS Larned, Kan. 600d WMES Boston, Mas. 5000d	WJDM Elizabeth. N.J., 500d WBX Chapel Hill NC 5000d WOBR Wanchese. N.C. 250d WCKY Cincinnatt. Ohlo KJEM Wagener. OK 280d WBCW Jeanette PA WHYP Nerth East. Pa. 1000d WYFC McConnellsburg PA WMBT Shenandeah. Pa. 1000d WJPJ Hutado. P.R. 1000d WASC Spartanburg. S.C. 1000d WJPJ Multington, TN KGTN Georgetown Tex. KGBT Harlingen, Tex. 1000d KNBO New Boston, TX KCLR Rails, Tex. 5000d WFIC Collinsville VA 250d	WURT Parsons. Tenn. WCHU Soddy Daisy. TN KCOM Comanche. Tex. KRGO Sant Lake City. UT WKBA Virian Beh Va. WXVA Charles Town, WV KOQT Beilingham. Wash. KGAR Vancouver, WA WMIR Lake Geneva, WIs. WWQM Madison, WI WEVR River Falls, Wis. 1560—192.3 WAGC Centre, AL KDDA Dumas, AR KBIB Monette. AR S00d

Call	Location	W.P.
KPMC	Bakersfield, Calif.	10000
KIQS	Willows, Calif.	250d 5000d
WVSE	Inverness FI	5000d
WLEI	Eau Gallie, Fla. Inverness, FL Ellijay, GA	
WKOG	Gordon, Ga. Canton, III. Shelbyville, III. Paoli. Ind. Rensselaer, Ind. Council Bluffs, lev	5000d
WBYS	Canton, III.	250d
WSHY	Shelbyville, III.	5004
WRIN	Rensselaer Ind.	10004
KRCB	Council Bluffs, lov	b0001 av
KUJJI	owa Gity, IA	
KABI	Abliene KS	250d 250d
WKDU	Middleshops KV	1000d
WDXR	Liberty, Ky. Middlesboro, KY Paducah, Ky.	10000
		b0001
WSDI	Slidell LA	1000d
WSMD	La Plata, Md. Portage MI	1000d
WHIC	Sandusky Mich	1000q
KREW	Blue Earth, Minn.	10000
KQYX	Sandusky. Mich. Blue Earth. Minn. Joplin. MO	10000d
KLTI	Macon. Mo.	250d
KTUI	Sullivan, Mo.	1000d
MMRK	Rrockport NY New York, N.Y. Warsaw, N.C. Charden, Chio Coshocton. Ohio Fairfield, O.	50000
WTRQ	Warsaw, N.C.	12000d
WBKC	Chardon, Ohlo	10004
WTNS	Coshocton. Ohlo	1000d
WCNW	Fairmeid, U.	5000d
WTOD	Tolede. Ohlo Chickasha, Okla.	5000d
KRRR	Salitaw Okla	2504
WRSJ	Saliisaw. Okla. Bayamon, P.R. Clemson SC	5000
WCCP	Clemson 8C	10004
WAGL	Lancaster, S.C.	100000
KKAA	Aberdeen, SD Nashville, Tenn.	100004
WBOL	Bolivar, Tenn.	2504
KCAD	Bolivar, Tenn. Abliene, Tex. Daingerfield, Tex. Hillsboro, Tex.	500d
KEGG	Daingerfield. Tex.	
KHBR	Hillsboro, Tex.	250d 500d
KGUL	Port Lavaca, Tex. Hoguiam, Wash.	10004
KDFL	Sumner, Wash.	2506
WFSP	Sumner, Wash. Kingwood, W.Va. Port Washington,	10004
WGLB	Port Washington,	Wis.
	1011	
1570-	—191.1	
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1570—191.1	
WCRL Onconta, AL	10004
WTOX Selma AL	5000d
KBRI Brankley, AR	250d
KBJT Fordyce, AR	250d
KSRB Hardy, AR	250d
KCVR Lodi, Cal.	5000d
KHNY Riverside, CA	5000d
KXES Salinas, CA	250d
KLOV Loveland, Colo.	1000d
WYWI Fernandina Beach Fi	5000d
WGTW Mount Dora, FL	5000d
WOKC Okeechobee, Fla.	1000d
WMES Ashburn, Ga.	10000
WGHC Clayton, Ga.	10000
WSSA College Park, Ga.	5000d
WGSR Millen, Ga.	250d
WOKZ Alten, III.	1000d
WFRL Freeport IL	5000d
WBEE Harvey, III.	1000d
WTAY Robinson, Iil.	250d
WIFF Auburn, Ind.	500d
WILO Frankfort, Ind.	250d
WOBS New Albany, IN	1000d
KMCD Fairfield, towa KQWC Webster City IA	250d 250d
KNDY Marysville, Kans.	250d
WKYR Burkesville, KY	1000d
WLBQ Morgantown KY	250d
WKKS Vanceburg, Ky.	250d
WABL Amite, La.	500d
KLLA Leesville, La.	1000d
KMAR Winnsboro, La.	1000d
WICIW IDWSON, MIG.	5000d
WPEP Taunton, Mass.	1000d
WMLO Beverly, Mass.	500d
WDEW Westfield, MA	2500d
WLQB Flint, Mi	10004

Call	Location	W.P.
	Grand Rapids, MI	1000d
WHILE	Golden Valley, Minn. Bay Springs MS	1000d
WONA	Winona, Miss.	10004
KLEX	Lexingten, Mo.	250d
WKOL	Amsterdam, N.Y. Dundee, N.Y.	1000d
	Fredenia, N.Y.	1000d 250d
WTKO	Ithaca, N.Y.	1000
WRCN	Riverhead, NY	1000d
WTLK		500d
WNCA	Siler City, N.C. Galion, OH	1000d
WPTW	Pisua. Ohio	250d
WTCL	Warren OH	500
KTAT	Frederick, Okla.	250d
KOLS WPGM	Pryor, Okla. Danville, Penn.	10004
WBUX	Doylestown, Pa.	5000d
WQTW	Latrobe, Pa.	1000d
WFGN	Gaffney, S.C.	250d
	Johnston, S.C.	250d
	Loris, S.C. Vermillion, S.D.	1000d
WHLP	Centerville, Tenn.	10000
WCLE	Cleveland, Tenn.	1000d
WTRB	Ripley, Tenn.	1000d
KVLG	Farwen, Tex. La Grange, Tex.	250d
KTER	Terrell, Tex.	250d 250d
WSWV	Pennington Gap. Va.	1000d
WYTI	Rocky Mount. Va.	Pount
WAPL	Appleton, W1	
1500	100.2	

1580-189.2	
WEYY Talladege, AL	2500d
KNIV Towns A7	
KPCA Marked Tree AR KFDF Van Buren AR	250d
KFDF Van Buren AR KWIP Merced, Cal.	10004
KDAY Santa Monica, Cal.	50000
KPIK Colorado Sprgs Colo.	5000d
WSBP Chattachoochee, Fla. WSRF Fort Lauderdaie, FL	10000
WSBP Chattachoochee, Fla. WSRF Fort Lauderdaie, FL WGTW Mt. Dora, FL	50000
WCCF Punta Gorda, Fla.	10004
WCLS Columbus. Ga.	1000
WKIG Glenville, Ga. WYYZ Jasper GA	1000d 250d
WKUN Monroe, Ga.	1000d
WFVR Aurora IL	250d
WDQN DuQuoin, III. WBBA Pittsfield, III.	259d 250d
WCCR Urbana, III.	250d
WCNB Connersville, Ind.	250d
WJVA South Bond, Ind. WAMW Washington, Ind.	10004
KCHA Charles City, Iowa	250d 500d
KWNT Davenport, lowa	500d
KDSN Denison, Iowa	500d
WAXU Georgetown, Ky. WMTL Leitchfield, Ky.	10000d 250d
WPKY Princeton, Kv.	250d
KLUV Haynesville, La.	10000
KLOU Lake Charles, La. WPGC Morningside. MD	1000d
WRBJ St. Johns. Mich.	10000
WRBJ St. Johns, Mich. KDOM Windom, Minn.	250d
WAMY Amory, Miss. WORV Hattiesburg, MS	5000d
WESY Leland, Miss.	10004
WPMP Pascagoula-Moss	
Point, Mississippi	
KTGR Columbia. Mo. KESM El Dorado Springs,	250d
Mo	
KNIM Maryville, Me. KAMI Gozad, Neb.	250d
WRDI Hammenton NJ	10004
WCRV Washington, N.J.	1000d
KZIA Albuquerque, N.M.	1000d
WYFA Patchogue, NY WZKY Albemarle, N.C.	250d
WVKO Columbus, Ohio	1000d
KLTR Blackwell, Okla.	1000d
WCLY Columbia, PA WEND Ebensburg, Pa.	500d
WANB Waynesburg PA	1000d 500r
WORG Orangeburg, S.C.	1000d

Call	Locati	on	W.P
	Travelers Colonial		C. 1000d
WHHM	Henderse	Ten	250d
WSKT	helbyville Knoxville Galnesvill	. Tenn.	1000d 5000d 250d
KILE G	alveston.	TX	1000
KWED	Rusk, Tex Sequin,	Tex.	500d 1000d
KRZI V	Shamrock Vaco TX Danvillo.		1000 1000d
WPUV	Pulaski, Watertow	Va.	5000d

KBYP Shamrock, Tex. KRZI Wase TX WILA Danville. Va. WPUV Pulaski, Va. WTTN Watertown. Wis.	250d
KRZI Wase TX	1000
WPIIV Puleski Va	1000d 5000d
WITN Watertown, Wis.	1000d
1590-188.7	
WATM Atmore, AL WACD Alexander City, AL WVNA Tuscumbla, AL	5000d
WAGD Alexander City, AL	10000
KYDE Pine Bluff, AR KYDE Pine Bluff, AR KSPR Springdale, AR KXEM MeFarland CA KLIV San Jose, Cal. KBBQ Ventura-Oxnard, CA KCIN Victorville, Calif.	5000r
MODE CINE DIVIS, AN	10004
KYEM MeFerland CA	500d
KLIV San Jose, Cal.	5000
KBBQ Ventura-Oxnard, CA	5000
KCIN Victorville, Calif.	500d
KBBQ Ventura-Oxnard, CA KCIN Victorville, Calif. WQQW Waterbury CT WDWY Clewiston, Fia.	5000
WOWY Clewiston, Fla.	500d
MUVD OF LALERSIDE DASCH	,
FL	1000d
WELE S. Daytona, Fla.	1000d
WALG Albany, Ga.	5000
WELE S. Daytona, Fia. WALG Albany, Ga. WLFA Lafayette, Ga. WTGA Thomaston, Ga. WLTD Evanston, Li	5000d
WTGA Thomaston, Ga.	500d
WLTD Evanston, IL WAIK Galesburg, III.	1000d
WAIR dalespurg, III.	50004
WLTD Evanston, IL WAIK Galesburg, III. WNTS Indianapolis, IN WPCO Mt. Vernon, Ind.	5000d
KWRG Roome IA	500d
WPCO Mt. Vernon, Ind. KWBG Boone IA WFJT Inez, KY	1590
WLBN Lebanon, Ky.	1000d
WPCO Mt. Vernon, Ind. KWBG Boone IA WFJT Inez, KY WLBN Lebanen, Ky. KKAY White Castle, LA WJRO Glen Burnie, MD WISZ Glen Burnie, Md.	
WJRO Glen Burnie, MD	500
WISZ Glen Burnie, Md.	500
	1000
WETT Ocean City, Md. WTVB Coldwater, Mich. WGRY Grayling MI	5000
WGRY Graying MI	10004
WSMA Marine City, Mich. KRAD E. Grand Forks,	10004
	1000d
WWUN Jackson, Miss. KPRS Kansas City, Mo, KDEX Detter, Mo. KCLU Reita, Mo. KCTH Wayne Nah	5000
KPRS Kansas City, Mo.	1000d
KDEX Dexter, Mo.	1000d
KCLU Relia, Me. KCTH Wayne, Neb. WSMN Nashua, N.H.	1000d
KCTH Wayne, Neb.	500d 5000
WSMN Nashua, N.H.	5000
WERA Plainfield, N.J.	500d
KCTH Wayne, Neb. WSMN Nashua, N.H. WERA Plainfield, N.J. WAUB Auburn, N.Y. WEHH Elmira Heights-	500d
MENH EIMITE Holgita	. 500d
WGGO Salamanca, N.Y.	5000d
WBHN Bryson City, N.C.	500d
WCSL Cherryville, N.C.	1000d
WGG O Salamanca, N.Y. WGGO Salamanca, N.Y. WBHN Bryson City, N.C. WCSL Cherryville, N.C. WVOE Chadbourn, N.C, WHPY Clayton NC	1000d
WHPY Clayton NC	
WEAT Greenville NC	5000d
WGLD High Point NC WAKR Akron. Ohio	
WAKE AKTON, Ohio	5000
WSRW Hillsbore, Ohio	500d
WSRW Hillsbore, Ohio KHEN Henryetta, Okia. KWEY Weatherford. Okia.	500d
KWEY Weatherford, Okla. KTIL Tillamoek, Ore. WPLW Carnegle, PA	5000
KTIL Tillamook, Ore. WPLW Carnegle, PA	10004
WCBG Chambersburg. Pa.	5000
WOLD Charten DA	1000-
WAEN Hanesdale, PA	500d
WMIM Mt. Carmel. PA	1000d
WAEN Hanesdale. PA WMIM Mt. Carmel. PA WXRF Guayama. P.R. WARV Warwiok-E. Greenw WABV Abbeville. S.C.	1000
WARV Warwick-E. Greenw	lch.
WARY Abbaullia R.I.	10004
WABV Abbeville. S.C.	10009

Call	Location	W.P.
KERC KINT KYOK KEND KBUS KIKN WGOE KZOK	Eastland, Tex. El Pase, Tex. Housten. Tex. Lubbock. TX Moxia, Tex Sinten TX Richmond, Va. Seattle, WA	500d 1000d 5000 1000 500d 1000r 5000d 5000d
WSWW	New Richmond, Wis. / Platteville, Wis. Two Rivers, Wis.	1000 1000d
	West Allie, Wis.	1000d

1600-187.5	
WEUP Huntsville, AL	5000r
WXVI Montgomery, AL KVIO Cottonwood AZ	1000
KXEW Tueson, AZ	1000d
KCGS Marshall, AR	5000d
KGST Fresho, Cal. KWOW Pomena, CA	5000d
KGST Fresno, Cal. KWOW Pomena, CA	5000r
KZON Santa Maria, Cal.	500d
KUBA Yuba City, Calif. KLAK Lakewood, Colo.	5000
KLAK Lakewood, Colo. WKEN Dover, DE	5000 1600
WJNJ Atlantic Beach, Fla.	1000
WKWF Kay West. Fla	500
WKWF Key West, Fla. WPOM Riviera Beach, FL	1000
WOKB Winter Garden, Fla	. 5000d
WACX Austell, Ga. WNGA Nashvilte, Ga.	1000d
WNGA Nashville, Ga.	10004
WQCK Warner Robins, GA WCGO Chicago Hgts., III. WMCW Harvard, III.	1000r
WMCW Harvard, III.	800d
WBTO Linton. Ind.	300d
WBTO Linton. Ind. WARU Peru. Ind,	10004
KICA Algono IA	5000d
KCRG Cedar Rapids. Iowa KMDO Ft. Scott. Kans.	
KMDO Ft. Scott, Kans.	500d
KMDO Ft. Scott. Kans. WSTL Eminence, Ky, WLLS Hartford KY	500d
KFNV Ferriday, La.	10004
KLEB Golden Meadow. La.	
WINX Rockville, Md.	1000
WUNR Brookline, Mass.	5000
WIXY East Longmeadow, N	IA
WAAM Ann Arber, MI WTRU Muskegon, Mich.	5000
WTRU Muskegon, Mich. KLLR Walker MN	5000 1000d
WKDI Claskedala Miss	10000
WKDL Clarksdale, Miss. KATZ St. Leuis, Mo. KTTN Trenton, Mo. KNCY Nebraska City, Neb KRFS Superior, Nebr.	5000
KTTN Trenton, Mo.	500d
KNCY Nebraska City, Neb	
KRFS Superior, Nebr. WWRL New York, N.Y. WMCR Onelda, N.Y.	500d 5000
WMCR Onelda, N.Y.	1000d
WLNG Sag Harbor, N.Y.	500d
WCIV Charlette N.C.	1000
WIDU Fayetteville, N.C. WHVL Hendersenville, N.C. WFRC Reidsville, NC	1000d
WHVL Hendersenville, N.C	10004
WFRC Reidsville, NC KDAK Carrington, N.Dak. WAQI Ashtabula, OH	1000 500d
WAQI Ashtabula, OH	1000d
WAQI Ashtabula, OH WBLY Springfield, OH WTTF Time, Ohio	10000
WRLY Springfield, OH WTTF Timn, Ohio	500d
KUSH Cushing, Okia.	1000d
KASH Eugene, Oreg. KOHI St. Hejens, Ore.	5000
WHOI Allentown Pe	1000d 500d
KOHI St. Helens, Ore. WHOL Allentown, Pa. WAYC Bedford, PA WPDC Elizabethtown, Pa.	1600
	500
WLUZ Bayamon, P.R.	1000
WFIS Fountain Inn, SC	10004
WFNL North Augusta, SC	500d
WHBT Harriman. Tenn. WKBJ Milan, Tenn.	5000d
KBRB Borger, TX	1000d
KBOR Brownsville, TX	1000
KEWS Cuero TX	500d
KWFI Midland TX	10004
KXVI McKinsey, TX	1600
KYAL McKinney, Tex. KOGT Orange, Tex. KLCK Centerville, UT	50000
KOGT Orange, Tex.	10001
WCPK Chesaneakt, Va.	1000d
WNST Milton WV	5000d
WNEU Wheeling WV	5000d
WCWC Ripen. Wis,	5000

Location	Call kHz
Abbeville AL Abbeville, La.	WARI 1480 KROF 960
Abbeville, S.C.	WABV 1590
Aperdeen, Md.,	WAMD 970
Aberdeen, Miss.	
Aberdeen, O.Dai	KABR 1420
	KKAA 1560
Aberdeen, Wash	KBKW 1450 KXRO 1320
Abitene, Tex.	KRBC 1470
Autiono, Tox.	KCAD 1560
	KNIT 1280
A 1. 11	KWKC 1340 KABI 1560
Abilene, Kans. Abingdon, Va.	KABI 1560 WBBI 1230
Ada, Okia.	KADA 1230
Adel, Ga.	WBIT 1470
Adrian, Mich.	WABJ 1490 KUAM 610
Agana, GU	KATB 570
	KTWG 770
Aguadilla, P.R.	WABA 850
Ahoskie, N.C.	WGRF 1340 WRC8 970
Aiken, S.C.	WAKN 990
	WLAW 1300
Ainsworth, NE	KBRB 1400
Aitkin, Minn. Akren, Ohio	KKIN 930 WAKR 1590
ARIUM, UMIU	WCUE 1150
	WHLO 640
Atamanana N. I	WSLR 1350
Alamogordo, N.	M. KALG 1230 KINN 1270
Alamo Heights.	
	KDRY III0

Location	Call	kHz
Alamosa Colo. Albany, Ga.	KGIW WALG WGPC	1590
Albany, Ky.	WJAZ WQDE WANY KASM	960 1250 1390
Albany, Minn. Albany, N.Y.	WABY WOKO WPTR	1400 1460 1540
Albany, Oreg.	WROW KWIL KRKT WABZ	790 990
Albert Lea, Minn. Albertville, Ala Albton, Mish.	WZKY KATE WAVU	1580 1450 630
Albuquerque, N.M.	WALM KABQ KAMX KUFF	1350 1520 1150
	KRKE KDAZ KKIM KOB	730
	KPAR KQEO KRZY	920 1450
Alexander City, Ala	WRFS	1470
Alexandria, La.	KALB KDB9 KBYL	1590 580 1410
Atexandria, Minn.	KXRA	1490

O D I L	JUAIN
Location	Call kHz
Alexandria, VA Algena, Iowa Alice, Tex. Allendale, S.C.	WPIK 730 KLGA 1600 KOPY 1070 WDOG 1460
Allentown, Pa.	WHOL 1600 WAEB 790 WKAP 1320 WSAN 1470
Alliance, Nebr. Alliance, Ohio Alma, Ga. Alma, Mich.	WFAH 1810 WULF 1400 WFYC 1280
Alpine, Tex. Altavista, Va.	Mich. WATZ 1450 KVLF 1240 WKDE 1000
Altona, III. Altona, Pa.	WOKZ 1570 WFBG 1290 WRTA 1240 WVAM 1430
Alturas, Calif. Altus, Okla. Aiva, Okla. Amarillo, Tex.	KCNO 570 KWHW 1450 KALV 1430 KDJW 1010
Alliai illo, Tex.	KPUR 1440 KGNC 710 KIXZ 940 KQIZ 1360
Ambridge, Pa. Americus, Ga.	KZIP 1310 WMBA 1460 WDEC 1290 WISK 1390
Amery, Wi Ames, Iowa	WXCE 1260 KASI 1430 W01 640 WTTT 1430
Amherst, Mass. Amherst, N.Y.	WUFO 1080

Cal	ll kHz
N.Y. WK	
K KR	PT 850
KFO	2D 750
WR	AJ 1440
	1000
	HT 1510
, KAI	NO 1470
nn. WA	
WA	1 1/2 900
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		U.S. AM STATION	S BY LOCATION
Location Call kHz .	Location Call kHz	Location Call kHz	Location Call kHz
Apollo, Pa. WAVL 910 Aponka, Fla. WTLN 1820 Apple Valley, Cal. KAVR 980 Appleton, Wis. WRXA 1570	WCAO 600 WCBM 680 WEBB 1380 WFBR 1300	Big Stone Gap, Va. WLSD 1220 Biloxi. Miss. WLOX 1480 WVWI 570	Broken Bow. Nebr. KCNI 1280 Bronson, Mo. KBHM 1220 Brookfield, Conn. WINE 940 Brookfield, Mo. KGHM 1470
Appomattox, VA WTTX 1280	WITH 1230 W81D 1010 WWIN 1400	Billings, Mont. KBMY 1240 KGHL 790 KOOK 970	Brookhaven, Miss. WCHJ 1470 WJMB 1340
Aptos-Capitola CA KKAP 1540 Aquadilla, P. R. WUNA 1340 Arab. AL WRAB 1380	Bamberg Denmark, S.C. WWBD 740 Bangor, Maine WABI 910	Binghamton, N.Y. WINR 880 WKOP 1360	Brooklings, S.Dak. KBRK 1430 Brookline, Mass. WUNR 1600
Arcadia FL WAPG 1480 Arcata, Calif. KATA 1340 Ardmore, Okia. KVSO 1240	Barahaa Wis WROO 740	Birmingham AL WAPI 1070	Brookneal, Va. WODI 1230 Brooksville, Fia. WWJB 1450 Brownfield, Tex. KKUB 1300
Areolbo, P.R. WSLV 1110 WCMN 1280 WNIK 1230 WMIA 1070	Barceloneta, PR WBQN 1160 Bardstown, Ky. WBRT 1320 Barbourville, Ky. WYWY 950 Barnesboro, Pa. WNCC 950	WERC 988 WCRT 1260 WAQY 1220	Brownsyllie, Pa. WASP 1130 Brownsyllie, Tenn. WBHT 1520 Brownsyllie, Tex. KBOR 1600 Brownwood, Tex. KBWD 1380
Arkadelphia AR KVRC (240 KDOV 1350	Barnesville, Ga. WBAF 1090 Barnwell, S.C. WBAW 740	WENN 1320 WATV 900 WEGN 610	Brunswick, Ga. WGIG 1440
Arkan, City, Kans. KSOK 1280 Arlington, Fla. WKTZ 1220 Arlington, Va. WAVA 780 WEAM 1390	Barre, Vt. WSNO 1450 Barrow, AK KBRW 650 Barstow, Calif. KWTC 1230	WYDE 850 WYDK 690 Bisbee AZ KSUN 1230	WMOG 1490 WYNR 790 Brunswick ME WKXA 900 Brunswick Md. WTRI 1520
Arroye Grande CA KFYV 1280 Artesia, N.M. KSVP 990	Bartlesville, Okla, KWON 1400 Bartow, Fla. WBAR 1460 WPUL 1130	Bishop, Calif. KIBS 1230 Bishopville, S.C. WAGS 1380 Bismarck, N.Dak. KFYR 550	Bryan, Ohio KCMP 1010 WBNO 1520
Ashburn, Ga. WMES 1570 Asbury Park, N.J. WJLK 1310	Bassett, Va. WODY 900 Bastrop, La. KTRY 730	Bismarck-Mandan, ND KWWB 1270	Bryan TX KTAM 1240 KAGC 1510 Bryson City, N.C. WBHN 1590 Buckhannon, W.Va. WBUC 1460
Asbury Park-Eatontown, NJ WHTG 1410 Ashebero, N.C. WGWR 1260	Batavia, N.Y. WBTA 1490 Batesburg, S.C. WBLR 1430	Black Mountain, N.C. WBMS 1350 WFGW 1010	Bucyrus, Ohlo WBCO 1540
Asheville, N.C. WISE 1310 WKKE 1380 WSKY 1230	Batesville AR KBTA 1340 Batesville, Miss. WBLE 1290 Bath, Maine WJTO 730	Blackfeet. Idaho KBLI 690	Buffalo MN KRWC 1360
Ashland, Ky. WCM1 1340	Bath, NY Baton Rouge, La. WVIN 1380 WAIL 1260 WLUX 1550	Blacksburg, Va, WKEX 1430 WQBX 710 Blackshear, Ga. WBSG 1350	Buffalo, N.Y. WBEN 930 WYSL 1400 WEBR 970
Ashland, Ohio WNCO 1340 Ashland OR KCMX 580	WYNK 1380 WIBR 1300 WJBO 1150	Blackstone, Va. WKLV 1440 Blackwell, Okla. KLTR 1580 Blaine, Wash. KARI 550	WGR 550 WKBW 1520 WWOL 1120
Ashland, Va. Ashland, Wis. Ashland, Wis. Ashtabula, Ohlo WAQI 1600	WLCS 910 WXOK 1460 Battle Creek MI WBCK 930	Blakely, Ga. WBBK 1260 Blanding, Utah KUTA 790 Bloomington, III. WJBC 1230	Buffalo, Wye. KBBS 1450 Buford, GA WDYX 1460 Burgaw NC WVBS 1470
Aspen, Colo. WRED 970 KSNO 1260	WKNR 1400 WVOC 1500 Baxley, Ga. WUFE 1260 Bay City, Mich. WBCM 1440	Bioomington, Ind. WTTS 1370 Bloomsburg, Pa. WCNR 930 WHLM 550 Blue Earth, Minn. KBEW 1560	Burlen, Wash. KQIN 800 Purkesville, KY WKYR 1570 Burley, Idaho KBAR 1230
Astoria, Oreg. KAST 1370 KVAS 1230 Atchinson, Kans. KARE 1470	Bay City, Tex. KIOX 1250	Bluefield, W.Va. WHIS 1440 WKOY 1240	Burlington, Colo. KNAB 1140 Burlington, Iowa KBUR 1490 KKUZ 1150 Burlington, N.C. WBBB 920
Athens, AL WKAC 1080 Athens, Ga. WGAU 1340 WDOL 1470	WRSJ 1560	Blythe, Calif. KYOR 1450 Blytheville AR KLCN 910 Boaz, AL WBSA 1300 Boca Raton, Fia. WSBR 740	Burlington- Graham, N.C.
Athens, Ohio WOUB 1340 Athens, Tenn. WLAR 1450	Bayard, NM KNFT 950 Bayou Vista, LA KQKI 1170 Bay St. Louis MS WPUP 1190	Bogalusa, La. WIKC 1490 WBOX 920 Boise ID KBRJ 950	Burlington, Vt. WBBB 920 WDOT 1400 WJOY 1230
Athens, Tex. KBUD 1410 Atlanta, Ga. WPLO 590	Bay Springs. Miss. WHII 1570 Baytown, TX KBUK 1380 Beacon, N.Y. WBMR 1260 Beardstown, III. WRMS 790	KB01 670 KGEM 1140 KID0 630	Burnet TX KHLB 1340 Burnettown, S.C. WVAP 1510 Burney, Cal. KAVA 1450
WIGO 1340 WAOK 1380 WERD 860	Beaufort, N.C. WBMA 1400 Beaufort, S.C. WBEU 960	KSPD 790 Bolivar, Mo. KBLR 1130 Bolivar, Tenn. WBOL 1560	Burns, Oreg. KRNS 1230 Burnsville, N.C. WKYK 1540
WGKA 1190 WGST 920 WGUN 1010	Beaumont, Tex. KLVI 560 KAYC 1450	Bonners Ferry, IN KBF1 1450 Boone. Iowa KWBG 1590	Butler AL Butler, Mo. KMAM 1530 Butler, Pa. WBUT 1050
WIIN 970 WQXI 790 W8B 750 WYZF 1480	KJET 1380 KTRM 990 Beaver Dam, Wis. WBEV 1430 Beaver Fails, Pa. WBVP 1230	Boone, N.C. WATA 1450 Boonville, Ind. WBNL 1540	Butte, Mont. KBOW 550 KXLF 1370 Cabo Rojo, P.R. WEKO 930
Atlanta-Decatur, Ga. WGUN 1010 Atlanta, Tex. KALT 900	Beckley, W. Va. WJLS 560 WCIR 1070 WWNR .620	Boonville, Miss. WBIP 1400 Boonville, Mo. KWRT 1370 Boonville, N.Y. WBRV 900	Cadillae, Mich. WATT 1240 WWAM 1370
Atlantic, Iowa KJAN 1220 Atlantic Beach, Fia. WJNJ 1600 Atlantic City, N.J. WFPG 1450	Bedford, Ind. WBIW 1340 Bedford, Pa. WBFD 1310 WAYC 1800	Boston, Mass. KBBB 1600 WBZ 1030	Caguas, P.R. WNEL 1430 WVJP 1110 Caire, Ga. WGRA 790
W USS 1490 W M ID 1340 Atmore AL W AT M 1590	Bedford, Va. WBLT 1350 Beeville, Tex. KIBL 1490 KACO 1090	WACQ 1150 WILD 1090 WEZE 1260	Cairo. III. WKRO 1490 Calais, Maine WQDY 1230 Caldwell, ID KBGN 1060
Atoka, Okia. KEOR 1110 Attleboro, Mass. WARA 1320 Auburn AL WAUD 1230	Belen, N. Mex. KARS 660 Belfast, Me. WBME 1230	WEEI 890 WHDH 850 WMEX 1510 WRKO 680	Calera AL KCID 1490 WBYE 1370 Calexico, Callf. KICO 1490 Calhoun, Ga. WEBS 1110
Auburn, Callf. KAHI 950 Auburn, Ind. WIFF 1570 Auburn, Me. WPNO 1530 Auburn, N.Y. WMBO 1340	Bellaire, Ohlo WOMP 1290 Bellafontaine, O. WTOO 1390	Boulder, Colo. KBOL 1490 KADE 1190	Calhoun City Miss WIRL 1536
Auburn, Wash. KASY 1220	Bellefonte, Pa. WBLF 970 Bell Fourche, S.Dak. KBFS 1450 Belle Glade, Fia. WSWN 900 Belleville, III. WIBV 1260	Bowle, Tex. KBAN 1410 Bowling, Green, Ky. WKCT 930 WBGN 1340	Camas. Wash. KVAN 1480 Cambridge, MD WCEM 1240 Cambridge, Mass. WCAS 740
Augusta AR KMCW 1190	Bellevue, WA KZAM 1540 Bellingham, Wash, KPUG 1170	Bowling Green, Mo. KPCR 1530 Bowl, Green, Ohio WMGS 730	Cambridge, Mass. WCAS 740 Cambridge, Ohlo WILE 1270 Camden AL WCOX 1546 Camden AR KAMD 910 KJWH 1450
WGAC 580 WRDW 1480	KGMI 790 KOQT 1550 KBFW 930 Bellville, TX KACO 1090	Boynton Beach FL WKAO 1510 Bozeman, Mont. KXXL 1450 KBMN 1230	Camden, N.J. WCAM 1310 WTMR 800
Augusta, Ga. WAUG 1050 Augusta, Maine WRDQ 1340 WRDQ 1400 WRDQ 1400	Belmont, N.C. WCGC 1270 Belolt, Wis. WGEZ 1490 WREL 1380	Braddock Po WI OA 1550	Camden, S.C. WACA 1590 WPUB 130 Camden, Tenn. WFWL 1220 Cameron, MO KMRN 1360
	Belton, S.C. WBEL 1380 WHPB 1380 Belton, Tex. KTON 940 Belzoni, Miss. WELZ 1480 Bemidji, Minn. KBUN 1480 KKBJ 1360	Braddocks Heights, Md. Braddocks Heights, Md. WMHI 1370 WTRL 1490 WBRD 1420	Cameron, Tex. KMIL 1330 Camilia, Ga. WCLB 1220 Campbell, Uhio WHOT 1330
Aurora, Mo. KSWM 940 Austell, Ga. WACX 1600	Bend, Oreg. KBND 1110	Bradford, Pa. WESB 1490 Brady, Tex. KNEL 1490 Brainerd, Minn. KLIZ 1380 KVBR 1340	Campbellsvirle, Ky. WTCO 1450 Camuy, P.R. WCHQ 1360
	Bennetsville, S.C. WBSC 1550 Bennington, Vt. WRTN 1370	Brandon, Miss. WRKN 970 Branson, Mo. KRHM 1220	Canadaigua, N.Y. WCGR 1550 Cannon City. Colo. KRLN 1400 Canonsburg, Pa. WARD 540
KIXL 970 KLBJ 590 KOKE 1370	Benson, Minn. KBMO 1290 Benson, N.C. WPYB 1130 Benton AR KBBA 690	Brattlebore, Vt. WTSA 1450 WKVT 1490 Brawley, Calif. KROP 1300 Brazil, IN WWCM 1130	Canton, Ga. WCHK 1290 Canton, III. WBYS 1560 Canton, Miss. WMGO 1370 Canton, N.C. WWIT 370
Ava. Mo. KSOA 1430 Avalon. CA KBRT 740	Benten, Ky. WCBL 1290 Benton, TN WBIN 1540	Breckenridge, Minn. Wahpeton, N.D. KBMW 1450	Canton, N.C. WWIT 970 WPTL 920 WHBC 1480 WOLU 1060
Avondale Estates, Ga. WAVO 1420 Avon Park, FL. WAPR 1390	Benton Harbor-St. Joseph, Mich. WHFB 1060 Berea, KY WKXO 1500	Breckehridge, Tex. KSTB 1430 Bremen, Ga. WWCC 1440 Bremerton, Wash, KBRO 1490	WINW 1520 WNYN 900
WGL1 1290	Berkeley CA Berkeley Springs, W.Va. WCST 1010 Berlin, N.H. WBRL 1400	Bremen, Ga. WWCC 1440 Bremerton, Wash, KBRO 1490 Brenham, TX KTTX 1280 Brevard, N.C. WPNF 1240 Brewster, N.Y. WPUT 1510 Brewton AL WEBJ 1240	Cape Girardeau, Mo. KFVS 960 KZYM 1220 KGMO 1550
Bainbridge, Ga. WMGR 930 WAZA 1360		Bridgeport AL WBTS 1480 Bridgeport, Conn. WICC 600 WD1Z 1530	Carbondale, III. WCIL 1029 Carbondale, Pa. WCDL 1440 Caribou, Maine WFST 600
Baker, Oreg. KBKR 1490 Bakersfield, Calif. KAFY 550	Bessemer AL WTAM 1450 Bethel AK KYUK 580	Bridgetown, N.J. WSNJ 1240 Brigham City, Utah KBUH 800	Carishad, N. Mex. KAVE 1240
KERN 1410	Bethlehem, Pa. WGPA 1100 Beulah, ND KHOL 1410	Bristol, Conn. WB18 1440	KBAD 740 KCCC 930 Carmel, Calif. KRML 1410 Carmi. III. WROY 1460
KUZZ 800 KLYD 1300 KWAC 1480 KPMC 1580 Baldwinsville, N.Y. WSEN 1050	Beverly, Mass. WMLO 1570 Elddeford, Maine WIDE 1400 Big Bear Lake, CA KBBV 1050 Big Deita, Alaska WXLL 980	Bristei, Va. WZAP 690	Carmichael, CA KFIA 710 Carnegie, PA WPLW 1590
Ballinger, Tex. KRUN 1400 Baltimore, Md. WBAL 1090	Big Rapids, Mich. WBRN 1460	Broadway-Timberville VA WBTX 1470 Broakwart NV WWBX 1550	Carolina PR WVOZ 1490 Carrington, N.Dak. KDAK 1600 Carrizo Springs, Tex.
WAYE 860 WBMD 750	Big Sprg., Tex. KBST 1490 KHEM 1270	Brockton, Mass. WBET 1460	KBEN 1450

U.S. AM	STATION	NS BY LOCATION		
Location	Call kHz	Location Call kHz	Location Call kHz	Location Call kHz
Carroll, Iowa Carollton AL Carrollton, Ga. Carrollton, Mo. Carson City, Nev. Cartersville, Ga.	KCIM 1380 WRAG 590 WLBB 1100 WPPI 1330 KAOL 1430 KPTL 1300 WBHF 1450	Chico, Calif. KHSL 1290 Chicopee, Mass. WACE 730 Chiefland, Fia. WLQH 940 Childress, Tex. KCTX 1510 Chillicothe, Mo. KCHI 1010	WCBI 550 WMBC 1440 Columbus, Nebr. KJSK 900 KTTT 1510 WBNS 1460 WBNS 1460 WCOL 1230	Dardanelle AR KCAB 880 Darlington, S.C. Davenport, Iowa WOC 1420 KWNT 1580 KSTT 1170 Dawson, Ga, WOWD 990
Carthage, III. Carthage, Mo. Carthage, MS	WCAZ 990 KDMO 1490 WECP 1480	Chipley, Fla. WBGC 1240 Chippewa Falls, WIs.	WMNI 920 W0SU 820 WTVN 610 WVKO 1580 Colville, Wash, KCVL 1270	Dawson, Ga. WDWD 990 Dayton, Ohio WHIO 1290 WING 1410 WONE 980 WAVI 1210
Carthage, Tenn. Carthage, Tex. Caruthersville, Mo. Casa Grande AZ Casey, III.	WKZI 800	Christiansburg, Va. WJJ 1280 Christiansted, V.I. WSTX 970 Church Hill, Tenn. WMCH 1260 Churchville, VA WABH 1150 Cieco, III. WVON 1450 Cincinnati, Ohio WCKY 1530	Comanche, Tex. KCOM 1550 Commerce, Ga. WJJC 1270 Concord, Calif. KWUN 1480 Concord, N.H. WKXL 1450 Concord, N.C. WEGO 1410	Dayton, Tenn. WDNT 1280 Daytona Beach, Fla. WNDB 1150 WMFJ 1450 WROD 1340
Casper, Wyo. Cathedral City, CA Catskill, N.Y.	WCKL 560	WKRC 550 WLW 700 WSAI (360	Connells ville, Pa. WCVI 1340 Conners ville, Ind. WCNB 1580 Conners ville, Ind. WCNB 1580 Conners, TX KIKK 900	Deadwood, S.Dak. KDSJ 980 Dearborn MI Decatur AL WHOS 800 WAJF 1490 WMSL 1400
Cave City, KY Cayce, S.C. Cayey, P.R. Cedar City. Utah	WKVE 800 WCAY 620 WLEY 1080 KSUB 590 KBRE 940 KCFI 1250	WUBE 1230 WZIP 1050 Circleville OH WNRE 1540 Clanton AL WKLF 980 Clare MI WRNN 990	Conway AR KCON 1230 KVEE 1330 Conway, N.H. WBNC 1050 Conway, S.C. WLAT 1330 WJXY 1050	Decatur - Atlanta, Ga. W GUN 1010 W XLL 1310 W DZ 1050 W SUY 1340
Cedar Falls, Iowa Cedar Rapids, Iow	KCRG 1600 KLWW 1450 WMT 600 KHAK 1360 WGAA 1340	Claremont, N.H. WTSV 1230 Claremore, Okla. KWPR 1270 Clairon. Pa. WWCH 1300 Clarksburg, W. Va. WBOY 1400 WHAR 1340 WPDX 750	Cookeville, Tenn. WHUB 1400 WPTN 1550 WPTN 155	Decatur, Ind. WADM 1540 KWLC (240) Decorah, Iowa KWLC 1240 Deer Lodge, Mont. KDRG 1400 Defiance, Ohio WONW 1280
Cedartown, Ga. Celina, Ohio Center, Yex. Centerville, Iowa Centerville, Ind. Centerville Miss.	WCSM 1350 KDET 930 KCOG 1400 WHON 930	Clarksdale, Miss. WKDL 1600 Clarkston, WA KCLK 1430 Clarksville AR KLYR 1360 Clarksville, GA WIAF 1500 Clarksville, Tenn. WJZM 1400	Copper Hill, Tenn. WLSB 1400 Couuille, Oreg. KWRO 630 Coral Gables, FL WRHC 1550 WVCG 1080 Corbin, Ky. WCTT 680 WYGO 1330	Defance, Unio WONW 1280 De Funiak Springs, Fia. WGTX 1280 WZEP 1460 De Katb, III. WLBK 1360 De Land. Fia. WETO 1490 WKKX 1310
Centreville, Miss. Centerville, Tenn. Genterville, UT Central City, Ky. Centralia, III.	WHLP 1570 KLRK 1600 WNES 1050 WMTA 1380	Clarksville, Tex. KCAR 1350 Claxton, Ga. WCLA 1470 Clayton, Ga. WGHC 1570 Clayton, MO KADI 1320	Cordele, Ga. WMJM 1490 Cordova AK KLAM 1450 Corinth, Miss. WCMA 1230 WKCU 1350 Cornella, Ga. WCON 1450	Delano, Calif. KCHJ (010 Delaware, Ohio WDLE 1550 Delray, Bch., Fla. WDBF 1420 Del Rio, Tex. KDLK 1230 KWMC 1490
Centralia & Cheha Centre AL Centreville AL Ceres, Calif.	WEIS 990 WBIB 1110 KLOC 920	Clayton, N.Mex. KLMX 1450 Clayton NC Clearfield, Pa. WCPA 900 Clearwater, Fla. WAZE 860	Corning AR KCCB 1260 Corning, N.Y. WCBA 1350 WCLI 1450 Cornwall, N.Y. WVLE 1170 Corona, Cal. KWRM 1370 Corpus Christi, TX KCTA 1030 KCCT 1150	Delta, Colo. KDTA 1400 Delta, UT Deming, N.M. KOTS 1230 Demopolis AL WXAL 1400 Denham Sprgs., La. WLBI 1220 Denison, Iowa KDSN 1530
Chadburn, N.C. Chadron, Nebr. Chambersburg, Pa.	WVOE 1590 KCSR 610	Clemson, S.C. WCCP 1560 Clermont FL WSLC 1340 Cleveland, Ga. WRWH 1350	KEYS 1440 KRYS 1360 KSIX 1230 KUNO 1400	Denison-Sherman, Tex. KDSX 950 Denmark-Bamberg, S.C. WWBD 790 Denton, Tex. KDNT 1440
Chanute, Kan. Chapel Hill, N.C. Chardon, O. Charlerol, Pa. Charles City, Iowa	WCHL 1360 WRBX 1530 WBKC 1560 WESA 940 KCHA 1580	Cleveland OH WWWE 1100 WMGC 1260 WERE 1300	Corry, PA WWCB 1370 Corsicana, Tex. KAND 1340 Cortez, Colo. KVFC 740 Cortland, N.Y. WKRT 920 Corvallis, Ore. KLOO 1340 KFLY 1240	Denver CO KAAT 1090 KDEN 1340 KFML 1390 KHOW 630 KIMN 950 KLIR 990 KLIZ 560
Charleston, III. Charleston, Mo. Charleston. S.C.	WEIC 1270 KCHR 1350 WCSC 1390 WOKE 1340 WPAL 730 WQSN 1450	WGAR 1220 WHK 1420 WABQ 1540 WJW 850 Cleveland, Tenn. WBAC 1340 WCLE 1570	KOAC 550 Corydon, Ind. WPDF 1550 Coshocton, Ohio WTNS 1560 Cottage Grove, Ore. KNND 1400 Cottonwood AZ KV10 1600 Coudersport, Pa. WFRM 600	KERE 710 KOA 850 KPOF 910 KBNO 1220
Charleston, W.Va.	WCAW 680 WCHS 580 WXIT 1490 WKAZ 950	Cleveland, TX KJCH 1410 Cleve. Hghts., Ohio WJMO 1490 Clewiston, Fla. WOWY 1590 Clifton AZ KCUZ 1490 Clifton Forme VA WKCF 1230	Council Bluffs, lows KRCB 1560 Courtenay, B.C. CFCP 1440 Covington, Ga. WGFS 1430 Covington, Kv. WCLU 1320	DeQueen AR KOQN 1390 DeRidder, La. KDLA 1010 Dermott, AR KAKA 1110 DeSoto, Mo. Des Moines, Iowa KGBC 1390
Charles Towns, W Charlesvolx, MI Charlotte, Mich. Charlotte, N.C.	WXVA 1550 WXVA 1550 WVOY 1270 WCER 1390 WBT 1110	Clincho, Va. WDIC 1430 Clinton, AR KGFL 1110 Clinton, Ill. WHOW 1520 Clinton, lowa KCLN 1390 KROS 1340 Clinton, Mo. KOKO 1280	Covington, La WARB 730 Covington, Tenn. WKBL 1250 Covington, Va. WKBY 1340 Cowan, Tenn. WZYX 1440 Cozad, Neb. KAMI 1580 Craig, Colo. KRAI 550	KNUA 940 KRNT 1350 KSO 1460 KWKY 1150 WHO 1040
	WAYS 610 WGIV 1600 WHVN 1810 WSOC 930 WIST 1240	Clinton, NC WRRZ 880 WCLN 1170 Clinton, Okla. KWOE 1320 Clinton, S.C. WPCC 1410 Clinton, Tenn. WYSH 1380	Crawfordsville, Ind. WCVL 1550 Crescent City, Calif. KPLY 1240 KPOD 1240 Creston, Iowa KSIB 1520	WDEE 1500 WILB 1400 WJR 780 WWJ 9850 WXYZ 1270
Charlotte Amalle,	WRPL 1540 V.I. WVWI 1000 WSTA 1340 WCHV 1260	Clovis, CA KXQR 790 Clovis, N.Mex. KCLV 1240 KICA 980 KWKA 680 Coachella Calif. KCHV 970	Crestview, Fla. WCNU 1010 WJSB 1050 Crewe, Va. WSVS 800 Crockett. Tex. KIVY 1290	Detroit Lakes, Minn. RDLM 1340 RDLM 1340 KDLR 1240 DeWitt AR KDEW 1470 Dexter, Mo. KDEX 1590
Chase City, Va. Chatham, Va. Chattahoochee, Fis	WINA 1070 WMEK 980 WKBY 1080	Coachella. Calif. KCHV 970 Coamo, P.R. WCPR 1450 Coatesville, Pa. WCOJ 1420 Cochran, Ga. WYMG 1440 Cocoa Beach, Fla. WEZY 1350 WWBC 1510 WRKT 1300	Crookston, Minn. KROX 1260 Crossett AR KAGH 800 Crossville, Tenn. WAEW 1330 WCSV 1490 KSIG 1450 KAJN 1560 Crozet, Va. WPED 810	Diboli, Tex. Dickinson, N.Dak. Dickinson, Tenn. Dilion, Mont. Dillingham. AK KDLG 670
Chattanooga, Tenn.	WDEF 1370 WDOD 1310 WDXB 1490 WGOW 1150	Cody Wyo KODI 1400 1	Crystal Lake, III. WIVS 650 Cuba, MO KBCC 1410 Cuero, TX KEWS 1600 Cullman AL WFMH 1460 WKUL 1340	Dillon, S.C. KOHN 1470 Dimuitt, Tex. KOHN 1470 Dinuba, Calif. KRDU 1130 Dixon, III. WIXN 1460 Dodge City, Kans. KGNO 1370 KEDD 1550
Cheboygan, Mich. Cheektowaga, N.Y. Chehalis-Centralia Chelan, Wash.	WN 00 1260 WCBY 1240 WN 1A 1230 Wash. KITI 1420 KOZI 1230	Coeur d'Alene, Ida. Coffeyville, Kans. Colby, Kans. Colby, Kans. Coldwater, Mich. Coleman, Tex. KSTA 1000 Colfax, Wash. College Park, GA College Station, Tex. Collierville TN WMSO 1590	Culpéper, Va, WCVA 1490 Cumberland, Ky. WCPM 1280 WCMD 1230 WCBC 1270 WTBO 1450 Cumming, GA WSNE 1170	Dodgeville, Wis. WDMP 810 Donalsonville, Ga. WSEM 1500 Donaldsonville, La. WSLG 1090 Donelson, Tenn. WAMB 1190 Donlphans, Mo. KOFN 1500 Dothan AL. WAGF 1320
Cheraw, S.C. CherryvIIIe. N.C. Cherokee, Iowa Chesapeake, Va. Chester, III. Chester, Pa.	WCRE 1420 WCSL 1590 KCHE 1440 WCPK 1600 KSGM 980	Collinsville, Va. WFIC 1530 Colonial Heights, Va. WPVA 1290 Colorado City, Tex. KVMC 1320 Colo. Sprgs., Colo. KPIK 1580 KVDR 1300 KVDR 1300	Cushing, Okla. KUSH 1660 Cuthbert, Ga. WCUG 850 Cuyahoga Falls, Ohlo WCUE 1150 Cypress Gardens, Fla.	WO1G 1450 W00F 560 Douglas AZ KDAP 1450 KAPR 930 Douglas Ga WDMG 860
Chester, Pa. Chester, S.C. Chester, Va. Chestertown MD Cheyenne, Wyo,	WQIQ 1590 WVCH 740 WGCD 1490 WIKI 1410 WCTR 1530 KFBC 1240	KYSN 1460 KRYT 1530	Cynthlana, Ky. WGTO 540 Dade City, Fla. WDCF 1350 Dalngerfield, Tex. KEGG 1560 Dalhart, Tex. KXIT 1410 Dallas. Oreg. KROW 1460 Dallas, Tex. KRUD 1080	Douglas, Wyo. KWIV 1050 Douglasville, Ga. WOGL 1520 Dover, Del. WDOV 1410 WKEN 1600 Dover, N.H. WTSN 1270
Chicago, III.	KRNK 1530 KRAE 1480 KVWO 1370 WAIT 820	Columbia, Miss. WCJU 1450 Columbia, Mo. KFRU 1400 KTGR 1580 Columbia, Pa. WHEX 1580	KPBC 1040 KSKY 660 KLIF 1190 WFAA 570	Dover, N.J. WRAN 1510 Dover-Foxcroft, ME WDME 1340 Dover-New Philadelphia, O. WJER 1450 Dowaglac, Mich. WDOW 1440
	WCRW 1240 WEDC 1240 WEDC 1240 WFMT 1450 WGN 720 WJPC 950	WIS 560 WOIC 1320 WNOK 1230 WQXL 1470 Columbia, Tenn. WGCP 1280	KBOX 1497 WRR 1310 Dallas-Ft. Worth TX WFAA 570 WRCD 1430 WRCD 1430 WTT1 1530	Dublin, Ga. WMLT 1330 WXLT 1230 Du Bola, Pa. WCED 1420 Dubuque, Iowa KDTH 1370 WDBQ 1490
	WIND 560 WJJD 1160 WLS 890 WMAQ 670 WMBI 1110	Columbus Ga. WRRM 1340 WRBL 1420 WRCG 1440 WHYD 1270	Danbury, Conn. WLAD 800 Danville, III. WDAN 1490 WITY 980 Danville, Ky. WHIR 1230	Duluth, Minn. KDAL 610 WEBC 560 KAOH 1390 WWJC 850 Dumas AR KDDA 1560
Chicago Hgts., III.	WVON 1390 WSBC 1240 WMPP 1470 WCGO 1600 KWCO 1560	WCLS 1580 WOKS 1340 WPNX 1460 Columbus, Ind. WCSI 1010 Golumbus, Miss. WACR 1050	Danville, Pa. WOOP 1000 WPGM 1570 WBTM 1330 WYPR 970 WDVA 1250	Dumas, Tex. KDDD 800 Duncan, Okla. KRHD 1350 Dunedin FL WDCL 1470 Dundee, N.Y. WFLR 1570 Dunnellon, Fla. WTR\$ 920

				7.5. AIVI 5 I	ATIONS	BY LOCATION
Location Cal	II kHz	Location	Call kHz	Location	Call kHz	Location Call kHz
Dunkirk, N.Y. WD Dunn, N.C. WC	OE 1410 KB 780		KUGN 590		KWHN 1320	Glenwood Sprgs., Colo.
Du Quoin, III. WD	QN 1580	Eunice, La. Eupora, MS	KEUN 1490 WEPA 710 KINS 980	Ft. Stockton, Tex. Ft. Valley, Ga.	KFST 860 WFPM 1150	Globe, AZ KPPR 1240
Durango, Colo. KI	DN 1430 UP 930 GO 1240	Eureka, Calif.	KHUM 790 KRED 1480	Ft. Walton Beach,	Fla. WNUE 1400 WFTW 1260	Gloucester, Va. WDDY 1420 Gloversville-Johnston NY
	FO 750	Eustis, Fla. Evanston, III.	WLC0 1240 WEAW 1330	Ft. Wayne, Ind.	WGL 1250 WFWR 1090	Gold Beach, Oreg. KBLY 1220
ws	RC 1410	Evanston, Wyo.	WLTD 1590 KEVA 1240		WOWO 1190 WLYV 1450	Golden Meadow, LA
	TIK 1310	Evansville, Ind.	WROZ 1400	Ft. Worth, Tex.	WMEE 1380 KJIM 870	Golden Valley, Minn. KQRS 1440
wT	RO 1330		WGBF 1280 WIKY 820 WJPS 1330	Tt. Worth, Tox.	KRXV 1540 KFJZ 1270	Goldsboro, N.C. WFMC 730 WGBR 1150
Eagle River, Wts. WE Easley, S.C. WE	RL 950 LP 1360	Eveleth, Minn. Everett, Pa. Everett, Wash.	WEVE 1340 WSKE 1050		KNOK 970 WBAP 820	Gonzales, LA WYNG 1300 WSLG 1090
E. Grand Forks, Minn.	RAD 1590		KRKO 1380 KWYZ 1230	Fosston, Minn.	KXOL 1360 KEHG 1480	Gonzáles, Texas KCTI 1450
E. Lansing, Mich. WK	RC 1590 AR 870	Excelsion Springs, N	WBLO 1470	Fostoria, Ohio Fountain Inn. S.C.	WF0B 1430 WFIS 1600	Goodland, Kans. KLOE 730 Gordon, Ga. WKOG 1560 Goshen, Ind. WKAM 1460
E. Liverpool, Ohlo WO	VIC 730 DHI 1490	Exeter, N.H. Fairbanks AK	KEXS 1090 WKXR 1540	Fowler, Calif. Framingham, Mass.	WKOX 1190	Gouverneur, N.Y. WIGS 1280 Grafton, ND KXPO 1340
East Longmeadow, Mass WI Eastman, Ga, WU	XY 1600	Fairbanks AK	KFAR 660 KFRB 900 KIAK 970	Frankfort, Ind. Frankfort, Ky.	WILO 1570 WFKY 1490	Granam, N.C. WSML 1190
E. Moline, IL WD1	LM 960	Fair Bluff, N.C. Fairbury, Nebr.	WWK0 1480 KGMT 1310	Franklin, Ky. Franklin, La.	WKED 1130 WFKN 1220 KFRA 1390	Graham, Tex. KSWA 1330 Grand Forks, N.D. KFJM 1370 KKXL 1440
East Prairie, Mo. KG	FS1 1490	Fairbury, Nebr. Fairfax, Va. Fairfield AL	WEEL 1310 WJLD 1400	Franklin, N.C. Franklin, N.H.	WFSC 1050 WFTN 1240	Grand Haven, Mich,
E. Syracuse, NY WYI	RD 1540 MD 1460	Fairfield, [] Fairfield, lowa	WFIW 1390 KMCD 1570	Franklin, Pa. Franklin, Tenn.	WFRA 1450 WAGG 950	Grand Island, Nebr.
Easton, Pa. WE	EST 1400	Fairfield, O. Fairhope AL	WCNW 1560 WABF 1220	Franklin, Va.	WIZO 1380 WYSR 1250	KMMJ 750 KRGI 1430
Eaton, OH WC	PQ 1520	Fairment, Minn. Fairment, N.C.	KSUM 1370 WFMO 860	Franklinton, La. Frederick, Md.	WFCG III0 WFMD 930	Grand Junction, Colo. KREX 1100
Eatontown, N.J. WH Eau Claire, WIs. WE	AQ 790	1 .0	WMMN 920 WTCS 1490 KUDL 1380	Frederick, Okla.	WZYQ 1370 KTAT 1570	KEXO 1230 KSTR 620
W0		Fairway, Kan. Fajardo, P.R. Faifurrias, Tex.	WMDD 1480 KPSO 1260	Fredericksburg, Te	KNAF 910	Grand Prairie, Tex. KQIL #340
Ebensburg, Pa. WEI Eden, NC WCI	ND 1580	Fallon, Nev. Fall River, Mass.	KVLV 980 WALE 1400	Fredericksburg, VA	WFLS 1350	Grand Rapids, MI WMAX 1480 WCUZ 1230
Edenton, N.C. WC	OE 1490	Falls Church, Va.	WSAR 1480 WFAX 1220	Fredericksted, VI Frederickstown, Mo.	WRRA 1290 KFTW 1450	WFUR 1570 WGRD 1410
Edinburg, Tex. KUI Edmonds, Wash. KGI	RV 710 DN 630	Falls City, Nebr. Fargo, N.Dak.	KTNC 1230 WDAY 970	Fredonia, N.Y. Freeport, III.	KFTW 1450 WBUZ 1570 WFRL 1570	WLAV 1340 WOOD 1300
Effingham, III. WC	BY 1130 RA 1090		KFGO 790 KFNW 1170	Freeport, N.Y. Freeport, Tex.	W GBB 1240 K BRZ 1460	Grand Rapids MN KOZY 1320 Granger, UT KRGO 1550
Elba AL Elberton, Ga. WSI	GC 1400	Faribault, Minn.	KQWB 1580 KDHL 920	Freemont, Mich.	WSHN 1550 KHUB 1340	Grangeville, Idaho KORT 1230 Granite City, III. WGNU 920
El Cajon, Calif. KD El Campo, Tex. KU El Centro, Calif. K	LP 1390	Farmington, Me.	KTDL 1470 WKTJ 1380	Fremont, Ohio Fresno, Calif.	WFRO 900 KARM 1430	Granite Falls, N. C. WKJK 900
KAI	XO 1230 MP 1430 MS 1290	Farmington, Mo. Farmington, N.M.	KREI 800 KENN 1390 KWYK 960		KBIF 900 KIRV 1510	Grants, N.Mex. KMIN 980 Grants Pass, Oreg. KAGI 930
KEI	LD 1400	Farmville, N.C.	KRZE 1280 WFAG 1250		KEAP 980 KXEX 1550	Grayling, MI WGRY 1590 Grayson, Ky. WGOH 1370
Eldorado Springs, Mo. KES		Farmville. Va. Farrell. Pa.	WFLO 870 WFAR 1470		KFRE 940 KGST 1600 KMAK 1340	Gt. Barrington, Mass.
Eleele, Kanal, Hawall	JAI 720	Fayette AL	WWWF 990		KMJ 580 KYNO 1300	Gt. Bend. Kans. KVGB 1590 Great Falls MT KEIN 1310
Elijiav, GA WI	LEJ 1560	Fayetteville AR	KHOG 1440 KFAY 1250	Friona, Tex. Front Royal, Va.	KNNN 1070 WFTR 1450	KQD1 1450 KMON 580
Elizabeth City, N. C.	DM 1530 NC 1240	Fayetteville, N.C.	WFAI 1230 WFNC 940	Frostburg, Md. Fulton, Ky,	WFRB 560 WFUL 1270	Greeley. Cole. KFKA 1310 KYOU 1450
WG		Fayetteville, Tenn.	WFLB 1490 WIDU 1600	Fulton, Miss. Fulton, Mo. Fulton, N.Y.	WFTO 1330 KFAL 900	Green Bay, WI WGEE 1360
Elizabethtown, Ky. WII	DD 1520 EL 1400	t agentering tomin	WEKR 1240 WIXC 1140	Fuquay-Varina, N.		WDUZ 1400 WNFL 1440
Elizabethtown, N.C.		Fergus Falls, Minn.		Gadsden AL	WAKS 1460 WGAD 1350 WJBY 930	Greenfeld, Mass. WHAI 1240
Elk City. OK KA	DS 1240	Fernandina Beach F	WYH1 1570	Gaffney, S.C.	WAAX 570 WFGN 1570	Green kiver, WY KUGR 1490 Greensboro, N.C. WBIG 1470
Elkhart, Ind. WCI WTI Elkins, N.C. WII	RC 1340	Ferriday, La. Festus, Mo.	KFNV 1600 KJCF 1400	Galnesville, Fla	WEAC 1500 WDVH 980	WCOG 1320 WEAL 1510
Elkins, N.C. WII Elkins, W.Va, WDI Elko, Nev. KEI	NE 1240	Festus-St. Louis, M	KXEN 1010 WFIN 1330		W G G G 1230 W R U F 850	WGBG 1400 WPFT 950
Elkton, Md. WS	EH 1550	Findlay, Ohio Fisher, W.Va. Fitchburg, Mass.	WELD 690 WEIM 1280	Galnesville, Ga.	WAKA 1390 WGGA 550 WDUN 1240	Greensburg, Ind. WTRE 1830 Greensburg, KY WGRK 1550
Etlenville, N.Y. WE	LE 1240 LV 1370	Fitzgerald, Ga.	WFGL 960 WRHR 1240	Gainesville, Tex.	WDUN 1240 WNRJ 1130 KGAF 1580	Greensburg, Pa. WHJB 620 Greenville AL WGYV 1380 Greenville, Mich. WPLB 1380
Fileworth Ma Whi	GB 1560 EA 1370	Flagstaff AZ	KCLS 600 KAFF 930	Galax, Va. Galesburg, III.	WBOB 1360 1	Greenville, Miss. WJPR 1330 WDDT 900
Elmira, N.Y. WEI	DC 1530 LM 1410 NY 1230	Flat River. Mo.	KEOS 690 KFMO 1240 WFDF 910	Gallon, OH	WGIL 1400 WAIK 1590 WGLX 1570	WGVM 1260 WBZQ 1550
Horseheads N V. WFI	HH IRON	Flint, Mich.	WTRX 1330	Gallatin, Tenn. Gallipolis, Ohio	WHIN 1010 WAMG 1130 WJEH 990	Greenville, N.C. WNCT 1070 WQQW 1340
El Paso, TX KRO	OD. 600 MA 1060		WCZN 1570 WKMF 1470	Gallup, N. Mex.	KGAK 1330 KYVA 1230	Greenville, Pa. WESC 660
KH	EY 690	Flomaton AL	WTAC 600 WTCB 990	Galveston TX	KILE 1400 KGBC 1540	WFBC 1330
KI	NT 1590 ISO 1150 ET 1340	Florence AL	WXOR 1340 WOWL 1240 WJMX 970	Garden City, Ga. Garden City, Kan.	WMNT 1520 KUIL 1240	WMRB 1490 WMTY 1090
KTS	SM 1380	Florence, S.C.	WOWL 1240 WJMX 970 WOLS 1230 WYNN 540	Garden City, Mich	KBUF 1050 WIID 1090 WABK 1280	WMUU 1260 WQOK 1440
Ely, Minn. WEI	LY 1230	Floydada, Tex. Foley AL	KFLD 900 WHEP 1310	Gardiner, Me. Gardner, Mass. Garner, N.C.	WABK 1280 WGAW 1340 WKBQ 1000	Greenwith, Conn. WGCH 1490 Greenwood, AR KCAJ 1510
Elyria, Ohlo WE Eminence, Ky. WS	STL 1600	Fond du Lac. Wis. Fordyce AR	KF1Z 1450 KBJT 1570	Gary, Ind.	WWCA 1270 WLTH 1370	Greenwood, Miss. WABG 960 WGRM 1240
Emporia, Va. WEY	VA 860	Forest City, N.C.	WMAG 850 WBBO 760	Garyville, La. Gastonia, NC	W GNC 1450	Greenwood, S.C. WSWG 1540 WCRS 1450
Emporium, Pa. WLI Endicott, N.Y. WE	EM 1250	Forks, Wash. Forrest City AR	WAGY 1320 KVAC 1490 KXJK 950	Gate City, Va. Gaylord, Mich.	WLTC 1370 WGAT 1050	Greer, S.C. WEAB 800
Englewood, CO KW Englewood, Fla. WEI	BZ 1150	Porsyth, MI	K1KC 1250	Geneseo IL	WGEN 1500 1	Grenada, MIss. WNAG 1400
Enid. Okla. KC	RC 1390	Ft. Bragg, Calif.	WFAW 940 KDAC 1230 WABD 1370	Geneva AL Geneva, III. Geneva, N.Y.	WGSB 1480	Gretna, La. KGLA 1540 Gretna VA WMNA 780
Enterprise AL WII Enterprise, Oreg. KW	RB 600 VR 1340	Ft. Collins, Colo.	KCOL 1410 KIIX 600	Georgetown, Del. Georgetown, Ky.	WJWL 900 WAXU 1580	Griffin, Ga. WKEU 1450 WHIE 1320
Enhrata, Pa. WG	ISA 1310	Ft. Dodge, Iowa	KVFD 1400 KWMT 540	Georgetown, S.C.	WGTN 1400 WINH 1470	Grinnelt, Iowa KGRN 1410
Erie, Pa. WLI	IET 1400	Ft. Kent, ME Ft. Knox. Ky.	WLVC 1340 WSAC 1470	Georgetown, Tex. Gettysburg, Pa. Gitlette. Wyo.	WGET 1320	Groton-New London CT WSUB 980
W W	GO 1450	Ft. Lauderdale, Fla.	WIXX 1520	Gillette. Wyo. Gilmer TX Gilroy, Cal.	KHYM 1060 KAZA 1290	Grundy, Va. WNRG 940 Guayama, P.R. WNRF 1590
Erwin, Tenn. WEI Escanaba, Mich. WD Escanaba MI WBI	BC 680	Ft. Madison, Jowa	W8RF 1580 WAVS 1190 KXGI 1360	Gladewater. Tex. Gladwin, MI	KEES 1430 WJEB 1350	Guayama, P.R. WXRF 1590 Gulfport, MS WGUF 1130 WGCM 1240
Escondido, Calif. KOV Espanola, N. M. KD	WN 1450 CE 970	Ft. Morgan, Colo. Ft. Myers, Fla.	WINK 1240	Glasgow, Ky.	WKAY 1490 WCDS 1440	Gulfnort, Bliovi MS
Estes Park, CO KS Estherville, Ia. KI	SIR 1470		WMYR 1410 WCAI 1350	Glasgow, Mont. Glen Burnie, Md.	KLTZ 1240 WISZ 1590	Gunnison, Colo, KGUC 1490 Guntersville AL WGSV 1270
Etowah, Tenn. WCI Eufula AL WUI	PH 1220 LA 1240	Fort Payne AL	WFPA 1400 WZOB 1250	Glendale AZ Glendale. Calif.	KRUX 1360 KIEV 870	Guthrie, Okia. KOKC 1490 Guymon, Okia. KGYN 1210
Eugene, Ore. KE	ED 1450 SH 1600	Ft. Pierce, FL Ft. Scott, Kans.	WFTP 1330 WIRA 1400 KMDO 1800	Glendive, Mont.	KKGN 1400 KGLE 590	Hackettstown, NJ WRNJ 1000
KO		Fort Smith AR	KMD0 1800 KFPW 1230 KFSA 950	Glens Falls, N.Y.	WBZA 1410 WWSC 1450	Hagerstown, Md. WARK 1490 WJEJ 1240 Hailey, Idaho KSKI 1340
KPN	NW 1120		KFSA 950 KTCS 1410	Glenville. Ga.	WWSC 1450 WKIG 1580	Hailey, Idaho KSKI 1340 Haines City, Fla. WHAN 930

U.S. AM STATIO		Location Call Life	Location Call kHz
Location Call kHz	Location Call kHz	Location Call kHz	
Haleyville AL WJBB 1230 Halfway, Md. WHAG 1410 Hamden, Conn. WCDQ 1220	Holly Hill SC WKHJ 1440 Hollister, Cal. KMPG 1540	Jackson, Ga. WJGA 1540 Jackson, Ky. WEKG 610 Jackson, Mich. WIBM 1450	Key West, Fla. WKLP 1390 WKWF 1800 WKIZ 1500
Hamilton AL WERH 970 Hamilton, MT KLYO 1240 Hamilton, Ohio WMDH 1450	Hollywood, Fla. WGMA 1320 Holly Springs, Miss. WKRA 1110	WKHM 970 WJCO 1510 Jackson, Miss. WJDX 620	Kilgore, Tex. KOCA 1240 Killeen TX KIXS 1050 Kimball, Nebr. KIMB 1260
Hamilton, Tex. KCLW 900 Hamlet N. C. WKDX 1250	Holyoke, Mass. WREB 930 Homestead, FL WQDI 1430	WJQS 1400 WJXN 1450 WOKJ 1550	King City, Calif. KRKC 1490
Hammond, Ind. WJOE 1230 Hammond, La. WFPR 1400 Hammonton NJ WRDI 1580	Homewood, Ala. WJLD 1400 Hondo, Tex. KRME 1460 Honesdale PA WHPA 1590	WWUN 1590 WRBC 1300	Kings Mountain, N.C.
Hampton, S.C. WBHC 1270 Hampton, Va. WVEC 1490	Honosdale PA WHPA 1590 Honotulu, HI KAIM 870 KISA 1840 KCCN 1420	Jackson MO KJAS 1170 Jackson, Ohio WLMJ 1260	Kingsport, Tenn. WKIN 1320 WKPT 1400 WGOC 1090
Hanesdale, PA WAEN 1590 Hanford, Calif. KNGS \$20	KGMB 590 KZ00 1210	Jackson, Tenn. WDX1 1310 WQZQ 1460 WTJS 1390	Kingston NY WKOT 1550 WGHQ 920 WKNY 1490
Manover, N.H. WISL 1400	KIDE 1080 KPO1 990 KIKI 830	Jackson, Wis. WYLO 540 Jackson, Wyo. KSGT 1340	Kingstree, S.C. WDKD 1310 WKSP 1090
Hanover, Pa. WHVR 1250 Hardin, Mont. KHDN 1210 Hardinsburg, Ky. WHIC 1520	KGU 760 KHVH 1040 KKUA 690	Jacksonville AR KGMR 1500 Jacksonville, Fla. WJAX 930 WAPE 690	Kingsville, Tex. KINE 1350 Kingwood. W.Va. WFSP 1560 Kinston, N.C. WELS 1010
Hardy, AR KSRB 1570 Harian, Ky. WHLN 1410	KND1 1270 KOHO 1170	WVOJ 1320 WEX1 1280 WPDQ 1460	WFTC 960 WISP 1230 Kirkland, WA KGAA 1460
WFSR 1470 WFSR 1470 WFSR 1470 Harrisburg, 111, WEBQ 1240	KORL 650 KUMU 1500 Hood River, Oreg. KIHR 1340	WCGL 1360 WOZN 970	Kirksville, Mo. KIRX 1450 Kissimmee, Fla. WF1V 1080
Harrishurg, Pa WFEC 1400	Hope AR KXAR 1490 Hopewell, Va. WHAP 1340 Hopkinsville, Ky. WHOP 1230	WCMG 1090 WERD 1400	Kittanning, Pa. WACB 1380 Klamath Falls, Oreg. KAGO 1150
WHP 580 WKB0 1230	Hannim Wash KGHO 1560	Jacksonville, III. WCRJ 1530 WJ1L 1550 WLDS 1180	KLAD 960
Harrison AR KHOZ 900 Harrisonburg, Va. WHBG 1360 WKCY 1300	Hornell NY WHHO 1320 WLEA 1480 Horseheads, N.Y. WIQT 1000	Jacksonville, N.C. WJNC 1240 WBBS 1290	Knox, IN WKV1 1520 Knoxville. Iowa KNIA 1320 Knoxville. Tenn. WBIR 1240
Harrodsburg, Ky. WHBN 1420 Hartford, Conn. WDRC 1360	Hot-Springs AR KBHS 590 KXOW 1420 KZNG 1340	Jacksonville, Tex. KEBE 1400 Jacksonville Beh., Fla.	WIVK 850 WJBE 1430
WCCC 1290 WPOP 1410 WTIC 1080	Hot Springs, S.Dak. KOBH 560 Houghton, Mich. WHDF 1400	Jamestown, Ky. WBIX 1010 Jamestown, Ky. WJKY 1080 Jamestown, N.Dak. KEYJ 1400 KSJB 600	WETE 820 WKGN 1340 WKXV 900
Hartford, Ky WLLS 1600 Hartford, Wis WTKM 1540	Houghton Lake, Mich. WHGR 1290	Jamestown, N.Y. KSJB 600 WJTN 1240 WKSN 1340	WNOX 990 WKVQ 1490 WSKT 1860
Hartsville, S.C. WHRT 860 WHRT 1450 WHRT 1450	Houma, La. KJIN 1490 Houston, Miss. WCPC 940	Jamestown, Tenn. WCLC 1260 WDEB 1500	Kodlak AK KVOK 560 Kokomo. Ind. WIOU 1350 Kosciusko, Miss. WKOZ 1340
Hartsville, Tenn. WIKM 1090 Hartwell, Ga. WKLY 980 Harvard, III. WMCW 1600 Harvey, III. WBEE 1570	Houston, Mo. KBTC 1250 Houston. Tex. KCOH 1430 KENR 1070 KEYH 850	Janesville, Wls. WCLO 1230	Kotzebue AK KOTZ 720
Harvey, III. WEEE 1570 Hastings, Mich. WECH 1220 Hastings, Minn. KDWA 1480	KEYH 850 KILT 610 KNUZ 1230	Jasper GA WYYZ 1580 Jasper, Ind. WITZ 990	La Crosse, WI WEMJ 1490 WIZM 1410 WLCX 1490 WKTY 580
Hastings, Nebr. KHAS 1230 KICS 1550 Hattlesburg, Miss. WBKH 950	KODA 1010 KPRC 950 KULF 790	Jasper. Tex. KTXJ 1350 Jeanette PA WBCW 1530 Jefferson City, Mo. KLIK 950	Ladysmith, Wis. WLDY 1340 Lafayette, Ga. WLFA 1590
WFOR 1400 WHSY 1230	KTRH 740 KXYZ 1320	Jefferson City, Tenn. WJFC 1480	Lafayette, Ind. WASK 1450 WAZY 1410 WBAA 920
WORV 1580 WXXX 1310 Haveloek, N.C. WKVO 1330 Haverhill. Mass. WHAV 1490	Howell, Mich. WHMI 1350 Hugo, Okla. KIHN 1340	Jeffersonville, Ind. WXVW 1450	Lafayette, La. KPEL 1420 KVOL 1330 KXKW 1520
Haverhill, Mass. WHAV 1490 Havre, Mont. KOJM 810 Havre de Grace, Md.	Hudsen, N.Y. WHUC 1230 Humacao, P.R. WALO 1240 Humble City, N.M. KCIA 1110 Humboldt, Tenn. WIBJ 740	Jenkins, KY WREM 1000	Lafayette, Tenn. WEEN 1480 LaFoilette. Tenn. WLAF 1450
Hawesville, KY WKCM 1140 Hawkinsville, Ga. WCEH 610	Huntingdon, Pa. WHUN 1150	Jennings, La. KJEF 1290 Jerome, Idaho KART 1400 Jerseyville, III. WJBM 1480 Jesup, Ga. WLOP 1370	LaGrange, Ga. WLAG 1240 WTRP 620
Hays, Kans. KAYS 1400 Haynesville, La. KLUV 1580 Hayward, Wis. WHSM 910	Huntingdon, TN WJPJ 1530 Huntington, Ind. WHLT 1300 Huntington, N.Y. WGSM 740	Jesup, Ga. WLOP 1370 John Day, Ore. KJDY 1400 Johnson City, Tenn. WJCW 910	LeGrange, III. WTAQ 1300 LaGrange, Tex. KVLG 1570 Lajunta, Colo. KBZZ 1400
Hazelhurst, Ga. WVOH 920	Huntington, W. Va, WKEE 800	Johnston, SC WETB 790 Johnston, SC WJES 1570 Johnstown, N.Y. WIZR 930	Lake Charles, La. KLOU 1880 KLCL 1470 KAOK 1400
Hazelton, Pa, WMDC 1220 WAZL 1490 WHZN 1300	Hunstville AL WBHP 1230	Johnstown, Pa. WJAC 850 WJNL 1490 WCRO 1230	Lake City, Fia. WDSR 1340 WGRO 960
Heath OH WHTH 1000 Heber Springs AR KAWW 1370 Helena AR KFFA 1380	WEUP 1600 WFIX 1450 WAAY 1550	Joliet, 111. WJOL 1340 WJRC 1510	Lake Geneva, Wis. WMIR 1550 Lake Havasu City AZ
Helena, Mont. KCAP 1340 KBLL 1240 KMTX 950	Huntsville, Tex. KSAM 1490 Huron, SD KIJV 1340	Jonesbero AR KBTM 1230 KNEA 970 Jonesbero, La. KTOC 920 Jonesbero, Tenn. WJSO 1590	Lake Isabella CA KVLI 1140 Lakeland FL WQPD 1430
Hemet, Calif. KHSJ 1320 Hemingway, S.C. WKYB 1000	Hurricane, WV WZTQ 1080 Hutchinson, Kans. KWBW 1450	Jonesville, La. KANV 1480 Joplin, Mo. WMBH 1450	WONN 1250 WWAS 1330 Lake Placid, N.Y. WIRD 920
Henderson, NV KBMI 1400	Hutchinson, Minn. KDUZ 1260	KQYX 1560 KF8B 1310 KODE 1230	Lakeport, Cal. KBLC 1270
Henderson-Las Vegas, NV KVOV 1280 Henderson N.C. WHNG 890	Hyde Park, NY WHPN 950 Idabel, Okla. KBEL 1240 Idaho Falis, Idaho K1D 590	Juntos, PR WFAB 1460	Lakeview, Oreg. KQIK 1230 Lake Wates, Fia, WIPC 1280
Henderson Tenn. WHHM 1560 Henderson, Tex. KGRI 1000	KTEE 1280 KUP1 980 Immekales FL WKEM 1490	Junetion, Tex. KMBL 1450 June. City, Kans. KJCK 1420 Juneau AK KINY 880 Jupiter, FL KINY 870 Jupiter, FL WRYZ 1000	
Hendersonville, N.C. WHKF 1450	Independence, CA KINC 600 Independence, Ia. KOUR 1220 Independence, Kans. KIND 1010	Kallua, H1 KLEI 1130	I Lamasa Tay KPET 800 I
Henryetta, Okia. KHEN 1590	Independence, Mo. KCCV 1510 Indiana, Pa. WDAD 1450	WZKO 590 WKMI 1360 WYYY 1470	Lampasas, Tex. KCYL 1450 Laneaster, Galif. KAYL 610 KKZZ 1380 Laneaster, Ky. WIXI 1280
Hereford, Tex. KPAN 880 Herkimer N.Y. WALY 1420 Hermiston, OR KOHU 1360	WBRI 1500 WNDE 1260	Kalispell MT KGEZ 600 KOF1 1180	Laneaster, Ky. WIXI 1280 Laneaster, N.Y. WXRL 1300 Laneaster, Ohio WHOK 1320 Laneaster, Pa. WGAL 1490
Herndon, Va. WOHN 1440 Herrin, III WJPF 1340 Hettinger, N.Dak. KNDC 1490	WNTS 1590 WIBC 1070 WIFE 1310	Kane, Pa. WKZA 980 Kankakee, 111. WKAN 1320 Kannapolis, N.C. WGTL 870 WRKB 1460	Lancaster, PA WDDL 1490
Hibbing. Minn. WMFG 1240 WKKQ 1060 Hickory, N.C. WHKY 1290	WIRE (430 WXLW 950 Indianola, Iowa KBAB (490	Kansa City, Kans. KCKN 1340 Kansas City, Mo. KCMO 810	Lancaster, S.C. WLCM 1360 WAGL 1560 Lancaster, WI WGLR 1280 Lander, Wyo. KOVE 1330
WIRC 630 WSPF 1000 Highland, III. WINU 1510	Indianola, Iowa KBAB 1490 Indianola, Miss. WNLA 1380 Indian Rocks Beach, FL WGNB 1520	KAYQ 1190 KMBZ 980 KPRS 1590	Lander, Wyo. KOVE 1350 Lanett AL WRLD 1490 Langdon, N.D. KNDX 1080 Lansdale, Pa. WNPV 1440
Highland Park- Deerfield IL WVVX 1430	Indio, Calif. KREO 1400 Inglewood, Calif. KTYM 1480	WDAF 610 WHB 710 Kaukauna, WIs. WKAU 1050	Lansdale, Pa. WNPV 1440 Lansford, Pa. WLSH 1410 Lansing, Mich. WILS 1320
Highland Park, Tex. KVIL 1150 Highland Springs, Va. WENZ 1450	Inkster, Mich. WCHB 1440	Kesiakekua, Hawaii KKON 790	WJIM 1240 WITL 1010
High Point, N.C. WMFR 1230 WGLD 1590 WGOS 1070	Inverness, Fla. WYSE 1560 lola, KS KIKS 1370	Kearney, Nebr. KGFW 1340 KRNY 1460 Keene, N.H. WKNE 1290 WKBK 1220	LaPiata, Md. WSMD 1560
Hillsboro, Orig. WSRW 1590 Hillsboro, Oreg. KU1K 1360 Hillsboro, Tex. KHBR 1560	Ionia, MI WION 1430 Iowa City, Iowa KXIC 800 KCJJ 1560	Kelse, Wash. KLUG 1490 Kemmerer, Wyo. KMER 950	LaPorte. Ind. WL01 1540 Laramie WY K0J0 1490 K0WB 1290 Laredo, Tex. KLAR 1300
Hilistate, Mich. WCSR 1340 Hilisville, Va. WHHV 1400	Iowa Falls, Ia. KIFG 1510	Kenedy-Karnes City, Texas KAML 990	Largo, Fia. KVOZ 1490 WSST 800
KIPA 620 KHLO 850	fron Mtn., Mich. WMIQ 1450 fron River, Mich. WIKB 1230 fronton, Ohlo WIRO 1230	Kennett, Mo. KBOA 830 KBXM 1540 Kennewick. WA KOTY 1340	Larned. Kans. KANS 1510 LaSaile. III. WLPO 1220 LasCruces, N.Mex. KOBE 1450
Hinesville, Ga. KGML 990 Hinten W.Va. WMTD 1380	Ironton, MO KPIA 1480 Ironwood, Mich. WJMS 590 Irvine, Ky. WIRV 1550	Kenosha, Wis. WLIP 1050	Las Vegas, Ney. KENO 1480
Hinton W.Va. WMTD 1380 Hobart, Okla. KTJS 1420 Hobbs, N.Mex. KWEW 1480 KHOB 1390	Irvine, Ky. WIRV 1550 Isabella, P.R. WISA 1390 Ishpeming, Mich. WJPD 1248 WUPY 970	Kent, O. WKNT 1520 Kentwood, MI WKWM 1140 Keokuk, 1owa KOKX 1310 Kermit, Tex. KERB 600	KLAV 1230 KRAM 1340 KLUC 1140
Hohenwald, TN WMLR 1230	Islip, N.Y. WLIX 540 Ithaea, N.Y. WHCU 870 WTKO 1470	Kerryllie, Tex. KERV 1230	KORK 920 KNUU 970 KDWN 720
Holdanville, OK KVYL 1370 Holdredge, Nebr. KUVR 1380 Holland, Mich. WHTC 1450	Jackson, AL WHOD 1230	Kershaw, S.C. WKSC 1300 Ketchikan AK KTKN 930 Kewanee, III. WKE1 1450	Las Vegas, N. Mex. KFUN 1230 Latrobe, Pa. WQTW 1570

			U.S. AM STATIONS	BY LOCATION
	all kHz	Location Call kHz	Location Call kHz	Location Call kHz
Laurel, Md. WL	TRA 1480 LMD 900	Loretto, Pa. WWSF 1400 Loris, S.C. WLSC 1570	Marion, N.C. WBR M 1250 Marion, Ohlo WMRN 1490	Michigan City, Ind. WIMS 1420
W	AML 1340 LAU 1430 NSL 1260	Los Alamos, N.Mex. KRNS 1490 Los Angeles, Calif. KABC 790 KFI 640	Marion, S.C. WATP 1430 Marion, Va. WMEV 1010 WOLD 1330	Michigan City, Ind. WIMS 1420 Middlebury, Vt. WFAD 1490 Middleport-Pomeroy, Ohlo WMPD 1390 Middlesboro, Ky. WMIK 560
Laurinburg, N.C. WE	LBG 860 EWO 1080 LNC 1300	KHJ 930 KFWB 980	Marked Tree AR KPCA 1580 Marks, Miss. WQMA 1520	WFXY 1560
Lawrence, Kans. KF	FKU 1250 LWN 1320	KGFJ 1230 KFAC 1330 KUS 1150	Marksville, La. KAPB 1370 Marlboro, MA WSRO 1470 Marquette, Mich. WDMJ 1320	Middletown, Conn. WCNX 1150 Middletown, N.Y. WALL 1340 Middletown, Onlo WPFB 910
Lawrence, Mass. W(CC M 800	KIIS 1150 KLAC 570 KMPC 710	Marshall, AR KCGS 1600 Marshall, Minn. KMHL 1400	Midland, Ma WMPX 1490 Midland, Tex. KCRS 550
Lawrenceville, Ga. WL	DXE 1370 LAW 1360 AKO 910	KNX 1070 KPOL 1540 KGBS 1020	Marshall, Mo. KMMO 1300 Marshall, N.C. WMMH 1460 Marshall, Tex. KMHT 1450	KNAM 1510 KWEL 1070
Lawton, Okia. KS	LES 580 SWD 1380	Los Banos, Calif. KLBS 1330	Marshalltown, Iowa KFJB 1230	Midwest City OK KRMC 1220 Milan, Tenn. WKBJ 1600
Leadville, CO KI	CCO 1050 BRR 1230 CLO 1410	Louisa, Ky. WVKY 1270 Louisburg, N.C. WYRN 1480 Louisville, Ga. WPEH 1420 Louisville, Ky. WAVE 970	Marshfield, Mo. KEMM 1510 Marshfield, WI WDLB 1450 Martin, Tenn. WCMT 1410	Milbank, SD KMSD 1510 miles City, MT KATL 1340 Miltord, Conn. WFIF 1500
Lebanon, Ky. Wi Lebanon, MO Ki	LBN 1590 LWT 1230	WAKY 790 WHAS 840	Martinsville, Ind. WCBK 1540	Miltord, Del. WTHD 930 Miltord, Mass. WMRC 1490
Lebanon, Oreg. Ke	GAL 920 LBR 1270	WKLO 1080 WINN 1240 WFIA 900	Martinsburg, W.Va. WEPM 1340 WRNR 740	Milledgeville, Ga. WMVG 1450 WXLX 1060
W'	VLV 940 COR 900	WLOU 1350 WTMT 620	Martinsville, Va. WHEE 1370 WMVA 1450 Maryville, Mo. KNIM 1580	Millen, Ga. WGSR 1570 Millington, Tenn, WTNN 1380
Leesburg, Pla. W	LRV 1380 LBE 790 /ZST 1410	Louisville, Miss. WLSM 1270 Loveland, Colo. KLOV 1570 Loves Park., III. WLUV 1520	Marysville, Calif. KMYC 1410 Marysville, Kans. KNDY 1570	Milinocket, Me. WMKR 1240 Miliville NJ WMVB 1440 Milton, FL WCKC 1490
	AGE 1290	Lovington, N.Mex. KLEA 630 Lowell, Mass. WCAP 980	Maryville, Tenn: WGAP 1400 Mason, Mleh. WUNN 1110 Mason City, Iowa KGLO 1300 KRIB 1490	Milton, Pa. WMLP 1380
Lehighton, Pa. Wi	YNS 1150	Lubbook TX KEND 1590 KDAV 586	KSMN 1010	Milwaukee, Wis. WEMP 1250 WRIT 1340 WISN 1130
Leland, Miss. WI	MTL 1580 ESY 1580 LEM 1410	KDAV 586 KLBK 1340 KLFB 1420	Massena, N.Y. WMSA 1340 WYBG 1050 Massillon, Ohlo WTIG 990	WZUU 1290 WNOV 860
Lemmon, S.D. Ki Lemoore, Calif. Ki	BJM 1400 LAN 1320	KFY0 790 KLLL 1460 KSEL 950	Matewan, W.Va. WHJC 1360 Mattoon, III. WLBH 1170	WOKY 920 WTMJ 620 Minden, La. KASO 1240
Lenoir, N.C. W	OAD 1240 VJRI 1340 KGX 1080	Lynn, MA WNSR 1360 Lucedale MS WRBE 1440	Mauston, Wis. WRJC 1270 Mayaguez, P.R. WAEL 600 WKJB 710	Mineola, N.Y. WTHE 1520 Mineola, Tex. KM00 1510 Mineral Wells, Tex. KORC 1140
Lenoir City. Tenn. Wi	BLC 1360 /LIL 730	Ludington, Mich. WKLA 1450 Lufkin, Tex. KRBA 1340	WORA 760 WPRA 990 WTIL 1300	Mineral Wells, Tex. KORC 1140 Minneapolis-St. Paul MN WCCO 830
Leonardtown, Md. WI	LMS 1000 KIK 1370 VUV 1120	Lumberton, N.C. KLUF 1420 WAGR 580 WTSB 1340	Mayfield, KY WNGO 1320 WYMC 1430	KDWB 630 WLOL 1330
Levelland, Tex. Ki Levittown. Pa. Wi	LVT 1230 BCB 1490	Luray. Va. WRAA 1330 Luverne, Ala. WLVN 1080	Mayodan, N.C. WMYN 1420 Mayville, N.D. KMAV 1520	KEEY 1400 WMKT 1370 WDGY 1130
W1	TGC 1010 YMC 1430 /JJM 1490	Lykens, PA WQIN 1290 Lynchburg, Va. WLVA 590	Maysville, Ky. WFTM 1240 McAlester. Okla. KTMC 1400 KNED 1150	WWTC 1280 KTCR 690
Lewisport, KY WK	KCM 1140 RLC 1350 OZE 1300	WLL 930 WLGM 1320	McAllen, Tex. KRIO 910 McCall. Ida. KMCL 1240	KTIS 900 KUOM 770 KSTP 1500
Lewiston, Maine WC	COU 1240 LAM 1470	WWOD 1390 WBRG 1050 Lynn, Mass. WLYN 1360	McComb, Miss. KAMY 1450 WHNY 1250	Minot, ND KKOA 1390 KHRT 1320
Lewistown, Mont. K) Lewistown, Pa. Wk	XLO 1230 KVA 920	Lyons, Ga. WBBT 1340 Machias, Me. WMCS 1400	WAKK 1140 WAPF 980 McConnellsburg, PA	KOJB 910 KTYN 1430
Lexington, Ky. WI	MRF 1490 LAP 630 BLG 1300	Macomb, III, WKAI 1510 WBML 4240 WCRY 900	McCook, Nebr. WVFC 1530 KBRL 1300 KICX 1360	Mission, Tex. KIRT 1580 Missoula, Mont. KGVO 1290
Lexington, Miss. WV	VLK 590 XTN 1000	WDEN 1500 WIBB 1280	McFarland, Cal. KXEM 1590 McGehee AR KVSA 1220	KGRZ 1450 KYL1 1340 KYSS 530
Lexington, Mo. KI Lexington, Neb. KF Lexington, N.C. WE	LEX 1570 RVN 880 BUY 1440	WMAZ 940 WNEX 1400 Macon, Mo. KLTI 1560	McKeesport, Pa. WEDO 810 WIXZ 1360 McKenzie, Tenn. WHDM 1440	Mitchell, S. Dak, KORN 1490
		Madawaska, Me. WSJR 1230 Madera, Callf. KHOT 1250 Madill, Okla. KMAD 1550	McKinney, Tex. KYAL 1600 McLeansborg, IL WMCL 1060	Moab, Utah KURA 1450 Moberly, Mo. KWIX 1230 Wobile AL WUNI 1410 WABB 1480
Lexington, Tenn. WI Lexington, Va. WI Lexington Pk., Md. WF Libby, Mont. Ki Liberal, Kans. KS	PTX 920 LCB 1230 SCB 1270	Madison FL WMAF 1230 Madison, Ga. WYTH 1250	Mc Minnville, Oreg. KMCM 1260 Mc Minnville, Tenn. WBMC 960 WAKI 1230	WGOK 900 WMOO 1550
Liberty, Ky. Wi	KDO 1560	Madison, Ind. WORX 1270 Madison, S.D. KJAM 1390	McPherson, Kans. KNEX 1540 McRae, Ga. WDAX 1410	WMOB 840 WKRG 710 WLIQ 1360
Liberty, N.Y. W	VOS 1240 PXE 1050	Madison, Wis. WHA 970 WIBA 1310	Meadville, Pa. WMGW 1490 Mechanicville, N.Y. WMVI 1170 Mebane NC WQWX 1060 Medvard MA WWF1 1430	Mobridge, S.Dak. KOLY 1300 Mocksville, N.C. WDSL 1520
Lihue, Hawaii Ki Lima, Ohio Wi	TOH 1350 IMA 1150	WISM 1480 WTSO 1070 WMAD 1550	Medford, Oreg. KMED 1440	Modesto. Calif. KTRB 860 KBEE 970 KFIV 1360
Lincoln, III. WF	CIT 940 PRC 1370 LKN 1450	Madisonville, Ky. WFMW 730 WTTL 1310	KSHA 860 KBOY 730 KRVB 1300	Mojave, Calli. KDOL 1340 Mojine, III. WQUA 1230
Lincoln, Nebr. KF	FOR 1240	Madisonville, Tenn. WZZI 1250 Magee, Miss. WSJC 81C Magnolla AR KVMA 630	Medford, WIs. WIGM 1490	Moncks Corner, S. C. WBER 950
Lineoln City OR KB	ECK 1480 ECK 1530 3CH 1380 LON 1050 ANL 1540 BTO 1600	Makawai, Hawaii KNUI 1310	Melbourne, Fla. WMMB 1240 WMEL 920 Memphis, Tenn. WHBQ 560 WHBQ 560 WWEE 1430	Monett, Mo. KRMO 990 Monette AK KBIB 1560 Monmouth, III. WRAM 1330
Lincolnton, N.C. WL Lincolnton, N.C. WA	LON 1050 ANL 1540	Malden. Mo. KTCB 1470 Malone, N.Y. WICY 1490 Malvern AR KBOK 1310 Manassas, Va. WPRW 1460	WMC 790	Monroe, Ga. WRAM 1330 Worroe, Ga. WMRE 1490 WKUN 1580 WRED 1490
Litchfield Minn. KI	LFD 1410	Manati, P.R. WMNI 1500	WMPS 680 WLOK (340	Monroe, La. KMLB 1440
Little Falls, Minn. Kl Little Falls, N.Y. WL	LTF 960 LFH 1230 ZZN 1490	Manchester, Ga. WFDR 1370 Manchester, Ky, WWXL 1450	W M Q M 1480 W R E C 600 K W A M 990	Monroe, MI WHND 560 Monroe, N.C. WIXE 1190
Little Rock AR KA	ARN 920	Manchester, N.H. WFEA 1370 WGIR 610	Memphis Tex KBGH 1130	WMAP 1060
KL	LRA 1010 DKY 1440 AAY 1090	Manchester, Tenn. WKBR 1250 WMSR 1320 Manhattan, Kans. KSAC 580	Mendota, III. WGLC 1090 Mendocino, CA KMFB 1300	Monroeville, Pa. WPSL 1510
Littleton, Colo. KD	SOH 1050 DKO 1510	Manistee, Mich. WMTE 1340 manistique, Mich. WTIQ 1490	Menominee, Mich. WAGN 1340 Menomenie, Wis. WMNE 1360 Merced, Calif. KYOS 1480	Monterey, Calif. KIDD 630 KMBY 1240 Montevideo Minn. KDMA 1460
Littleton, N. H. WL	LTN 1400 NER 1250	Manitou Springs, Colo.	Meriden, Conn. WMMW 1470	Monte Vista. Colo. KSLV 1240 Montezuma, Ga. WMNZ 1050
Livingston, Mont. KP Livingston, Tenn. W Livingston, Tex. KE	LIV 920 ETX 1440	Manitowoe, Wis. WCUB 980 WOMT 1240 Mankato Minn KYSM 1230	WDAL 1330 WMOX 1010	WXVI 1600
Lock Haven, Pa. WE	CLT 1060 BPZ 1230 LVL 1340	Manning, S.C. WYMB 1410	WOKK 910 WQIC 1450	WHHY 1440 WMGY 800
Lodi, Calif. KC	CVR 1570 LGN 1510	Mansfield, Ohio WMAN 1400 WCL W 1140	Merkle, TX KBUS 1590 KBGG 1500	Montgomery, W.Va. WMON 1340
Logan, Utah KB KS KV	STU 1300 VNU 610	Manti, VT KMTI 1340 Many, LA KWLA 1400	Mesa AZ KBUZ 1310	Monticello AR KHBM 1430 Monticello, FL WTBJ 1090
Logan, VT KB	BLW 1390 LOG 1230	Maguoketa, Jowa KMAQ 1320	Metropolis, III. WMOK 920 Metter, Ga. WMAC 1360	Monticello, Ky. WFLW 1360 Monticello, Miss. WMLC 1270 Montpeller, Ida. KVS1 1450
Logansport, Ind. WS Lompoc, Calif. Ki	SAL 1230 BIK 1400	Marianna AN KZOT 1460	Mexico Mo. KXED 1346	Montpeller-Barre, Vt. WSKI 1240
N. P.	MEZ 960	Marianna, Fia. WTYS 1340 WTOT 980 Marietta, Ga. WFOM 1230	Miami AZ KIKO 1340	Montrose, Colo. KUBC 580
Long Beach, Calif. KF	FTG 1400 FOX 1280 GER 1390	Marletta, Ohio WMOA 1490	WFAB 990	Morehead, Ky. WMOR 1330
Longmont, Colo. KL Long Prairie, Minn. KE Longview, Tex. KF	LMO 1060	Marine City, Mich. WSMA 1590	WFUN 790 WWOK 1280 WQAM 560 WQBA 1140	Morgan City, La. WMBL 740 KMRC i430
Longview, Wash, KE	EDO 1400	Marinette WI WMAM 570 WLOT 1300 Marion AL WJAM 1310	WQBA 1140 WOCN 1450 WINZ 940	Morgantield, Ky. WMSK 1550 Morganton, N.C. WMNC 1430
Lookout Mountain-	FLI 1070	Marion, III. WGGH 1150 Marion, Ind. WBAT 1400	Miami, Okla, KGLC 910	Morgantown, W.Va. WAJR 1440 WCLG 1300
	LRO 1380	Marion, Ky. WGOM 860 WMJL 1010	Miami Beach, Fla. WMBM 1490	Morriston AR WPGC 1580 Morriston AR KVOM 800

U.S.	AM	ST	ATIO
Location		Call	kHz
Morris, ill Morris, M Morristown Morristown	, N.J.	WCSJ KMRS WMTR	1550 1230 1250
Morristown Morro Bay Morton, To Moscow, Ic		WMTN	1150 1300 1150
Moscow, Ic Moses Lak	laho e, Wash.	KRAN KRPL KSEM KWIQ	1400 1470 1260
Moss Point Moulton. A Moultrie, (110	WHIV	1460 1530 1130 1300
Moundsyille Mountain	e, W.Va. City, Ten	WEIF	1300 1370 1390
Mountain (Mountain (Mountain Mountain	Home AR	KLRS KTLO	1360 1240
Mountlake	Ierr., W		1510 740
Mt. Airy, Mt. Carme Mt. Carme Mt. Cieme		WSYD WYER WMIM	1300 1360 1590
			1430
Mt. Dora, Mt. Holly, Mt. Jackso Mt. Kisco, Mt. Olive, Mt. Pleasa Mt. Pleasa Mt. Pleasa Mt. Shasks	N.J. n, Va. N.Y.	WSIG	1460 790 1310
Mt. Pleasa Mt. Pleasa Mt. Pleasa	nt, IA nt, Mich. nt. Tex. n, Calif. ng, Ky.	KKSI WCEN KIMP	1130 1150 960
Mt. Sterlin	n, Calif. ng, Ky. n, III.	WSTW WSIZ WSIZ WYIP WDJS KKSI WCENP KWST WMST WMST WMST WMST WMST WMST WMST W	620 1150 940
Mt. Vernor Mt. Vernor Mt. Vernor Mt. Vernor	n, Ind. n, Ky. n. Ohio n, Wash.	WRVK WMVO KAPS	1460 1300 1470
	Tex.	KBRC KMUL WJAY	1430 1380 1280
	id. Ite, Ky.	WERK WIBC	1340 990 1070
Munfordvil Munising Murfreesbo	110, N. U	WGON	1080
Murfreesbo		WMTS	810 600 1320
Murphysbo Murray, K Murray, L	ro, III. y. Itah	WINI	
Murray, K Murray, L Muscatine, Muscle Sh Muskegon,	lowa oals AL Mich.	WNBS KPRQ KWPC WLAY WKBZ WTRU WMUS	860 1450 850
Muskegon		WIRU WMUS Mich. WKIR	1090
Muskogee, Myrtle Be		MICH. WKJR KBJX KMUS WMYB WTGR KEEE KSFA KFXD KAIN WNAK KVON WNOG	1490 1380 1450
Nacogdoch Nampa, Id		KEEE KSFA KFXD	1520 1230 860 580
Nanticoke, Napa, Cal Naples, Fi		KAIN WNAK KVON	580 1340 730 1440
Naples, Fi Narrows-P Va. Nashua, N	earisburg	WNRV	990
Nashville Nashville		KBHC	1590 1260
Nashville,	Tenn.	WNGA WLAC WMAH WSIX WSM WMGM WMIS WNAT	1240 1510 1300 1360 980
		WSIX WSM WWGM	980 650 1560 1240
Natchitoch	es, La.	WMIS	
Natick, M Naugatuek Navasota, Nebraska	Tex.	KGTR WOWW KWBC	1060 1380 1550
Needles (A Vis.	KNCY KSFE WNAM WCCN	1600 1340 1280 1370
Neosho.	VID.	WNKY KBTN KNEM	1480 1420 1240
New Alha	nv. Miss.	WREY	1570 1290 1470
Newark, I Newark, Newark, I	N.J.	MANI	1260 620 1430 1420
New Bedf	ord, Mass	WNBH	1430 1420 1340
New Berr		WRNB	1380 1490
Newberry, Newberry, New Bost	S.C.	WKDK	1520
New Bost New Brau New Brau	on, Tex. ntels, Fex ain, CT	KNBO KGNB	1420
New Bru	nswick, A	WCTC WGNY	1450 1220
New Bru Newburgh Newburyh New Cast New Cast New City	te, Ind.	WOTW WBZY	1470 1550 1140
Newcastle New City	, Wyo.	WRKL	1280 1240 910

IS BY L	OCATION
Location	Call kHz
New Haven, Con	m. WAVZ 1300 WELI 960
New Iberia, La.	WELI 960 WNHC 1340 KANE 1240 KNIR 1360
New Kensington	Pa. WKPA 1150
Newland, NC New London, Con New Martinsville	wJTP 1130 n. WNLC 1510
Newnan, Ga.	WETZ 1330
New Orleans LA	WNEA 1300 WGSO 1280 WNNR 990
	WBOK 1230 WNOE 1060 WSMB 1350
	WWIW 1450 WSHO 800
	WTIX 690 WWL 870 WVOG 600
Newport AR Newport, Ky.	WYOG 600 WYLD 940 KNBY 1280 WNOP 740
Newport, Ky. Newport, N.H. Newport, Oreg. Newport, R.I.	WCNL 1010
Newport, Jenn. Newport, Vt.	WADK 1540 WLIK 1270 WIKE 1490 /a. WGH 1310
Newport News, V	A WUKI 1270
Newport Richey,	Fla. WGUL 1500
	WIXK 1590 KWRG 1500
New Roads, La. New Rochelle, N. New Smyrna Bea	WIXK 1590 KWRG 1500 Y. WVOX 1460 ach. Fla. WSBB 1230
Newton, lowa Newton, Kans. Newton, Mass.	KCOB 1280 KJRG 950 WNTN 1550
Newton, Miss.	WBKN 1410
Newton, N.J. Newtn, N.C. New Ulm, Minn. New York, N.Y.	KNUJ 860 WABC 770 WADO 1280
	WBNX 1380 WCBS 880
	WHN 1050 WIIT 1480
	WIIT 1480 WINS 1010 WLIB 1190 WMCA 570
	WNBC 660 WNEW 1130
	WMCA 570 WNBC 660 WNEW 1130 WNYC 830 WOR 710 WPOW 1330
Niagara Falls, N	WWRL 1600
Nicholasville, K	WIJL 1440
Niles, Mich. Niles, Ohio Nobjesville, Ind.	WHYT IIIN
Nobjesville, Ind. Nogales AZ Nome AK	KFBR 1340 KICY 850 KNOM 780
Norfolk, MA Norfolk, Nebr. Norfolk, Va.	WJAG 780
Morrork, Va.	WCMS 1050 WNOR 1230
Normal, IL	WRAP 850 WZAM 1110 WAKC 1440 WNAD 640
Norman, Okia.	KNOR 1400
Norristown, Pa. N. Adams, Mass N. Atlanta, Ga.	KNOR 1400 WNAR 1110 WMNB 1230 WRNG 680
N. Bend. Ore.	WFNL 1800 KBBR 1340
MOI the Chaireston	1, S.C.
North East, Pa. Northfield. Minr	WHMP 1400 WHYP 1530 WCAL 770 KYMN 1080
N. Little Rock,	KYMN 1080 AR KDXE 1380
North Platte, N	ebr. KILT 970
North Pole AK	KAHL 1410 KODY 1240 KJNP 1170
No. Syracuse, N N. Vernon, Ind. No. Wilkesboro,	KAHL 1410 KODY 1240 KJNP 1170 KRKM 600 Y. WSOQ 1220 WOCH 1460 N.C.
M . M	WKBC 810
Norton, va.	WKBC 810 KNBI 1530 WNVA 1350 WNLK 1350 WLKR 1510 WICH 1310
Norwich, N.Y.	WNVA 1350 WNLK 1350 WLKR 1510 WICH 1310 WCHN 970 KREH 900
Ookee ND	KWCL 1289
Oak Grove, La, Oak Hill, W. V Oakland, Cal.	A. WOAY 860 KNEW 910 KABL 960
Oakland, Md. Oakland Park,	KABL 960 KDIA 1310 WMSG 1050
Oak Park, III. Oak Ridge, Ter	WEXY 1520 WOPA 1490
	WORI 1320
Oberlin OH Ocala, Fia.	WTMC 1290 WWKE 1370
Ocean City, Mo Ocean City, So	d. WETT 1590 mers Pt., N.J.

Location	Call kHz
Occaside Calls	WSLT 1520 KUDE 1320
Oceanside, Calif. Ocilla, Ga. Oconto, Wis.	
Odessa TX	WOCO 1280 KBZB 920 KOZA 1230 KOYL 1310
	KOYL 1310 KRIG 1410
Oelwein, Iowa Ogailala, Nebr. Ogden, Utah	KOEL 950
Ogden, Utah	KLO 1430 KANN 1090 KSVN 730 KVOG 1490
	KSVN 730 KVOG 1490 WSLB 1400
Ogdensburg, N.Y. Oil City. PA Okeechobee, Fla.	WOYL 1340
Okla. City, Okla.	KBYE 890
	WOKC 1570 KBYE 890 KLPR 1140 KOCY 1340 KOMA 1520 KTOK 1000 KQCV 800 WKY 930
	KTOK 1000 KQCV 800
Okmulgee, Okla.	WKY 930 KOKL 1240 WLIS 1420 WMNS 1360 WHDL 1450 WVLN 740 KGY 1240 KITN 920 KYNN 1490 KFAB 11190
Okmulgee, Okla. Old Saybrook, Conn. Olean, N.Y.	WLIS 1420 WMNS 1360
Oiney, Ili. Olympia, Wash.	WHDL 1450 WVLN 740 KGY 1240 KITN 920
Omaha, Neb.	KITN 920 KYNN 1490
	KFAB 1110 KOIL 1290 KOOO 1420
	KOOO 1420 KOWH 680
Omak, Wash. Oneida, N.Y. Oneida, Tenn.	WOW 590 KOMW 680
	WMCR 1600 WBNT 1310 KBRX 1350 WCRL 1570
O'Neill. Nebr. Oneonta AL Oneonta, N.Y.	WCRL 1570
Ontario, Oreg.	WD08 730 KSOM 1510 KSRV 1380
Opelika AL	KOWH 680 WOW 590 KOMW 680 WMCR 1600 WBNT 1310 KBRX 1350 WCRL 1870 WD08 730 KSOM 1510 KSRV 1380 WAOA 1820 WJHO 1400 KSLO 1230
Opelousas, La. Opp AL	WAMI 860
Opportunity, Wash. Orange, Mass. Orange, Tex.	WAMI 860 KZUN 630 WCAT 1390 KOGT 1600
Orange, Va. Orangeburg, S.C.	WJMA 1340 WDIX 1150 WORG 1580
	WORG 1580 WTND 920
Orange Park, Fia. Ord, Neb. Oregon City, Ore. Orlande, Fia.	WTND 920 WAYR 550 KNLV 1060
Orlando, Fia.	KYXJ 1520 WDB0 580 WHOO 990
	WHOO 990 WORL 1270 WLOF 950 WKIS 740
Orleans, Mass.	WKIS 740 WVLC 1170
Orleans, Mass. Ormond Beach, Fla Orocovis, PR Orofino, Idaho Oroville CA	WKCK 1470
Orofino, Idaho Oroville CA Ortonville, Minn.	KORV 1340
Ostonville, Minn. Osage Bch., Mo. Osceola AR Oshkosh, Wis.	KDIO 1350 KRMS 1150 KOSE 860 WAGO 690
Oshkosh, Wis.	WAGO 690 WYTL 1490
Oskaleesa, lewa Oswego, N.Y. Othello, Wash.	KBOE 740 WSGO 1440
Othello, Wash. Otsego, Mich.	
Ottawa, III. Ottawa. Kans. Ottumwa, Iowa	WAOP 980 WCMY 1430 KOFO 1220 KBIZ 1240
Owatonna, Minn.	KREO 1390
Owego, N.Y. Owensboro, Ky.	WEBO 1330
Owosso, Mich. Oxford, Miss.	WOAP 1080
	WSUH 1420 WCBQ 1340 KOXR 910
Oxnard, Callf. Ozark AL	WOZK 900° WAYD 1190
Ozark AR Paducah, Ky.	KZRK 1540 WDXR 1560 WKYX 570
Dana A7	WRYX 570 WPAD 1450
Page AZ Pageland, SC	WCPL 1510
Pagosa Springs, CC	KPAG 1400 WPVL 1460
Painesville, Ohio Paintsville, Ky. Palatka, Fia.	WSIP 1490 WWPF 1260
	WSUZ 800 KNET 1450
Palestine, Tex. Palm Beach FL Palm Sprgs., Cai.	KPAG 1400 WPVL 1460 WSIP 1490 WWPF 1200 WSUZ 800 KNET 1450 WPBR 1340 KCMJ 1010 KDES 920
Palmdale, Calif.	KPSI 1450 KUTY 1470
Paim Desert, Cal.	KGOL 1270 KIBE 1220
Palmdale, Calif. Paim Desert. Cal. Palo Alto, Calif. Pamona, Cal. Pampa, Tex.	KWOW 1600 KPDN 1340 KGRO 1230
Panama City Beh	KCMJ 1010 KDES 920 KPSI 1450 KUTY 1470 KGOL 1270 KIBE 1220 KWOW 1600 KPDN 1340 KGRO 1230 FIa. WGNE 1460 WSCM 1290
Panama City, Fla.	WSCM 1290 WDLP 590
	WPCF 1430 WVAK 1560
Paradise, Cal. Paragould AR	KEWQ 930 KDRS 1490
Paris AK Paris, III. Paris KY Paris, Tenn.	WPRS 1440
Paris, Tenn. Paris, Tex.	WTPR 710
Parker, AZ	KPRE 1250 KZUL 1380
Parkersburg, WV	WSCM 1290 WDLP 590 WPLF 1430 WVAK 1580 KEWQ 930 KDRQ 1440 WEGR 1440 WTR 710 KPLT 1490 KPRE 1250 WAZU 1380 WAZU 1380 WYAK 1450 WKYG 1230 WKYG 1230 WNBI 980
Park Falls, Wis. Park Rapids, Mir	WKYG 1230 WNBI 980
rark Mapids, Mir	KPRM 1240

	Location	Call	kHz
11	Parma OH	WSUM	1000
	Parsippany NJ Parsons, Kans. Parsons, Tenn.	WSUM WQTK KLKC WTBP KPPC	1310 1540 1550
		KPPC	1550 1240
	Pasadena, Tex.	KWKW KLVL KIKK	1300
	Pascagoula-Moss P	KIKK pint, MI	650 \$5.
	Pascagoula-Moss Person Pasco, Wash, Pasco Hobles, Calif. Pastillo, P.R.	WPMP	1580 910
	Pastillo, P.R.	WCGB	1230 1050
	Patchogue, L.I., N.	WALK	1370 1580
	Paterson, N.J. Pauls Valley, Okla. Pawhuska, OK	WPAT	930 1470
1	Dawtuskat DI	KOKN WGNG	1500 550
	Payette, Ida. Pearsall, Tex.	KYET	550 1450 1280
	Payette, Ida. Pearsall, Tex. Pecos. Tex. Peckskill, N.Y.	WLNA	1420
	Pekin, III. Pell City AL Pendieton, Oreg.	WFHK KTIX KUMA	1430
		KUMA	1290
	Pensacola, Fla.	WSWV WBOP WBSR	980
		WBSR	610 1230
		WHYM WNVY WCOA WPFA WENA	1370
	Penuelas, PR	WENA WXCL WMBD	1330
		WMBD	1350 1470 1290
	Perry FL	WIRL WPEO WGKR	1310
	Perry, Ga. Perry, Iowa	WPRY	1400
	Perryton, Tex.	KDLS KEYE WARU KTOB	1400
	Peru. Ind. Petaluma. Calif. Peterborough, N.H	KTOB	1490 /
		WSCV	1050
	Petersburg, Va. Petosi, Mo. Petoskey, Mich.	WSSV KYRO WMBN WJML	1280 1340 1110
		WIML	1110
	Phenix City, Ala. Philadelphia, Miss. Philadelphia, Pa.	WHOC KYW WCAU	1490
			1210
		WDAS WFI WFLN WHAT	L 560 900 1340
		WIBG WIP WPEN	990 610
		WPEN	950 1540
	Philipsburg, Pa.	WRCP WTEL WPHB	860 1260
	Phillipsburg, KS Phoenix AZ	KKAN KIFN KASA KHCS	860 1540
		KHCS	1010
		KHEP	1280 74J
		KHCS KPHX KHEP KMEO KOY KOOL KJJJ KRIZ	550 960
		KRIZ	910 1230 620
	Picayune, Miss. Pickens, SC	KTAR	
	Pickens, SC Pledmont AL	WRJW WTGF WPID	1540
	Pledmont, Mo. Pierre, S.D.	KPWB	1060
	Pikeville, Ky.	KCCR	1240
1	Pikesville, TN Pine Bluff AR	WPKE WUAT KCLA	1240 1110 1400
	i me oran Arr	KADL	1270
		KADL KOTN KCAT KYOE	1340 1590
	Pine Castle-Sky Le Pine City, Minn. Pineilas Park. Fia Pineville, LA Pineville, LA Pineville, W.Va. Pigus, Ohio Pittsburg, Calif, Pittsburg, Calif,	WDZY	1190
	Pinellas Park, Fla.	WESO	1350 570 1230
	Pineville, LA Pineville, W.Va.	KPAL WWY0	1230 1110 970
	Pigua, Ohio	WPTW	1050 1570 990
	Pittsburg, Calif. Pittsburg, Kans.	KKIS KOAM KSEK KDKA KQV WAMO WKPQ WPIT WTAE WEEP	990 860 1340
	Pittsburgh, Pa.	KDKA	1340 1020 1410
		WAMO	1320
		WTAE	730 730 1250
	Pittsfield, III.	WEEP	1080 970 1580
	Pittsneid, Mass.	WBBA WBEC WBRK WGRG	1420
	Pittston, PA	WGRG	1110 1540 1590
	Pittston. PA Plainfield, N.J. Plainview, Tex.	WARD WERA KVOP KKYN WPLA	1590
	Plant City, Fla. Platteville, Wis. Plattsburg, N.Y.	WPLA	1590
	Plattsburg, N.Y.	WPLA WSWW WEAV WIRY	960 1340 1070
	Plattsmouth. Neb.	WKDR	1070
	Pleasanton, Tex.	KOTD KBOP WOND WTCA WPLM WPNC	1380
	Plymouth, Ind. Plymouth, Mass. Plymouth, N.C.	WPLM	1050 1390 1470
	rymouth, N.C.	WENG	1470

Location Call kHz	Location Call kHz	Location Call kHz	Location Call kHz
Plymouth, N.H. WPNH 1300 Plymouth, Wis. WPLY 1420 Pocahontas AR KPOC 1420	Pullman, Wash. KWSU 1250 KPUL 1150	Rockford, 11f. WROC 1280 WROK 1440 WYFE 1150	Salida, Colo. KVRH 1340 Salina, Kans. KSAL 1150 KFRM 550
Pocatello, Idahe KSEI 930 KWIK 1240 KSNN 1250 Pocomoke City, Md. WDMV 540	Punta Gorda, Fla. WCCF 1580 Punxsutawney, Pa. WPME 1540 Putnam, Conn. WINY 1350 Puyailup, WA KUPY 1450	Rockford, Mich. WRRR 1330 WJPW 810 Rock Hills, S.C. WRHI 1340 WTYC 115u	Salinas, Calif, KINA 910 KDON 1460 KTOM 1380 KYWT 1570
Polson, MT KERR 1070 Pomona, Callf. KWOW 1600 KKAR 1220	Quanah, Tex. KOLJ 1150 Quantico, VA WPWC 1530 Quincy, Cal. KPCO 1370	Rockingham, N.C. WAYN 900 WLWL 1500 Rock Island, III. WHBF 1270	KCTY 980 KXES 1570 Salinas, P.R. WHOY 1210
Pompton, Lakes, N. J. WKER 1500 Pompano Beach, Fla.	WIND 330	Rock Springs, WY KRKK 1360	Salisbury, Md, WNRS 1290 WBOC 960 WICO 1320
WLOD 980 WRBD 1470 Ponca, City, Okia. WBBZ 1230 Ponca, P.R. WPRP 910	Quincy, Mass. WJDA 1300 Quincy, WA KWNC 1370 Quitman, Ga. WSFB 1490 Quitman, Miss. WBFN 1500	Rockville, Conn. WRKV 800 Rockville, Md. WINX 1800 Rockwood. Tenn. WOFE 580 Rocky Ford, Colo. KAVI 1320	Sallsbury, N.C. WSTP 1490 WSAT 1280 Sallisaw, Okla. KBJS 1510
Ponce, P.R. WPRP 910 WEUC 1420 WPAB 550 WLEO 1170	Racine, WI WRKR 1460 WRJN 1400 Radford, Va. WRAD 1460	Rocky Mount, N.C. WCEC 810 WEED 1390 WRMT 1490	Salmon, Idaho KRBB 1560 Salmon, Idaho KSRA 960 Salt Lake City, Utah
WISO 1280 WISO 1280 WZBS 1490 Pontiac, III. WPOK 1080 Pontiac, Mich. WPON 1460	Raeford, N.C. WSHB 1400 Rainelle. WV WRRL 1130 Rainsville AL WVSM 1500 Raieigh, N.C. WKIX 850	Rocky Mount, Va. WYTI 1570 WNLB 1290 Rogers AR KAMO 1390	KALL 910 KCPX 1320 KLUB 570
Pontotoc, Miss. WSEL 1440 Pooli, Ind. WVAK 1560	WYNA 1550 WPTF 680	Rogers City, Mleh. WHAK 960 Rogersville, Tenn. WRGS 1370 Rolla, Mo, KCLU 1590 KTTR 1490	KNAK 1280 KRSP 1060 Salt Lake City, UT KRGO 1550 KSL 1160
Poplar Bluff, Mo. KWOC 930 KLID 1340 Poplarville, Miss. WRPM 1530 Portage MI WBUK 1560	Rails, Tex. KCLR 1530 Rantoul, III. WRTL 1460 Randolph VT WCVR 1320	Rome, Ga, WLAQ 1410 WIYN 1360 WRGA 1440	KSOP 1370 KSXX 63n KWHO 860
Portage, Pa. WWML 1470 Portage, Wis. WPDR 1350 Portageville, Mo. KMIS 1050	Rapid City, S.Dak. KOTA 1380 KIMM 1150 KTOQ 1340	Rome, N.Y. WROM 710 WKAL 1450 WRNY 1350 Bonceverte, WV WRON 1400	San Angelo, Téx. KWMS 1280 KTEO 1340 KGKL 960
Port Angeles, Wash. KAPY 1290 KONP 1450	Raton, N.Mex. KKLS 920 Ravenswood, W.Va. WMOV 1360 Rawlins, Wyo. KRAL 1240	Roosevelt, UT KNEU 1250 Roseau, Minn. KRWB 1410 Roseburg, Oreg. KRNR 1490	KPEP 1420 KIXY 1260 San Antonio, Tex. KAPE 1480 KKYX 680
Port Arthur TX KOLE 1340 KPAC 1250 KYKR 1510 Porterville, Calif. KTIP 1450	Raymond, Wash, KAPA 1340 Raymondville, Tex. KSOX 1240	KQEN 1240 KRXL 1250 KYES 950	KQAM 1150 KBUC 1310 KCOR 1350
Port Gibson, MS WKPG 1320 WPGR 1520 Port Hueneme, Calif. KAGY 1520	Reading, Pa. WEEU 850 WHUM 1240 WRAW 1340	Rose Hill, N.C. WEGG 710 Rosenberg, Tex. KFRD 980 Roseville, Cal. KPOP 1110 Rossville, Ga. WRIP 980	KEDA 1540 KUKA 1250 KMAC 630 KONO 860
Port Huron, Mich. WHLS 1450 WPHM 1380 Port Jervis, N.Y. WDLC 1490 Port Lavaca, Tex. KGUL 1560	Redding, Calif. KRDG 1230 KCLM 1330 KQMS 1400	KRDD 1320 KBIM 910	KTSA 550 WOAI 1200 San Bernardino, Calif.
Portland, IN WPGW 1440 Portland, Maine WCSH 970 WCSN 560	Red Bluff, Calif. KBLF 1490	Hoxboro, N.C. WRXO 1430 Royal Oak, Mich. WEXL 1340 Royston, Ga. WBLW 810	KCKC 1350 KFXM 590 KBON 1240
WLOB 1310 WPOR 1490 Portland, Oreg. KBPS 1450	Redfield, SD KFCB 1380 Redflands, Calif. KCAL 1410 Red Lion, Pa. WGCB 1440 Red Lodge, Mont. KRBN 1450	Rugby, N.Dak, KGCA 1450 Ruidoso, NM KRRR 1360	Sandersville, Ga. WSNT 1490 San Diego, Calif. KCBQ 1170 KFMB 760
KLIQ 1290 KEX 1190 KGW 620 KKEY 1150	Redmond, Oreg. KPRB 1240	Rushton, La. KRUS 1490 Rusk, Texas KTLU 1580	KOGO 600 KGB 1360 KSON 1240
KOIN 970 KPAM 1410 KDPQ 800	Red Springs, N.C. WYRU 1510 Red Wing, Minn. KCUE 1250 Redwood Falls, MI. KLGR 1490 Reedsburg, Wis. WRDB 1400 Reedsport, Ore. KDUN 1470	Russelly Kans. KRSL 990 Russelly lile AL WWWR 920 WKAX 1506 Russelly lile AR KARV 1490	San German, PR WBOZ 1090 Sandpoint, Idaho KSPT 1400 Sand Spring, Okla. KTOW 1340
KUPL 1330 KWJJ 1080 KXL 750 Port Neches, TX KSUZ 1180	Reldsville GA WTNL 1390 Reldsville, N.C. WFRC 1600 WREV 1220	Russellville, Ky. WRUS 610 Rutland, Vt. WHWB 1000 WSYB 1380	Sand Spring, Okla. KTOW 1340 Sandusky, Mich. WMIC 1560 Sandusky. Ohlo WLEC 1450 Sandy Crook-Pulaski, NY
Port St. Joe, Fla. WJOE 1080 Portsmouth, N.H. WBBX 1380	Remsen, N.Y. WAOR 1480 Remo, Nev. KOH 630 KBET 1341	Rutherfordton, N.C. WCAB 590 Sacramento, Calif. KCRA 1320	San Fernando, Calif. KGIL 1260 Sanford, Fia. WTRR 1400
Portsmouth, Ohio WPAY 1400 WNXT 1260 Portsmouth, VA WPCE 1400	KCRL 780 KOBY 1550 KOLO 920 KONE 1450	KFBK 1530 KGMS 1380 KJAY 1430 KRAK 1140	Sanford, Me. WSFR 1300 WSME 1220 Sanford, N.C. WEYE 1290
WHNE 1350 WPMH 1010 Port Sulphur LA KAGY 1510 Port Washington, Wis.	Rensselaer, IN WRIN 1580 Rensselaer, N.Y. WQBK 1300 Rexburg, Idaho KRXK 1230	KROY 1240 KNDE 1470 Safford, Ariz. KGLU 1480	San Francisco, CA KFRC 610 KCBS 740 KFAX 1100
Post, Tex. WGLB 1560 KPOS 1370	Rhinelander, Wis. WOBT 1240 Rice Lake, Wis. WJMC 1240	Sag Harbor, N.Y. WLNG 1600 Saginaw, Mich. WKNX 1210 WSAM 1400	KGO 810 KNBR 680 KKHI 1850
Potomac-Cabin John, Md. WCTN 1300 WCTN 1300 Potosi, Mo. KYRO 1280 Potsdam, N.Y. WPDM 1470	Ridgefield, CT WVFR 850 Richfield MN WY00 980 Richfield, Utah KSVC 980 Richland, Wash. KALE 960 Richland Center, Wis.	WSAM 1400 WSGW 790 St. Albans, Vt. WWSR 1420 St. Albans, W.Va. WKLC 1300	KIQI 1016 KSFO 560 KEST 1450 KYA 1260
Pottstown, Pa. WPAZ 1370 Pottsviile, Pa. WPAM 1450 WPPA 1560	Richlands Va WRIC 540	St. Anthony, Ida. KIGO 1400 St. Augustine, Fla. WFOY 1240 WAOC 1420	San Gabriel, Cal. KALI 1430 San German, P.R. WBOZ 1090 Sanitobia, Miss. WSAO 1550
Poughkeepsie, N.Y. WEOK 1390 WKIP 1450 Powell, Wyo. KPOW 1260	Richmond, Ind. WKBV 1440 Richmond, Ky. WEKY 1340 WCBR 1110 Richmond, Va. WANT 990	St. Charles. Mo. KIRL 1460 St. Cloud, M N KCLD 1450 WJON 1240 St. George, S.C. WQ1Z 810 St. George, UT KDXU 1450	San Jose, Calif. KLOK 1170 KLIV 1590 KEEN 1370 KXRX 1500
Poynette, Wis. Praire du Chien, Wis. WPRE 980 Pratt, Kan. KWNS 1290	WBBL 1480 WRGM 1540 WLEE 1480	St. Helens, Oreg. KOHI 1600 St. Ignace, Mich. WIDG 940	San Juan, P.R. WAPA 680 WBMJ 1190 WHOA 870
Prattville AL WPXC 1410 Prentiss, Miss. WKP0 1510 Prescott AZ KYCA 1490 KENT 1340	WEET 1320 WGOE 1590 WTVR 1380 WRNL 910	St. Johns, Mich. WRBJ 1580 St. Johnsbury, Vt. WTWN 1340 St. Joseph, Mich. WSJM 1400	WIAC 740 WIPR 940 WOLL 140
KENT 1340 KNOT 145 Present AR KTPA 1370 Presque, Isle. Me. WAGM 950	WRVA 1140 WXGI 950 Richwood, W.Va. WVAR 600	Mich. WHFB 1060 St. Joseph, Mo. KFEQ 680 KKJO 1550	WKAQ 580 WKVM 810 W0S0 1030 WQBS 630
Preston, Idaho KPST 1340	Ridgecrest, Cal. KLOA 1240 KZIQ 1360 Ridgefield.CT WVFR 850	St. Louis, Mo. KATZ 1600 KATZ 1600 KMOX 1120	Sau Luis Obisno Calif
Prestonsburg, Ky. WPRT 960 WDOC 1310 Price, Utah KOAL 1230	Ridgeland, S.C. WBUG 1430 Riffe, Colo. KWSR 810 Rio Piedras, P.R. WUNO 1320 Ripley, Miss. WSCA 1260	KSD 550 KTSL 690 KWK 920	KATY 1340 KSLY 1400 KVEC 320 San Marcos, TX KONY 1470 San Mateu, Caill. KOFY 1050
Princeton, III. WZOE 1490 Princeton, Ind. WRAY 1250 Princeton, Kv. WPKY 1580	Ripley, Miss. WSCA 1260 Ripley, Tenn. WTRB 1570 Ripon, Wis. WCWC 1600 River Falls, Wis. WEVR 1550 Riverhead, N.Y. WRIV 1390	KXOK 630 WEW 770 WIL 1430 KXEN 1010	San Saba, Lex. KBAL 1410 San Saba, Lex. KBAL 1410 San Sebastion, P.R.
Princeton, Minn. WQPM 1300 Princeton, N.J. WHWH 1350	Riverside, CA KPRD 1440 KHNY 1570	St. Louis Park, Minn. KRSI 950 St. Maries ID KOFE 1480	Santa Ana, Calif. KWIZ 1480 Santa Barbara, Cal. KDB 1490
Princeville, Ureg. KRCO 690 Prosser, Wash. KARY 1310 Pritchard, AL WXLK 1270 Providence R.1 WFAN 790	Riverton, Wyo. KVOW 1450 Roanoke AL WELR 1360 Roanoke Va WEIR 960	St. Mary's, Pa. WKBI 1400 St. Matthews, SC WQKI 710 St. Paul MN (see Minneapolis- St. Paul MN) St. Pauls NC WLAB 1050	KTYD 990 KIST 1340 KTMS 1250 KKIO 1290
WHIM 1110 WICE 1290 WJAR 920	WRIS 1410 WTOY 910 WROV 1240	St. Peter Minn. KRMI 1310	Santa Calra, CA KNTA 1430 Santa Cruz, Calif. KSCO 1080 Sante Fe. N.Mex. KTRC 1400
WLKW 990 WPRO 630 WRIB 1220	Roanoke Rapids. N.C. WCBT 1230 Roaring Springs, Pa.	St. Petersburg, Fla. WWBA 680 WSUN 620 WLCY 1380 St. Peterside Beach, FL WRXB 1590	KAFE 810. KVSF 1260 Santa Maria, Cal. KUHL 1440
Provo. Utah KIXX 1400 KFTN 1400 KEYY 1450 KOVO 860	Robinson, III. WTAY 1570	Salamanca, N.Y. WGGU 1590 Salam, III WIRD 1350	KSMA 1240 KSEE 1480 KZON 1600 Santa Monica, Cal. KDAY 1580
Prvor Okla KOLS 1570	Rochester, Minn. KROC 1340 KWEB 1270	Salem, Mass. WESX 1230 Salem, Mo. KSMO 1340 Salem NH WVNH 1110	Santa Paula, CA KAAP 1400 Santa Rosa, Calif. KSRO 1350 KVRF 1460
KAPI 690 KCSJ 590 KFEL 970 KIDN 1400	Rochester, N.H. WWNH 930 Rochester, N.Y. WBBF 950 WHAM LIBU	Salem, N.J. WJIC 1510 Salem, O. WSOM 600 Salem. Oreg. KSLM 1390 KCGS 1220	Santa Rosa, N. Mex. KSYX 1420 Sanulpa, Okla, KRFK 1550
Pulaski, Tenn. WKSR 1420 Pulaski, Va. WPUV 1580	WHEC 1460 WNYR 660 WSAY 1370	KBZY 1490 KBZY 1490 KGAY 1480 WBLU 1480	Saranae Lake, N.Y. WNBZ 1240 Sarasota, Fla. WKXY 930 WQSA 1220 WSPB 1450

Location Call kHz	Location Call kHz	Location Call kHz	Location Call kHz
Sevierville, Tenn. WSEV 930 Seward, AK KRXA 950 Seymour, Ind. WJCD 1390	KJRB 790 KREM 970 KXLY 920	Tawas City, Mich. WIUS 1480 Taylor, Tex. KTAE 1260 Taylorsville, N. C. WSTH 860	Travelers Rest. S.C. WBBR 1580 Traverse City, Mich. WTCM 1400
Seymour. Tex. KSEY 1230 Shakopee, Minn. KSMM 1530	KMBI 1330 KUDY 1280 Springdale AR KBRS 1340	Taylorville, III. WTLK 1570 Tazewell, Tenn. WNTT 1250 Tazewell. Va. WTZE 1470	Trenton, Mo. KTTN 1600
Shallotte, N.C. WVCB 1410 Shamrock, Tex. KBYP 1580 Sharron, Pa. WPIC 790	Springfield, III. WCVS 1450 WMAY 970	Tempe AZ KUPD 1060	WBUD 1260 WTTM 920 Trenton, Tenn. WTNE 1500
Shawano, Wis. WTCH 960 Shawnee, Okla. KGFF 1450 Sheboygan, Wis. WHBL 1330	Springfield, Mass. WHYN 560 WMAS 1450	Temple, Texas KTEM 1400 Terre Haute, Ind. WBOW 1230	Trinidad, Colo. KCRT 1240 Troy AL WTBF 970 Troy, N.Y. WHAZ 1330 WTRY 980
Shemeld AL WSHF 1290 Shelby, Mont. KSEN 1150	WSPR 1270 Springfield MO KBUG 1060 KGBX 1260 KICK 1340	WAAC 1300 WTHI 1480 Terrell, Tex. KITE 1870 Terrell Hills, Tex. KITE 930 Terrytown, Nebr. KEYR 690	Troy, N. C. WJRM 1390 Truckee, Cal. KTRT 1400 Trumann AR KTMN 1530
Shelbyville, III. WSHY 1560	KLF3 1550 KTTS 1400 KWTO 860	Terrytown, Nebr. KEYR 690 Texarkana AR KOSY 790 KTFS 1400	Truth or Consequences, New Mexico KCHS 1400 Tryon, N.C. WTYN 1550
Shelbyville, Ind. WSVL 1520 Shelbyville, Ky. WCND 940 Shelbyville, Tenn. WHAL 1400 WLII 1580	Springfield, Ohlo WIZE 1340 WBLY 1600 Springfield-Eugene, Ore.	Texarkana, Tex. KCMC 740 Texarkana, TX-AR KADO 940 Texas City. Tex. KTLW 920	KXEW 1600 KAIR 1490
Sheldon, Iowa KIWA 1550 Shell Lake, WIs. WCSW 940 Shelton, Wash. KMAS 1280	Springfield, Tenn. WUBL 1590	The Dalles, OR KALM 1290 The Dalles, OR KODL 1440 KACI 1300	KCEE 790 KIKX 580 KCUB 1290 KEVT 690
Shenandoah, Iowa KMA 960 KFNF 920 Shenandoah, Pa. WMBT 1530	Springfield, Vt. WCFR 1480 Springfill, La. KBSF 1480 Spring Lake, N.C. WFBS 1450	Thermopolis, Wyo, KRTR 1490 KTHE 1240 Thief River Falls, Minn. KTRF 1230	KMGX 940 KHYT 1330 KTKT 990
Sheridan, Wyo. KWYO 1410 KROE 930 Sherman, TX KIKM 910	Spring Valley, N.Y. WGRC 1300 Spruce Pine, N.C. WTOE 1470	Thibodaux, La. KTIB 630 Thomaston, Ga. WSFT 1220	KOPO 1450 KUAT 1550 Tueumearl, N.Mex. KTNM 1400
Shippensburg, Pa, WSHP 1480 Show Low, AZ KVSL 1450 KVWM 970	Stamford, Conn. WSTC 1400 Stamford, Tex. KDWT 1400 Stanford, Kv. WRSL 1520	Thomasville, Ga. WTGA 1590 WJDB 630 Thomasville, Ga. WPAX 1240 WLDR 730	Tulare, Calif. KCOK 1270 KGEN 1370 Tulia, Tex. KTUE 1260
Shreveport. La. KBCL 1220 KEEL 710 KOKA 1550	Stanton, KY WBFC 1470 Stanke, Fla. WPXE 1490 Stankville, Miss. WKOR 980	Thomasville, N.C. WTNC 790 Thomson, Ga. WTWA 1240 WTHO 1530	Tullahoma, TN WBGY 740 Tulsa, Okla. KAKC 970 KXXO 1300 KRMG 740
KJOE 1480 KCIJ 980 KRMD 1340	State College, Pa. WMAJ 1450 WRSC 1390 Statesboro, Ga. WWNS 1240	Thousand Oaks CA KGOE 850 Three Rivers, Mich. WKLM 1510 Thurmont, Md. WTHU 1450	KELI 1430 KVOO 1179 KFMJ 1050
KWKH 1130 KFLO 1300 Sidney, Mont: KGCX 1480	Statesville, N.C. WSIC 1400 WDBM 550	Thurmont, Md. WTHU 1450 Ticonderoga, N.Y WIPS 1250 Timn, Ohlo WTTF 1600 Tifton, Ga. WTIF 1340	Tupelo, Miss. WELO 580 WJLJ 1060 WTUP 1490
Sidney, Nebr. KSID 1340 Sidney, O. WMVR 1080 Sierra Vista AZ KTAN 1420 Sikeston, Mo. KSIM 1400	Staunton, Va. WTON 1240 WKDW 900 Steamboat Surings, CO	Tillamook, Oreg. WWGS 1430 KTIL 1590	Turlock, Calif. KCEY 1390 Tuscaloosa AL WJRD 1150 WACT 1420 WNPT 1280
Sikeston, Mo. KSIM 1400 KMPL 1520 Siler City, N.C. WNCA 1570 Siloam Springs AR KUOA 1290	Stephenville, Tex. KSTV 1510 Sterling, Colo. KSTC 1230	Tloga, N.D. KTGO 1090 Titusville, FL WRMF 1060 Titusville, Pa. WTIV 1230 Toccoa, Ga. WLET 1420	WTUG 790 WTBC 1230 Tuscumbla AL WVNA 1590
Silsbee, Tex. KKAS 1300 Silver City, N.Mex. KSIL 1340 Silver Spring MD WGAY 1050	Sterling, III. WSDR 1240 Steubenville. Ohio WSTV 1340 WLIT 950 Stevens Point, Wis. WXYQ 1010	Toledo, Ohlo WOHO 1470 WSPD 1370 WTOD 1560	Tuskegee AL WBIL 580 Twenty-Nine Palms, Calif.
Sincoe, Ont. CFRS 1560 Sinton, Tex. KIKN 1590 Sioux Center, Iowa KVDB 1090	Stillwater, Minn. WAVN 1220 Stillwater, Okla. KSPI 780 Stirling. NJ WKMB 1070	WCWA 1230 WGOR 1520 WYND 1280	Twin Fatts, Idaho KTLC 1270 KLIX 1310 KEEP 1450
Sioux City, Iowa KSCJ 1360 KMNS 620 KWSL 1470 Sioux Falis, S.Dak. KISD 1230	KSTN 1420 KWG 1230	Saratoga Springs, N.Y. WKAJ 900 Sauk Rapids, Minn.	Two Rivers, W(s. WQTC 1590 KZAK 1330 KDOK 1490
KCHF 1520 KELO 1320 KNWC 1270	Storm Lake, Iowa KAYL 990 Streator, III. WIZZ 1250 Stroudsburg, Pa. WVPO 840 Stuart, Fla. WSTU 1450	Sault Ste. Marie. Mich. WS00 1230	KTBB 600 KZEY 690 Tylertown, Miss. WTYL 1290
Sitka AK KIFW 1230 KSEW 1400	Stuart. Va. WHEO 1270 Sturgeon Bay, Wis. WDOR 910 Sturgls. Mich. WSTR 1230	Savannah GA WQQT 1450 WEAS 900 WSAV 630	Tyrone, Pa. WTRN 1340 Uhrichsville, O. WBTC 1540 Uklah, Cal. KMSL 1250
Skowhegan ME WSKW 1150 Slaton, Tex. KCAS 1050 Slidell LA WSDL 1560 Smithfield, N.C. WMPM 1270	Sturgis, S.D. KBHB 810 Stuttgart, A.R KWAK 1240	WSGA 140J WTOC 1290 WSOK 1230 Savannah, Tenn. WORM 1010	Ulysses, Kan. KUKI 1400 Union, Mo. KLPW 1220 Union, S.C. WBCU 1460
Smithfield, VA WEOO 940 Smithville, Tenn. WILE 1480	Sullivan, Ind. WKQV 1550 Sullivan, Mo. KTUI 1560 Sulphur, LA KEZM 1310	Sayre, Pa. WATS 960 Schenectady, N.Y. WGY 810 WWWD 1240	Union, S.C. WBCU 1460 Union City, Tenn. WENK 1240 Uniontown. Pa. WMBS 590 Urbana, III. WILL 580
Snyder, Tex. KSNY 1450 Socorro, N.Mex. KSRC 1290 Soda Springs, Ida. KBRV 790	Sulphur Sprgs., Tex. KSST 1230 Summerville, Ga. WGTA 950 Summerville, S.C. WAZS 980	Scotland Neck, N.C. WYAL 1280 Scott City, Kans. KFLA 1310 Scottsbluff, Nebr. KNEB 960	Utlea, N.Y. WIBX 950 WBVM 1550
Soldotna AK KSRM 920 Somerset, Ky. WSFC 1240	Sumber, Wash. KDFL 1560 Sumter, S.C. WFIG 1290 WDXY 1240 WSSC 1340	Scottsboro AL WCRI 1050 WROS 1330	WRUN 1150 WTLB 1310 Utuado, P.R. WUPR 1530 Uvalde, Tex. KVOU 1400
Somerset, Pa. WTLO 1480 WVSC 990 Somerville, N.J. WBRW 1170 Soddy, Tenn. WEDG 1240	Sunbury, Pa. WKOK 1070 Sunnyside, Wash. KREW 1230 Superior, Nebr. KRFS 1600	Scottsdale AZ KDOT 1440 Scottsville, Ky, WLCK 1250 Scranton, Pa. WARM 590 WEJL 630	Valdese, N.C. WSVM 1490
Soddy-Daisy TN WPJD 1550 Sonora, Callf. KVML 1450 Sonora, TX KVRN 980	Superior, Wis. WDSM 710 WAKX 970 Susanville, Calif. KSUE 1240	WGBI 910 WICK 1460 WSCR 1320	WGAF 910 WJEM 1150 WVLD 1450 Valentine, Nebr. KVSH 940
So, Beloit, III. WBEL 1380 So, Bend Ind. WNDU 1490	Sutton, W.Va. WSGB 1490 Swalnsboro. Ga. WJAT 800 Sweet Home, Ore. KFIR 1370 Sweetwater, Tenn. WDEH 800	Seaford, DE WSFD 1280 Searcy, AR KWCK 1300 Seaside, Ore. KSWB 930 Seattle, Wash. KAYO 1150	Valley City, N. Dek. KOVC 1490
WIVA 1580 WSBT 960 Seuthwest City, MO KCTE 1140	Sweet Home, Ore. KFIR 1370 Sweetwater, Tenn. WDEH 800 Sweetwater, Tex. KX 0X 1240 Sylasauga AL WFEB 1340 WMLS 1290	Seattle, Wash. KAYO 1180 KIXI 910 KING 1090 KIRO 710	Valparaiso, Fla. WFSH 1340 Valparaiso, Ind. WAKE 1500 WNWI 1080 Van Buren AR KFDF 1580 Van Cleve, Ky. WMTC 730 Vaneeburg, Ky. WKKS 1570
Southbridge, Mass. WESO 970 So. Boston, Va. WHLF 1400 Southern Pines, N.C. WEEB 990	Sylva, NC WRGC 680 Sylvanla, Ga. WSYL 1490 Sylvester, Ga. WOGA 1540 Syraeuse, N.Y. WHEN 620	KJR 950 KMPS 1300 KOMO 1000	KVAN 1480
South Charleston, WV WSCW 1410 S. Daytona, Fla. WELE 1590	Syracuse, N.Y. WHEN 620 WFBL 1390 WNDR 1260 WOLF 1490	KZOK 1590 KYAC 1250 KVI 570 KXA 770 KBLE 1050	Vandalia, III. WPMB 1500 Van Wert, Ohlo WERT 1220 Vega Baja, P.R. WEGA 1350 Venice, Fla. WAMR 1320
So. Gastonia, N.C. WGAS 1420 So. Haven, Mich. WJOR 940 South Hill, Va. WJWS 1370 Southington, Conn. WNTY 990	Tabor City, N.C. WTAB 1370 Tacoma, Wash. KMO 1360	Sehring, Fla. WICM 960	Ventura, Calif. KVEN 1450 Ventura-Oxnard. CA
So. Knoxville, Tenn. WSKT 1580 South Lake Tahoe, Cal, KOWL 1490	KTAC 850 KTNT 1400 KVI 570	Sedalla, Mo. KDRO 1490 KSIS 1050 Sedona, AZ KAZM 1470	Vermillion, S.Dak. KUSD 690 VVRA 1570 Vernal, Utah KVEL 920
S. Mlaml, Fla. KTHO 590 WFUN 790 South Paris. ME WXIV 1450	Taft, Calif. KTKR 1310 Tahlequah, Okla. KTLQ 1350 Tahoe Valley, Calif.	Seguin, Tex. KWED 1580 Selinsgrove, Pa. WSEW 1240 Selma AL WAMA 1340	Vernal, Utah KVRA 1570 Vernan AL WVSA 1380 Vernon AL WVSA 1380 Vernon, Tex. KVWC 1490 Vero Beach, Fia. WAXE 1370 WTTB 1490
So. St. Paul, Minn. KDWB 630	Talladega AL WEYY 1580 WNUZ 1230	WHBB 1490 WTQX 1570 Selma, N.C. WBZB 1090	Vicksburg, Miss. WQBC 1420
So. Williamsport, Pa. WMPT 1450 Spanish Fork, Utah, KONI 1480	WONS 1410 WANM 1070 WTAL 1450	Selmer, Tenn. WDTM 1130 Seminole, Tex. KIKZ 1250 Senatobia, Miss. WSAO 1550 Seneca Falls, N.Y. WSFW 1110	WIFL 1990 WVIM 1490 Victoria, Tex. KNAL 1410 KVIC 1340 Victorialic, Calif, KCIN 1590 Victorialic, Victorialic
Sparks-Reno NV KWRL 1270 Sparta, III. WHCO 1230 Sparta, N.C. WCOK 1060	Tallapoosa, GA WKNG 1060	Seneca Township, S.C. WSNW 1150	Vicques. P.R. WIVV 1370 Ville Platte. La. KVPI 1050
Sparta, Wis. WKLJ 990	Tallulah, La. KTLD 1360 Tallulah, La. KTLD 1360 Tampa, Fla. WQYK 1250 WDAE 1250 WYOU 1350 WFLA 970	Toledo, Oreg. KTDO 1230 Tolleson AZ KRDS 1190 Tomah, Wis. WTMB 1460 Tomahawk WI WYYS 810	Vincennes. Ind. WAOV 1450 Vincennes. N.J. WWBZ 1360 WDVL 1270 Vinita, Okla. KVIN 1470
Spartanburg, SC WKDY 1400 WORD 910 WSPA 950	WING 1010	Thompkinsville, Ky. WTKY 1370 Tooele, Utah KDYL 990 Topeka Kans WIBW 580	Vinton, Va. WKBA 1550 Virginia, Minn. WHLB 1400 Virginia Beach, Va.
Spencer, Iowa KICD 1240 Spencer, W.Va. WVRC 1400 Spokans, Wash. KGA 1510	WTMP 1150 WSOL 1300 Tags N. Max. KKIT 1340	WREN 1250 KTOP 1490	Virouqua, Wis. WISV 1360 Visalia, Calif. KONG 1400
Spokane, Wash. KGA 1510 KXX R 1440 KSPO 1230 KEZE 1380	Tappahannock, Va. WRAR 1000 Tarboro, N.C. WCPS 760 Tarbon Springs FL WCWR 1470	Toppenish, Wash. KENE 1490 Torrington CT WSNG 610 Torrington, Wyo. KGOS 1490 Towanda Pa. WTTC 1550	Vista, Cal. KMLO 1000 Vivian, LA KNCB 1320 Wabash, Ind. WAYT 1510 Wabasha MN KWMB 1190
KHQ 590	Tasley, Va. WESR 1330 Taunton, Mass. WPEP 1570	Towson, MD WTOW 1570	Waco, Tex. WACO 1460

Location Call kHz	Location Call kHz	Location Call kHz	Location Call kHz
KRZI 1580	, would 1500	Westfield, Mass. WDEW 1570 C	Winnfield, La. KVCL 1270 Winner, S.Dak, KWYR 1260
KWTX 1230	Watseka, III. WGMF 1500 WGFA 1360	Westminster, Md. WTTR 1470 Weston, W.Va. WHAW 980	
Waco-Marlin, TX KKIK 1010 Wadena, Minn. KWAD 920	Watsonville, Calif. KOMY 1340	West Warwick RI WKRI 1450	Winnsboro, S.C. WCKM 1250
Wadesboro, N.C. WADE 1210	Wauchula, Fla. WAUC 1310 Waukegan, III, WKRS 1220	Wetumka AL WETU 1250 Wewoka-Seminole, Okla.	Winona, Minn. KWNO 1280 KAGE 1380
Wagoner, OK KJEM 1530 Wailuku, Hawall KMVI 550	Waukesha, Wis. WAUK 1510 Waukon, Ia. KNEI 1140	KWSH 1260	Winona, Miss. WONA 1570
Waipahu, Hawaii KAHU 940	Waupaca, Wis. WDUX 800 Waupun, Wis. WLKE 1170	Wharton, Tex. KANI 1500 Wheatland, Wyo. KYCN 1340	Winslow AZ KINO 1230 Winston-Salem, N.C.
Walhalla, S.C. WGOG 1000 Walker, Minn. KLLR 1800	Waupaca, Wis. WDUX 800 Waupun, Wis. WLKE 1170 Wausau, WI WRIG 1400	Wheaton, Md. WDON 1540 Wheeling, W.Va. WHLL 1600	WAAA 980
Wallace, Idaho KWAL 620	WSAU 550	WNEU 1600	WAIR 1340 WPGD 1580
Wallace, N.C. WLSE 1400 Walla Walla, Wash.	Waverly, Iowa KWAY 1470	WKWK 1400 WWVA 1170	WSJS 600
KHIT 1320 KUJ 1420	Waverly, Ohio WPKO 1380	WWVA 1170 White Castle, LA KKAY 1590	WTOB 1380 WURL 1500
KTEL 1490	Waxahachle, Tex. KBEC 1390	Whitehall, Mich. WLRC 1490 White Plains, N.Y. WFAS 1230	Winter Garden, Fla. WOKB 1600
Wainut Ridge AR KRLW 1320 Waisenburg, Colo. KFLJ 1380	Waveross, Ga. WACL 570	White River June., Vt.	Winter Haven, Fla. WSIR 1490 WZNG 1360
Walterboro, S.C. WALD 1060	Wayne, Neb. KTCH 1590	Whitesburg, Ky. WTCW 920	Winter Park, FL WNBE 1440 WNNO 990
Waltham, MA WHET 1330 Walton, N.Y. WDLA 1270	Waynesboro, Ga. WBRO 1310 Waynesboro, Miss. WABO 990	Whitesburg, Ky, WTCW 920 White Sulphur Springs, WV WSLW 1310	Wisconsin Dells, Wi
Wanchese, N.C. WOBR 1530	Waynesburg, Pa. WANB 1580	Whiteville, N.C. WENC 1220	Winters, TX KRWT 1060
Warner Robbins, Ga.	W00Z 1540	Whitley City, KY WEQO 1220 Wichita, Kans. KAKE 1240	Wisconsin Rapids, Wis, WFHR 1320
WQCK 1600	Waynesboro, Tenn. WAAN 1480	KSGL 900	Wolfeboro, N.H. WASR 1420 Wolf Pt., Mont. KVCK 1450
Warren AR KWRF 860	Waynesboro, Va. WAYB 1490 WANV 970	KLEO 1480 KFD1 1070	Woodburn, Ore, KWRC 940
Warren, Ohio WHHH 1440 WTCL 1570	Waynesville, Mo. KJPW 1390	KFH 1330	Woodbury TN WBRY 1540 Wood River, III. WRTH 590
Warren, Pa. WNAE 1310	Waynesville, N.C. WHCC 1400	Wichita Falls, Tex. KNIN 990 KTRN 1290	Woodruff, S.C. WSJW 1510
Warrensburg, Mo. KOKO 1450 Warrenton, Mo. KWRE 730	Weatherford, Okla, KWEY 1590	KWFT 620	Woodward, Okla. KSIW 1450
Warrenton, N.C. WARR 1520	Weatherford TX KZEE 1220 Webster City IA KQWC 1570	Wickenburg AZ KSWW 1250 Wickford, R.I. WKFD 1370	Woonsocket, R.I. WNRI 1380
Warrenton, Va. WEER 1250 WKCW 1420	Weirton W.Va WFIR (430)	Wiggins, Miss. WIGG 1420 Wildwood, N.J. WCMC 1230	Wooster, Ohlo WWST 960
Warsaw IN WRSW 1480	Welch, W.Va. WELC 1150	Wilkes-Barre, Pa. WBAX 1240	Worcester, MA WNCR 1440 WNEB 1230
Warsaw, N.C. WTRQ 1560	Weldon, N.C. WSMY 1400	WBRE 1340 WILK 980	WORC 1310
Warsaw, Va. WNNT 690	Wellington, Kan. KLEY 1130	Wilkesboro, N.C. WWWC 1240	Worland, Wyo. WTAG 580 KWOR 1340
Warwick NY WTBQ 1110	Wellsboro, Pa. WNBT 1490 Wells River, VT WYKR 1490	Williams, PA KBWA 1240 Williamsburg, Ky. WEZJ 1440	Worthington, Minn. KWOA 730
Warwiek-E. Greenwich, R.I. WARV 1590	Wellston, Ohio WKOV 1330	Williamsburg, Va. WBCI 740	Worthington, Ohio WRFD 880 Wynne AR KWYN 1400
Waseca MN KOWO 1170 Waseo, Calif. KWSO 1050	Wellsville, N.Y. WLSV 790 Wematchee, WA KWWW 1340	Williamson, W.Va. WBTH 1400 Williamsport, Pa. WLYC 1050	Wyoming MI WYGR 1530 Wytheville, Va. WYVE 1280
Washington, DC WFAN 1340	Wendell-Zehulon N.C.	WRAK 1400 WWPA 1340	Xenia, O. WELX IIIO
Washington, D.C. WMAL 630 WOL 1450	KUEN 900	Williamston, N.C. WIAM 900	Yabucoa, PR WXEW 840
WWDC 1260	Weslaco, Tex. KRGV 1290	Willimantle, Conn. WILI 1400 Williston, N.D. KEYZ 1360	Yadkinville, N.C. WYDK 1480
WUST 1120 WRC 980	Weslaco, Tex. KRGV 1290 West Allis, Wis. WAWA 1590 W. Bend, Wis. WBKV 1470	Willmar, Minn. KWLM 1340	Yakima, Wash. KIT 1280 KMWX 1460
WTOP 1500	West Branch MI WBMB 1060	Willoughby, Ohio WELW 1330 Willow Springs, Mo. KUKU 1330	KBBO 1390
Washington, Ga. WLOV 1370 Washington, Ind. WAMW 1580	Westbrook-Portland ME WJBQ 1440	Willows, Calif. KIQS 1560 Wilmington, Del. WAMS 1380	KUTI 980
Washington, Iowa KCII 1380 Washington, N.J. WCRV 1580	West Chester, Pa. WCHE 1520	WDEL 1150	Yankton, S.D. KYNT 1450 WNAX 570
Washington, N.C. WEEW 1320	West Covina, Cal. KGRB 900 Westfield, MA WDEW 1570	WILM 1450 WTUX 1290	Yauco, P.R. WKFE 1550
Washington, Pa. WJPA 1450	W. Frankfort, III. WFRX 1300	Wilmington, N.C. WMFD 630	Yazon City, Miss. WAZF 1230 WYAZ 1530
WKEG 1110	W. Hartford, Conn. WMLB 1550	WHSL 1490 WKLM 980	York, Nebr. KAWL 1370
Washington Court House, Ohlo WCHO 1250	West Jefferson, N.C.	Wilmington, OH WKFI 1090	York, PA WZIX 1350
Waterbury, Conn. WATR 1320 Waterbury CN WQQW 1590	W. Liberty, Ky. WKSK 580 W. Liberty, Ky. WKS 1450	Wilson, N.C. WGTM 590	WNOW 1250 WSBA 910
WWC0 1240	West Memphis AR KSUD 730 W. Monroe, La. KUZN 1310	WLLY 1350 WYOT 1420	York, S.C. WYCL 980
Waterloo IA KLEU 850	W. Palm Beach. Fla. WEAT 850	Wirchester, Ky. WWKY 1380 Winchester, Tenn. WCDT 1340	Youngstown, Ohio WBBW 1240 WFMJ 1390
KXEL 1540	WJNO 1230	Winchester, Va. WINC 1400	WGFT 1500
KWWL 1330	West Plains, Mo. KWPM 1450	Windber, Pa. WWBR 1350	Ypsilanti, Mich. WKBN 570 Ypsilanti, Mich. WSDS 1480
Watertown, N.Y. WATN 1240 WOTT 1410	West Point, Ga. WBMK 1310	Winder, Ga. WIMO 1300	Yreka, Calif. WYFC 1520 Yreka, Calif. KSYC 1490
WWNY 790	West Point, Miss. WROB 1450 Westport, Conn. WMMM 1260	Windermere, Fla. WVCF 1480 Windom, Minn. KDOM 1580	Yuba City, Calif. KUBA 1600
Watertown, S.Dak. KSDR 1480 KWAT 950	West Springfield, MA	Window Rock AZ KHAC 1300 Windsor, Colo. KUAD 1170	Yuma AZ KOBO 1450 KAWC 1320
Watertown, Wis, WTTN 1580 Water Valley, Miss.	W. Yarmouth, Mass. WOCB 1240	Windsor, Conn. WKND 1480	KVOY 1400
WVLY 1320	W. Yellowstone, Mont. KWYS 920	Windsor, N.C. WBTE 990	Zanesville, Ohio WHIZ 1240 Zephyrhills, Fla. WPAS 1400
Waterville, Me. WTVL 1490 Watkins Glen, N.Y.	Westerly, R.I. WERI 1230	Winnemucca, Nev. KWNA 1400 Winfield AL WEZQ 1300 Winfield, Kan. KNIC 1550	Zephyrhills, Fla. WPAS 1400 Zlon, III. WZBN 1500
wateris Giell, N.T.	W Catoriy, N.1. WENT 1230	Williagu, Kall. Kitto 1990	1500 H 1500
U.S.	AM STATIONS	BY CALL LETTE	RS

KAAA Kingman AZ 1230 KALI San Gabriel, Gal. 1430 KASM Albany, Minn. 1150 KRRV Big Bear Lai	ce. CA 1050
	1410
KAAP Santa Paula, CA 1400 KALL Salt Lake City, Utah 910 KASO Minden, La, 1370 KBCC Cuba, MO KAAR Mountlake Terr., WA 1510 KALM Thayer, Mo. 1290 KAST Astoria, Ore. 1220 KBCH Lincoln City (
KAAT Denver CO 1090 KALO Little Rock AR 1250 KASY Auburn, Wash. 1240 KBCL Shreveport, L	
KAAY Little Rock AR 1090 KALT Atlanta, Tex. 900 KATA Arcata CA 1340 KBCR Steamboat S	prings,
KABC Los Angeles, Calif. 790 KALV Alva, Okta. 1430 KATB Agana, GU 570 CO	1230
KABI Abitene, Kans. 1560 KAMA El Paso TX 1060 KATE Albert Lea, Minn. 1450 KBCQ Roswell, NM KABL Qastand, Casilf. 960 KAMD Camden AR 910 KATI Casper, Wyo. 1400 KRDF Eugene, Okand Castand, Casta	1020
MODI Cagolie, On	1280 13. 1480
KABQ Albuquerque, N.M. 1330 KAMI Cozad, Neb. 1380 KATL Miles City, Mont. 1340 KBEA Mission, Kar KABR Aberdeen, S. Dak. 1420 KAML Kenedy-Karnes City, KATC Safford AZ 1230 KBEC Waxahachta	
KACH Preston, ID 1340 Tex. 990 KATR Eugene, Ore, 1320 KREE Modesto, Cal	
KACI The Dalles, Oreg. 1300 KAMO Rogers AR 1390 KATY San Luis Obispo, Cal. 1340 KBEL Idabel, Okla.	
KACJ Greenwood, AR 1510 KAMP El Centro, Callf. 1430 KATZ St. Louis, MO 1600 KBEN Carrizo Sprg.	., Tex. 1450
KACO Bellville, TX 1090 KAMX Albuquerque NM 1520 KAUS Austin, Minn. 1480 KBET Reno. Nev. KACT Andrews Tex. 1360 KAMY MeCamey, Tex. 1450 KAVA Burney, Cal. 1450 KAYA Burney, Cal.	1340
MANA A TOO MANA A TOO MANA TOO	
1000 MANUEL TO THE TOTAL COLD IN THE BUILDING FORTY	
CAND Considers Tay 1240 KANI Largester Cally 610 KBrs Belle Pourche	
KADI Clayton, MO 1320 KANE New Iberia, La. 1240 KAVR Apple Valley, Calif. 960 KAVR Apple Valley, Calif.	Wash. 930
KADL Pine Bluff AR 1270 KANI Wharton, Tex. 1300 KAWC Tuma AZ 1320 KBGH Mamphis Te	
KADO Texarkana, IX-AR 940 KANN Ugden, Utah 1090 KAWL TURK, Neb. 1370 KBGN Caldwall ID	1060
KADS Elk City, Okia. 1240 KANO Anoka, Minn. 1470 KAWW Heper Springs An 1370 KRHR Sturgle S	
KAFE Sante Pe, N.M. 810 KANS Larined, Kan. 1310 KAYO Beaumont, 182. 1400 KBHC Nashville AR	1260
MARY DAME SEO MACH Late Charles La 1400 MANY Brown LIT 060 KBITM Branson, Mr.	1220
WACC Union TV 1510 WACI Corrollton Mr. 1420 WAVI Storm Lake John 990 KBHS HOUS SPRINGS	
WARD MILES WARD BOWNING WASH LAND KIND KIND KIND KIND KIND KIND MORETTE AN	1860
KAGR Crossett AR 800 KAPB Marksville, La. 1370 KAYU Kansas City, Mo. 1190 KBK Lampa, Call.	900
KAGI Grants Pass. Uren. 1300 KAPE San Antonio, 1ex. 1400 KATS nays, Kans. 1400 Unit Liberty Ma	1140
KAGU Klamath Palis, Oreg. (130 KAPJ Pueblo, Colo. 650 KATI hupert, luano 570 WDIM Pormell N M	
KAPI Anacortes, Wash. 1340 KAPK Duglas AZ 330 KAZA Girly, Cat. 1230 KBIX Muskogee, Ok	la. 1490
MALI AND THE COMMENT OF STATE	
MADE AND LIES SAILISAW, UKIN	
KAHU Walpahu, Hawali 940 KARI Blaine, Wash. 550 KBAI Morro Bay, Calif. 1150 KBI Torong AP	1240
KAIM Honolulu, Hawaii 870 KARM Fresno, Calif. 1430 KBAL San Saba, Tex. 1410	
KAIN Nampa, Ida. 1340 KARN Little Rock AR 920 KBAM Longview, Wash. 1270 KBKB Fort Madison	
KAIR Tusson, Arlz. 1490 KARR Great Falls. Mont. 1400 KBAN Bowie, Tex. 1410 KBKR Baker, Oreg KAIN Crowley. La. 1563 KARS Belen, N.M. 860 KBAR Burley, Idaho 1230 KBKW Aberdeen, V	
KAJN Crowley, La. 1563 KARS Belen. N.M. 860 KBAR Burley, Idaho 1230 KBKW Aberdeen, V KAJO Grante Pass, Oreg. 1270 KART Jerome. Idaho 1400 KBBA Benton AH 690 KBLC Laksport, CA	
KARV Russellville AR 1490 KBBB Borger, Tex. 1600 KBLE Scattle, Wash	
KAKC Tulsa Okla. 970 KARY Prosser, Wash. 1310 KBBO Yakima, Wash. 1390 KBLF Red Bluff, Ca	lif. 1490
KAKE Wichita, Kan. 1240 KASA Phoenix AZ 1540 KBBQ Ventura-Oxnard, KBLI Blackfoot, Ida	ho 690
KALB Alexandria, La. 580 KASH Eugene, Ore. 1600 CA 1590 KBLL Helena, Mont	
KALE Richland, Wash. 960 KASI Ames, 10ws 1430 KBBR North Bend, Oreg. 1340 KBLR Bolivar, Mo. KALE Alamonorda N.Max. 1230 KASI Newsattle, Wvo. 1240 KBBR Buffalo. Wvo. 1450 KBLV Yuma, Article N. Max. 1240 KBRS Buffalo. Wvo. 1450 KBLV Yuma, Article N. Max. 1240 KBRS Buffalo. Wvo. 1450 KBLV Yuma, Article N. Max. 1240 KBRS Buffalo. Wvo. 1450 KBLV Yuma, Article N. Max. 1240 KBRS Buffalo. Wvo. 1450 KBLV Yuma, Article N. Max. 1240 KBRS Buffalo. Wvo. 1450 KBLV Yuma, Article N. Max. 1240 KBRS Buffalo. Wvo. 1450 KBRS	1130
KALG Alamogordo, N.Mex. 1230 KASL Newcastle, Wyn. 1240 KBBS Buffalo. Wyo. 1450 KBLU Yuma, Ariz.	300

Call Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
KBLW Logan, Utah 1390 KBLY Gold Beach, Oreg. 1220 KBMN Bozeman, Mont. 1230 KBMN Bozeman, Mont. 1230 KBMN Bozeman, Mont. 1230 KBMN Bismarck, N. D. 1350 KBMR Bismarck, N. D. 1350 KBMW Wahpeton, N.D Breckenridge, Minn. 1450 KBMN Billings, Mont. 1240 KBND Bend, Oreg. 1110 KBND Bend, Oreg. 1110 KBND Denver, CO 1220 KBND Denver, CO 1220 KBND Bend, Oreg. 1110 KBND Bend, Oreg. 1110 KBND Bend, Oreg. 1110 KBND Boise, 10 570 KBOK Malvern AR 1310 KBOL Boulder, Colo. 1490 KBOW Malvern AR 1310 KBOR Brownsville, Tex 1600 KBOW Botte, Mont. 1380 KBOW Botte, Mont. 1380 KBOW Botte, Mont. 1380 KBOW Botte, Mont. 1490 KBOW Medford, Oreg. 1450 KBND Medford, Oreg. 1450 KBND KBRE Cedar City, Utah KBRE Cedar City, Utah KBRE Frigus Falls, Minn. 1250 KBRK Browklings, S.Dak. 1430 KBRN Brighton, Colo. 800 KBRN Brighton, Colo. 800 KBRN Bremerton, Wash. 1490 KBRR Springdale AR 1340	KCMP Brush, CO	XELI Tutsa, Okia,	KGAS Carthage, Tex. 1590 KGAY Salem, Oreg. 1430 KGB San Diego, Calif. 1360 KGBC Galveston, Tex. 1540 KGBC Galveston, Tex. 1540 KGCL East Prairie, Mo. 1450 KGCL East Prairie, Mo. 1480 KGCN Edmonds, Wash, 630 KGCX Sidney, Mont. 1480 KGEN Edmonds, Wash, 630 KGER Bakersfield, Calif. 1330 KGER Bolse, Idaho 1140 KGEN Tulare, Calif. 1390 KGER Long Beach, Calif. 1390 KGER Long Beach, Calif. 1390 KGER Kalispeli, Mont. 600 KGFF Shawnee, Okla. 1450 KGFF Shawnee, Okla. 1450 KGFL Clinton, AR 1110 KGFL Billings, Mont. 790 KGFK Pierre, S.D. 1060 KGFK Dierre, S.D. 1060 KGFK Dierren S.D. 1660 KGFK DIERren DIERren S.D. 1660 KGFK DIERren
KBRT Avalon, CA 740 KBRW Soda Springs, Ida. 790 KBRW Barrow AK 680 KBRX O'Neili, Nebr. 1350 KBRZ Freeport. Texas 1460 KBSR Springhill, La. 1460 KBSS Springhill, La. 1460 KBSS Pringhill, La. 1460 KBSS Bringhill, La. 1460 KBSN Crane, Tex. 970 KBIA Batesville AR 1340 KBIA Batesville AR 1340 KBIA Batesville AR 1250 KBIM Jonesboro AR 1230 KBIM Jonesboro AR 1230 KBIM Jonesboro AR 1230 KBIM Sparks, Nev. 1270 KBUG San Antonio. Tex 1270 KBUG San Antonio. Tex 1410 KBUG Arthens, Tex, 1410 KBUG Arthens, Tex, 1410 KBUS Brigham City, Utah 1450 KBUR Brigham City, 1480 KBUR Springs, 1480 KBY Shamrock, 1480 KBY Shamrock, 1480 KBY Shem City, 0kia. 1490 KBZ Lajunta, Colo. 1400 KCAB Oardanelle AR	KDAC Ft. Brage, Calif. 1238 KDAK Carrington, N.D. 1600 KDAL Duluth. Minn. 610 KDAL Duluth. Minn. 610 KDAL Duluth. Minn. 610 KDAL Minneapolis-St. Paul MN 1370 KDAP Douglas, AZ 1450 KDAP Albuouerque, N.M. 780 KDAP Albuouerque, N.M. 780 KDAP Albuouerque, N.M. 780 KDAP Albuouerque, N.M. 780 KDBM Dillon, Mont. 1490 KDBM Dillon, Mont. 1590 KDBM Donlohan, Mont. 1590 KDBM Donlohan, Mont. 1590 KDBM Donlohan, Mont. 1590 KDBM Donlohan, Mont. 1590 KDBM Dillon, Mont. 1590 KDBM Dillon, Mont. 1590 KDBM Dillon, Mont. 1590 KDBM Dillon, Mont. 1310 KDBM Dillon, Mont. 1310 KDBM Dillon, No. 1230 KDBM Marrillo, Tex. 1470 KDBM Dillon, No. 1230 KDBM Marrillo, Tex. 1270 KDBM Marrillo, Tex. 1270 KDBM Marrillo, Tex. 1010 101	KEXO Grand June., Colo. 1230 KEXE Excelsior Springs. Mo. 1090 KEYE Perryton, Tex. 1400 KEYH Houston, T.X KEYJ Jamestown, N.Dak. 1400 KEYJ Long Prairle, Minn. 1400 KEYR Terrytown, N.Ber. 690 KEYS Corpus Christi, Tex. 1440 KEYY Provo, Utah 1450 KEYY Provo, Utah 1450 KEYY Williston, N.Dak. 1380 KEZW Williston, N.Dak. 1380 KEZW Sulphur, LA 1310 KEZY Anahelm. Calif. 1990 KEZY Anahelm. Calif. 1990 KEZY Anahelm. Calif. 1330 KEZW Sulphur, LA 1310 KEZY Anahelm. Calif. 1330 KFAU Los Omnha. NB 1110 KFAU Los Omnha. NB 1110 KFAU Los Omnha. 1480 KFAU San Francisco. Calif. 1330 KFAL Fulton, Mo. 660 KFAU Fayetteville AR 1280 KFBC Cheyenne, Wo. 1240 KFBC Cheyenne, Wo. 1240 KFBR Nogales AZ 1380 KFBR Nogales AZ 1380 KFBR Nogales AZ 1380 KFDR Nogales AZ 1380 KFDR Van Buren AR 1380 KFDR Grand Coules. Wash. 1360 KFEL Pueblo. Colo. 970 KFER Grand Coules. Wash. 1360 KFFA Helena AR 1360 KFFA Helena AR 1360 KFFA Helena AR 1360	KGMB Honolulu, Hawaii 590 KGMB Bellingham, Wash. 790 KGMO Cape Girardeau, Mo. KGMS Saeramento. Calif. 1300 KGMS Saeramento. Calif. 1310 KGMS Saeramento. Calif. 1310 KGMS Hew Braunfels, Tex. 1420 KGMC Amarillo, Tex. 1420 KGNC CAmarillo, Tex. 1420 KGNC Dodge City, Kans. 1370 KGO San Francisco. Calif. 810 KGOE Thousand Oska, Calif. 850 KGOE Thousand Oska, Calif. 850 KGOE Thousand Oska, Calif. 850 KGOE Torrinston, Wyo. 1490 KGRB West Covina, Cal. 1490 KGRB West Covina, Cal. 1490 KGRB Henderson, Tex. 1000 KGRL Bend, Oreg. 940 KGRN Grinnell, Iowa 1410 KGRO Pampa, Tex. 1250 KGRZ Missoula, MT 1450 KGTN Georgetown, Tex. 1530 KGU Gunnison, Colo. 1490 KGU Gunnison, Colo. 1490 KGU Greenville, Tex. 1400 KGU Greenville, Tex. 1400 KGU Greenville, Tex. 1400 KGV Belgrade, Mont. 630 KGV Belgrade, Mont. 620 KGY Ollympia, Wash. 1240 KGYN Guymon, Okia, 1240 KGYN Guymon, Okia, 1240 KGYN Guymon, Okia, 1240
KCAL Rediands, Callf. KCAM Glennallen AK 790 KCAN Glennallen AK 790 KCAN Canyon, Tex. 1550 KCAR Clarksville, Tex. 1350 KCAS Slaton, Tex. 1050 KCAS Slaton, Tex. 1050 KCAT Pine Bluff AR 1340 KCBD Reno, Nev. 1230 KCBD San Diego, Callf. KCBS San Fran., Callf. KCBS Corning AR KCCC Carlsbad, N.M. 1260 KCCC Carlsbad, N.M. 1420 KCCC Carlsbad, N.M. 1420 KCCC Carlsbad, N.M. 1420 KCCC Carlsbad, N.M. 1420 KCCC Lawton, Okla. 1420 KCCC Honolulu, Hawaii 1420 KCCC Honolulu, Hawaii 1420 KCCC Turloch, Callf. KCCT Turloch, Callf. KCCT Turloch, Callf. 1510 KCCT Turloch, Callf. 1630 KCCF B Mendoelno, CA 1630 KCCF B Mendoelno, CA 1630 KCCF Charles AII, Iowa KCCS Marshall, AR 1630 KCH Charles Clowa KCCH Charles	KDKA Pittsburgh, Pa. 1029 KDKB Mess. AZ KDKD Clinton, Mo. 1280 KDKD Clinton, Mo. 1280 KDKD Clinton, Colo. 1510 KDLA DeRidder, La. 1010 KDLA DeRidder, La. 1010 KDLK Oel Rilo, Tex. 1230 KDLM Detroit Lakes. Minn. 1340 KDLR Devils Lake, N.Dak. 1246 KDLS Perry, Iowa KDLT Detta. UT 540 KDLT Detta. UT 540 KDMO Carthage. Mo. 1490 KDMS El Dorado AR 1290 KDMS El Dorado AR 1290 KDNT Denton, Tex. 1440 KDOK Tyler. Tex. 1440 KDOK Moloave, Calif. 1340 KDOM Windom. Minn. 1580 KDOM Windom. Minn. 1580 KDON Satinas, Calif. 1460 KDOV Ashland OR 1330 KDRO Oec Lodge, Mont. 1400 KDRS Paragouid AR 1490 KDRY Alamo Hts., Tex. 1490 KDSN Denison, Ia. 1530 KDTA Oelta, Colo. 1400 KOTH Oubuque, Iowa 1370 KDUN Reedsport. Ore. 1470	KFH Wiehlta, Kana. 1330 KFI Los Angeles, Calif. 640 KFI Los Angeles, Calif. 640 KFI LPreston, Minn. 1060 KFI RSweet Home, Ore. 1370 KFI Wodesto, Calif. 1360 KFI Wodesto, Calif. 1360 KFI Wodesto, Calif. 1360 KFI Modesto, Calif. 1360 KFI Morand Forks, N.Dak. 1379 KFI Marshalltown, Iowa 1230 KFI MGrand Forks, N.Dak. 1379 KFI MGrand Forks, N.Dak. 1379 KFI Worth. Tex 1270 KFK Greeley, Colo. 1310 KFK LU Lawrence, Kans. 1250 KFL A Soott City, Kane. 1310 KFL D Floydada, Tex. 1300 KFL Mountain Home, Ida. 1240 KFL Masherhurg, Colo. 1380 KFL Masherhurg, Colo. 1380 KFL Stlamath Falls OR 1380 KFL Gorvalis. Oreg. 1240 KFM San Diego, Cal. 750 KFM San Diego, Cal. 750 KFM LDenver. Colo. 1390 KFM LDenver. Colo. 1390 KFM Donver. Colo. 1390 KFM Donver. Colo. 1390 KFM Denver. Colo. 1390	KHAD Desoto, Mo.
KCHR Charleston, Mo. KCHS Truth or Consequences. New Mexico KCHV Coachella, Callf. 970 KCIA Humble City, N. Mex. 110 KCID Caldwell, Idaho KCII Washington, lowa 1380 KCII Washington, lowa 1380 KCII Washington, lowa 1380 KCIM Carroll, lowa 1390 KCIB Minot, N.Dak. 910 KCJJ Jowa City, IA 1560 KCKC San Bernardino, Cal. 1330 KCKK W Jena, La. 1480 KCKW Jena, La. 1480 KCKW Jena, La. 1480 KCKW Jens, La. 1480 KCLA Pine Bluff AR 1400 KCLA Pine Bluff AR 1400 KCLC Clarkston, Wash. 1430 KCLM Redding, Cal. 1330 KCLM Clinton, lowa KCLN Clovia, N. Mex. 1590 KCLV Clovia, N. Mex. 1240 KCLW Hamilton, Tex. 900 KCLW Colfax, Wash. KCMC Texarkans, Tex. 740	KDUZ Mutchinson. Minn. KU wA Hastings, Minn. KD wB Minneapolis- St. Paul MN KDWN Las Vegas, NV KDWN Las Vegas, NV KDWN Stamford, Tex. KDWN Stamford, Tex. KDWN Losele. Utah KDXL Mansneld. La. KDXL Mansneld. La. KDXL Mansneld. La. KDXL St. George, UT KDYL Tocele. Utah KDZA Pueblo. Colo. KEAN Brownwood, Tex. KEAP Fresno, Calif. KEAP Fresno, Calif. KEAP Fresno, Calif. KEAP Fresno, Calif. KEAP San Antonia. Tex. KEDD Dodge City. Kans. KEDD Dodge City. Kans. KEDD Lognel. Ore. KEEE Nacogdoches. Tex. KEEE Nacogdoches. Tex. KEEL Shreveport, La. KEL Shreveport,	KFPW Fort Smith AR 1230 KFQD Anchorage AK 750 KFRA Franklin, LA 1390 KFRB Fairbanks AK 900 KFRC San Francisco, Calif. KFRD Rosenberg-Rishmond. Tex. 980 KFRE Fresno, Calif. 940 KFRM Salina, Kan. 550 KFRO Longview, Tex. 1370 KFRU Columbia, Mo. 1400 KFSA Fort Smith AR 950 KFSB Jopiln, Mo. 1310 KFST Ft. Stockton, Tex. 860 KFTM Ft. Morgan, Colo. 1400 KFTM Ft. Morgan, Colo. 1400 KFTM Ft Garleston, Mo. 1450 KFUD Clayton, Mo. 850 KFVS Cape Girardeau, Mo. KFUD Clayton, Mo. 850 KFVS Cape Girardeau, Mo. KFWB Los Angeles, Calif. 980 KFVM Das Vegas, N.Mex. 1230 KFVS Dampa, Idaho 850 KFVM San Bernardino, Calif. 590 KFYM Bonham, Tex. 790 KFYR Bismarck, N.Dak. 550 KGA Spokane, Wash. 1510 KGAA KIrkland, WA 1460 KGAA KIrkland, WA 1460 KGAA KGallup, N.Mex. 1330 KGAL Lebanon, Oreg. 920 KGAR Vancouver, Wash. 1550	KHUB Fremont, Nebr. 1340 KHUM Eureks CA KHVH Honolulu, Hawail KHYM Gilmer TX KHYT Tueson AZ 1330 KIAK Fairbankka, AK KIBE Palo Alto, Calif. 1220 KIBL Beeville, Tex. 1490 KIBS Bishop, Alif. 1230 KICA Glovia, N. M. 1240 KICA McCook, Neb. 1360 KICA McCook, Neb. 1360 KICY McCook, Neb. 1360 KICY Mome AK KICI daho Falla, Idaho KID Monterey, Calif. 870 KID Monterey, Calif. 870 KID Boise, Idaho KID Glova Falla, Ia. 1510 KIDN Pueblo, CO KID Boise, Idaho KIEV Glendale, Calif. 870 KIFR Phoenix AZ KIFW Sitka AK KIGI Pasadena, CA KIFN Phoenix AZ KIFW Sitka AK KIGI Pasadena, CA KIGO St. Anthony, Ida. 1340 KIHN Hugo, Okla. 1340 KIIX Honolulu, Springs, CO KIKS Los Angeles, Calif. 1150 KIKT, Corsyth, MT KIKI Honolulu, Hawail 830

Call Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
KRFO Owatonna, Minn. 1390 KRFS Superlor, Nebr. 1430 KRGI Grand Island, Neb. 1430	KSPO Spokane. Wash. 1230 KSPR Springdale AR 1590 KSPT Sandpoint, Idaho 1400	KUEN Wenatchee, Wash. 900 KUFE Agana, Guam 940 KUFF Albuquerque, NM 1150 KUGN Eugene, Oreg. 590	KWHO Salt Lake City, Utah 860 KWHW Altus, Okla, 1450 KWIK Pocatello, Idaho 1240 KWIL Albany, Oreg, 790
KRGV Weslasco. Tex. 1550 KRGO Salt Lake City, UT 1550 KRHD Duncan, Okla. 1350 KRIB Mason City, Iowa 1490	KSRA Salmon, Idaho 960 KSRB Hardy, AR 1570 KSRC Socorro, N.Mex, 1290 KSRM Soldotna AK 920	KURR Green River, WY 1490 KUHL Santa Marla, Cal. 1440 KUIK Hillsborg, Oreg. 1360	KWIP Merced, Calif. 1580 KWIQ Moses Lake, Wash. 1260 KWIV Douglas, WY 1050
KRIG Odessa. Tex. 1410 KRIH Rayville, La. 990 KRIO McAllen, Tex 910 KRIZ Phoenix AZ 1230	KSRO Santa Rosa, Callf. 1350 KSRV Ontario, Oreg. 1380 KSSS Colorado Springs, Colo. 740 KSST Sulphur Springs, Tex. 1230	KUJ Walla Walla, Wash. 1420 KUKA San Antonio, Tex. 1250 KUKI Ukiah, Calif. 1400 KUKU Willow Springs, Mo. 1330	KWIZ Santa Ana, Calif. 1480 KWJJ Portland, Oreg. 1080 KWK St. Louis, MO 920
KRKC King City, Calif. 1490 KRKE Albuquerque, NM 610 KRKK Rock Springs, WY 1360	KSTA Coleman, Tex. 1000 KSTB Breckenridge, Tex. 1430 KSTC Sterling, CO 1230	KULA Honolulu, Hawall 690 KULE Ephrata, Wash. 730 KULF Houston, Tex. 790 KULP El Campo, Tex. 1390	KWKA Clovis, NM 680 KWKC Abilene, Tex. 1340 KWKH Shreveport, La. 1130 KWKW Pasadena, Calif. 1300
KRKM North Pole, AK 600 KRKO Everett, Wash. 1380 KRKT Albany, Ore. 990 KRLC Lewiston, Ida.	KSTN Stockton, Calif. 1420 KSTP St. Paul, Minn. 1500 KSTR Grand Junction, Colo. 620	KÜLP El Campo, Tex. 1390 KULY Ulysses, Kan. 1420 KUMA Pendieton, Oreg. 1290 KUMU Honolulu, Hawaii 1500 KUNO Corpus Christi, Tex. 1400	KWKY Des Molnes, lowa 1150 KWLA Many, LA 1400 KWLC Decorah, lowa 1240 KWLM Willmar, Minn. 1340
Clarkston, Wash. 1350 KRLD Dallas. Tex. 1080 KRLN Canon City, Colo. 1400 KRLW Walnut Ridge AR 1320	KSTT Davenport, lowa 1170 KSTV Stephenville, Tex. 1510 KSUB Cedar City, Utah 590 KSUD West Memphis AR 730	KUOA Siloam Springs AR 1290 KUOM Minneapolis, Minn. 770 KUPD Tempe AZ 1060	KWMB Wabasha, MN 1190 KWMC Del Rio, Tex. 1490 KWMS Salt Lake City, UT 1280
KRMC Midwest City OK 1220 KRMD Shrevenort, La. 1340	KSUE Susanville, Callf. 1240 KSUM Fairmont. Minn. 1370 KSUN Bisbee AZ 1230 KSUZ Port Neches. TX 1150	KUPI Idaho Falls, ID 980 KUPL Portland, OR 1330 KUPY Puyailup, WA 1450 KURA Moab. Utah 1450	KWMT Ft. Dodge, Iowa 540 KWNA Winnemucca, Nev. 1400 KWNC Quincy, WA 1370 KWNO Winona, Minn. 1230
KRME Hondo, Tex. 1460 KRMG Tulsa, Okla. 740 KRML Carmel, Calif. 1410 KRMO Monett. Mn. 990 KRMO Sage Beach, Mo. 1150	KSVC Richfield, Utah 980 KSVN Ogden, Utah 730 KSVP Artesia, N. Mex. 990	KURL Billings, Mont. 730 KURV Edinburg, Tex. 710 KURY Brookings, Oreg, 910 KUSD Vermillion, S.Dak. 690	KWNS Pratt. Kans. 1290 KWNT Davenport, Iowa 1580 KWOA Worthington, Minn. 730 KWOC Poplar Bluff, Mo. 930
KRNK Cheyenne, WY 1530 KRNR Roseburg, Oreg. 1490 (RNS Burns, Oreg. 1230 KRNT Des Moines, Iowa 1350 KRNY Kearney, Nebr. 1460	KSWB Seaside, Ore. 930 KSWM Aurora, Mo. 940 KSWO Lawton, Okla. 1380	KUSH Cushing, Okla. 1600 KUSH St. Joseph, Mo. 1270 KUTA Blanding, Utah 790 KUTI Yakima, Wash. 980	KWOE Clinton, Okla. 1320 KWON Bartlesville. Okla. 1400 KWOR Worland, Wyo. 1340 KWOS Jefferson City, Me. 1240
KRNY Kearney, Nebr. 1460 KROB Robstown, Tex. 1510 KROC Rochester, Minn. 1340 KROD El Paso, Tex. 600 KROE Sheridan, Wyo. 930	KSWW Wickenburg AZ 12bu KSXO Redding, CA 600 KSXX Salt Lake City, Utah 630 KSYC Yreka, Calif. 1490	KUTY Paimdale, Calif. 1470 KUVR Holdredge, Nebr. 1380 KUXL Golden Valley, Minn. 1570 KUZN W. Monroe, La. 1310	KWOW Pomona, Calif. 1800 KWPC Muscatine, Iowa 860 KWPM West Plains, Mo. 1450 KWPR Claremore, Okla. 1270
KROE Sheridan, Wyo. 930 KROF Abbeville, La. 960 KROP Brawley, Calif. 1300 KROS Clinton, Iowa 1340	KSYL Alexandria. La. KSYX Santa Rosa, N.Mex. 1420 KTAC Tacoma, Wash. 850 KTAE Taylor, Tex. 1280 KTAM Bryan TX 1240	KUZZ Bakersfield, CA 970 KVAC Forks, Wash, 1490 KVAN Vancouver, Wash, 1480	KWRC Woodburn, Ore. 940 KWRD Henderson, Tex. 1470 KWRE Warrenton, Mo. 730 KWRF Warren AR 860
KROW Dallas, Ore. 1260 KROX Crookston, Minn. 1460 KROY Sacramento, Calif. 1240	KTAN Sierra Vista AZ 1420 KTAR Phoenix AZ 620	KVBR Brainerd, Minn. 1340 KVCK Wolf Point, Mont. 1450 KVCL Winnfield, La. 1270	KWRG New Roads, La. 1500 KWRM Corona, CA 1370 KWRO Coquille, Oreg. 630
KRPT Anadarko, Okla. 850 KRRR Ruidoso, NM 1360 KRSC Othello, Wash. 1400	KTBB Tyler, Tex. 600 KTCB Malden, Mo. 1470 KTCH Wayne, Neb. 1590	KVDB Sloux Center, la. 1090 KVEC San Luis Obispo, Calif. 920 KVEE Conway AR 1330 KVEL Vernal, Utah 920 KVEN Ventura, Calif. 1450	KWRT Boonville. Mo. 1370 KWSD Mt. Shasta. Callf. 620 KWSH Wewoka-Seminole, Oklahoma 1260
KRSI St. Louis Park. Minn. 950 KRSL Russell. Kans. 990 KRSN Los Alamos, N.Mex. 1490 KRSP Salt Lake City, Utah 1060	KTDL Farmersville, La. 1470 KTDO Toledo, Oreg. 1230	KVEN Ventura, Calif. 1450 KVEN Ventura, Calif. 1450 KVET Austin, Tex. 1300 KVFC Cortez, Coto. 740 KVFD Ft. Dodge, Iowa 1400	KWSL Sloux City. IA 1470 KWSO Wasco, Calif. 1050 KWSR Rifie, Colo. 810 KWSU Pullman, Wash. 1250
KRSY Roswell. N.Mex. 1230 KRTN Raton, N.Mex. 1490 KRTR Thermopolis, Wyo. 1490 (RUN Ballinger, Tex. 1400	KTEE Idaho Falls, Idaho 1260 KTEL Walla Walla, Wash. 1490 KTEM Temple, Tex. 1400 KTEO San Angelo, Tex. 1340	KVGB Great Bend, Kans. 1590 KVI Seattle, Wash, 570 KVIC Victoria, Tex. 1340 KVIL Highland Park, Tex. 1150	KWTC Barstow, Calif. 1230 KWTO Springfield, Mo. 560 KWTX Waco, Tex. 1230 KWUN Concord, Cal. 1480
KRUS Ruston, La. 1490 KRUX Glendale AZ 1360 KRVN Lexington, Neh. 880 KRVB Medford, OR 1300	KTER Terrell, Tex. 1570 KTET Payette, Idaho 1450 KTFS Texarkana, Tex. 1400 KTGO Tioga, N. D. 1990	KVIN Vinita, OK KVIO Cottonwood AZ I600 KVIP Redding, Callf. 540	KWWR Enterprise, Oreg. 1340 KWWB Bismarck-Mandan, ND 1270 KWWL Waterloo, Iowa 1330
KRWB Rossau, Minn, 1410 KRWC Buffalo MN 1380 KRWT Winters, TX 1060 KRXA Sward AK KRXA Rexburg, Idaho 1230	KTGR Columbia. Mo. 1850 KTJS Hobart OK 1420 KTHE Thermopolis. Wyo. 1240 KTHO South Lake Tahoe. Cal. 590	KVLF Alpine, Tex. 1240 KVLG LaGrange, Tex. 1570 KVLH Pauls Valley, Okla. 1470 KVLI Lake Isabella, CA 1140	KWWW Wematchee, WA 1340 KWXY Cathredal City CA 1340 KWYK Farmington, N.Mex. 950 KWYN Wynne AR 1400
KRXK Rexburg, Idaho 1230 KRXV Fort Worth, TX 1540 KRYS Corpus Christi. Tex. 1360 KRYT Colo Springs, Colo. 1530	KTHS Berryville, Ark. 1480 KTIB Thibodaux, La. 630 KTIL Tillamook, Oreg. 1590	KVLL Woodville, Tex. 1220 KVLV Fallon, Nev. 980 KVMA Magnolia AR 630 KVMC Colorado City, Tex. 1320	KWYO Sheridan, Wyo. 1410 KWYR Winner S.Dak. 1280 KWYS W. Yellowstone. Mont. 920 KWYZ Everett, Wash. 1230 KXA Seattle. Wash. 770
KRZE Farmington, N.M. 1280 KRZI Waco TX 1580 KRZY Albuquerque, N.M. 1450 KSAC Manhattan, Kans. 580	KTIP Porterville, Calif. 1450 KTIS Minneapolis, Minn. 900 KTIX Pendleton, Ore. 1240	KVML Sonora. Callf. 1480 KVNC Winslow, Ariz. 1010 KVNI Coeur d'Alene, Idaho 1240 KVNU Logan, Utah 610	KXAR Hops AR 1490 KXEL Waterloo, lowa 1540
KSAL Salina, Kans. 1150 KSAM Huntsville, Tex. 1490 KSCB Liberal. Kans. 1270	KTJS Hobart, Okia. 1420 KTKN Ketchikan AK 930 KTKR Taft, Calif. 1310 KTKT Tueson AZ 990	KVOB Bastrop, La. 1340 KVOC Casper, Wyo. 1230 KVOE Emporta, Kans. 1400	KXEO Mexico, Mo. 1340 KXEN Festus-St. Louis, Mo. 1010 KXES Salina, CA 1570
KSCJ Sloux City, Iowa 1360 KSCO Santa Cruz, Callf. 1080 KSD St. Louis, Mo. 550 KSDN Aberdeen, S.Dak. 930	KTLC Twin Falls, ID 1270 KTLD Tuilulah, La. 1360 KTLK Denver, Colo. 1280 KTLO Mountain Home AR 1240	KVOL Lafayette, La. 1330 KVOM Morritton AR 800	KXEW Tueson AZ 1600 KXEX Fresno, Calif. 1550 KXGN Glendive, Mont. 1400 KXIC lowa City. IA 800
KSDO San Diego, Calif. 1130 KSDR Waterton, S.Dak. 1480 KSEE Santa Maria, Calif. 1480 KSEI Pocatello, Idaho 930	KTLQ Tahlequah, Okla. 1350 KTLU Rusk, Tex. 1580 KTLW Texas City. Tex. 920 KTMC McAlester, Okla. 1400	KVON Napa, Calif. KVOO Tulsa, Okla. 1170 KVOP Pialnview, Tex. 1400 KVOR Colo. Springs, Colo. 1300 KVOU Uvalde, Tex. 1400	KXIT Dalhart, Tex. 1410 KXIV Phoenix AZ 1400 KXJK Forrest City AR 950 KXKW Lafayette, La. 1520 KXL Portland, Oreg. 750
KSEK Pittsburg, Kans. 1340 KSEL Lubbock, Tex. 950 KSEM Moses Lake, Wash. 1470 KSEN Snelby, Mont. 1150	KTMM Trumann AR 1530	KVUV Menderson-Las Vegas,	KXLE Ellensburg, Wash. 1240 KXLF Butte, Mont. 1370 KXLO Lewiston, Mont. 1230
KSEI Pocatello, Idaho 930 KSEK Pittsburg, Kans. 1340 KSEL Lubbock, Tex. 950 KSEM Mosss Lake. Wash. 1470 KSEN Snelby, Mont. 1150 KSEO Durant, Okla. 750 KSET El Paso, Tex. 1340 KSEW Sitka, Alaska 1400 KSEY Seymour, Tex. 1230 KSFA Nacogdoches, Tex. 860 KSFE Needles CA 1340	KTNQ Los Angeles, CA 1020 KTNT Tacoma, Wash. 1400 KTOB Petaluma, Cal. 1490	NV 1480 KVOW Riverton, Wyo. 1480 KVOX Moorhead, Minn. 1280 KVOY Yuma, Ariz. 1400 KVOZ Laredo, Tex. La. 1450 KVPA Ville Platto, S. D. 1570 KVRA Vermillion, S. D. 1570 KVRA Arkadelphia AR 1460 1	AR 1150 KXLW Clayton, MO 1320 KXLV Spokane, Wash. 920
KSFA Nacogdoches, Tex. 860 KSFE Needles CA 1340 KSFO San Francisco, Callf. 560 KSGL Wichita, KS 900	KTMS Santa Barbara, Calif. 1250 KTNC Falls City, Nebr. 1230 KTNM Tucumcari, N.Mex. 1400 KTNQ Los Angeles, CA 1020 KTNT Tacoma, Wash. 1400 KTOB Petaluma, Cal. 1490 KTOE Jonesboro, La. 920 KTOE Mankato. Minn. 1420 KTOE Mankato. Minn. 1420 KTOE Lihue, Hawali 1350 KTOK Oklahoma City. Okla. 1380 KTOM Salinas, Cal. 1380 KTON Belton, Tex. 940 KTOP Topeka, Kans. 1490 KTOQ Rapid City, SO 1340 KTOW Sand Spring, Okla. 1340 KTPA Prescott AR 1370 KTRB Modesto, Calif. 880	KVRA Vermillion. S. D. 1570 KVRC Arkadelphia AR 1240 KVRE Santa Rosa, CA 1460 KVRH Salida, Colo. 1340	KXOK St. Louis, Mo. 630 KXOL Ft. Worth, Tex. 1360
KSFO San Francisco, Callf. 560 KSGL Wichita, KS 900 KSGM Chester, III. 980 KSGR Scottsdale. AZ 1440 KSGT Jackson, Wyo. 1340 KSHA Medford. Ore. 860	KTOM Salinas, Cal. 1380 KTON Belton, Tex. 940 KTOP Topeka, Kans. 1490 KTOQ Rapid City, SD 1340	KVSA McGehee AR 1220 KVSF Sante Fe, N. Mex. 1260	KXOX Sweetwater, Tex. 1240
KSGH Scottsgate, AZ 1440 KSGH Jackson, Wyo. 1340 KSHA Medford, Ore. 860 KSIB Creston, Iows 1520 KSID Sidney, Nebr. 1340 KSIG Crowley, La, 1450 KSIL Silver City, N.Mex. 1340 KSIM Sikeston, Mo, 1400 KSIR Sikeston, Mo, 1400	KTOW Sand Spring, Okla. 1340 KTPA Prescott AR 1370 KTRB Modesto, Callf. 860 KTRC Santa Fe, N.Mex. 1400 KTRF Thlef River Falls, Minn. 1230 KTRU Houston Tey 740	KVSH Montpeller, Ida. 1450 KVSL Show Low AZ 1450 KVSC Ardmore, Okla. 1240 KVWC Vernon, Tex. 1490 KVWG Pearsall, Tex. 1280 KVWM Show Low AZ 970	K X Q R Clovis, CA 790 K X R A Alexandria, Minn. 490 K X R B Sioux Fails, S.D. 520 K X R O Aberdeen, Wash. 1320 K X R San Jose, Calif. 1500 K X T O Sherman, Tex. 1500 K X Y V M c K inney. T X 1500
KSIS Segalia, Mo. 1050	KTRF Thief River Falls, Minn. 1230 KTRH Houston, Tex. 740 KTRM Beaumont, Tex. 990	KVVI Holdenville, Okla, 1370	KXVI McKinney, TX 1600 KXXL Bozeman, Mont. 1450 KXXO Tulsa. OK 1300 KXXR Spokane. WA 1440
KSIW Woodward, Okla. 1450 KSIX Corpus Christl, Tex. 1230 KSIB Jamestown. N.Dak. 600 KSKI Halley, Ida. 1340 KSKY Dallas, Tex. 660	KTRN Wichlta Falls, Tex. 1290 KTRT Truckee, Cal. 1400 KTRY Bastrop, La. 730 KTSA San Antonio, Tex. 550	KWAC Bakersfield, Calif. 1490 KWAK Stuttgart AR 1240 KWAD Wadena, MN 920 KWAL Wallace, ID 620	KXXX Colby, Kans, 790 KXYZ Houston, Tex. 1320 KXA San Francisco Callf 1280
KSKI Halley, Ida. 1340 KSKY Dallas, Tex. 660 KSL Salt Lake City, Utah 1160 KSLM Salem, Oreg. 1390 KSLO Opelousas, La. 1230 KSLV Monte Vista, Colo, 1240	KTSM EI Paso, Tex. 1380 KTTN Trenton, Me. 1600 KTTR Rolla, Mo. 1490 KTTS Springfield, Mo. 1400 KTTT Columbus. Nebr. 1510	KWAM Memphis, Jenn. 990	KYCA Prescott AZ 1490 KYCN Wheatland, Wyo. 1340
KSLM Satern, Oreg. 1330 KSLV Opelousas. La. 1230 KSLV Monte Vista, Colo, 1240 KSLY San Luis Oblispo, Cal. 1400 KSMA Santa Maria. Calif. 1240 KSMA Shakopee, Minn. 1530 KSMN Mason City, Iowa 1010 KSMN Calem Ma. 1340	KTTX Brenham, TX 1280 KTUC Tucson A2 1400 KTUE Tulla. Tex. 1260	KWBC Navasota, Tex. 1550 KWBE Beatries, Nebr. 1450 KWBG Boone, Iowa 1590	KYDE Pine Bluff, AR 1590 KYES Hoseburg, Ores. 950 KYET Payette, idaho 1450 KYJC Mediord, Ures. 1250 KYKR Port Arthur, TX 1510
KSNN Pocatello, Ida. 1290 KSNO Aspen, Colo. 1260 KSNY Snyder Tex 1450	Minn. 1230 KTRH Houston, Tex. 740 KTRM Beaumont, Tex. 990 KTRN Wichita Falls, Tex. 1290 KTRT Truckee, Cal. 1400 KTRY Bastrop, La. 730 KTSA San Antonio, Tex. 550 KTSM El Paso, Tex. 1380 KTTN Trenton, Mo. 1600 KTTR Rolla, Mo. 1490 KTTR Springfield, Mo. 1400 KTTT Columbus, Nebr. 1810 KTTX Brenham, TX 1280 KTUE Tulla. Tex. 1260 KTUE Tulla. Tex. 1260 KTUE Sullivan, Mo. 1560 KTUG Agana, Guam. 770 KTWO Casper, Wyo. 1330 KTXJ Jasper, Tex. 1800 KTXJ Jasper, Tex. 1800	KWBZ Englewood, CO 1150	KYME Buise, Idaho 740 KYME Buise, Idaho 740 KYME Northfield, MN 1080 KYNG Coos Bay, Oreg. 1420
KSO Des Molnes, Iowa 1460 KSOA Ava. Mo. 1430 KSOH Little Rock, AR 1050 KSOK Arkansas City, Kans. 1280	KTYM Inglewood. Callf. 1460 KTYN Minot. N.D. 1430	KWCO Chickasha, Okla, 1560 KWEB Rochester, Minn. 1270 KWED Seguin, Tex. 1580 KWEI Waiser, Idaho 1260	KYNO Fresho, Cally. 1300 KYNT Yankton, S.Dak. 1450 KYOK Houston, Tex. 1590
KSOM Ontario, Cal. 1510 KSON San Diego, Calif. 1240 KSOO Sloux Falls, S.Dak, 1140 KSOP Salt Lake City, Utah 1370	KUAD Windsor, CO 1170 KUAI Eleele, Kanai, Hawaii 720 KUAM Agana, GU 610 KUAT Tueson AZ 1550	KWEW Hobbs, N. Mex. 1480	KYOR Blytne, Calif. 1450 KYUS Merced, Calif. 1480 KYNO Fotosi, Mo. 1280 KYDU Greeley, Colo. 1450
KSOP Salt Lake City. Utah 1370 KSOX Raymondville. Tex. 1240 KSPO Boise, Idaho 790 KSPI Stillwater, Okla. 780 KSPL Diboll, Tex. 1280	KUBA Yuba City, Calif. 1600 KUBC Montrose, Colo. 580 KUDE Oceanside, Calif. 1320 KUDY Spokane, Wash. 1280	KWFT Wichlita Falls, Tex. 620 KWG Stockton, Calif. 1230 KWGH Big Lake. Tex. 1290 KWHK Hutehinson, Kans. 1260 KWHN Fort Smith AR 1320	KYSM Mankato, Minn. 1230 KYSM Culoradu Sprms., Colo. 1460 KYSS Missoula, Mont. 930 KYle Portland, OR 970

Call Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
KYUK Bethel AK KYVA Gallup, N.Mex, KYW Philadelphla, Pa, KYM Corgon City, Ore, KYXX Odessa, TX KZAK Tyler, Tex. KZAK Tyler, Tex. KZAK Tyler, Tex. KZEE Weathertord TX KZEE Weathertord TX KZEY Tyler, TX KZEY TYLER K	WAOK Atlanta, Ga. 1380 WAOP Ostego. Mich. 980 WAOV Vincennes, Ind. 1450 WAPA San Juan. P.R. 680 WAPE Jacksonville. Fia. 690 WAPF McComb, Miss. 980 WAPF McComb, Miss. 980 WAPG Arcadia. FL 1480 WAPI Birmingham AL 1070 WAPL Appleton. Wis. 1570 WAPR Avon Park, Fia. 1390 WAQI Ashtabula, Ohio 1600 WARA Attleboro. Mass. 1320 WARB Covington. La. 730 WARB Covington. La. 730 WARB Covington. PA 1540 WARE Ware, Mass. 1250 WARF Jasper AL 1480 WARK Ware, Mass. 1250 WARF Jasper AL 1480 WARK Hagerstown, Md. 1490 WARM Scranton, PA 590 WARM Scranton, PA 590 WARW Warrenton, N.C. 1520 WARW Warwick. 1520 WARW Warwick. 1520 WARV Warwick. 1530 WASK Lafayette, Ind. 1450 WASK Lafayette, Ind. 1450 WASK Derivanture, S.C. 1530 WASK Lafayette, Ind. 1450 WASR Wolfeboro, N.H. 1420 WATA Boone, N.C. 1450 WATA Boone, N.C. 1450 WATA Gaylord, Mich. 900 WATI Indianapolis, Ind. 1610 WATH Waterbury, Conn. 1220 WATH Waterbury, Conn. 1230 WATH Ashland WI 1400 WATY Ashland WI 1400 WATY Ashland WI 1400 WATY Ashland WI 1400 WATY Ashland WI 1400 WATU Ashland WI 1400 WAT	WBFN Quitman, Miss. 1500 WBGC Chipley, Fla. 1240 WBGN Bowling Green, Ky. 1340 WBGR Parls KY 1440 WBGR Parls KY 1440 WBHS Tullaloma, TN 740 WBHS Fitzgerald, Ga. 1240 WBHC Hampton, S.C. 1270 WBHF Cartersville, Ga. 1450 WBHM Blrmingham, Ala. 1550 WBHM Blrson City, N. C. 1590 WBHM Bryson City, N. C. 1590 WBHA Augusta, Ga. 1230 WBHA Augusta, Ga. 1230 WBHA Centreville, AL 1110 WBIC New Bern, NC 1380 WBIG Greensboro, N.C. 1470 WBIC Harietta, Ga. 1080 WBIG Barietta, Ga. 1470 WBIL Tuskegee AL 580 WBIN Benton, TN 1540 WBIR Bristol, Conn. 1440 WBIR Knoxyille, Tenn. 1240 WBIR Bristol, Conn. 1440 WBIR Bristol, Conn. 1440 WBIR MER Seath, WIS. 1400 WBIX Jacksonville Beach, Fla. 1400 WBKC Chardon, O. 1560 WBKN Newton, Miss. 1410 WBKN Newton, Miss. 1410 WBKN MENTON, S. D. 1440 WBKN Newton, Miss. 1470 WBKA West Bend, WIS. 1470 WBKA Elizabethtown, N.C. 1440 WBLA Blizabethtown, N.C. 1440 WBLA Blizabethtown, N.C. 1440 WBLA Batesville, Miss. 1290 WBLF Bellefonte, Pa. 970 WBLF Bellefonte, Pa. 970 WBLF Bellefonte, Pa. 970 WBLF Bellefonte, Pa. 1380 WBLU Salem, Va. 1480 WBLY Springneld, Ohlo 1600 WBMA Beautort, N.C. 1440 WBLY Springneld, Ohlo 1600 WBMA Beautort, N.C. 1400	WCBA Corning, N.Y. WCBC Cumberland, MD WCBG Chambersburg, Pa. WCBG Columbus, Miss. WCBK Martinsville, Ind. WCBK Martinsville, Ind. WCBM Baltimore, Md. WCBM Baltimore, Md. WCBR Richmend, Ky. WCBR New York, N.Y. WCBR New York, N.Y. WCBR New York, N.C. WCBY Cheboygan, Mich. WCCY Cherboygan, Mich. WCCY Chartford, Conn. WCCF Punta Gorda, Fla. WCCM Lawrence, Mass. WCCM Nellisville, Wis. WCCM Nellisville, Wis. WCCM Urbana, III. WCCY New Smyrna Reach, FL WCDJ Edenton, N.C. WCDL Carbondale, Pa. WCDJ Edenton, N.C. WCDJ WCDT Winchester, Tenn. WCCP Clemson, S.C. WCDJ WCDT Winchester, Tenn. WCCC Rocky Mount, N.C. WCDJ WInchester, Tenn. WCEC Rocky Mount, N.C. WCDJ WInchester, Tenn. WCEC Rocky Mount, N.C. WCDJ Hawkinsville, Ga. WCEM Hawkinsville, Ga. WCEM Cambridge, Md. WCEM Cambridge, Md. WCEM Cambridge, Md. WCEM Pastillo, P.R. WCGB Pastillo, P.R. WCGC Liacksonville, FL. WCGG Chicago Hights, III. WCGG Chicago Hights, III. WCGG Cannon Con. WCHA Chambersburg, Pa. WCHB WCHE Westenester, Pa. WCHB WCHE Westenester, Pa. WCHE Westenester, Pa. WCHE Westenester, Pa.
WABY Auany, N.Y. WABZ Albemarle, N.C. WACA Camden, S.C. WACB Kittanning, Pa. WACD Alexander City. AL WACE Chicopee, Mass. WACI The Dailes, Ore. WACI Wacycross, Ga. WACI WACY Newark, N.Y. WACI WACY WACY WACY WACY WACY WACY WACY WACY WACY WACY WACY WACY WACY Could Wall. WACY Austell, Ga. WADA Shelby, N.C. WADD Ashelby, N.C. WACY Parkersburg, WV WADD WALE WAGESHORO, N.C. WACY WACY WACY NEWSTANNIA WACY WACY WACY Crossville, Tenn. WACY WACY WACY Constille, Tenn. WACY WACY WACY Constille, Tenn. WACY WACY WACY	WAUD Auburn AL WAUG Augusta, Ga. WAUK Waukesha, Wis, ISI0 WAVA Arlington, Va. WAVC Warner Robins, Ga. WAVE Louisville; Ky. WAVI Dayton, Ohlo WAVA Apollo, Pa. WAVN Stillwater, Minn. WAVA Nest Allis, Wis. WAVA Wavers, Ga. WAVE Avondale Estates, Ga. WAVA Abertollite, Ala. WAVA Wabertville, Ala. WAVA West Allis, Wis. WAVA West Allis, Wis. WAVA West Allis, Wis. WAXU Georgetown, Ky. WAYB Waynesboro, Va. WAYB Waynesboro, Va. WAYB Waynesboro, Va. WAYB Waynesboro, Va. WAYB Chalforte, Md. WAYE Baltimore, Md. WAYK Lehigh Acres, Fla. WAYR Chalforte, N.C. WAYB Waynesboro, Va. WAYR Orange Park, Fla. WAYR Orange Park, Fla. WAYB Chalforte, N.C. WAYB Waynesboro, Pa. WAYB Waynesboro, Pa. WAYB Waynesboro, Pa. WAYB Chalforte, N.C. WAYB Wayross, Ga. WAYZ Wayross, Ga. WAYZ Wayross, Ga. WAYZ Wayross, Ga. WAYE Bedford, PA WASR Wolfeboro, NH WAYE Bedford, PA WAYE Bedford, PA WAYE Marlayette, Ind. WAZE Clearwater, Fla. 860 WAZE Lazelton, Pa. WAZE Glearwater, Fla. 860 WAZE Lazelton, Pa. WAZE Alazelton, Pa. WASR Wolfeboro, NH WASR Wolfebo	WBMA Beaurort, N.C. 1400 WBMB West Branch, MI 1000 WBMC McMInnville, Tenn. 960 WBMC Belfarach, Me. 1230 WBME Belfast, Me. 1230 WBMS Baltimore, Md. 1310 WBML Macon, Ga. 1240 WBMS Black Mountain, N.C. 1350 WBMC Conway, N.H. 1050 WBNC Conway, N.H. 1050 WBNL Boonville, Ind. 1540 WBND Bryan, Ohlo WBNS Black Mountain, N.C. 1350 WBNC Conway, N.H. 1260 WBNS Columbus. Ohlo WBNS Columbus. Ohlo WBNS Columbus. Ohlo WBNT Onelda, Tenn. 1310 WBNX New York, N.Y. 1380 WBOB Galax, Va. 1360 WBOS Callsbury, Md. 980 WBOK New Orleans, La. 1230 WBOS Salsbury, Md. 980 WBOK New Orleans, La. 1230 WBOS Bolivar, Tenn. 1560 WBOD daraboo, Wls. 740 WBOP Pensacola, Fla. 960 WBOW Terre Haute, Ind. 1230 WBOS San German, PR. 1090 WBOZ San German, PR. 1230 WBOS Bareeloneta, PR. 1340 WBOS Bareeloneta, P	WCHI Cnillicothe, Ohlo WCHJ Brooknaven, Miss. WCHK Canton, Ga. WCHK Chapet Hill, N.C. WCHN Norwich, N.Y. WCHU Wasnington Court House, Ohlo WCHY Camuy, P.R. 380 WCHY Camuy, P.R. 380 WCHY Charleston, W.Va. WCHY Charleston, W.Va. WCHY Charlottesville, Va. WCHY Ghornation, Miss. WCHY Warsaw NY WCKY Greer, S.C. WCKY WINNSON, S.C. WCKY WINNSON, S.C. WCKY WINNSON, S.C. WCKY Clarinati, Ghio WCLA Claxion, Ga. WCLY Columbia, FA.
WAHT Annville-Gleona, Pa. 1510 WAIK Gainesburg, III. 1590 WAIK Bainchorn, S.C. 1230 WAIN Columbia, Ky. 1270 WAIR Monteron, S.C. 1230 WAIN Columbia, Ky. 1270 WAIR Winston-Salem, N.C. 1340 WAIT Chicago, III. 820 WAJT Decatur AL 1490 WALL Winter Park, FL 1440 WALK Morgandown, W.J. 1440 WAKA Gainesville FL 1390 WAKC Normal, IL 1440 WAKE Valparaiso, Ind. 1500 WAKI McMinnville, Tenn. 1230 WAKK McComb, MS 1140 WAKE Valparaiso, Ind. 1500 WAKI McMinnville, III. 910 WAKE Valparaiso, Ind. 1500 WAKK McComb, MS 1440 WAKR AKRO, Ohio 1590 WAKK McComb, MS 1440 WAKR Akron, Ohio 1590 WAKS Fuperior WI 970 WAKY Superior WI 970 WAKY Superior WI 970 WAKY Louisville, Ky. 790 WALE Fail River, Mass. 1490 WALG Albany, Ga., 1590 WALE Fail River, Mass. 1490 WALL Middistown, N.Y. 1340 WALM Albion, Mich. 1250 WALM Albion, Mich. 1250 WALM Selma Albion, Mich. 1250 WALM Solma Albion, Mich. 1250 WALM Aberdeen, Md. 130 WAMM Solma Al. 130 WAMM Ophalm Simple, 1300 WAMM Ophalm Simple, 1300 WAMM Washington, Ind. 1300 WAMM Venice, Fla. 1320 WAMM Washington, Ind. 1880 WAMM Venice, Fla. 1320 WAMM Washington, Ind. 1880 WAMM Venice, Fla. 1320 WAMM Washington, Ind. 1880 WAMM Venice, Fla. 1320 WANN Waynesboro, Va. 1400 WAND Albany, Ky. 1390 WAND WAND Prineville, Ky. 1230 WAN	WBAR Bartow, Fla. 1460 WBAY Marion, Ind. 1400 WBAW Barnwell, S.C. 740 WBAX Wilkes-Barre, P. 1240 WBBA Pittsfield. III. 1580 WBBA Pittsfield. III. 1580 WBBF Rochester, N.Y. 950 WBBF Rochester, N.Y. 950 WBBF Rochester, N.Y. 950 WBBR Abingdon, Va. 1230 WBBK Blakely, Ga. 1280 WBBM Chicago, III. 780 WBBM Tayelers Rest, S.C. 1580 WBBM Fravelers Rest, S.C. 1580 WBBM Tayelers Rest, S.C. 1580 WBBM Tayelers Rest, S.C. 1580 WBBM Youngstows, Ohlo 1240 WBBM Youngstows, Ohlo 1240 WBBM Youngstows, Ohlo 1240 WBBM YOUNGSTOW, N.C. 1230 WBCM Bay Winnette AL 1110 WBCM BAW Portsmouth, N.H. 1380 WBCM Bay City, Mich, 1440 WBCM Jeanette PA. 1530 WBCM Jeanette PA. 1530 WBCM Jeanette PA. 1530 WBCM Jeanette PA. 1530 WBCM Buffalo, N.Y. 930 WBER Moneks Corner, S.C. 960 WBEX Chillicothe, Ohlo 1490 WBFO Bedford, Pa. 1310	WBSG Blackshear, Ga. 1350 WBSM New Bedford, Mass. 1420 WBSR Pensacota, Fla. 1450 WBTC Infarlotte, N.C. 1110 WBTA Batavia, N.Y. 1490 WBTC UhrichsVille, D. 1540 WBTE Windsor, N.G. 980 WBTM Williamson, WV 1400 WBTM WIlliamson, WV 1400 WBTM Danville, Va. 1330 WBTM Bennington, Vt. 370 WBTD Linton, Ind. 1600 WBTS Bridgeport, AL 1480 WBTX Broadway-Timberville VA WBUC Bridgeport, AL 1480 WBUD Trenton, N.J. 1260 WBUG Ridgeland, S.C. 1430 WBUG Ridgeland, S.C. 1430 WBUG Ridgeland, S.C. 1430 WBUG Ridgeland, S.C. 1430 WBUK Portage MI 1560 WBUG Burlingham AL 1220 WBUT Butter, Pa. 1050 WBUX Doylestown, Pa. 1570 WBUY Lexington, N.C. 1440 WBUZ Fredonia, N.Y. 1570 WBUY Exercent N.Y. 1550 WBUY Exercent N.Y. 1550 WBUY Batavia, N.Y. 1570 WBVP Beaver Falls, Pa. 1230 WBYE Calera AL 1370 WBYS Canton, Ill. 1560 WBZ Beston, Mass. 1030 WBZA Glens Falls, N.Y. 1410 WBZB Selma, N.C. 1090 WAZQ Greenville, MS WBZA Glens Falls, N.Y. 1130 WCAD Baltimore, Md. 600 WCAP Lowell, Mass. 980 WCAR Detroit, Mich. 1130 WCAS Cambridge, Mass. 1390 WCAY Carte, S.C. 620 WCAZ Carthage, Ill. 990	WCMA WINTERSTORY, Pa. 1480 WCMC Wildwood, N.J. 1230 WCMC Wildwood, N.J. 1230 WCMG Jacksonville, FL 1090 WCMI Ashland, Ky. 1340 WCMN Arecibo, P. R. 1280 WCMP Pine City, Minn. 1350 WCMR Martin, Tenn. 1410 WCMS Norroik, Va. 1050 WCMT Martin, Tenn. 1410 WCMS Norroik, Va. 1050 WCMT Martin, Tenn. 1410 WCMS Onnersville, Ind. 1580 WCMC Elizabeth City, N.C. 1240 WCNC Bloomsburg, Pa. 1230 WCNL WCMF, N. 1010 WCNR Bloomsburg, Pa. 1010 WCNR Bloomsburg, Pa. 1010 WCNR WCMF, N. 1010 WCNN Fairfield, O. 1860 WCNL Cestville, Pa. 1420 WCNL WCMF, N. 1010 WCNR WCMF, N. 1010 WCNR WCMF, WCMF, N. 1000 WCNR WCMF, WCMF, N. 1010 WCNR WCMF, WCMF, N. 1010 WCNR WCMF, WCM

COUNTY OF THE CALLED BY LAND AND ADDRESS	O.S. AN STATION	A N		C-U Iti-ti
SCHOOL MARKET ST. 1950 W. F. D. Gerrer, S. C. 1850 W. F. D. Gerrer, S. C	Call Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
## WALE ADMINISTRATION OF THE PROPERTY OF THE	WCRT Riemingham AL 1260	FL 1190	WEZQ Winfield AL 1300	WGFS Covington, Ga. 1430
CES Worlds 150 W. A. Cressbart 1.5	WCSA Rinley Mass. 1280	WEAC Gaffney, S. C. 1500 WEAG Alcoa, Tenn. 1476	WEAR Juneos PR 1460	WGGA Gainesville, Ga. 550 WGGG Gainesville, Fla. 1230
CERT CHARLES AND ADDRESS AND A	WCSH Portland, Maine 970 WCSH Columbus, Ind. 1010	WEAL Greensboro, N.C. 1510 WEAM Arlington, Va. 1390	WFAD Middlebury, Vt. 1490 WFAG Farmville, N.C. 1250	WGGO Salamanea, N.Y. 1590
### Willische Misselfe Series 150	WCSJ Morris, III. WCSL Cherryville, N. C. 1590	WEAN Providence, R.1. 790 WEAU Eau Claire, Wis. 790	WFAH Alliance, Ohio 1310 WFAI Favetteville, N.C. 1230	WGHC Clayton, Ga. 1570 WGHN Grg. Haven. Mich. 1370
WEND MALL AND MALL AN	WCSM Cellna, Unio	WEAT W. Palm Beach, Fla. 850	WFAR Farreli, Pa. 1470 WFAS White Plains, N.Y. 1230	WGHQ Kingston, N.Y. 920 WGIC Xenia, O. 1500
## Carl S. Aller, M. 1985 ## Carl S. Aller, M.	WCST Berkeley Springs,	WEBB Baltimore, Md. 1360	WFAU Augusta, Me. 1340 WFAW Ft. Atkinson, Wis. 940	WGIL Galesburg, III. 1400
### Carls And Date	WCSV Crossville. TN 1490 WCSW Shell Lake, Wis. 940	WEBJ Brewton AL 1240	WFBA San Sebastion, P.R. 1460	WGKA Atlanta, Ga. 1190
WETT Gerbt, K. 162. WETT Gerb	WCTM Eaton, Ohlo 1130	WEBQ Harrisburg, III. 1240 WEBR Buffalo, N.Y. 970	WFBG Altoona, Pa. 1290 WFBL Syracuse, N.Y. 1390	WGL Fort Wayne, Ind. 1250
## WELD CLANDES Falls Onto 15 1869 WELD CLANDES IN	Cabin John MD 1300 WCTR Chestertown MD 1530	WECL Eau Claire, Wis. 1050	WFBR Baltimore, MD 1300 WFBS Spring Lake, N, C. 1450 WFCM Winston Salem N C 1550	WGLC Mendota, III. 1090
## WED Marks Spann, 26. ## WED Marks Spann, 2	WCTW New Castle, Ind. 1550	WEDC Chicago, III. 1240	WFDF Flint, Mich. 910	WGLI Babylon, N.Y. 1290
W.V.L. Graw-forthill, Ind. W. L. Graw-forthill, Ind. W. L. Graw-forthill, Ind. W. L. Graw-forthill, Ind. W. C. Graw-forthill,	WCUE Cuyahoga Falis, Ohio 1150 WCUG Cuthbert, Ga. 850	WEDG Soddy, Tenn. 1240 WEDO McKeesport, Pa. 810	WFEB Sylacauga AL 1340	WCMA Hollywood Fin. 1320
W. C. M. C. M. C. W. C. W. C. M. C. W. C. W. C. W. C. M. C. W. C.	WCVZ Grand Rapids MI 1230 WCVA Culpeper, Va. 1490	WEED HOOKY Mount. N.C. 1390	WFFG Marathon, Fla. 1300 WFGL Fitchburg, Mass. 980	WGML Hinesville, G≠ 990 WGMS Bethesda, Md 570
weby Specified Community of the Communit	WCVI Connellsville, Pa. 1340 WCVL Crawfordsville, Ind. 1550	WEEL Boston, Mass. 590	WFGN Gaffney, S.C. 1570 WFGW Black Mountains,	WGNB Indian Rocks Beach,
WEYN 2 clarks. 5. WEYN Swalledam, N. 1320 WEFF Richards, N. 1320 WE	WCVR Randolph, Vt. 1320	WEEP Pittsburgh, Pa. 1080	WFHG Bristol, Va. 980 WFHK Pell City AL 1430	WGNE Panama City
WARF Teams, Fig. M. 1920 WARF Teams, Fig. M. 1920 WARF Climburk, Gr.	WCWA Toledo, O. 1230 WCWC Ripon, Wis. 1800	WEET Richmond, VA 1320 WEEU Reading, Pa 850	WFHR Wis. Rapids, Wis. 1320 WFIA Louisville, Ky. 900	WGNG Pawtucket RI 550 WGNL Wilmington, N.C. 1450
WOAR Dambel, G	WCYN Cynthiana, Ky. 1400 WDAD Indiana, Pa. 1450	WEEV Easten Da 1220	WFIF Milford, Conn. 1500 WFIG Sumter, S.C. 1290	WGNS Murtreesboro, Tenn. 1450 WGNT Huntington, W.Va. 930
WOAT Orange stack, Fig. 1800 WELF Researchis, V. 1800 WELF RESEARCHISTORY, V. 1800 WELF RES	WDAF Kansas City, Mo. 610 WDAK Clumbus, Ga. 540	WEGU Concord, N.C. 1410	WEIN FINDIAY, Ohio 1330	
Welle Standber. Hilb. Welle Gerich A. V. Welle Granten, W. Welle Welle, W. Welle Granten, W. Welle Westen, W. Welle Westen, W. Welle Granten, W. Welle Westen, W. Welle Granten, W. Welle Westen, W. Welle Granten, W. Welle Westen,	WUAK Darlington, S.C. 1330	WEHH Elmira Heights-		WGOE Richmond, Va. 1590 WGOG Walhalla, S.C. 1000
W DE L Seamble. minh p. 680	WDAT Ormond Beach, Fla. 1380	WEIC Charleston, III. 1270 WEIF Moundsville, W. Va. 1370	WFIW Fairfield, [1]. 1390 WFIX Huntsville AL 1450	W GUM Marion, Ind.
W DED D'ERROR, FIL. W DED B'ERROR, FIL. W DE	WDBC Escanaba, Mish. 680	WEIS Centre Al 998	WFKN Franklin, Ky. 1220 WFKN Frankfort, Ky. 1490	WGON Munising MI (400
WULF Dated city, Fig. 1490 WULF Dated city, Fig. 1590 WULF Dated city, Fig.	WDBL Springfield, Tenn. 1690 WDBM Statesville N.C. 550	WEJL Seranton, Pa. 630 WEKG Jackson, Ky. 810	WFLB Payetteville, N.G. 1490	WGOV Valdosta. Ga. 950 WGOW Chattanooga, TN 1150
WDLIN LUMBERT FL. 1470 WDLIN Hancey, R.M. 1430 WELE S. Dayton, Fla. 1430 W	WDBU Orlando, Fla. 280 WDBU Dubuque, Iowa 1490	WEKR Fayetteville, Jenn. 1240 WEKY Richmond, Ky. 1340	WELN Philadelphia Pa 900	WGPA Bethlehem, Pa. 1100 WGPC Albany, Ga. 1450
WDDT Greenville, Miss. 900 WELK Charlettsville Vs. 1010 WELK Charlettsville Vs. 1010 WELK Charlettsville Vs. 1010 WELK Charlettsville Vs. 1010 WDLS Jamstevn. Tenn. 1500	WUCL Dunedin FL 1470	WEKZ Monroe, Wis. 1280 WELB Elba AL 1350	WFLO Farmville, Va. 870 WFLR Dundee, N.Y. 1570	WGRA Cairo, Ga. 790 WGRC Spring Valley, NY 1300
WEER Elisorth, Men. 1300 WEER Clarify, S.C. 1300 WEER Clarify, S.C. 1300 WEER Clarify, S.C. 1300 WEER Clarify, Men. 1300 WEER Clarify, Men. 1300 WEER Clarify, Men. 1300 WEER Clarify, S.C. 1300 WEER Clarify, Men. 1300 WEER Clarify, S.C. 1300 WEER Clarify, S.C. 1300 WEER Clarify, Men. 1300 WEER Clarify, S.C. 1300 WEER Clarify, S.C. 1300 WEER Clarify, Men. 1300 WEER Clarify, S.C. 1300 WEER Clarify, S.C. 1300 WEER Clarify, Men. 1300 WEER Clarify, S.C. 1300 WEER	WDDL Lancaster, PA 1490 WDDO Macon, GA 900	WELD Fisher, W.Va. 690 WELE S. Daytona, Fla. 1590	WFMC Goldsboro, N.C. 730	WGRD Grand Rapids, Mich. 1410 WGRI Griffin, Ga. 1410
WELD Easley, S.C. 1380	WDDT Greenvile, Miss. 900 WDDY Gloucester, Va. 1420 WDEA Filsworth Me. 1370	WELK Charlottesville, Va. 1010	WFMH Cullman, AL 1460	WGRM Greenwood, Miss. 1240 WGRO Lake City, Fis. 980
WDEL Wilmington. Del. 1550 WDEL Wilmington. Del. 1550 WDELW Wilmington. Del. 1550 WDELW Wilmington. Del. 1550 WDELW Wilmington. Del. 1550 WDELW Waterbury, Vt. 1550 WDELW States, M. 1570 WDELW Waterbury, Vt. 1550 WDELW Waterbury, Mt. 1550 WDELW Manageburg, Pt. 1550 WD	WULB Jamestown, Tenn. 1500	WELD Tupelo, Miss. 580 WELP Easley, S.C. 1360	WFMO Fairmont, N.C. 860 WFMW Madisonville, KY 730	
W DEV Waterbury, V. 550 W DEV Marchan, V. 550 W	Whee Detroit, Mien. 1500 Whee Chattanooga, Tenn. 1370 Wheel Sweetwater Tenn. 800	WELS KINSTON, N.C. 1010	WFMT Chicago, IL 1450 WFNC Favetteville, N.C. 940	WGSB Geneva, III. 1480
WDEW westheld, Mass. WDEW Douglaville, G. B. WDEW Coulsaville, G. B. WDEW Coulsaville, G. B. WEND Entitle, Man. WEND Entitle, M. B. WEND WILL Coulsaville, M. B. WEND Entitle, M. B. WEND Entitle, M. B. WEND Entitle, M. B. WEND WILL Coulsaville, M. B	WDFF Wilmington, Del. 1130	WFLW Willoughby, O. 1330	WFOB Fostoria, Ohio 1430 WFOG Suffolk, VA 1450	WGSM Huntington, NY 740 WGSO New Orleans LA 1280
WDIC Clinche, Va. 1430 WDIG Clinche, Va. 1430 WERP Milwakee, Wit. 1250 WDIG Othan AL. 1430 WERP Milwakee, Wit. 1250 WERP	WDGL Douglasville, Ga. 1520	WELY Ely. MN 1450 WELZ Belzoni, Miss. 1480 WEMR Fruin Tenn 1420	WFOR Hattlesburg, Miss. 1400	WGSV Guntersville AL 1270
WDIX Orangeburg, S. C. 1450 WDIX Orangeburg, S. C. 1450 WDIX Mt, Olive, N. C. 1430 WDIX Drangeburg, Com. 1430 WERC Mitterlife, N. C. 1220 WERD Ebensburg, Pa. 1550 WERD Ebensburg, Pa. 1550 WERD Ebensburg, Pa. 1550 WERD Edictoft, N. Y. 1430 WERD Edicator, N. Y. 1430 WERD Edictoft, N. Y. 1430 WERD Edictoft	WDGY Minneapolis, Minn. 1130 WDIA Memphis. Tenn. 1070	WEMJ Laconia, N.H. 1490	WFPA Fort Payne AL 1400 WFPG Atlantic City, N.J. 1450	WGTA Summerville, Ga. 950 WGTL Kannapolis NC 870
WENG Englawood, Fig. 1530 WENG Congression, VI. 1250 WENG Congression, VI.	WDIG Dothan AL 1450 WDIX Orangeburg, S.C. 1150	WENA Penuelas, PR 1330	WFPR Hammond, La. 1400	WGTN Georgetown, S.C. 1400 WGTO Cypress Gardens, Fla. 540
WOLA Diakson, Tenn. 1280 WOLA Walton, N.Y. 1270 WOLB Marshfield, VI 1450 WOLC Port Jervis, N. 1450 WEND Green, M. 1450 WOLD Finama City, Fla. 1550 WOLD Finama City, Fla.	WDIS Mt. Olive, N.C. 1430 WDIZ Bridgeport, Conn. 1530	WEND Ebensburg, Pa. 1580 WENE Endicott, N.Y. 1430	WFRB Frostburg, Md. 560 WFRC Reldsville, N.C. 1600	WGTR Natick, Mass. 1060 WGTW Mt. Dora, FL 1580
WEND Madison, Tenn. 4309 WFRX West Frankfort, III. 3300 WFRX West Frankfort, III. 3300 WFRX Mest Frankfort,	WDKN Dickson, Tenn. 1260. WDLA Walton, N.Y. 1270	WENG Englewood, Fla. 1530	WFRM Coudersport, Pa. 600	WGUE Guifnort MS 1130
WDMG Douglas, GA	WDLB Marshfield, WI 1430	WEND Madison, Tenn. 1430 WENR Englewood, Tenn. 1090	WFRX West Frankfort, III. 1300 WFSC Franklin, N.C. 1050	
WDMG Douglas, GA	WDLM E. Moline, 111. 980 WDLP Panama City, Fla. 590	WENT Gloversville- Johnston NY 1340	WFSO Pinellas, Fla. 1340 WFSO Pinellas, Fla. 570 WFSP Kingwood W Va. 1560	WGUY Bangor, Maine 1250 WGVA Geneva, N.Y. 1240
WDNE Elkins, W.Va. WDNG Anniston, AL 450 WDNG Anniston, AL 450 WDNG Anniston, AL 450 WDNG Chartaneoga, Tenn. 1280 WERD Blamingham AL 450 WERD Blamingham AL 450 WERD Chartaneoga, Tenn. 1310 WERD Chartaneoga, Tenn. 1310 WERD Elkins, W.Va. 1320 WERD Lagle River, Wis. 950 WFTW Front Royal, Va. 4150 WFTW Finn Royal, Va. 4150 WHAAR Gearneid Mass. 4150 WHAAR Georneid Mass. 4150 WHAAR Georneid Mass. 4150 WHAAR Clarksburg. WHAAR Georneid Mass. 4150 WHAAR Georneid Mass. 4150 WHAAR Clarksburg. WHAAR Clarksburg. WHAAR Charksburg. WHAAR Clarksburg. WHAAR Cl	WDLT Indianola, Miss. 1380 WDME Dover-Foxeroft, Me. 1340	WENZ Highland Springs, Va. 1450	WFSR Harlan, KY 1470 WFST Caribou, Maine 600	WGVM Greenville, Miss. 1250 WGWC Selma, Ala. 1340 WGWR Asheliano N.C. 1240
WDNE Elkins, W.Va. WDNG Anniston, AL 450 WDNG Anniston, AL 450 WDNG Anniston, AL 450 WDNG Chartaneoga, Tenn. 1280 WERD Blamingham AL 450 WERD Blamingham AL 450 WERD Chartaneoga, Tenn. 1310 WERD Chartaneoga, Tenn. 1310 WERD Elkins, W.Va. 1320 WERD Lagle River, Wis. 950 WFTW Front Royal, Va. 4150 WFTW Finn Royal, Va. 4150 WHAAR Gearneid Mass. 4150 WHAAR Georneid Mass. 4150 WHAAR Georneid Mass. 4150 WHAAR Clarksburg. WHAAR Georneid Mass. 4150 WHAAR Georneid Mass. 4150 WHAAR Clarksburg. WHAAR Clarksburg. WHAAR Charksburg. WHAAR Clarksburg. WHAAR Cl	WDMJ Marquette, Mich. 1320 WDMP Dodgeville, Wis. 810	WEOK Poughkeepsie, N.V. 1390 WEOL Etyria, Ohio 930 WEOO Smithfield VA 940	WFTG London, N.C. 960 WFTG London, Ky, 1400	WGY Schenectady, N.Y. 510 WGYV Greenville AL 1380
WONT Dayton, Tenn. 1260	WDMV Pocomoke City, Md. 540 WDNC Durham, N.C. 620	WEPA Eupora, MS 710 WEPG S. Pittsburgh, Tenn. 910	WFTM Maysville, Ky. 1240 WFTN Franklin, N.H. 1240	WHA Madison, Wis. 970 WHAG Haifway, Md. 1410
WOSL Mockey Most	WDNG Anniston, AL 1450 WDNT Dayton, Tenn. 1280	WEQO Whitley City, KY 1220 WERA Plainfield, NJ 1590		WHAK Rogers City. Mien. 980 WHAL Sheibyville, Tenn. 1400
WOSL Mockey Most	WDOC Prestonsburg, Ky. 1310 WDOD Chattanooga, Tenn. 1310 WDOF Dunklick N.Y. 1410	WERC Birmingham AL 980 WERD Jacksonville, FL 1400	WFTW Ft. Walton Beach,	WHAM Rochester, N.Y. 1180 WHAN Haines City, Fla. 930
WOSL Mockey Most	WDOG Allendale, S.C. 1450 WDOL Athens, Ga. 1470	WERH Hamilton, AL 970. WERI Westerly, R.i., 1230	WFUN Miami, Fla. 1270 WFUN Grand Rapids, Mich. 1570	WHAR Clarksburg, W.Va. 1340 WHAS Louisville, Ky. 840
WOSL Mockey Most	WDON Wheaton, Md. 1540 WDOR Sturgeon Bay, Wis. 910 WDOS Openta N.Y. 730	WERK Muncle, Ind. 990 WERL Eagle River, Wis. 950	WFVA Fredericksburg, Va. 1230 WFVR Aurora IL 1580	WHAT Philadelphia, Pa. 1340 WHAV Haverhill, Mass. 1490 WHAW Waston W Va. 1990
WOSL Mockey Most	WDOV Dover, Del. 1410 WDOT Burlington, Vt. 1400	WESA Charleroi, Pa. 940 WESB Bradford, Pa. 1490	WFWR Ft. Wayne, Ind. 1090 WFXY Middlesboro, KY 1560	WHAZ Troy, N.Y. 1330 WHB Kansas City, Mo. 710
WOSL Mockey Most	WDOW Dowaglat, MI 1440 WDQN DuQuoin, 111. 1580 WDRC Hartford Copp. 1360	WESC Greenville, S.C. 660 WESL E. St. Louis IL 1490	WFYC Alma, Mich. 1280 WGAA Cegartown, Ga. 1340	WHBB Selma AL 1490 WHBC Canton, Ohio 1480
WOSL Mockey Most	WDSC Dillon, S.C. 800 WDSG Dyersburg, Tenn. 1450	WESR Tasley, Va. 1330 WEST Easton, Pa. 1400	WGAD Gadsden AL 1350 WGAF Valdosta, Ga. 910	WHBG Harrisonburg, Va. 1380 WHBL Sheboygan, Wis. 1330
WDUN Gainesville, Ga. 1240 WETU Westumpks AL 1250 WGAU Athens, Ga. 1340 WHCC Waynesville, N.C. 1400 WDUX Waupaca, Wis. 600 WETZ New Martinsville, WGAW Gardner, Mass. 1340 WHCC Waynesville, N.C. 1400 WDUX Green Bay, WI 1400 WEUC Ponce, P.R. 1420 WGBB Freeport, N.Y. 1240 WHDY AU DANVILLe, Va. 1250 WEUP Huntsville AL 1600 WGBF Evansville, Ind. 1280 WHUD Huntsville, AL 1600 WGBF Greensboro, N.C. 1400 WHD Boston, Mass. 850 WDVH Gainesville, Fla. 980 WEVE Experia, Va. 1330 WGBB Greensboro, N.C. 1400 WHDL Olean, N.Y. 1450 WDVD Dawson, Ga. 980 WEVE Eveleth. Minn. 1340 WGBB Goldsboro, N.C. 1150 WHEB Portsmouth, N.H. 750 WHEB	WDSK Cleveland, Miss. 1410 WDSL Mocksville, N. C. 1520 WDSM Superior, Wis		WGAL Elizabeth City, N.C. 580 WGAL Lancaster, Pa. 1490	WHBN Harrodsburg, Ky. 1420 WHBO Tampa, Fla. 1050
WDUN Gainesville, Ga. 1240 WETU Westumpks AL 1250 WGAU Athens, Ga. 1340 WHCC Waynesville, N.C. 1400 WDUX Waupaca, Wis. 600 WETZ New Martinsville, WGAW Gardner, Mass. 1340 WHCC Waynesville, N.C. 1400 WDUX Green Bay, WI 1400 WEUC Ponce, P.R. 1420 WGBB Freeport, N.Y. 1240 WHDY AU DANVILLe, Va. 1250 WEUP Huntsville AL 1600 WGBF Evansville, Ind. 1280 WHUD Huntsville, AL 1600 WGBF Greensboro, N.C. 1400 WHD Boston, Mass. 850 WDVH Gainesville, Fla. 980 WEVE Experia, Va. 1330 WGBB Greensboro, N.C. 1400 WHDL Olean, N.Y. 1450 WDVD Dawson, Ga. 980 WEVE Eveleth. Minn. 1340 WGBB Goldsboro, N.C. 1150 WHEB Portsmouth, N.H. 750 WHEB	WDSR Lake City, Fla. 1340 WDSU New Orleans, La. 1280	WETC Wendeil-Zebulon, N.C. 540 WETO DeLand, Fla. 1490	WGAP Maryville, Tenn, 1400 WGAR Cleveland, Ohio 1220	WHBT Harriman, Tenn. 1600 WHBU Anderson, Ind. 1240
WDUR Durham, NC	WDTM Seimer, Tenn, 1130 WDUN Gainesville, Ga. 1240 WDUX Waunaca, Wis. 600	WETT Ocean City, Md. 1590 WETU Wetumpka AL 1250	WGAT Gate City, Va. 1050 WGAU Athens, Ga. 1340	WHCC Waynesville N.C. 1400
WDVA Danville Va. 1280 WEUP Huntsville AL 1800 WGBE Evansville. Ind 1280 WHDH Boston, Mass. 850 WDVA Gainesville. Fla. 980 WEVA Emporla, Va. 860 WGBG Greenshoro, N. C. 1400 WHD Olean, N.Y. 1450 WDVA Dawson, Ga. 1810 WEVE Veleth, Minn. 1340 WGBR Goldsboro, N. C. 1150 WHDM McKenzie, Tenn. 1440 WDVA Chartanooga, Tenn. 1490 WEVE Veleth, Minn. 1340 WGBR Goldsboro, N. C. 1150 WHDM McKenzie, Tenn. 1440 WEVE River Falls. Wis. 1850 WGCB Rad Lion, Pa. 1440 WHED Portsmouth, N.H. 750 WGCB Rad Lion, Pa. 1440 WHED Rotsmouth, N.H. 750 WGCB Rad Lion, Pa. 1440 WHED Rotsmouth, N.H. 750 WGCB Chester, S.C. 1490 WHE Martinsville, Va. 1370 WEVE Lawrenceburg, Tenn. 1490 WEX Lawrenceburg, Tenn. 1490 WEX Lawrenceburg, N.C. 1880 WGCH Greenwich, Conn. 1490 WFIN Syracuse, N.Y. 820 WGCH Guttort, Miss. 1240 WGEM Geneva AL 1150 WHED Syract, Va. 1270 WGEM Geneva AL 1150 WHED Portsmouth, N.H. 1310 WEX Marsville, VA. 1320 WGEM Geneva AL 1150 WHED Portsmouth, N.H. 1330 WGEM Geneva AL 1350 WGEM Geneva AL 1350 WHED Portsmouth, N.H. 1350 WGEM Geneva AL 1350 WGEM Geneva AL 1350 WHED Portsmouth, N.H. 1350 WGEM Geneva AL 1350 WHE Wattham, MA 1330 WGEM Geneva AL 1350 WHEN Syract, Va. 1350 WGEM Geneva AL	WELLE Dunbon NO 1400	West Virginia 1330 WEUC Ponce, P.R. 1420	WGAW Gardner, Mass. 1340 WGAY Silver Spring MD 1050 WGBB Freeport, N.Y. 1240	WHCU Ithata, N.Y. 670 WHDF Houghton, Mich. 1400
WDWD Dawson, Ga. 990 WEVE Eveleth. Minn. 1340 WGBR Goldsboro, N. C. 1150 WHEB Portsmouth, N.H. 780 WDWB Champaign, III. 1400 WEVR River Falls. Wis. 1850 WGCB Rad Llon, Pa. 1440 WHEC Rochester. N.Y. 1460 WDWB Chartsmooga. Tenn. 1490 WEW St. Louis, Mo. 770 WGCD Chester, S.C. 1490 WHE Martinsville, Va. 1370 WEW D. Laurinburg, N.C. 1080 WGCH Greenwich, Conn. 1490 WFXI Jackson, Tenn. 1310 WFXI Jackson, Tenn. 1490 WEXL Royal Oak, Mich. 1340 WGEA Geneva AL 150 WHEP Stuart. Va. 1270 WDXP Clarksville, Tenn. 1490 WEXL Royal Oak, Mich. 1340 WGEA Geneva AL 150 WHEP Foley AL 1310 WDXP Ruducah. Ky. 1560 WEXY Oakland Park, Fla. 1520 WGEA Geneva Rad. 1440 WFXY Sumter, S.C. 1490 WFYE Sanford, N.C. 1580 WGEN Genese ol. 1590 WHER Benton Harbor-St. 1680 WFYE Sanford, N.C. 1580 WGEN Genese ol. 1590 WGEN Genese ol. 1590 WHER Benton Harbor-St. 1680 WFYE Sanford, N.C. 1580 WGEN Genese ol. 1590 WHER Benton Harbor-St. 1680 WGEN Genese ol. 1680 WHER Benton Harbor-St. 1680 WGEN	WDVA Danville, Va. 1250 WDVH Galnesville, Fla. 980	WEUP Huntsville AL 1600 WEVA Emporia, Va. 860	WGBF Evansville, Ind. 1280 WGBG Greensboro, N.C. 1400	WHDH Boston, Mass. 850 WHDL Olean, N.Y. 1450 WHDM McKanzie Tann
WDXB Chattanooga. Tenn. 1490 WEW St. Louis. Mo. WEW MED Strain. WEST.	WDVL Vineland, N.J. 1270 WDWD Dawson, Ga, 990 WDWS Champaign, III. 1400	WEVE Eveleth, Minn. 1340 WEVR River Falls, Wis. 1850	WGBR Goldsboro, N. C. 1150 WGCB Red Lion. Pa. 1440	WHEB Portsmouth, N.H. 750 WHEC Rochester, N.Y. 1460
WDAL Jackson, 16nn. WDAL Lexington, Tenn. WEXL Royal Oak, Mich. 1340 WEXL Royal Oak, Mich. 1340 WEXL Green Bay, WI 1380 WHET Waitham, MA 1330 WDAR Puducah. Ky. WEXY Oakland Park, Fla. WDAY Sumtor, S.C. WDAY Sumtor, S.C. WDAY Buford, GA WEYE Sanford, N.C. WEYE Boston. Mass. WGET Getrysburg, Pa. WGET Getrysburg, Pa. WHHH Warren, Ohlo WHHH Warren, Ohlo 1440	WDXB Chattanooga, Tenn. 1490 WDXE Lawrenceburg, Tenn. 1370	WEW St. Louis, Mo. 770 WEWO Laurinburg, N.C. 1080	WGCD Chester, S.C. 1490 WGCH Greenwich, Conn. 1490	WHEE Martinsville, Va. 1370 WHEN Syracuse, N.Y. 820 WHEO Street Va. 1270
WDXR Puducah. Ky. 1560 WEXY Oakland Park, Fla. 1520 WGEM Quincy, III. 1440 WFFB Benton Harbor-St. 1080 WGEN Senses ol. 1500 WGEN Genses ol. 1500 Joseph. Mich. 1080 WFY Talladega. AL 1580 WGET Gettysburg, Pa. 1320 WHGR Houghton L., Mish. 1290 WGEZ Beloit, Wis. 1490 WHHH Warren, Ohlo 1440	WDXL Jackson, Tenn. 1310 WDXL Lexington, Tenn. 1490 WDXN Clarksville, Tenn. 540	WEXL Royal Oak, Mich. 1340 WEXM Jamesville, VA 1820	WGEA Geneva AL 1150 WGEE Green Bay, W1 1380	WHEP Foley AL 1310 WHET Waltham, MA 1330
WDZ Decatur, III. 1080 WEZE Boston. Mass. 1280 WGEZ Beloit. Wis. 1490 WHHH Warren, Ohlo 1440	WDXR Puducah. Ky. 1560 WDXY Sumter, S.C. 1240	WEXY Oakland Park, Fla. 1520 WEYE Sanford, N.C. 1290	WGEM Quincy, III. 1440 WGEN Geneseo IL 1500	WHFB Benton Harbor-St. Joseph, Mich. WHGR Houghton L., Mish, 1290
	WDZ Decatur, 111.	WEZE Boston. Mass. 1260	WGEZ Beloit, Wis. 1490	WHHH Warren, Ohio 1440

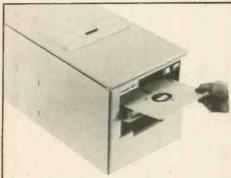
Call Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
WHHL Pine Castle-Sky Lake, FL (190 WHHM Henderson, Tenn. 1580 WHHO Hornell, N.Y. WHHT Lucedale, M.Y. WHHT Lucedale, M.Y. WHHY Montgomery AL WHLY Montgomery AL WHIS WHIIs WILL, M. 1520 WHIE Griffin, Ga. WHIE Bay Springs, Miss. WHIE Bay Springs, Miss. WHIE May Springs, Miss. WHIE Bay Springs, Miss. WHIE Bay Springs, Miss. WHIE Danville, Ky. 1230 WHIE Danville, N.C. WHIE Danville, N.C. WHIE Danville, N.C. WHIE Danville, N.C. WHIE Danville, W.Y. WHIE Danville, W.Y. WHIE Danville, W.Y. WHIE Morensylle, Ohlo WHIE Zaneswille, Ohlo WHIE Zaneswille, Ohlo WHIE Greensburg, Pa. WHIE Masewan, W. Va. WHIE Masewan, W. Va. WHIE WHIE NIE MISSO WHKE Viewland, Ohlo WHKP Hendersonville, N.C. WHLE Wieginla, Minn. WHLD Niagara Falls, N.Y. WHLE Nouth Boston, Va. WHLE Wheeling, W.Va. WHLE Hempstead, N.Y. WHLE Wheeling, W.Va. WHLE Wheeling, W.Va. WHLE Wheeling, W.Va. WHLE Nouth Miss. WHLE Northampton, Miss. WHLE Northampton, Miss. WHMP Northampton, Mass. WHMP Northampton, Mass. WHMP Northampton, Miss. WHMP Morros, MI WHE Portsmouth, VA. WHOD Jackson, AL WHOU Laneaster, Ohlo WHOD Jackson, AL WHOL Laneaster, Ohlo WHOL Laneaster, Ohlo WHOL Dasson, AL WHOL Laneaster, Ohlo	WILO Frankfort, Ind. 1570 WILS Lansing, Mich. 1320 WILY Centralia, III. 1210 WIMA Lima, Dhio 1150 WIMO Winder, Ga. 1300 WIMS Michigan City, Ind. 1420 WINA Charlottesville, Va. 1400 WIND Chicago, III. 560 WINE Brookheld, Conn. 1230 WING Dayton, Ohio 1410 WINF Manchester, Conn. 1470 WINF Manchester, Conn. 1470 WINF Marphysboro, III. 1420 WINH Georgetown, S. C. 1470 WINH Groyetown, S. C. 1470 WINH Groyetown, S. C. 1470 WINH Groyetown, S. C. 1470 WINT Murphysboro, III. 1420 WINK Fort Myers, Fla. 1240 WINN Louisville, Ky. 1240 WINN Ringhamton, N.Y. 680 WINS New York, N. Y. 1010 WINT Ringhamton, N.Y. 680 WINS New York, N. Y. 1010 WINT WINT Might III. 1510 WINT Rockville, Md. 1500 WINT WINT Might III. 1510 WINT WINT WINT MIGHT III. 1510	WJJZ Mt. Holly, N. 1. 1460	WKIK Leonardtown, Md. WKIN Kingsport, Tenn. WKIP Poughkeepsle, N.Y. WKIS Orlando, Fla. WKIX Raleigh, N.C. WKIX Raleigh, N.C. WKIX Raleigh, N.C. WKIX Raleigh, N.C. WKIX Randeigh, N.C. WKIX Randeigh, N.C. WKIX Randeigh, N.C. WKIX Mayauez, P.R. 710 WKJK Granite Falls, N.C. WKJR Muskegon Helghts, Mich. WKKN Rockford, IL WKKQ Hibbing, MN WKKS Vanceburg, KY. WKKZ DeLand FL WKLA Ludington, MIch. WKLK St. Albans, W.Va. WKLA Ludington, N.C. WKLC Gloquet, Minn. WKLM Wilmington, N.C. WKLC Louisville, Ky. WKLV Hartwell, Ga. WKLV Hartwell, Ga. WKLY Hartwell, Ga. WKLY Hartwell, Ga. WKMG Newberry, S.C. WKMG Newberry, S.C. WKMG Ningston, Va. WKMT Kings Mtn., N.C. WKMT Kings Mtn., N.C. WKNE Keene, N.H. WKNE Saglnaw, Mich. WKNE Keene, N.H. WKNE KEENE, M.H. WKNE
WHOA San Juan, P. 1430 WHOC Philadelphia. Miss. WHOD Dackson, AL 1430 WHOK Laneaster, Ohio WHOL Allentown. Pa. 1600 WHON Centerville, Ind. 930 WHOD Plopkinsville, I. 930 WHOP Hopkinsville, I. 930 WHOP Hopkinsville, I. 1230 WHOS Decatur AL 800 WHOT Campbell, Ohio 1330 WHOU Houlton, Maine 1340 WHOW Clintoh, I. 1520 WHOY Salinas, P. R. 1210 WHOY Salinas, P. R. 1210 WHOY Harrisburg, Pa. 580 WHPB Belton, B.C. 1390 WHPH Winchester, Va. 610 WHPH Winchester, Va. 610 WHPN Hyde Park, NY 950 WHPL Winchester, Va. 160 WHSM Hawward, WIs. 910 WHSM Hawward, WIs. 910 WHSW Hattiesburg, Miss. 1230 WHSC Hartsville, S.C. 1450 WHSW Hattiesburg, Miss. 1230 WHSW Hattiesburg, Miss. 1230 WHTC Holland, Mich. 1450 WHSW Hattiesburg, Miss. 1230 WHTC Holland, Mich. 1450 WHSW Hattiesburg, Miss. 1230 WHUR Hattingdon, Pa. 1150 WHUM Reading, Pa. 1240 WHUM Reading, Pa. 1240 WHUM Huntingdon, Pa. 1150 WHUM Huntingdon, Pa. 1150 WHUM Huntingdon, Pa. 1150 WHUM Huntingdon, Pa. 1150 WHUM Pensacola, FL WHYM Centersonville, N.C. 1600 WHYW Randerson, Ind. 1470 WHYM Pensacola, FL WHYM Pen	WIRY Plattsburg, N.Y. 1340 WIS Columbia. S.C. 560 WISA Isabella, P.R. 1390 WISE Asheville, N.C. 1310 WISK Americus, Ga. 1390 WISL Shamokin, Pa. 1480 WISM Madison, Wis. 1480 WISM Madison, Wis. 1480 WISM Milwaukee, Wis. 1480 WISD Ponce, P.R. 1260 WISP Kinston, N.C. 1230 WISR Butler, Pa. 680 WISP Serlin, Wis. 1990 WIST Charlotte, PA.C. 1240 WIST Charlotte, PA.C. 1240 WIST Wirouqua, Wis. 1360 WITH Baitlmore, Md. 1230 WITH Baitlmore, Md. 1990 WITK Charlotte, PR. 1970 WITK Sashington, N.C. 1240 WITK Jasper, Ind. 1890 WITK Sorystal Lake, III. 980 WITK Grystal Lake, III. 850 WIVV Vieuues, P.R. 1370 WIXC Fayetteville, Tenn. 140 WIXE Monroe, N.C. 1190 WIXE Monroe, N.C. 1190 WIXE Mornoe, N.C. 1190 WIX Tancaster, Ky. 1280 WIXN Dixon, III. 1520 WIXN Teast Lonumeadow, MA WIXZ McKeesport, Pa. 1360 WIZE Springfield, Ohlo WIZM La Cross, WI 1410 WIZM Streator, III. 1250 WIAK Jackson, TN 1450 WIAK Jackson, TN 1460 WIAK Marlon AL 1310 WIAF Providence, R.I. 920 WIAT Swalnsboro, Ga. 800 WIAY Mullins, S.C. 1280 WIAY Mullins, S.C. 1280 WIAD Baton Rougle, La. 150 WIBM Baieyville AL 1230 WIBD Baton Rougle, La. 150 WIBM Gasden AL 930 WICM Sebring, Fia. 960	WJRL Calhoun City, Miss. 1530 WJRM Troy, N.C. 1590 WJRO Glen Burnie, MD 1590 WJRO Grestvlew, Fla. 1050 WJSM Martinsburg, Pa. 1110 WJSM Martinsburg, Pa. 1110 WJSD Jonesboro, Tenn. 1590 WJST Jupiter, Fla. 1000 WJST Jupiter, Fla. 1000 WJTH Calhoun, GA 900 WJTN Jamestown, N.Y. 1240 WJTO Bath, Me. 1220 WJVA South Bend. Ind. 1590 WJW Gleveland, Ohlo 850 WJW L Georgetown, Del. 850 WJW D Lehanon. PA 940 WJW L Georgetown, Del. 1670 WJW South Hill, Va. 1670 WJWN Jackson, Miss. 1450 WJXN Jackson, Miss. 1450 WJXN Glarksville, Tenn. 1400 WKAL Macomb, HI. 1510 WKAL Macomb, HI. 1510 WKAL Rome, N.Y. 1450 WKAL Rome, N.Y. 1450 WKAL Rome, N.Y. 1450 WKAL Rome, N.Y. 1450 WKAL Rome, N.Y. 1520 WKAP Allentown, Pa. 1320 WKAP Allentown, Pa. 1320 WKAP Allentown, Pa. 1320 WKAP Glasgow, Ky. 1490 WKAZ Charleston, W.Va. 1550 WKAY Glasgow, Ky. 1490 WKAS RUSSEIVILLE AL. 1500 WKAS WKAY RUSSEIVILLE AL. 1600 WKAS WKAS RUSSEIVILLE AL. 1600 WKBK Merner, N.C. 1600 WKBK WBW Buffalo, N.Y. 1620 WKBW Buffalo, N.Y. 1620 WKCW Warrenton, Va. 1440 WKCY CEImhurst. 11. 1650	WKOX FramIngham, Mass. 1190 WKOY Bluefield, W.Va. 240 WKOZ Kosciusko. Miss. 1340 WKPA New Kensington, Pa. 1150 WKPG Port Gibson, Ms. 1510 WKPG Port Gibson, Ms. 1510 WKPG Pertiss, Miss. 1510 WKPG Pittsburgh PA 1320 WKPR Kalamazoo, Mieh. 1420 WKPT Kingsport. Tenn. 1400 WKOT GaryVille, La. 1610 WKRA Hotly Springs, Miss. 1110 WKRA Hotly Springs, Miss. 1110 WKRA Hotly Springs, Miss. 1110 WKRA Morbie AL. 710 WKRA Morbie AL. 710 WKRA Morbie AL. 1550 WKRA Morbie AL. 1610 WKRA Morbie AL. 1610 WKRA Morbie AL. 1710 WKRA WSTA MORBIE TON 1340 WKRA Colleinant, Tenn. 1420 WKRA Collinant, Tenn. 1420 WKRA Cartersville, Ga. 1720 WKRA Cartersville, Ga. 1730 WKSA W. Jefferson NC WKSJ Prichard AL. 1270 WKSA V. Jefferson NC WKSJ Jamestown, N.Y. 1340 WKSA KW. Jefferson NC WKSJ Prichard AL. 1270 WKST WKST New Castie, Pa. 1420 WKST Kingstree, S. C. 1090 WKST Pulaski, Tenn. 1420 WKST Kingstree, S. C. 1090 WKST Pulaski, Tenn. 1420 WKST Korthama AL. 1340 WKT ATT AITINGTON. Maine WKTS Sheboygan, Wis. 1380 WKT LaCrosse, Wis. 580 WKT LaCrosse, Wis. 580 WKT LaCrosse, Wis. 580 WKVA Lewistown, Pa. 920 WKVE Cave City. KY WKVM San Juan, P.R. 810 WKVA Brunsville, Tenn. 1490 WKWK Mas Juan, P.R. 810 WKVA Brunswille, Tenn. 1490 WKWK Wheeling, W.V.a. 1490 WKWK Wheeling, W.V.a. 1490 WKWK Wheeling, W.V.a. 1490 WKWK Wheeling, W.V.a. 1490 WKWK Bransville, Tenn. 900 WKXL Concord. N.H. 1450 WKWY Branswille, M. 990 WKYZ Bristol. Tenn. 91550 WKYZ Bristol. Tenn. 930 WKYG Bristol. Tenn. 930
WICK Seranton, Pa. 1400 WICO Salisbury, Mal. 1420 WICO Malone, N.Y. 1420 WICO Malone, N.Y. 1420 WIDE Biddeford, Maine 1490 WIDE Biddeford, Maine 1490 WIDE St. Ignace, Mieh. 940 WIDE St. Ignace, Mieh. 940 WIDE St. Ignace, Mieh. 940 WIFF Indianapolis. IN 1310 WIFE Indianapolis. IN 1570 WIFF Auburn, Ind. 1570 WIFF Source Indianapolis. 1420 WIFF Auburn, Ind. 1570 WIFF Auburn, Ind. 1570 WIFF Source Indianapolis. 1420 WIFF Source	WICO Jackson, Mich, 1510 WICO Jackson, Mich, 1510 WIDA Quincy, Mass, 1300 WIDA Quincy, Mass, 1300 WIDA Quincy, Mass, 1300 WIDB Thomasville AL 630 WIDM Elizabeth, N.J. 1530 WIDM Elizabeth, N.J. 1530 WIDM Saitsbury, Mid. 1470 WIDM Saitsbury, Mid. 1470 WIEB Gladwin, Mid. 1350 WIEB Gladwin, Mid. 1240 WIEM Valdosta, Ga. 1150 WIEM Valdosta, Ga. 1150 WIEM Dover-New Philadelphia, O. 1450 WIEM Dover-New Philadelphia, O. 1450 WIES Johnston, S.C. 1670 WIET Erle, Pa. 1400 WIFT Erle, Pa. 1400 WIFT Erle, Pa. 1400 WIFT Erle, Pa. 1400 WIFT Vicksburo, Mass, 1540 WIFT Vicksburo, Midh. 1550 WIMM Lansing, Mich. 1240 WIIT New York, NY 148n WIJT New York, NY 148n WIJT Commerce, Ga. 1270 WIJT Chiesago, Ill. 1160 WIJT Chiesago, Ill. 1160 WIJT Christiansburg, Va. 1260 WIJT Lewisburg, Tenn. 1490 WIJT Tomahawk, WI 1810 WIJT Tomahawk, WI 1810 WIJT Tomahawk, WI 1810 WIJT Tomahawk, WI 1800 WIJT T	WKDC Elmhurst, IL 1530 WKDE Altavista, Va. 1000 WKDH Ashland, VA 1430 WKDK Newberry, S.C. 1240 WKDL Clarksdale, Miss. 1600 WKDD Liberty, Ky. 1560 WKDD Liberty, Ky. 1560 WKDR Plattsburgh, N.Y. 1070 WKDW Staunton, VA 900 WKDX Hamiet, N. C. 1250 WKDY Spartanburg, SC 1400 WKDZ Cadiz, Ky. 1110 WKED Frankfort, KY 1130 WKEE Huntington, W. Va. 1100 WKEE Washington, Pa. 1110 WKEE Washington, Pa. 1450 WKER Immokatee, FL 1490 WKER Dover, DE WKER Pompton Lakes, N.J. 1500 WKER Pompton Lakes, N.J. 1500 WKER Pompton, Va. 1430 WKEY Ovington, Va. 1430 WKEY Ovington, Va. 1370 WKFE Yauco, P.R. 1550 WKFI Wilmington, OH 1090 WKGX Lenoir, N.C. 1080 WKHM Jackson, Mich. 970 WKIG Gienville, Ga. 1580	WKYN Burkesville, KY WKYN Burkesville, KY WKYX Padueah, Ky. WKYY Amherst, VA WKZA Kane, Pa. WKZO Kalamazoo, Mich. WKZO Casey, III. WKZO Kalamazoo, Mich. WLAD Danbury, Conn. WLAF LaFollette, Tenn. WLAD Danbury, Conn. WLAF LaFollette, Tenn. WLAG La Grange, Ga. WLAG La Grange, Ga. WLAM Lewiston, Malne WLAM Lewiston, Malne WLAM Lewiston, Ky. WAG Rome, Ga. WLAY Larel, MIS. WLAY Jacksonville, N.C. WLAS Jacksonville, N.C. WLAS Jacksonville, N.C. WLAY Conway, S.C. WLAU Laurel, Miss. WLAU Grand Rapids, Mich. WLAW Lawreneeville, Ga. WLAY Muscle Shoals AL WLAW Muscle Shoals AL WLAW Grand Rapids, Mich. WLAW Carelliton, Ga. WLAU Lawrellite, Ga. WLAY Muscle Shoals AL WLAW Grand Rapids, Mich. WLAW Carelliton, Ga. WLAU Lawreneeville, Ga. WLAY Muscle Shoals AL WLAW Grand Rapids, Mich. WLAW GRAND RAWRAW

Call Location	kHz	Call Location	kHz	Call Location kHz	Call Location kHz
WLBK DeKalb, III. WLBL Auburndale, Wis. WLBN Lebanon, Ky.	1360 930 1590	WMBN Petoskey, Mich. WMBO Auburn, N.Y. WMBS Uniontown, Pa.	1340 1340	WNAX Yankton, S.Dak. 570 WNBC New York, N.Y. 660	WONN Lakeland, Fla. 1230 WONS Tallahassee, Fla. 1410
WLBQ Morgantown, KY WLBR Lebanon, Pa. WLBS Centreville, Miss.	1570 1270 1580	WMBT Shenandoah, Pa. WMC Memphis, Tenn. WMCA New York, N.Y.	590 1530 790	WNBF Binghamton, N.Y. 1290 WNBH New Bedford, Mass. 1340 WNBI Park Falls. Wis. 980	WONW Deflance, Ohio 1280 WOOD Grand Rapids, Mich. 1300 WOOF Dothan, AL 560
WLBZ Bangor, Maine WLCB Buffalo-Hodgenville.	620	WMCH Church Hill, Tenn. WMCL MeLeansboro, 111.	570 1260 1060	WNBP Newburyport, Mass. 1470 WNBS Murray, Ky. 1340 WNBT Wellsboro, Pa. 1490	WOOP Danville, KY 1000 WOOW Greenville, N.C. 1340 WOOZ Whiteville, NC 1540
WLCK Scottsville, Ky. WLCM Lancaster, S.C.	1430 1250 1360	WMCP Columbia, Tenn, WMCR Oneida, N.Y. WMCS Machias, Me.	1280 1600 1400	WNBY Newberry, Mich. 1450 WNBZ Saranac Lake, N.Y. 1240	WOPA Oak Park, IL 1490 WOPI Bristol, Tenn. 1490 WOR New York, N.Y. 710
WLCN Laurensburg, N.C. WLCO Eustis, Fia. WLCS Baton Rouge, La.	1300 1240 910	WMCT Mountain City, Tens WMCW Harvard, III. WMDC Hazelhurst, Miss,	1. 1390 1600 1220	WNCC Barnesboro, Pa. 950 WNCG N. Charleston, S.C. 910	WORA Mayaquez, P.R. 760 WORC Worcester, Mass. 1310
WLCX LaCrosse, Wis, WLCY St. Petersburg, Fla.	1490 1380 1180	WMDD Fajardo, P.R. WMEE Ft. Wayne IN	1480 1380 980	WNCR Worcester, MA 1440 WNCT Greenville, N.C. 1070	WORT Newport News, VA 1270 WORD Spartanburg, S.C. 910 WORG Orangeburg, S.C. 1580
WLDS Jacksonville, III. WLDY Ladysmith, Wis. WLEA Hornell, N.Y.	1340 1480 1480	WMEK Chase City, Va. WMEL Melbourne FL WMEN Tallahassee, Fla. WMES Ashburn GA	920 1330 1570	WNDB Daytona Beach, Fla. 1150 WNDE Indianapolis IN 1260 WNDI Sullivan, IN 1550	WORL Orlando FL 1270 WORM Savannah, Tenn. 1010 WORV Hattiesburg, Miss. 1580
WLEE Richmond, Va. WLEC Sandusky. Ohio WLEJ Ellijay, GA	1450 1560	WMEV Marion, Va. WMEX Boston, Mass. WMFC Monroeville AL	1010 1510 1360	WNDR Syracuse, N.Y. 1260 WNDU South Bend, Ind. 1490 WNEA Newnan, Ga. 1300	WORX Madison, Ind. 1270 WOSC Fulton, N.Y. 1300 WOSO San Juan, PR 1030
WLEM Emporium, Pa. WLES Lawrenceville, Va. WLET Toccoa, Ga.	1240 580 1420	WMFD Wilmington, N.C. WMFG Hibbing, Minn. WMFJ Daytona Beach, Fla.	630	WNEB Worcester, Mass. 1230 WNEG Taccoa, Ga. 630 WNEL Caguas, P. R. 1430	WOSU Columbus, Ohio 820 WOTT Watertown NY 1410 WOUB Athens, Ohio 1340
WLEW Bad Axe, Mich. WLEY Cayey, P.R. WLFA Lafayette. Ga.	1340 1080 1590	WMFR High Point, N.C. WMGA Moultrie, Ga.	1230 1130	WNER Live Oak, Fla. 1250 WNES Central City, Ky. 1050 WNEU Wheeling, W. Va. 1470	WOW Omaha, Nebr. 590 WOWO Ft. Wayne, Ind. 1190 WOWW Naugatuck, Conn. 1380
WLFH Little Falls, N.Y. WLGM Lynchburg, Va. WLGN Logan, O.	1230 1320 1510	WMGC Cleveland. OH WMGO Canton, Miss. WMGR Bainbridge, Ga.	1260 13 7 0 9 30	WNEW New York, N.Y. 1130 WNEX Macon, Ga. 1400	WOWY Clewiston. Fla. 1590 WOYL Oil City, PA 1340
WLIB New York, N.Y. WLIJ Shelbyville, Tenn. WLIK Newport, Tenn	1190 1580 1270	WMGW Meadville, Pa. WMGY Montgomery AL WMIA Arecibo, P. R.	1490 800 1070	WNGA Nashville, Ga. 1600 WNGO Mayfield, Ky. 1320	WOZN Jacksonville, Fla. 970 WPAB Ponce, P.R. 550
WLIL Lenvir City, Tenn. WLIP Kenosha, Wis. WLIQ Mobile AL	730 1050 1360	WMIA Areelbo, P. R. WMIC Sandusky, Mieh. WMID Atlantic City, N.J. WMIK Middlesboro, Ky, WMIM Mt. Carmel, Pa	1580 1340 560	WNHC New Haven, Conn. 1340 WNHV White River Jet., Vt. 910 WNIA Cheektowaga, N.Y. 1230	WPAD Paducah, Ky. 1450 WPAG Ann Arbor, Mich. 1050 WPAL Charleston, S.C. 730
WLIS Old Saybrook, Conn.	950 920	WMIM Mt. Carmel, Pa. WMIN Maplewood, MN WMIQ fron Mountain, Mich.	1590	WNIC Dearborn MI 1310 WNIK Arecibo, P.R. 1230 WNIL Niles, Mich. 1290	WPAM Pottsville, Pa. 1450 WPAQ Mount Airy, N.C. 740 WPAR Parkersburg, W.Va. 1450
WLIV Livingston, Tenn. WLIX Islip, N. Y. WLIZ Lake Worth, Fla.	540 1380	WMIR Lake Geneva, Wis. WMIS Natchez, Miss. WMIX Mt, Vernon, III.	1550 1240 940	WNIR Newark, N.I. 1430	WPAS Zephyrhills, Fla. 1400 WPAT Paterson, N.J. 930
WLKE Waupun, Wis. WLKK Erie, PA WLKM Three Rivers. Mich.	1170 1260 1510	WMJK Kissimmee, FL WMJL Marion. Ky. WMJM Cordele, Ga.	1220 1010	WNKY Neon, Ky. 1480 WNLB Rocky Mount, VA 1290 WNLC Nen London, Conn. 1510	WPAX Thomasville, Ga. 1240 WPAY Portsmouth, Ohio 1400 WPAZ Pottstown, Pa. 1370 WPBR Palm Beach FL 1340
WLKN Lincoln, Me. WLKR Norwałk, O. WLKS W. Liberty. Ky.	1450 1510 1450	WMKR Millinocket, Me. WMLB West Hartford, CT	1490 1240 1550	WNLK Norwalk, Conn. 1350 WNMT Garden City, Ga. 1520 WNNC Newton, N.C. 1230 WNNJ Newton, N.J. 1360	WPCC Clinton, S.C. 1410 WPCE Pertsmouth, VA 1400
WLKW Providence, R.I. WLLH Lowell, Mass.	990 1400 930	WMLC Monticello, Miss. WMLO Beverly, Mass. WMLP Milton, Pa.	1270 1570 1380	WNNO Wisconsin Dells, WI 990	WPCF Panama City, Fla. 1430 WPCO Mt. Vernon, Ind. 1590 WPDC Elizabethtown, Pa. 1600
WLLL Lynchburg, Va. WLLN Oiney, III. WLLS Hartford, Ky. WLLY Wilson, N.C. WLMD Laurel, Md.	740 1600 1350	WMLR Hohenwald, TN WMLS Sylacauga AL WMLT Dublin, Ga.	1230 1290 1330	WNNR New Orleans LA 990 WNNT Warsaw, Va. 690 WNOE New Orleans, La. 1060 WNOG Naples, Fla. 1270	WPDF Corydon, Ind. WPDM Potsdam, N.Y. 1470 WPDQ Jacksonville, FL 1480
WLMD Laurel, Md. WLMS Leominster, Mass. WLNC Laurinburg, N.C.	900 1000 1300	WMMB Melbourne. Fla. WMMH Marshall, N.C. WMMM Westport, Conn.	1240 1460 1260	WNOK Columbia, S.C. 1230 WNOO Chattanooga, Tenn. 1260	WPDR Portage, Wls. 1350 WPDX Clarksburg, W.Va. 750 WPED Crozet, Va. 810
WLMJ Jackson, Ohio WLNA Peekskill, N.Y. WLNC Laurinburg, N.C.	1280 1420 1300	WMMM Westport, Conn. WMMN Fairmont, W.Va. WMMW Meriden. Conn. WMNA Gretna, Va.	920 1470 730	WNOR Norfelk, Va. 1230	WPEH Louisvile, Ga. 1420 WPEL Montrose, Pa. 1250 WPEN Philadelphia, Pa. 950
WLNG Sag Harbor, N.Y. WLNH Laconia, N.H.	1600 1350 1550	WMNB No. Adams, Mass. WMNC Morganton, N.C.	1230 1430	WNOX Knoxville, Tenn. 990 WNPT Tuscaloosa AL 1280	WPEO Peorla, III. 1020 WPEP Taunton, Mass. 1570 WPET Greensboro, N.C. 950
WLOA Braddock, Pa. WLOB Portland. Maine WLOC Munfordville, Ky. WLOD Pompano Beach, Fla.	1310	WMNE Menomonie. Wis. WMNI Columbus, Ohio WMNS Olean, N.Y.	1360 920 1360	WNPV Lansdale, Pa. 1440 WNRE Circleville OH 1540 WNRG Grundy. Va. 940 WNRI Woonsocket, R.I. 1380	WPFA Pensacola, Fla. 790 WPFB Middletown, Ohlo 910 WPGA Perry, Ga. 980
WLOE Eden, NC WLOF Orlando, Fla. WLOG Logan, W.Va.	1490 950 1230	WMNT Manati, P.R. WMNZ Montezuma, Ga. WMOA Marietta. Ohio	1500 1050 1490	WNRK Newark, Del. 1280	WPGC Morningside, MD 1580 WPGD Winston-Salem NC 1550 WPGM Danville, Pa. 1570
WLOK Memphis, Tenn.	1340	WMOB Mobile AL WMOC Chattanooga, Tenn. WMOG Brunswick, Ga.	840 1450 1490	Va, 990	WPGR Port Glbson, MS 1520 WPGW Portland, Ind. 1440 WPHB Philipsburg, Pa. 1260
WLOL Minneapolls, Minn. WLON Lincolnton, N.C. WLOP Jesup, Ga.	1330 1050 1370 730	WMOH Hamilton, Ohio WMOK Metropolis, III. WMON Montgomery, W.Va.	920 1340	WNSL Laurel, Miss. 1260 WNSR Lynn, MA 1360 WNST Milton WV 1600	WPHC Waverly, Tenn. 1060 WPHM Port Huron, Mich. 1380 WPIC Sharon, Pa. 790
WLOR Thomasville. Ga. WLOT Marinette, Wis. WLOU Louisville, Ky.	1300 1350	W MOO Mobile, AL W MOP Ocala, Fla. W MOR Morehead, KY	1550 900 1330	WNTN Newton, Mass, 1550 WNTS Indianapolis, IN 1590 WNTT Tazewell, Tenn. 1250	WPID Piedmont AL 12hv WPIK Alexandria, VA 730 WPIT Pittsburgh, Pa 730
WLOV Washington, Ga. WLOW Alken, S.C. WLOX Biloxi, Miss. WLPH Irondale AL	1370 1300 1490 1480	WMOV Ravenswood, W.Va. WMOX Meridian, Miss. WMPA Aberdeen, Miss.	1360 1010 1240	WNTY Southington, Conn. 990 WNUE Ft. Walton Bch Fla. 1400 WNUS West Springfield, MA 1490 WNUZ Talladega AL 1230	WPKE Pikeville, Ky. 1240 WPKO Waverly, Ohio 1380 WPKY Princeton, Ky. 1580
WLPO LaSalle, III. WLPS Leighton, Pa	1220 1150	WMPC Lapeer, Mich, WMPL Hancock, Mich, WMPM Smithfield, N.C.	1230 920 1270	WNVA Norton, Va. 1350 WNVL Nicholasville, Kv. 1250	WPLA Plant City, Fla. 910 WPLB Greenville, Mich. 1380 WPLK Rockmart, Ga. 1220
WLQH Chlefland, Fla. WLRC Whitehall, Mich.	1570 940 1490	WMPO Middleport-Pomeroy, Ohio WMPP Chicago Heights, III.	1390 1470	WNVY Pensacola, Fia. 1230 WNWI Valparaiso, Ind. 1080 WNXT Portsmouth, Ohio 1260	WPLM Plymouth, Mass. 1390 WPLO Atlanta, Ga. 590 WPLW Carnegie, PA 1590
WLRV Lebanon, VA WLS Chicago, III.	1380 1380 890	Ohio WMPP Chicago Heights, III. WMPS Memphls, Tenn, WMPT S. Williamsport, P/ WMPX Midland, MI WMQM Memphis, Tenn, WMRB Greenville, S.C. WMRC Milford, Mass. WMRF Lewistown, Pa. WMRN Marion, Ohio WMRO Aurora, III.	680 1450 1490	WNVY Pensacola, Fla. 1230 WNWI Valparaiso, Ind. 1080 WNXT Portsmouth. Ohio 1260 WNYC New York, N.Y. 830 WNYG Babylon, NY 1440 WNYN Canton, O. 900 WNYR Rochester, N.Y. 680 WOAI San Antonio, Tex. 1200 WOAP Owsso, Mich. 1080 WOAP Ows Hill, W.Ya. 660 WOBL Oberlin, O. 1570 WOBR Wanchese N.C. 1530	WPLY Plymouth, Wis. 1420 WPMB Vandalla, III. 1500
WLSB Copper Hill, Tenn. WLSC Loris, S.C. WLSD Big Stone Gap. Va.	1400 1570 1220	WMQM Memphis, Tenn. WMRB Greenville, S.C. WMRC Milford, Mass.	1480 1490 1490	WNYR Rochester, N.Y. 680 WOAI San Antonio, Tex. 1200 WOAP Owosso, Mich. 1080	WPMH Portsmouth, VA 1010 WPMP Pascagoula, Miss. 1580 WPNC Plymouth, N.C. 1470
WLSE Wallace, N.C. WLSH Lansford, Pa. WLSI Pikeville, Kv.	1400 1410 900	WMRE Monroe, Ga. WMRF Lewistown, Pa. WMRN Marion, Ohio	1490 1490 1490	WOAY Oak Hill, W.Va. 860 WOBL Oberlin, O. 1570 WOBR Wanchese, N.C. 1530	WPNF Brevard, N.C. 1240 WPNH Plymouth, N. H. 1300 WPNO Auburn, Me. 1530
WLSM Louisville, Miss. WLSQ Montgomery, AL WLSV Wellsville, N.Y.	950 790	WMRO Aurora, III. WMSA Massena, N.Y. WMSG Oakland, Md. WMSK Morganfield, Ky.	1280 1340 1050	WOBS New Albany, IN 1570	WPME Punxsutawney, Pa. 1540 WPMH Portsmouth, VA 1010 WPMP Pascagoula, Miss. 1580 WPNC Plymouth, N.C. 1240 WPNF Brevard, N.C. 1240 WPN H Plymouth. N. H. 1300 WPNO Auburn. Me. 1530 WPNX Phenix City, AL 1460 WPNX Columbus, GA 1460 WPOK Pontiac, III, 1080 WPOM Riviera Beach, FL 1600 WPON Pontiac, Mich. 1460
WLQB Filnt, MI WLQH Chleffand, Fla. WLRC Whitehall, Mich. WLRO Lorain, Ohlo WLRV Lebanon, VA WLS Chicago, III. WLSB Copper Hill, Tenn. WLSC Loris, S.C. WLSD Big Stone Gap, Va. WLSE Wallace. N.C. WLSH Lansford, Pa. WLSI Pikeville. Ky. WLSM Louisville, Miss. WLSQ Montgomery, AL WLSV Wellsville, N.Y. WLTC Gastonia, N.C. WLTD Evanston, IL WLTH Gary, Ind.	1370 1590 1370	WMSK Morganfield, Ky. WMSL Decatur, AL WMSO Collierville TN	1550 1400 1590	WOBT Rhinelander, Wis. 1240 WOCD Davenport, Iowa 1420 WOCB W. Yarmouth, Mass. 1240 WOCH North Vernon, Ind. 1460 WOCN Miami, Fla. 1450 WOCD Conto. Wis. 1280 WOOD Bassett, Va. 230 WOFE Rockwood, Tenn. 580 WOGA Sylvester, Ga. 1540 WOHI E. Liverpool, Ohlo 1490 WOHN Herndon, Va. 1440 WOHO Toledo, Ohlo 1470 WOHS Shelby, N.C. 730 WOI Ames, Iowa 640 WOIC Columbia, S.C. 1320	WPOM Riviera Beach, FL 1600 WPON Pontiac, Mich. 1460 WPOP Hartford, Conn. 1410
WLTD Evanston, IL WLTH Gary, Ind. WLTN Littleton, N. H. WLUV Loves Park, Iil. WLUX Baton Rouge, La. WLUZ Bayamon, P. R. WLVA Lynchburg, Va. WLVC Ft. Kent, ME WLVL Lockport, NY WLVN Luverne, Ala. WLW Cinelnnati, Ohlo WLWL Rockingham, N.C.	1400 1520 1550	WMSK Morganneld, Ky. WMSL Decatur, AL WMSO Collierville TN WMSR Manchester. Tenn. WMST Mt. Sterling, Ky. WMT Cedar Rapids, lowa WMTA Central City, Ky. WMTC Vancleve, Ky. WMTD Hinton, W. Va. WMTE Manistee, Mich. WMTL Leitchfield, Ky. WMTM Moultrie, Ga.	1320 1150 600	WOCO Oconto, Wis. 1260 WODI Brookneal, Va. 1230 WODY Bassett, Va. 900	WPON Pontiae. Mich. 1460 WPOP Hartford. Conn. 1400 WPOR Portland. Maine WPOR New York, N.Y. 1330 WPPA Pottsville. Pa. 1360
WLUZ Bayamon, P. R. WLVA Lynchburg, Va.	1600 590 1340	WMTA Central City, Ky. WMTC Vancieve, Ky. WMTD Hinton, W. Va.	1380 730 1380	WOFE Rockwood, Tenn. 580 WOGA Sylvester, Ga. 1540 WOHI E. Liverpool, Ohlo 1490	
WLVL Lockport, NY WLVN Luverne, Ala.	1340 1080 700	WMTE Manistee, Mich. WMTL Leitchfield, Ky. WMTM Moultrie, Ga.	1340 1580 1300	WOHN Herndon, Va. 1440 WOHO Toledo, Ohio 1470 WOHS Shelby, N.C. 730	WPPI Carrollton, GA 1330 WPRA Mayaguez, P.R. 990 WPRC Lincoln, IL 1370 WPRE Prairle Du Chlen, WIs. 980
WLWL Rockingham, N.C, WLWO (V.O.A.) Marathon, Fla. WLYC Williamsport. Pa.	1500	WMTN Morristown, Tenn. WMTR Morristown, N.J.	1300 1250 810	WOI Ames, Iowa 640 WOIC Columbia, S.C. 1320 WOIO Canton, O. 1060	WPRN Butter AL 1240
WLYC Williamsport. Pa. WLYV Ft. Wayne, Ind.	1050	WMTY Greenwood SC WMUS Muskegon, Mich.	1090 1098 1260	WOKA Douglas, Ga. 1310	WPRP Ponce, P.R. 910 WPRS Paris, III. 1440 WPRT Prestonsburg, Ky. 980 WPRW Manassas, Va. 1460
WLYV Ft. Wayne, Ind. WMAC Netter, Ga. WMAF Madison FL WMAG Forest. MI	1360 1230 860	WMTS Muriressboro, Tenn. WMTY Greenwood SC WMUS Muskegon, Mich. WMUU Greenville, S.C. WMVA Martinsville, Va. WMVB Millville, N.J. WMVG Milledgeville, Ga. WMVI Mechanieville, N.Y. WMVO MT Værnon Ohlo	1450	WOKC Okeechobee, Fla. 1570 WOKE Charleston, S.C. 1340 WOKI Oak Ridge TN 1550	WPRY Perry, FL 1400
WMAG Forest, MI WMAJ State College, Pa. WMAK Nashville, Tenn. WMAL Washingten, D.C. WMAM Marinette, Wis. WMAN Mansfield, Ohio WMAP Monroe, N.C. WMAQ Chleago, III. WMAS Springfield, Mass. WMAX Grand Rapids, Mich. WMAY Springfield, Mich. WMAY Springfield, Mich. WMAY Springfield, Mich. WMAZ Macon, Ga. WMBA Ambridge, Pa. WMBC Columbus, Miss. WMBD Peorla, III.	1450 1300 630	WMVI Mechanieville, N.Y. WMVI Mt. Vernon. Ohlo	1450 1170 1300	WORD Witter Garden, Fla. 15000 WORC Okeechobee, Fla. 1570 WORE Charleston, S.C. 1340 WORL Oak Ridge TN 1550 WORL Jackson. Miss. 1550 WORK Meridian, MS 910 WORL Eau Claire. Wis. 1050 WORD Albany, N.Y. 1460	WPSL Monroeville, Pa. 1510 WPTB Statesboro, GA 850 WPTF Raleigh, N.C. 680 WPTC Canton, N.C. 920 WPTN Cookeville, Tenn. 1550 WPTR Albany, N.Y. 1540 WPTW Piqua, Ohlo 1570 WPTX Lexington Pk., Md, 920 WPUB Camden, S.C. 1130 WPUL Bartow, Fla 1130
WMAN Marinette, Wis. WMAN Mansfield, Ohio WMAP Monroe, N.C.	570 1400 1060	WMVO Mt. Vernon. Ohlo WMVR Sidney. Ohio WMYB Myrtle Beach. S.C. WMYN Mayodan, N.C.	1080 1450 1420	WOKO Albany, N.Y. 1460 WOKS Columbia, Ga. 1340 WOKW Brockton, Mass. 1410	WPTR Albany, N.Y. 1540 WPTW Piqua, Ohlo 1570 WPTX Lexington Pk., Md. 920
WMAQ Chicago, III. WMAS Springfield, Mass. WMAX Grand Rapids, Mich.	070 1450 1480	WMYR Ft. Myers, Fla.	1410 1450 640	WOKY Milwaukee, Wis, 920 WOKZ Alton, III. 1570 WOL Washington, D.C. 1450	WPUB Camden, S.C. 1130 WPUL Bartow, Fla. 1130 WPUP Bay St. Louis MS 1190
WMAY Springfield, III. WMAZ Macon, Ga. WMBA Ambridge, Pa.	970 940 1460	WNAD Norman, Okla. WNAE Warren, Pa. WNAG Grenada, Miss. WNAH Nashville, Tenn. WNAK Nantieoke, Pa.	1310 1400 1360	WOLD Marlon, Va. 1330 WOLF Syracuse, N.Y. 1490 WOLS Florence, S. C. 1230	WPUT Brewster, N.Y. 1510 WPUV Pulaski, Va. 1580 WPVA Colonial Hights. Va. 1290
WMBC Columbus, Miss. WMBD Peorla, III. WMBH Joplin, Mo.	1400 1470 1450	WNAK Nanticoke, Pa. WNAM Neenah, Wis. WNAR Norristown, Pa. WNAT Natchez, Miss.	730 1280 1110	WOKO Albany, N.Y. 1460 WOKS Columbla, Ga. 1340 WOKW Brockton, Mass. 1410 WOKY Milwaukee, Wis. 920 WOKZ Alton, III. 1570 WOLD Marlon, Va. 1330 WOLF Syracuse, N.Y. 1490 WOLS Florence, S. C. 1230 WOMP Bellaire, Ohlo 1290 WOMP Bellaire, Ohlo 1290 WOMP Manitowoe, Wis. 1570 WOND Pleasanty Ville N.J. 1490	WPXC Prattville At. 1410
WMBD Peorla, III. WMBH Joplin, Mo. WMBH Ghleago, III. WMBL Morehead City, N.C. WMBM Mlami Beach, Fla.	740 1490	WNAU New Albany, Miss. WNAV Annapolis, Md.	1470 1430	WONA Winona, Miss. 1570 WOND Pleasantville, N.J. 1400 WONE Dayton, O. 980	WPXE Starke, Fla. 1490 WPXY Greenville, N. C. 1550 WPYB Benson, N.C. 1130

Call Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
WQAM Miami, Fla. 560 WOBA Miami, Fla. 1140 WQBC Vicksburg, Miss. 1420	WRR Dallas, Tex. 1310 WRRA Fredericksted, VI 1290	WSOO Sit. Ste. Marle, Mich. 1230 WSOQ No. Syracuse, N.Y. 1220	WTQX Selma AL 1570 WTRA Latrobe, Pa. 1480 WTRB Ripley, Tenn. 1570
WOBS San Juan, P.R. 630	WRRL Rainelle, WV H30 WRRR Rockford, 111. 1330 WRRZ Clinton, N.C. 880 WRSC State College, Pa. 1390	WSOY Decatur, III. 1340 WSPA Spartanburg, S.C. 950 WSPB Sarasota, Fla. 1450	WIRL EIKNATT, TRU. 1340
WOOK Warner Robins, GA 1600 WQDE Albany GA 1250	WRSC State College, Pa. 1390 WRSJ Bayamon, P. R. 1560 WRSL Stanford, Ky. 1520	WSPD Toledo, Ohlo 1370 WSPF Hickory, N.C. 1000 WSPR Springfield, Mass. 1270	WTRE Greensburg, Ind. 1330 WTRI Brunswick, Md. 1520 WTRL Bradenton, Fla. 1490 WTRN Tyrone, PA 1340
WQDI Homestead, FL 1430 WQDY Calais, Maine 1230	WRSW Warsaw IN 1480 WRTA Altoona, Pa. 1240 WRTH Wood River, III. 590	WSRC Durham, N.C. 1410 WSRF Fort Lauderdale, FL 1580	WTRO Dyersburg, Tenn. 1330 WTRP LaGrange, Ga. 620
WQIC Meridian, MS 1450 WQII San Juan, P.R. 1140 WQIN Lykens, PA 1290	WRTL Rantoul, 111. 1460 WRUF Gainesville, Fla. 850	WSRG Elkton, KY 1070 WSRO Marlboro, MA 1470 WSRW Hillsboro, Ohlo 1590	WTRQ Warsaw, N.C. 1560 WTRR Sanford, Fla. 1400 WTRS Dunnellon, Fla. 920
WQIO Canton, OH 1060 WQIQ Chester, PA 1590 WQIZ St. George, S.C. 810	WRUM Rumtord, Maine 790 WRUN Utica, N.Y. 1150 WRUS Russellville, Ky. 610	WSSA College Park. Ga. 1570 WSSC Sumter, S.C. 1340 WSSO Starkville, Miss. 1230	WTRU Muskegon, Mlch. 1600 WTRX Flint, Mlch. 1330 WTRY Troy, N.Y. 980
WQKI St. Matthews, SC 710 WQMA Marks, Miss. 1520	WRVA Richmond, Va. 1140 WRVK Mt. Vernon, Ky. 1460 Wr.XB St. Peterside Beach,	WSST Largo, Fia. 800 WSSV Petersburg, Va. 1240 WSTC Stamford, Conn. 1400 WSTH Taylorsville, N.C. 880	WTRX Flint, Mich. 1330 WTRY Troy, N.Y. 980 WTSA Brattleboro, Vt. 1450 WTSB Lumberton, N.C. 1340 WISL Hanover, N.H. 1400
WQPD Lakeland FL 1430 WQPM Princeton, MN 1300	FL 1590 WRWD Augusta, Ga. 1480 WRWH Cleveland, Ga. 1380	WSTH Taylorsville, N.C. 880 WSTK Woodstock, Va. 1230	WTSO Madison, Wis. 1070
WQQT Savannah GA 1450 WQQW Waterbury CN 1590 WQSA Sarasota FL 1220	WRXO Roxboro, N.C. 1430 WRYM New Britain, Conn. 840	WSTK Woodstock, Va. 1230 WSTL Eminence, Ky. 1600 WSTP Sallsbury, N.C. 1490 WSTR Sturgls, Mich, 1230 WSTU Stuart, Fla. 1450	WTSV Claremont, N.H. 1230 WTTB Vero Beach, Fia. 1490 WTTC Towanda, Pa. 1550
WQSN Charleston, S.C. 1450 WQTC Two Rivers, Wis. 1590 WQTK Parsippany, NJ 1310	WRYZ Jupiter, FL 1000 WSAC Fort Knox, Ky. 1470	WSTX Christlansted, V.I. 970	WTTF Tiffin, Ohio 1600 WTTI Dalton, Ga. 1530 WTTL Madisonville, Ky. 1310
WQTW Latrobe, Pa. 1570 WQUA Moline, III. 1230 WQWX Mebane NC 1060	WSAF Sarasota, Fla. 1220 WSAI Cinelnnatl, Ohio 1360 WSAJ Grove City, Pa. 1340 WSAL Logansport, Ind. 1230	WSUB Groton- New London CT 980 WSUH Oxford, Miss. 1420 WSUI lowa City, lowa 910	WTTM Trenton, N.J. 920 WTTN Watertown, Wis. 1580 WTTR Westminster, Md. 1470
WQXI Atlanta, Ga. 790 WQXL Columbia, S.C. 1470	WSAL Logansport, Ind. 1230 WSAM Saginaw, MI 1400 WSAN Allentown, Pa. 1470	WSUN St. Petersburg. Fig. 620	WTTR Westminster, Md. 1470 WTTS Bloomington, Ind. 1370 WTTT Amherst, Mass. 1430 WTTX Appomattox VA 1280
WQXR New York, N.Y. 1560 WQYK Tampa, Fia. 1110 WRAA Luray, Va. 1330	WSAD Senatohia Miss 1550	WSUZ Palatka, Fla. 800 WSVA Harrisonburg, Va. 550	WTUG Tusealoosa AL 790 WTUP Tupelo, MS 1490
WRAD Radford, Va. 1460 WRAG Carrollton AL 590	WSAU Wausau, Wis. 550	WSVM Valdese, N.C. 1490 WSVS Crewe, Va. 800	WTUX Wilmington, Del. 1290 WTVB Coldwater, Mich. 1590
WRAI San Juan, P.R. 1520 WRAJ Anna, III. 1440 WRAK Williamsport, PA 1400	WSBA York, Pa. 910 WSBB New Smyrna Beach.		WTVR Richmond, Va. 1380
WRAM Monmouth, III. 1330 WRAN Dover, N.J. 1510 WRAP Norfolk, Va. 850	Fla. 1230 WSBC Chicago, III. 1240 WSBR Boca Raton, Fla. 740 WSBS Gt. Barrington, Mass. 260	WSYB Rutland, Vt. 1380 WSYD Mt. Airy, N.C. 1300 WSYL Sylvania, Ga. 1490	WTWA Thomson, Ga, 1240 WTWB Auburndale, Fla. 1570 WTWN St. Johnsbury, Va. 1340
WRAR Tappahannock, Va. 1000	WSBS Gt. Barrington, Mass. 260 WSBT South Bend, Ind. 960 WSBP Chattahoochee, Fla. 1580	WSYR Syracuse, N.Y. 570 WTAB Tabor City, N.C. 1370 WTAC Filnt, Mich. 600	WTYC Rock Hill, S.C. 1150 WTYL Tylertown, Miss. 1290
WRAW Reading, Pa. 1340 WRAY Princeton, Ind, 1250 WRBC Jackson, Miss. 1300 WRBD Pompano Beach, Fla. 1470	WSCM Panama City Beach, Fla. 1290 WSCP Sandy Creek-Pulaski,	WTAD Quincy, III. 930 WTAE Pittsburgh, Pa. 1250	WTYS Marianna, Fla. 1340 WTZE Tazewell, Va. 1470 WUAT Pikeville TN 1110
WRBE Lucedale MS 1440 WRBJ St. Johns, Mich. 1580 WRBX Chapel HIII NC 1530 WRC Washington, D.C. 980	NY 1070 WSCR Scranton, Pa. 1320 WSCV Peterborough, N.H. 1050	WTAI Eau Gallie, Fla. 1560 WTAL Tallahassee, Fla. 1450	WUSE Cincinnati, O. 1230 WUCR Sparta, TN 860
WRC Washington. D.C. 980 WRCD Dalton, Ga. 1430 WRCN Riverhead, NY 1570	WSCW South Charleston, WV 1410 WSDC Hartsville SC 1490	WTAQ LaGrange, 111. 1300 WTAR Norfolk, Va. 790	WUFF Eastman, Ga. 710 WUFO Amherst. N.Y. 1080
WRCO Richland Center, WI 1450 WRCP Philadelphia, Pa. 1540	WSDL Sidell LA 1560 WSDR Sterling, III. 1240 WSDS Ypsilanti, Mich. 1480 WSEB Sebring, Fla. 1340	WTAY Robinson, III. 1570	WULA Eufula AL 1240 WULF Alma, GA 1400 WUMU Gainesville, Fla. 1390
WRCQ New Britain, CT 910 WRCS Ahoskle, N.C. 970 WRDB Reedsburg, WI 1400 WRDI Hammonton NJ 1580	WSEL Pontotoc, Miss. 1440 WSEM Donalsonville, Ga. 1500	WTBC Tuscatoosa AL 1230 WTBF Troy AL 970	WUNA Aquadilla, P. R. 1340 WUNI Mobile AL 1410 WUNN Mason, Mich. 1110
WRDN Durand, Wis. 1430 WRDO Augusta, Maine 1400	WSEN Baldwinsville, N.Y. 1050 WSER Elkton, Md. 1550 WSEV Sevierville, Tenn. 930	WTBJ Monticello, FL 1090 WTBO Cumberland, Md, 1450 WTBP Parsons, Tenn. 1550 WTBQ Warwick NY 1110	WUNO Rio Piedras, P.R. 1320 WUNR Brookline, Mass. 1600 WUPE Pittsfield, MA 1110
WRDW Augusta, GA 1480 WREB Holyoke. Mass. 930 WREC Memphis, TN 600	WSEW Sellnsgrove, PA 1240 WSFB Quitman, Ga. 1490 WSFC Somerset, Ky. 1240	WTCA Plymouth, Ind. 1050 WTCB Flomaton AL 990 WTCH Shawano, Wis. 960	WUPY Ishpeming MI 970
WRED Monroe, GA 1490 WREL Lexington, Va. 1450 WREM Jenkins. Ky. 1000	WSFD Seaford, DE 1280 WSFR Sanford, Fla. 1300	WTCJ Tell City, Ind. 123° WTCL Warren, Ohio 1570	WURL Winston-Salem, NC 1500 WUSS Atlantic City, NJ 1490 WUST Washington DC 1120
WREN Topeka, KS 1250 WREO Ashtabula, Ohlo 970 WREV Reidsville, N.C. 1220	WSFT Thomaston, Ga. 1220 WSFW Seneca Falls, N.Y. 1110 WSGA Savannah, Ga. 1400 WSGB Sutton, W.Va. 1490	WTCO Campbellsville, Ky. 1450 WTCR Ashland, Ky. 1420	WVAK Paoli, IN 1560 WVAK Pauk Rapids, Minn, 800
WREY New Albany, Ind. 1290 WRFC Athens, Ga. 960 WRFD Worthington, Ohlo 880	WSGC Elberton, GA 1400 WSGN Birmingham AL 610	WTCW Whitesburg, Ky. 920 WTEL Philadelphia Pa 860	WVAM Altoona, Pa. 1430 WVAP Burnettown, S.C. 1510 WVAR Richwood, W.Va, 600
WRFS Alexander City, Ala. 1050 WRGA Rome, Ga. 1470	WSGO Oswego, N.Y. 1440 WSGW Saginaw, Mich. 790 WSHB Raeford, N.C. 1400	WTGA Thomaston, Ga. 1590 WTGC Lewispurg, PA 1010	WVBS Burgaw NC 1470 WVCB Shallotte, N.C. 1410 WVCF Windermere, Fia. 1480
WRGC Sylva. NC 680 WRGI Marco Island FL 1510 WRGM Richmond, Va. 1540	WSHN Fremont, Mich. 1550 WSHO New Orleans, La. 800	WTGR Myrtle Beach, S.C. 1520 WTHB Augusta, Ga. 1550	WVCG Corat Gabtes, Fla. 1080 WVCH Chester, Pa. 740 WVEC Hampton, Va. 1490
WRGS Rogersville, Tenn. 1370 WRHC Coral Gables, FL 1550 WRHI Rock Hill, S.C. 1340	WSHP Shippenburg, Pa. 1480 WSHY Shelbyville, III. 1560	WTHE Mineola, N.Y. 1520 WTHI Terre Haute, Ind. 1480	WVFC McConnellsburg, PA 1530 WVFR Ridgefield, CT 850
WRHL Rochelle, III. 1060 WRIB Providence, R.I. 1220 WRIC Richlands, Va. 540	WSIC Statesville, N.C. 1400 WSID Battimore, Md. 1010 WSIG Mount Jackson, Va. 790 WSIP Paintsville, Ky. 1490 WSIR Winter Haven, Fla. 1490 WSIV Pekln, Ill. 1140 WSIX Nashville, Tenn. 980 WSIZ Ocilla, Ga. 1380 WSJC Mapee, Miss. 810 WSJR Modawaska, Me. 1230 WSJR Modawaska, Me. 1230 WSJR Winston-Salem, N.C. 600	WTHO Thomson, GA 1530 WTHU Thurmont, Md. 1450 WTIC Hartford, Conn. 1080 WTIC Hartford, Conn. 1270 WTID Newport News, Va. 1270 WTIF Tifton, Ga. 1340 WTIG Massillon, Ohio 990 WTIC Desbray	WVIN Bath, NY 1380
WRIE Erie, Pa. 1330 WRIG Wausau, Wis. 1400 WRIM Pahokee, Fla. 1250	WSIR Winter Haven, Fla. 1490 WSIV Pekin, III. 1140 WSIX Nashville, Tenn. 980	WTID Newport News, Va. 1270 WTIF Tifton, Ga. 1340	WVJP Caguas, P.R. III0
	WSIZ Ocilia, Ga. 1380 WSIC Magee, Miss. 810	WTIL Mayaguez, P.R. 1300	WVKO Columbus, Onto 1580 WVKY Louissa, Ky. 1270
WRIT Milwaukee, Wis. 1340 WRIV Riverhead, N.Y. 1390 WRIC Maunston Wis. 1270	WSJM St. Joseph, Mich. 1400 WSJR Modawaska, Me. 1230 WSJS Winston-Salem, N.C. 600	WTIM Taylorville, III. 1410 WTIP Charleston, W.Va. 1240 WTIQ Manistique, Mich. 1490	WYLD Valdosta, Ga. 1450 WYLD Valdosta, Ga. 1450 WYLK Lexington, Ky. 590 WYLN Olney, III. 740 WYLY Lebanon, PA 940 WYLY Water Valley, Miss. 1320
WRIP Rossville, Ga., 980 WRIS Roanoke, Va., 1410 WRIV Riverhead, N.Y., 1390 WRIV Riverhead, N.Y., 1390 WRIV Racine, Wis., 1400 WRIM Racine, Wis., 1400 WRIM Picayune, Miss., 1320 WRIZ Knoxville, TN, 620 WRIZ Knoxville, TN, 620	WSJW Woodruff, S.C. 1510 WSKE Everett, Pa. 1050 WSKI Montpeller-Barre, Vt. 1240	WTIQ Manistique, MIch. 1490 WTIV Titusville, Pa. 1230 WTIX New Orleans, La. 690 WTJH East Point, Ga. 1260	WVLV Lebanon, PA 940 WVLY Water Valley, Miss. 1320 WVMG Cochran, Ga. 1440
WPKD Rockland Maine 1450	WSJR Modawaska, Me. 1230 WSJS Winston-Salem, N.C. 600 WSJW Woodruff, S.C. 1510 WSKE Everett, Pa. J050 WSKI Montpelier-Barre, Vt. 1240 WSKT Knoxville, Tenn. 1580 WSKY Asheville, N.C. 1230 WSKY Asheville, N.C. 1230	WTJS Jackson, Tenn. 1380 WTJS Jackson, Tenn. 1380 WTKM Hartford, Wis. 1540 WTKO Ithaca, N.Y. 1470 WTKY Tompkinsville, Ky. 1370 WTLK Taylorsville, N.C. 1570 WTLN Annaka Fis. 1520	W V L Y water valley, miss. 1320 W V MG Cohran, Ga. 1440 W V MI Billoxi. Miss. 570 W V MT Burlington. V t. 620 W V NA Tuscumbla. A L 1590 W V N H Salem. N H 1110 W V N J Newark, N J. 620 W V O Bed Alt Md 1520
WRKL New City, N. Y. 910 WRKM Carthage, Tenn. 1350 WRKN Brandon, Miss. 910 WRKO Boston, Mass. 880	WSLY ASHEVILE, N.Y. 1400 WSLB Ogdensburg, N.Y. 1400 WSLC Roanoke VA 610 WSLG Gonzales, LA 1090 WSLI Jackson, Miss. 930 WSLM Salem, Ind. 1220 WSLM Salem, Ind. 1220 WSLM Salem, Ind. 1250	WTKY Tompkinsville, Ky. 1370 WTLB Utica, N.Y. 1310 WTLK Taylorsville, N.C. 1570	WVNH Salem, NH 1110 WVNJ Newark, N.J. 620
WRKT Cocoa Beach, Fla. 1300	WSLI Jackson, Miss. 930 WSMA Marine City Mich. 1590 WSLM Salem, Ind. 1220	WTLN Apopka, Fla. 1520 WTLO Somerset, Ky. 1480 WTLS Tallassee AL 1300	WVOE Chadburn. N.C. 1590 WVOG New Orleans, La. 600
WRKV Rockville, Conn. 800 WRLD Lanett AL 1490 WRMF Titusville, FL 1060 WRMG Red Bay AL 1430	WSLT Ocean City-Somers	WTMA Charleston, S.C. 1250 WTMB Tomah WI 1460 WTMC Ocala, Fia. 1290	WVOH Hazelhurst, Ga. 920 WVOJ Jacksonville, Fla. 1320 WVOK BirmIngham AL 690
WRMN Flain. III 1410	WSLW White Sulphur	WTNE Trenton, TN 1500 WTMJ Milwaukee, Wls. 620	WVOL Berry Hill, Tenn. 1470 WVOM luka, MS 1270
WRMS Beardstown, III. 790 WRMT Rocky Mount, N.C. 1490 WRNB New Bern, N.C. 1490	Springs, WV 1310 WSM Nashville, Tenn. 650 WSMA Marine City, Mich. 1590	WTMP Tampa, Fla. 1150 WTMR Camden, N.J. 800 WTMT Louisville, Ky. 620	WVON Chicago, 1L 1390 WVOP Vidalia, Ga. 970 WVOS Liberty, N.Y. 1240
WRNC Raleigh, N.C. 1240 WRNG N. Atlanta, Ga. 680 WRNJ Hackettstown, NJ 1000 WRNL Richmond, Va. 910	WSMB New Orleans, La. 1350 WSMD La Plata, Md, 1560 WSME Sanford, Maine 1220	WTNC Thomasville, N.C. 790 WTND Orangeburg, S.C. 920 WTNJ Trenton NJ 1300	WVOL Berry Hill, Tenn. 1470 WVOM luka, MS WVON Chicago, 1L 1390 WVOP Vidalla, Ga. 970 WVOS Liberty, N.Y. 1240 WVOT Wilsca, N.C. 1420 WVOY Huntsville AL 1000 WVOW Logan, W.Va. 1290 WVOX New Rochelle, N. 1460 WVOY Charlesvolx, MI 1270 WVOZ Carolina, P. R. 1400
WRNL Richmond, Va. 910 WRNN Clare, M1 990 WRNR Martinsburg, WV 740	WSMG Greeneville, Tenn. 1450 WSMI Litchfield, III. 1540 WSML Graham, N.C. 1190	WTLK Taylorsville, N.C. 1570 WTLN Apopka, Fla. 1520 WTLO Somerset, Ky. 1480 WTLS Tallassee AL 1300 WTMA Charleston, S.C. 1250 WTMB Tomah W1 1480 WTMC Coala, Fla. 1290 WTNE Trenton, TN 1500 WTMJ Milwaukee, Wls. 620 WTMP Tampa, Fla. 1150 WTMP Tampa, Fla. 1150 WTMR Camden, N.J. 800 WTMT Coulsville, Ky. 620 WTMT Louisville, Ky. 620 WTND Orangeburg, S.C. 920 WTNJ Trenton N.J 1300 WTNK Meridian MS 1390 WTNL Reidsville, GA 1390 WTNL Reidsville, GA 1390 WTNL Reidsville, GA 1390 WTNN Millington, TN 1380 WTNN Millington, TN 1380 WTNN Millington, TN 1380 WTNN Millington, TN 1500	WVOX New Rochello, N.Y. 1460 WVOY Charlesvolx, MI 1270 WVOZ Carolina, P.R. 1400
WRNB New Bern, N.C. 1490 WRNC Raleigh, N.C. 1240 WRNG N. Atlanta, Ga. 680 WRNJ Hackettstown, NJ 1000 WRNL Richmond, Va. 910 WRNN Clare, M1 990 WRNR Martinsburg, WY 740 WRNY Rome, N.Y. 1350 WROA Gulfport-Biloxi, MS 1390 WROB West Point, MS 1450 WROC Rochester, N.Y. 1280 WROB CROChester, N.Y. 1280 WROK Roekford, Ill. 1440 WROK Roekford, Ill. 1440 WROM Rome, GA 710	Springs, WV S110		WVPO Stroudsburg, Pa. 840 WVRC Spencer, W. Va. 1400 WVSA Vernon Al. 1380
WROC Rochester, N.Y. 1280 WROD Daytona Beach, Fla. 1340 WROK Rockford, III. 1440	WSNE Cumming. Ga. 1170 WSNG Torrington, CT 610 WSNJ Bridgeton, N.J. 1240	WTOB Winston-Salem, N.C. 1380 WTOC Savannah, Ga. 1290	WVSM Rainsville A1 1500
WRON Ronceverte, WV 1400	WSNO Barre, Vt. 1450 WSNT Sandersville, Ga. 1490	WTOE Spruce Pine, N.C. 1470	WVVW Grafton, W.Va. 1260 WVVX Highland Park-
WROV Roanoke, Va. 1240 WROW Albany, N.Y. 590 WROY Carmi, III. 1460 WROZ Evansville, Ind. 1400 WRPL Charlotte, N.C. 1540	WCNV lacksonville E1 600	WTOP Washington, D.C. 1500	WVWI Charlotte Amaile, VI 1000 WWAB Lakeland, Fla. 1330 WWAM Cadillac, Mich. 1370
WROZ Evansville, Ind. 1400 WRPL Charlotte, N.C. 1540 WRPM Poplarville, Miss. 1530	WSOC Charlotte, N.C. 930 WSOK Savannah, Ga. 1230 WSOL Tampa, Fla. 1300 WSOM Salem, Ohlo 600 WSON Henderson, Ky. 660	WTPR Paris, Tenn. 710 WTOW Towson, Md. 1570	WWBC Cocoa, Fia. 1510
WRPM Poplarville, Miss. 1530	WSON Henderson, Ky. 660	WTOY Roanoke Va. 910	J WWBD Bamberg-Denmark,

COMPUTER NEW PRODUCTS

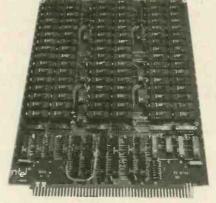
Here in one place Communications World presents information for you on the newest hobby computers and computer accessories.



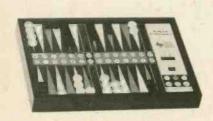
Automatic Floppy Disc Unit—Olivetti's Automatic Floppy Disc Unit is compartible with IBM3740 floppy discs. In addition to on-line uses, the unit is expected to serve the media conversion market. Data from various discette recording stations, for example, can be pooled on the Automatic Floppy Disc Unit and converted into magnetic tape media for input to a main frame. Any multiple station in-house processing operation, such as that indigenous to EDP service bureaus, will find this Olivetti device a useful solution to media conversion

problems, according to the manufacturer. The unit is made up of an automatic loader, dual read/write floppy disc unit (two interchangeable floppy disc drives with two read/write heads), and a power supply unit. It holds a maximum of 20 discettes, stacked one atop the other. The length of the automatic loading cycle (insertion of a discette and rejection of the discette previously processed) is about 5.5 seconds. A separate feed slot is available for changing discettes manually if desired. Prices start from \$4,560. Circle 52 on Reader Service Coupon for more information about this product or others from this company.

Static OEM Semiconductor Memory-This in-7000 Static Semiconductor Memory System by Intel Memory Systems offers OEMs design flexibility with a wide 16K to 256K word range of memory capacity and 6 to 96 bits word size. The system uses only a single +5V power supply, needs no refresh and comes as a basic card or in a chassis. The basic in-7000 card is available in four 16K configurations: 16K x 12, 20 or 24 bits. In each case the user may change the card to the corresponding 32K x 6, 8, 10 or 12 bits configuration merely by operating the byte control input line that is standard on the in-7000. The unit provides a flexible

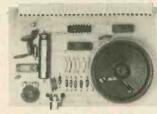


memory for many applications. Two in-7000 chassis models are available: an in-Minichassis has bullt-in power supply and blowers, and holds up to six fully populated cards or eight 16K x 16-bit cards; and in-Unichassis holds up to 33 fully populated cards, and external power supply and blowers are available. Price for the in-Minichassis is \$1,490. Circle 57 on Reader Service Coupon for more information about this or other Intel Memory units.



Computer Backgammon—Twenty million backgammon players in this country can now play the ancient game with a computer if mere human adversaries are not challenging enough. Texas Micro Games spent eight months developing and programming Computer Backgammon, a game featuring a solid state microcomputer system. In traditional backgammon, a player's moves are determined by the roll of dice. In

computer backgammon, moves are determined by the display of simulated dice readings on a digital display. The display is initiated by pushing one of six command keys used to control play. All moves, both those for the computer and for the human player, are initiated by depressing appropriate keys. Since the computer computes each move before making it, the game is both a teacher and competitor, say its developers. An experienced player will be fully challenged and a novice can learn from the computer. The retail price in areas is about \$200; slightly higher on both West and East coasts. Circle 50 on Reader Service Coupon for more information about this product and others by this company.



Newtech Music Board-Model 68 Music Board by Newtech Computer Systems is used to generate music, sound effects, rhythms and Morse code and for touchtone synthesis. It's designed to be compatible with Southwest Technical Products 68 computer, using one I/O slot. Model 68 consists of a digital-to-analog converter, audio amplifier, speaker, volume control and phono jack for convenient connection to an external speaker or home audio system. A complete Users Manual includes sound effect programs, test routines, and listings of a BASIC program for writing musical scores and a 68 Assembly language routine for playing them. An AC-3 compatible cassette, supplied with Model 68, contains programs from the Users Manual and software for pre-coded songs. The fully assembled and tested Music Board has "high quality" components on a glass epoxy printed circuit board. Comes with a 60-day parts and labor warranty at a retail price of \$59.95. Circle 54.



Semikit Memory Board-A 16KRA memory board selling for \$369 in semikit form is offered by Processor Technology. This new RAM board is the first in a series of memory modules provided in fully assembled and wave soldered form with pretested IC's. The semikits are intended to "bring an end to such common kitbuilding problems as bad solder joints, heat-damaged components and faulty integrated circuits. Full documentation is provided with step-by-step procedures for the user to test and burn in the boards. The 16KRA is also available fully assembled, tested and burned-in for \$399. Features of this first semikit include: a 16,-384 byte memory, invisible refresh and worst case access time of 400 nsec. Each 4096 word block is independently addressable for maximum system flexibility. Power is typically 5 watts, the same as for most single 4K memory modules. Backup power connection is built-in. For more information about this product, circle 48.



CBNEW PRODUCTS

Communications World looks at some of the newest CB transceivers, antennas and accessories for you to use in CB contacts this year!

Electret

Telex Communications has two new CB hand microphones incorporating an Electret element. Called the "ProCom I" and "ProCom II" in the Telex Professional Communications Series, the mikes are said to offer excellent sound quality, sensitivity, and immunity to RF interference. With the Electret design, voice pressure moves an electrically charged diaphragm which is positioned in front of a plate carrying an opposite charge.



The changing distance between the diaphragm and plate generates a corresponding voice signal. The ProCom I has a fixed level output and has a suggested retail price of \$19.95. The ProCom II is a power mike, equipped with a variable gain preamplifier. It sells for \$29.95. Both mikes have long-life universal 6 conductor cords. For more info, write to Telex Communications, 9600 Aldrich Avenue South, Minneapolis, MN 55420.

Tuneable CB Base Antenna

Anixter-Mark's new Mark AMB-2 Base Station Antenna is tuneable to reduce the effects of nearby objects and the detuning as height varies, but with no unsightly ground radials. The new AMB-2 is constructed of "four easy pieces" facilitating both a new ease of handling and shipping by UPS. The tuneable Mark AMB-2 also features the exclusive "Static Sheath" which eliminates precipitation static. improves signal-to-noise ratio, gives an operating system receiving gain of up to 20 dB, increases

56 ON READER SERVICE COUPON receiver sensitivity and measurably extends intelligible coverage. A reactive tuner eliminates the problem of raising and lowering base station antennas for best VSWR. Now you can install the Mark AMB-2 at any desired height, adjust the reactive tuner as needed and you are in match again. Sells for \$49.75. For further information, write to Anixter-Mark, 5439 West Fargo, Skokie, IL 60076.

Transformized Magnetic Mount

Metz has introduced a base-loaded 54-in. mobile whip antenna, called the Metz CB-40, with features that include a stainless steel tapered whip, a 1.5:1 SWR or less over 40 channels, plus magnetic mount with a 90 pound pull. A patented transformer, hermetically sealed in a heavy-walled stainless steel housing, is said to be the secret of the new unit's ability to deliver peak per-



formance and maximum range. All mating parts are silver plated for optimum conductivity. Each transformer is hand wound using 25 feet of wire, and tested to exacting tolerances. The unit comes equipped with 12 or 18 feet of low-loss RG158 MILSPEC coax and a PL-259 connector. Priced at \$59.95, the CB-40 Model is available from Metz Communication Corp., Laconia. NH 03246.

CB Noise Filter Kit

As with most noise problems, there are no guaranteed solutions, but MayCom claims increased effectiveness for their new noise filters. With commercial-grade components used throughout, the GW-20 filter kit consists of heavy-gauge, blue-jacketed coax, ground lugs, metal-can 0.5 MFD, 40A., 50 V capacitor with mounting bracket, quick-disconnect leads for the radio, in-line fuse



CIRCLE 75 ON READER SERVICE COUPON

block with 4 A. fuse for the battery lead, and a couple of splicers thrown in for good measure. As with other CB accessories from MayCom, the GW-20 filter kit comes shrink-packed for see-what-you-get display. The GW-20 retails at \$8.95. Get more facts by writing to MayCom Communications Products, 1134 W. John Beers Rd., Stevensville, MI 49127.

In-Dash CB AM-FM

The Aircommand CBR-40 mobile entertainment system combines a 40 channel CB with AM/FM stereo radio. The Aircommand CBR-40 is designed for in-dash mounting and is equipped with adjustable control shafts which permit installation in virtually any automobile. Convenient push-button tun-



ing allows AM or FM stations to be preset and phase lock loop circuitry insures the best possible reception. The CBR-40 features LED digital CB channel readout, and a CB/Radio monitor switch which allows CB override while listening to the AM/FM radio. In addition, a two color transmit and receive indicator light clearly verifies which mode is operating. Other features include an illuminated S/RF meter, FM local/distance selector switch, and a detachable dynamic microphone (CMP-22D). Sells for \$319.95. For more information, write to Superscope "Aircommand", 20520 Nordhoff St., Chatsworth, CA 91311.

Indoor DC Power

Bring a mobile CB rig into the house for base operation or testing, and trouble begins—you don't have a 13.7 VDC power outlet. Don't despair! Elenco Precision Model XP-50 Deluxe regulated, metered power supply delivers 13.7 VDC at 3A with overload protection. It'll drive your CB rig, tape



CIRCLE 81 ON READER SERVICE COUPON

player, AM/FM car radio or other mobile equipment. No loss of RF output due to dropping DC voltage. Output DC current protection minimizes surge current that may cause damage. Sells for \$35.95. Write to Elenco Electronics, Inc., Northbrook, IL 60062.

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WWBR WWCAB WWCCAB WWCCMWWCCMWWCCMWWCCMWWCCMWWCCMWWCCMWWC	Brockport, NY Windber, Pa. Vineland, N.J. Gary, Ind. Corry, PA. Clarion, Pa. Brazil. Ind. Waterbury, Conn. Washington, D.C. Hackensack, NJ. Murfreesboro, N. C. Memphis TN Medford MA. Clermont FL. Nashville, Tenn. Erie, Pa. Sanford, N.C. Memphis TN Medford MA. Sanford, N.C. Mew Orleans, La. Canton, N.C. New Orleans, La. Canton, N.C. New Orleans, La. Canton, N.C. Battle Creek, Mil. Brocksville, Fla. Duluth, Minn. Ocala, Fla. Fair Bluff, N.C. Battle Creek, Mil. Winchester, Ky. Lew Orleans, La. Cornwall, N.Y. Portage, Pa. Rochester, N. H. Beckley, W. Va. Statasboro, Ga. Watertown, N.Y.	790 1560 1380 1370 1370 1370 1370 1440 1240 1970 1430 1430 1430 1430 1430 1440 1450 1450 1450 1450 1450 1450 145	Call Location WWOD Lynenburg, Va. WWOK Miami. Fia. WWOL Buffalo, N.Y. WWON Woonsocket. R.I. WWOW Conneaut, Ohlo WWPA Williamsport. Pa. WWPP Palatka. Fia. WWQM Madison, WI. WWSR St. Albans, Vt. WWSF Loretto, Pa. WWSR St. Albans, Vt. WWSF St. Albans, Vt. WWST Wooster, Ohlo WSW Pittsburgh. Pa. WWTC Minneapolis, Minn. WWUN Jackson, Mias. WWVA Wheelina. W.Va. WWWB Jasper AL WWWB Jasper AL WWW By WWWB Jasper AL WWW Russeliville AL WWW Russeliville AL WWW Russeliville AL WWXL Manchester, Ky. WYAL Demopolis. AL WXCE Camery, WI WCCE Amery, WI WCCE Welch, WV WXEW Yabucoa, PR WXGI Richmond, VA. WXIT Charleston, W.Va. WXLU Decatur, GA WXLL Decatur, GA WXLK Pitchard, AL WXLL Big Delta, Alaska WXLW Midianapolis, Ind. WXLX Milledgeville, GA	kHz 1390 1280 1280 1280 1280 1340 1340 1350 1550 1480 1490 1400 1420 970 1280 1290 1490 1290 1490 1290 1490 1290 1490 1290 1490 1290 1490 1290 1490 1290 1490 1290 1310 1290 1490 1290 1310 1310 1290 1490 1490 1490 1590 1190 1190 1190 1190 1190 1190 11	Call Location WXOK Baton Rouge, La. WXOX Bay City, Mich. WXOR Florence AL. WXOR Florence AL. WXPE Eatonton, Ga. WXTN Lexington, Miss. WXRE Lancaster, N.Y. WXVA Charles Town, W.Va. WXVV Mentgomery, AL. WXVV Jeffersonville. Ind. WXXX Hattlesburg, Miss. WXQ Stevens Point, WI. WXYZ Detroit, Mich. WYAZ Scotland Neck, N.C. WYAM Bessemer AL. WYAY Azavo City, MS WYBG Massena, N.Y. WYCL York, S.C. WYDE Birmingham AL. WYDK Yadkinville. N.C. WYDE Birmingham AL. WYDK Yadkinville. N.C. WYDE Birmingham AL. WYDK Yadkinville. N.C. WYDE Wyoming MI. WYGR Wyoming MI. WYM WYAR Wells. River, VT. WYNA Raleigh, N. C. WYNA Baton Rouge, La. WYNN Baton Rouge, La. WYNN Selphon, Pa. WYNS Myrna, Ga. WYNS Soperton, GA.	Hz 1480 1250 1250 1250 1250 1250 1250 1250 125	WYER Mount Carmel, IL WYFA Patchogue, NY WYOU Tampa, Fla. 1550 WYPR Danville, Va. WYRE Annapolis, Md. WYRE Annapolis, Md. WYRE Annapolis, Md. WYRE Annapolis, Md. WYRE Lulsburg, N.C. WYRE Liverness, Fla. WYRU Red Springs, N.C. WYSE Linverness, Fla. WYSH Clinton, Tenn. WYSL Buffalo, N.Y. WYSH Clinton, Tenn. WYSL Buffalo, N.Y. WYSH Gilnton, Ga. WYSH Gilnton, Tenn. WYSR Franklin, Va. WYSH Gilnton, Tenn. WYSR Franklin, Va. WYTH Rocky Mount, Va. WYNY WYTH Rocky Mount, Va. WYNY WYNY Barbourville, Ky. WYNY Athems, Tenn. WYYZ Atlanta, Ga. WYAZA Pistol, Va. WZAP Bristol, Va. WZAP Bristol, Va. WZAP Lor, IL WZDS Ponce PR WZEP Cincinnati, Ohlo WZIX York, PA WZKY Albermarle, N.C. WZNG Winter Haven FL WZOB Fort Payne AL WZOB Asheboro, N.C. 710 WZYY Cowan, Tenn. WZYA Tuscumbia, AL WZZI Madisonville, TN WZZZ West Point, GA

WWNS Statesho	W.Va. 620 pro, Ga. 1240 pwn, N.Y. 780	WXLL Big Delta, Alaska 980 WXLW Indianapolls, Ind. 950 WXLX Milledgeville, GA 1060	WYNS Leighton, Pa. 1150 WYNX Smyrna, Ga. 1550 WYOK Soperton, GA 1000	WZYX Cowan. Tenn. 14 WZZA Tuscumbla. AL 14 WZZI Madisonville, TN 12 WZZZ West Point, GA 13
		J.S. FM STATIO	NS BY LOCATIO	N
Location	Call MHz	Location Call MHz	Location Call MHz	Location Call Mi
ALA	BAMA	Tuscumbla WVNA-FM 100.3 Tuscaloosa WUAL-FM 91.7 WUOA 95.7	KHDX 89.1 KVEE-FM 105.1 Crossett KAGH-FM 104.9	Buena Park KBPK 9 Camarillo KGAB 9 Carlshad KKOS 9
Abbeville Albertville	WXLE 94.3 WQSB 105.1	Tuskegee WACT-FM 105.5 WVNS 95.9	Dardanelle KWKK 102.3 DeWitt KDEW-FM 96.7	Carlsbad KK08 9 Carmel KLRB 10 Cathedral City KWYX-FM 9
Alexander City Andalusia	WRFS-FM 106.1 WQHQ 98.1	Union Springs WQSI 100.9 Wrangell KSTK 101.7	El Dorado KRIL 99.3 KEZU 103.1	Chieo KCBM 9
Anniston Arab	WHMA-FM 100.5 WCRQ-FM 92.7	York WSLY 99.3	Favetteville KKEG 92.1	Claremont KPAY-FM 9.
Athens	WATM-FM 104.1	ALASKA	KNWA 103.9	Coachella KVIM 9
Auburn	WFRI 97.7 WEGL 91.1	Ancherage KNIK-FM 105.5	Ft. Smith KISR 93.7	Cupertino KKUP 9
Ballinger	KCWB 103.1 WWSM 105.5	KKLV 103.9 KJZZ 102.1	KTCS-FM 99.9	Crescent City KVXJ 9
Bay Minette Birmingham	WAPI-FM 94.5	College KGOT 101.3 KUAC 104.7	Harrison KHOZ-FM 102.9	KYLO 10
	WQEZ 96.5	Juneau KTOO 104.3	Heber Springs KAWW-FM 96.7 Helena KCRI 103.1	Delano KDNO 9 Del Rey Oaks KPLN 10
	WDJC 93.7 WVOK 99.5	Kenal KQOK 101.1 Ketchikan KRBD 105.9	Hope KHPA 104.9 Hot Springs KBHS-FM 96.7	El Caion KECR 9
	WENN-FM 107.7 WKXX 106.9	Kodlak, KMXT 100.1 Nome KICY 100.3	Hot Springs KXOW-FM 106.3	El Centro KX0-FM 10 KEGH-FM 9
	WJLN-FM 104.7 WJSR 91.1	North Pole KJNP-FM 100.3 Petersburg KFSK 100.9	Jacksonville KGMR-FM 100.3 Jonesboro KBTM-FM 101.9	El Cerrito KECG 8 Escondido KOWN-FM 9
Brewton	WVSU-FM 91.1 WKNU 106.3		KASU 91.9 KFIN 107.9	Eureka KFMI 9
Carrollton Clanton	WAQT 94.1 WEZZ 97.7	ARIZONA	Kenai KQOK 100.1 Lake Village KLVA 95.9	Failbrook KAVO 10
Culiman	WFMH-FM 101.1 WKLN 92.1	Apache Junction KSTM 107.1 KSMR-FM 106.6	Little Rock KARN-FM 103.7 KLRE 90.8	KOHL 8
Decatur	WDRM 102.1 WBQM 91.7	Batesville KGED 88.1 Bullhead City KRHS 102.3	KLAZ 98.5 KEZQ 94.1	KKDJ 10
Demonalla	WRSA 96.9 WNAN 106.3	Bisbee KBAZ 92.1 Case Grande KBFE 105.5	Magnolla KFMV 107.9	KFCF 8
Demopolis Dothan	WOOF-FM 99.7 WTVY-FM 95.5	KAXR 86.5 Douglas KAPR-FM 95.3	Mammoth Spring KAMS 95.1	KKNU 10
Enterprise	WIRB-FM 96.9	Flagstaff KFLG 92.9 KCTB-FM 93.9	Mena KSKB 101.7 Monticello KHBM-FM 93.5 Mountain Home KTLO-FM 98.3	KPHD. 9
Eufala	WKMX 106.7 WULA-FM 92.7 WABF-FM 92.1	Glendale KXTC 92.3 Glove KIKO-FM 100.3	I Nashville KNAS.105.5	KVPR-FM 8
Fairhope Fayette	WHKW 98.1	Kingman KZZZ B2.7 Lake Havasu City KBAS 95.9	Newport KOKR 105.5 Nome KICY 100.3 Osceola KOSE-FM 98.1	Gilroy KFAT 9
Florence Gadsden	WQLT 107.3 WQEN 103.7 WEXP 91.5	Mesa KBUZ-FM 104.7	Paragould KHIG 104.9	Hanford KKYS 10
Geneva	WCEA.EM 035	KDKB-FM 93.3 KIOG 104.7	1 KOTN-FM 92.3	Hemet KHSJ-FM 10
Greensville Guntersville	WKXN 95.9 WTWX 95.9 WERH-FM 92.1	Nogales KAYN 98.3 Phoenix KRFM 95.5	Pochontas KPOC-FM 103.9 Rogers KAMO-FM 94.3	Hollister KHIP 9
Hamilton Huntsville	WANK 99.1	KMEO-FM 98.9 KOOL-FM 94.5	Salen KSAR 95.9 Searcy KSER 99.3	Inglewood KACE 10
	WLRH 89.3 WNDA 95.1	KMCR-FM 91.5 KNIX-FM 102.5	Siloam Springs KUOA-FM 105.7	Jackson KNGT 9 La Canada KUNF 8
Jackson	WOCG 90.1 WHOD-FM 104.9	KBBC 98.7 KHEP-FM 101.5	Texarkana KADO-FM 107.1 KOSY-FM 102.5	Lancaster KOTE 10 Livermore KKIQ 10
lacksonville lasper	WLJS-FM 91.9 WWWB-FM 102.5	Prescott KEZH 98.3 KNOT-FM 98.3	Walnut Ridge KCAC 106.3 Warren KWRF-FM 105.5	I todi KWIN 0
Mobile	WKRG-FM 99.9	Scottsdale KDOT-FM 100.7 Show Low KVWM-FM 93.5	Wynne KWYN-FM 92.7	I Lompoe KLPC·FM 9
	WBLX 92.9	Sierra Vista KTAZ-FM 100.9	CALIFORNIA	Long Beach KLON 8 KNOB 9 KPEN 9
	WKSJ-FM 94.9 WLPR 96.1	Sun City KWAO 106.3 Tempe KUPD-FM 97.9 Tsalle KNCC 91.9	Alameda KJAZ 92.7	KSUL 9
Monroeville	WMFC-FM 98.5 WFMI 98.9	Tucson KUAT-FM 90.5 KFMM 99.5	Angwin KEZY-FM 95.9 Angwin KANG 89.9	KPEN 9
Montgomery	WREZ 103.3	KAIR-FM 94.9	Apple Valley KAVR-FM 102.3 Areadia KMAX 107.1	KRCA III
	WKLH 92.3 WHHY-FM 101.9	KCEE-FM 96.1 KNIX-FM 102.5	Areata KXGO 93.8 KAHS 91.5	KFAC-FM 9
Musele Shoals Dreonta	WLAY-FM 105.5 WKLD 97.7	KRQQ 93.7 KWFM 92.9	Atascadero KHSU-FM 90.5	KGBS 9
)pp)zark	WAMI-FM 102.3 WOAB 104.9	Wilteox KWCX 98.3 Yuma KALJ 95.1	Auburn KHYL 101.1 Avalon KBIG-FM 104.3	KRTH 10 KJOI 9
rattville	WAYD-FM 103.9 WQIM 95.3	Klok 93.1	Bakersheld KLYD-FM 94.1	KIIS-FM 10 KMET 9
Phenix City Roanoke	WEIZ 100.1 WELR-FM 95.3	ARKANSAS	KBBY 107.9 KGFM 101.5 KHIS-FM 96.5	KNX-FM 9
Scottsboro	WCNA-FM 98.3 WTUN 100.1	Arkadelphla KSWH 91.1 KDEL-FM 100.9	KKXX 107.9 KZIN-FM 107.9	KPFK 9
Selma St. Gold	WALX 100.9 WRCK-FM 106.3	Ashdown KMLA 103.9	Barstow KWTC-FM 94.3	KLVE 10 KWST 10
Sheffield Stevenson	W VSV 101.7	Berryville KAAM 107.1	Berkeley KPFA 94.1 KALX 90.7	KXLU 8
Sylatauga Falledega	WMLS-FM 98.3 WHTB 92.7	Brinkley KBRI-FM 102.3	KPFB 89.3 KRE-FM 102.9	KBIG 10 KHOF 9
Thomasville. Troy	WIDB-FM 95.3 WRES 105.7	Brinkley KBRI-FM 102.3 Camden KWEH 97.1 Clarksville KLYR-FM 92.7 Conway KUCA 91.5	Big Bear Lake KTOT-FM 101.7 Bishop K10Q-FM 100.3 Biythe KYOR-FM 100.3	Los Banos KLBS-FM 9 Los Gatos KRVE 9 Madera KUUL 9

Location	Call MHz	Location Call MHz	Location Call MHz	Location Call MHz
Mammoth Lakes	KMMT 106.3 KNBS 90.3	Santa Rosa KZST 100.1 KBBF 89.1	WRTC-FM 89.3	WJHR 96.3
Manteca Mariposa Marysville	KUBB 96.3 KRFD 99.9	KVRE-FM 91.5 Seaside KZEN 107.1	WTIC-FM 96.5 Hartford-Meriden WKSS 95.7	WGOS-FM 93.9 WIGL 107.5 WDNA 88.9
Menducino Merced	KMFB-FM 92.7 KBDR 89.1	Sonora KROG 92.7 KTHO 103.1 Shafter KQEZ 97.7	Kent WKSB 90.9 Middletown WESU 88.1	WAIA 97.8 WLYF 101.5
Mission Vielo Modesto	KMYT 97.5 KSBR 88.5 KBEE-FM 103.3	South Lake Tahoe KRLT 100.1 Stanford KZSU 90.1	Monroe WMNR 88.1 New Britain WRCH-FM 100.5	WMCU 89.7 WMJX 96.3 WLRN-FM 91.3
	KBHI-FM 89.9 KHOP 104.1 KDHS 90.5	Stockton KUOP 91.3 KCJH 90.5 KJAX 99.3	New Britain WFCS 90.1 New Canaan WSLX 91.9 New Haven WPLR 99.1	Miami Beech WWWL 93.9 WOCN-FM 94.9
Mojave	KFIV-FM 102.3 KDOL-FM 97.7	KSJC-FM 89.5 KSTN-FM 107.3	New London WTYD 100.9	Milton WXBM-FM 102.3 Mt. Dora WORJ-FM 107.7
Monterey Monte Rio	KWAV KRJB 97.7	Susanville KSUE-FM 92.7 Thousand Oaks KNJO 92.7 Torrance KNHS 89.7	WCN1 91.5 Norwalk WNLK-FM 95.9 Norwich WCTY 97.7	Naples WCVU 94.5 Naples WNFM 94.5 Naples WNTU 92.1
Moraga Mountain View Mount Shasta	KSMC 89.5 KSFH 90.5 KEDY 95.3	Tracy KSRT 100.9 Travis AFB KVIK 91.5 Truckee KEZC 101.7	Stamford WSTC-FM 96.7 Storrs WHUS-FM 91.7	New Port Richey WGUL-FM 105.5
Newport Beach Northridge	KOCM 103.1 KCSN 88.5	Tutare KBOS 94.9 KJUG 106.7	Wallingford WWEB 89.9 Waterbury WWYZ 92.5 WIOF 104.1	Ocala WFUZ 93.7 WMFQ 92.7 Okeechobee WLMC 103.1
Oceanside . Ontarlo Ojal	KJFM 102.1 KSOM-FM 93.5 KOVA 105.5	Turlock KCSS 91.9 KBDG 90.9 KMIX 98.3	W. Hartford WWUH 91.3 West Haven WNHU 88.7 Westport WDJF 107.9	Orlando WDBO-FM 92.3 WDIZ 100.3 WGAG-FM 89.3
Oroville Oxnard	KFAM 97.7 KPMJ 104.7 KDAR 98.3	Twenty-Nine Palms KQYN 95.7	WWPT 90.3 WIllimantle WXLS 98.3	WHOO-FM 96.5 WKIS-FM 100,3
Pacific Grove	KOCN 104.9 KAZU 90.3	Vacaviile-Fairfield KUIC 95.3	DELAWARE	WBJW 105.1 WFTU-FM 89.9 Palatka WIYD-FM 99.9
Paim Springs Paradise	KDES-FM 104.7 KPSH-FM 88.3 KNVR 96.7	Ventura KBBY 95.1 KHAY 100.7 Visalia KONG-FM 92.9	Bethany Beach WWTR-FM 95.9 Dover WDSD 94.7	Palm Beach WJNO-FM 97.9 Panama City WPFM 107.9
Pasadena	KPCS 89.3 KROQFM 106.7 KPRA 94.3	Walnut Creek KDFM 92.1	Georgetown WSEA 93.5 Hockessin WZZE 88.7	WGNE-FM 98.5 WKGC-FM 90.7 WPAP-FM 92.5
Paso Robles Patterson Paso Robles	KOSO 93.1 KPRA 94.3	West Covina KBOB 98.3 W. Sacramento KWHS 91.7 Woodland KSFM 102.5	Newark WXDR 91.3 Milford WAFL 97.7 Rohoboth Beach WLRB 92.7	Pensacola WAJB 107.3 WMEZ 94.1
Pismo Beach Porterville Redding	KPGA 95.3 KiOO 99.7 KVIP-FM 98.1	Yuba City KHEX 103.9	Seaford WSUX-FM 98.3 Wilmington WMPH 91.7	WJIQ 100.7 WBOP-FM 101.5 WPCS 893
Redondo Beach Rediands	KKOP 93.5 KCAL-FM 98.7	COLORADO Alamosa KASF 90.9	WJBR 99.5 WSTW 93.7	Plantation Key WXOS 100.3 Pompano Beach WCKO 102.7
Ridgeerest	KUOR-FM 89.1 KLOA-FM 105.5 KZIQ-FM 92.7	Aspen KALQ-FM 93.5 KSPN 97.7	D. C.	Port Charlotte WEEJ 100.1 Port St. Joe WGCW 93.5 Punta Gorda WCCF-FM 92.7
Rio Vista Riverside	KRVH-FM 90.9 KBBL 99.1 KHNY-FM 92.7	Boulder KGNU 88.5 KBCO 97.3	Washington WASH 97.1 WAMU-FM 88.5 WETA-FM 90.9	Quincy WCNH-FM 101.7 Riviera Beach WGMW 94.3
	KDUO 97.5 KLLU 89.7	Brookfield WRKI 95.1 Canon City KSTX 103.9	WOOK 100.3 WGAY-FM 99.5 WGMS-FM 103.5	St. Petersburg WKES 101.5 WQYK-FM 99.5
Roseville Sacramento	KPIP 93.5 KCTC 96.1 KERS 90.7	Colorado Springs KRCC 91.5 KEPC 90.5	WGTB 90.1 WMAL-FM 107.3	Sarasota WWBA-FM 107.3 WQSR 102.5 WSPB-FM 106.3
2	KFBK-FM 92.5 KEBR 100.5 KEWT 105.1	KKFM 96.5 KSPZ 92.9 KPIK-FM 94 3	WMZQ 98.7 WKYS 93.9 WHUR 96.3	WKZM 105.5 Sebring WSKP-FM 105.5 Starke WPXE-FM 106.1
	KWOD 108.5 KROI 96.9	KRDO-FM 95.1 KINX 101.9 KRYT-FM 101.9	WPFW-FM 89.3	Stuart WMCF 92.7
	KXOA 107.9 KZAP 98.5 KWOD 106.5	Craig KRAI-FM 93.7 Denver KADX 105.1	FLORIDA Apopka WTLN-FM 95.3	WFSU-FM 91.5 WBQM-FM 98.9 WOMA 94.9
St. Helena Salinas	KVYN 99.3 KDON 102.5 KRAY·FM 103.9	KCFR 90.1 KIMN-FM 98.5 KLIR-FM 100.3	Arcadia WOKD-FM 98.3 Attantic Beach WJNJ-FM 104.9	WAMF 90.5 WOWD 101.9 WAMF 90.5
	KWYT-FM 100.7 KAUG 90.9	KLZ-FM 106.7 KHOW-FM 95.7 Denver KXKX 95.7	Belle Glade WSWN-FM 93.5 Boca Ratan WWOG 99.9 Boynton Beach WHRS 90.7	Tampa WJYW 100.7 WFLA-FM 93.3
Salinas- Monterey San Bernardino	KRSA-FM 100.7 KVCR 91.9	Denver KXKX 95.7 KOAQ 103.5 KOSI-FM 101.1 KBP1 105.9	Bradenton WRMB 88.7	WYNF 94.9 WEZX 104.7 WINO 88.5
San Clemente	KQLH 95.1 KQLH 95.1 KAPX 107.9	KVOD 99.5 KAZY 106.7	Clearwater WOKF 95.7	WUSF 89.7 Titusville WRMF-FM 98.3 WP10 89.9
San Diego	KFMB-FM 100.7 KFMB-FM 100.7 KFSD-FM 94.1	Durango KRSJ 101.5 KDUR 91.9 Ft. Collins KCSU-FM 90.9	St. Petersburg WQXM 97.9 Clewiston WAFC 106.3 Cocoa WEZY-FM 99.3 Cocoa Beach WCKS 101.1	Venice WAMR-FM 92.1 Vero Beach WGYL 93.5 West Palm Beach
	KITT 105.3 KGB-FM 101.5 K1FM 98.1	KTCL 93.3 KCOL-FM 107.9 Fort Morgan KBRU 101.7	Goral Gables WYOR 105.1	WEAT-FM 104.5 WIRK-FM 107.9
	KLRO 94.9 KOZN-FM 103.7	Glenwood Springs KCMK 90.5 KGLS 92.7	Crestview WAAZ-FM 104.9 Crystal River WRYO 98.5	Winter Haven WHFL 97.8 Winter Park WPRK 91.5
	KEZL 102.9 KPRI 106.5 KPBS-FM 69.5	Grand Junction KREX-FM 92.3 KQIX 93.1 KMSA 91.3	Daytona Beach WDNJ 94.5 WQXQ 101.9	WLOQ 103.1 WPFL 88.9
	KSDS 88.3 KSON-FM 97.3 KYXY. 96.5	Greeley KUNC-FM 91.3 KGRE 92.3	WMFJ-FM 101.9 WWLV 94.5 DeFuniak Springs WQUH 103.1	GEORGIA
San Fernando San Francisco	KGIL-FM 95.3 KALW 91.7	Gunnison KWSB-FM 91.9 Ignacio KSUT 91.3	Deland WELE-FM 103.9 Dunnellon WTHS-FM 102.3 Fort Lauderdala WAFG 90.3	Albany WGPC-FM 104.5 WJIZ 96.3 WWCW 101.7
	KCBS-FM 98.9 KDFC 102.1 KEAR 97.3	Lamar KLMR-FM 93.3 La Junta KBLJ 92.1 Lakewood KPPL 107.5	WGLO 108.7 WAXY 105.9 WLQY 101.7	Americus WIPE 94.3 WPUR 97.7
	KFOG 104.5 KMEL 106.1 KIOI 101.3	Longmont KCDC 90.7 KLMO-FM 104.3 Loveland KLOV-FM 102.3	Ft. Meyers WINK-FM 98.9	WAGQ 104.7 WUOG 90.5
1 1 2 1 1	KYUU 99.5 KMPX 106.9	Manitou Springs KIIQ-FM 102.7 Montrose KUBG-FM 94.1	WHEW 101.9 W80R 95.3 Ft. Plerce WLQY 98.7	Atlanta WABE 90.1 WVEE 103.3 WZGC 92.9
	KPOO 89.5 KQED-FM 88.5 KSAN 94.9	Norwalk WLYQ 95.9 Oak Creek KFMU 103.9	Ft. Walton Beach WFTW-FM 99.3	WKLS 96.1 WRAS 88.8 WREK 91.1
The lates	KOIT 96.5 KSFX 103.7 KUSF 90.3	Pueblo KVMN 98.9 KTSC-FM 89.5 KDJQ 97.9	Gainesville WRUF-FM 103.7 WRUF-FM 103.7 WGVL 105.5	WCLK 91.9 WSB-FM 98.5
He Tarre	KABL-FM 98.1 KKHI-FM 95.7 KYA-FM 93.3	KZLO 100.7 KPUB-FM 99.9 Rocky Ford KAVI-FM 95.9	WGLY 98.3 Green Cove Springs WKKJ 92.7 History WCMQ-FM 92.1	WLTA 99.7 WAUG-FM 105.7 WACG-FM 90.7 WBBQ-FM 104.3
San Jose	KSJO 92.3 KBAY 100.3 KEZR 106.5	Salida KVRH-FM 92.1 Security KWYD 105.5 Steamboat Springs	Immokallee WLEQ 95.9 Jacksonvitte WJAX-FM 95.1	WGUS-FM 102.3 WZZW 103.1
different	KOME 98.5 KSJS 90.7	Sterling KBCR-FM 96.7	WFAM 91.1 WQIK-FM 99.1 WIVY-FM 102.9	Bainbridge WJAD 97.3 Bige Ridge WPPL 103.9 Brunswick WSBI-FM 100.7
San Luis Oblepo	KLEL 89.3 KUNA 96.1 KCPR 91.3	TeUuride KOTO 91.7 Vail KVMT 104.7 Windsor KUAD-FM 99.1	WJEE 107.3 WKTZ-FM 90.1 WAIV 96.9	WYNR-FM 101.5 Buford WGC0 102.3 Camitla WEBI 105.5
San Mateo	KCBX-FM 90.1 KZOZ 93.3 KCSM 91.1	CONNECTICUT	WAIV 96.9 WJCT-FM 89.9 WYFL-FM 89.1 Jupiter WRYZ-FM 96.7	Canton WCHK-FM 105.5 Carrellton WBTR-FM 92.1
San Rafael	KSOL 107.9 KTIM-FM 100.9 KWIZ-FM 96.7	Bridgeport WEZN 99.9 WPKN 89.5	Key West WFYN-FM 92.5 WVFK 95.5	Chatsworth WCMT 99.3 Claxton WCLA-FM 107.1
Santa Ana Santa Barbara	KYMS 106.3 KCSB-FM 91.9	Brookfield WINE-FM 95.1	Lakewood WIIS 107.1 Lake City WTDL-FM 94.3	Coshran WVMG-FM 96.7
NI VIII	KDB-FM 93.7 KTYD 99.9 KRUZ 103.3	Fairfield WXCI 91.7 WSHU 91.1 WVOF 88.5	Lakeland WVFM 94.1 WC1E-FM 91.3 Leesburg WLBE-FM 106.7	WHYD-FM 107.3 WWRH 104.9 Cordele WFAV 98.3
Santa Ciara Santa Cruz	KTMS-FM 97.5 KARA 105.7 KSCO-FM 99.1	Groton WSUB-FM 105.5 Gulfford WGCT 90.5 Hamden WKC1 101.3	Lehigh Acres WSWF 107.1 Live Oak WQHL 98.1	Cornella WCON-FM 99.3 Dawson WDWD-FM 92.1 Decatur WPCH 94.9
Santa Maria	KUSP 88.9 KZSC 88.1 KXFM 99.1	WQAQ 88.7 Hartford WHCN-FM 105.9 WDRC-FM 102.9	marathon. FL WMUM 94.3 Marianna WJAQ 100.9	Douglas WOKA-FM 92.1 WDMG-FM 99.5
Santa Monica	KSMA-FM 102.5 KCRW 89.9	WCCC-FM 106.9 WJMJ 88.9 WLVH 93.7	Melbourne WYRL 102.3 WTAI-FM 107.1 WFIT 91.5	Eastman WXLI-FM 92.7
Santa Paula	KSRF 103.1 KAAP-FM 96.7	WQTQ 88.3	Miami WTMI 93.1	Elberton WWRK 92.1 Forsyth WFNE 97.1

Location C	ali MHz	Location	Call	MHz	Location	Call MHz	Location	Call MHz
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	WWID 106.7 WFOX 97.1 WBCX 89.1		WCYC WZRD WDAI	88.3	Salem Savanna	WVIK 91.1 WJBD-FM 100.1 WCCI 100.1	Plymouth	WART 98.3 WTCA-FM 94.3 WPGW-FM 100.9
Glanvilla WKI	G-FM 106.3 G-FM 107.1		WMET	95.5 99.5	Shelbyville Skokie	WSHY-FM 104.9 WRSV 101.9	Princeton Rensselaer	WRAY-FM 98.1 WJCK 97.7
Hawkinsville WCE Hazlehurst WV	M-FM 103.9 OH-FM 93.5		WLOD	100.3	S. Beloit South Bend	WRWC 103.1 WWJY 100.5	Reckville	WPUM 90.5 WAXI 104.9 WQLK 96.1
Jesup WIF	A-FM 92.1 FO-FM 105.5 DJ-FM 98.3		WKKC WGCI WFMT-FM	107.5	Springfield	WDBR 103.7 WFMB 104.5 WVEM 101.9		WECI 91.5 WRIA 101.3 WROI 92.1
La Grange V Louisville WPE	WWCG 104.1 H-FM 92.1 Y-FM 107.9		WFMT WFYR WKQX	103.5	Sterling Streator	WSSR 91.9 WVJM 94.3 WLAX 97.7	Rushville Salem	WRCR 94.3 WSLM-FM 98.9 WMPI 100.9
WDE	N-FM 109.3 Z-FM 99.1 R-FM 93.3		WMBI-FM WNIB WXRT	90.1 97.1 93.1	SullIvan Summit	WFWA 106.3 WARG 88.9 WEEE 92.7	Seymour Shelbyville	WSVL-FM 97.1
Mariotta Metter	WBIE 101.5 WHCG 104.9		WLAK	93.9 88.7	Taylorville Tuscola Urbana	WITT 93.5	0001111	WETL 91.9 WHME 103.1 WNDU-FM 92.9
	G-FM 102.3 WXGC 88.9 M-FM 93.9 H-FM 96.7	Chillicothe	WOLL	88.9	Vandalla	WPGU 107.1 WTWC 103.9 WKRV 107.1		WRBR 103.9 WSBT-FM 101.5 WTHI-FM 99.9
Perry WPG	WZOT 107.1	Clinton V Columbia Crest Hill	WCBW WCCQ	104.9	Watseka Waukegan W. Frankfurt	WGFA-FM 94.1 WEFA 102.3 WFRX-FM 97.7		WBOQ 107.5 WBOW 107.5 WPFR 102.7
WRO	WQTU 102.3 M-FM 97.7 WOWE 105.5	Crete Danville		102.3	Wheaton Winnebago Winnetka	WETN 88.1 WYFE-FM 95.3 WNTH 88.1		WVTS 100.7 WISU 89.7 WKUZ 95.9
Sandersville WSA Savanijah WTO	NT-FM 94.3 OC-FM 94.1 WZAT 102.1	Decatur	WSOY-FM WJMU WDZQ	102.9 89.9	Woodstock Zion	WSTK 105.5 WKZN-FM 96.5	Warsaw	WHFG 91.1 WRSW-FM 107.3 WFML 106.5
WIC	WHCJ 88.5 CL-FM 96.5	Dekalb	WNIO-FM WDEK	89.5 92.5		DIANA	Washington W. Terre Haute Valparaiso	WWVR 105.5
WSG	AS-FM 93.1 F-FM 95.5 WXLM 97.3		WYEN WIXN-FM WDGC-FM	101.7	Anderson Angola	WLHN 97.9 WLKI 100.1 WEAX 88.3	Vevay	WVUR 89.5 WAVV 95.9 WAOV-FM 96.7
Springfield Stateshore	KI-FM 94.1 WGEC 103.9 WMCD 100.1	Dundee DuQuoin East Moline	WVFV WDQN-FM WEMO	95.9	Auburn Aurora Batesville	WIFF-FM 105.5 WSCH 99.3 WRBI 103.9	Winchester	WYUB 91.1 WIUC 98,3
Swainshore WIA	WVGS 91.3 T-FM 98.3 WTUF 107.1	E. St. Louis Edwardsville	WDLM-FM WMRY WSIE	101.1	Bedford Bloomington	WBIF 105.3 WFIU 103.7	10	DWA
Thomson WTH	10-FM 101.7 BR-FM 90.5 WCUP 100.3	Effingham Elderado	WCRC-FM WKS	95.7	Bluffton Boonville	WGTC 92.3 WCRD 100.1 WBNL-FM 107.1	Ames	KLGA-FM 92.7 KCCQ 107.1 W01-FM 90.1
Toccoa WLE Vidalia	T-FM 106.1 WTCQ 97.7	Elain Elaihurst	WEPS WJKL WRSE-FM	94.3	Carmel Chesterton	WWCM-FM 97.7 WHOE 91.3 WDSO 89.1	Ankany	KLFM 104.1 KPGY 91.9 KANY 106.3
,	WVVS 89:9 WAFT 101.1	Elmwood Park Elsah Evanston	WXFM WTPO WOJO	89.7	Columbia City Columbus	WFDT 108.3	Atlantic Atlantic	KJAN-FM 103.7 KJAN-FM 103.7
Warner Rollins WRB Washington WLO	WLGA 95.9 BN-FM 101.7 DV-FM 100.1	Fairfield Flora	WNUR WFIW-FM WNOI	89.3 104.9	Connersville Crawfordsville	WWWY 104.5 WCNB-FM 100.3 WNDY 106.3 WLFQ 103.9	Burlington	KWBG-FM 98.3 KBUR-FM 107.3
Wayerosa WAC	CL-FM 103.3 WLTE 102.5 WWGA 100.9	Freeport	WHFH WFRL-FN WAC	88.5	Crown Point Danville	WFLM 103.9 WGRT 107.1 WADM-FM 92.7	Carroll Cedor Falls	KCIM-FM 93.7 KHKE 88.1
W. Point	WCJW 100.9	Galesburg	WOIL-FM	90.5	Decatur Elkhart	WYEZ 100.7 WXAX 104.7	Cadar Ranida	KUNI 90.9 KHAK-FM 98.1 KCOE-FM 90.9
Hilo	KKEA 97.9 KFSH 97.1	Geneseo Godfrey	WRSQ-FM WLCA WDCB	90.9	Elwood Evansville	WWPE 88.1 WBMP 101.7 WIKY 104.1		KOJC 89.7 KCCK-FM 88.3 KWMR 88.9
Honotulu KAI	M-FM 95.5 IU-FM 94.7 KEKI 93.9	Glen Ellyn Greenville	WORN	88.5 90.9 89.3		WUEV 91.5 WPSR 90.7 WVHI 105.3	1000	WMT-FM 96.5 KQCR 102.9 KTOF 104.5
	KQMQ 93.1 KGMQ 93.1	Granite City	WGNU-FM WEBQ-FM WDUK	106.5	Fort Wayne	WPTH 95.1 WIPU 89.1	Centerville Charles City	KMGO 98.7 KCHA-FM 104.9 KCHE-FM 102.3
	KHSS 97.5 KHUI 93.9 KTUH 90.3	Highland Park Hinsdale Jacksonville	WVVX-FM WHSD WEAL	103.1		WBCL 90.3 WCMX 101.7 WLHI 88.3	Clarinda Clarion	KSWI 106.3 KRIT 96.9
Walluku Walpahu	KAOI 95.1 KULA 92.3	Jerseyville Jollet	WJBM-FM WLLI-FM WAJP	104.1	Franklin	WMEF 97.3 WXKE-FM 103.9 WFCI 89.3	Council Bluffs	KSAY 96.1 KCLN-FM 97.7 KQKQ-FM 98.5
IDAHO Blackfoot KB	LI-FM 97.7	Kankakee .	WBYG	99.9	Frankfort	WIFN 95.9 WBCL 90.3 WILO-FM 99.7	Creston Davenmort	KITR 101.7 KIIK 103.7 KALA 90.1
Boise KB	01-FM 97.9 BK-FM 92.3 KBSU 90.1	Kewanee LaGrange Lake Forest	WKEI-FM WLTL WMXM	88.9	Gary Gaston Goshen	WGVE 88.7 WDHS 90.9 WGC8 91.1	Decorah	KWNT-FM 106.5 KLCD 89.5 KDSN-FM 107.1
Burley KB	KJOT 105.1 AR-FM 98.3 XL-FM 94.1	LaSalle Lawrenceville	WLNR-FM WLPO-FM WAKO-FM	99.3	Greencastle	WZOW 97.7 WGRE 91.7 WXTA 94.3	Des Moines	KDPS 88.1 KDM1 97.3 KLYF 100.3
Emmett Idaho Fails K	ID-FM 98.1	Lineoin	WLCC WLNX WPRC	91.1	Greenfield Greensburg Hammond	WSMJ 99.8 WTRE-FM 107.3 WYCA 92.3	7	KGGO 94.9 KRNQ 102.5 KIOA-FM 93.3 KMGK 93.3
Jerome.	KIBQ 91.9 KFMA 92.7	Litchfield Lockport Loves Park	WLRA WLUV-FM	88-1	Hartford City Howe	WWHC 104.9	Dabaque	KMGK 93.3 WDBQ-FM 105.3 KFMD 92.9
Moseow	ZE-FM 98.7 KLHS 89.1 KUID 91.7	Macomb	WIUN WKAI-FM WDDD	91.3	Huntingburg Huntington	WBDC 100.9 WVSH 91.9 WHLT-FM 103.1	Estherville Fairfield	KILR-FM 95.9 KBCT 95.9 KKEZ 94.5
KU	01-FM 89.3 PL-FM 103.9 XD-FM 94.9		WLKI WLBH-FM WGLC-FM	96.9	tudianapolis	WAJC 104,5 WBDG 90.9 WJEL 89.0		KTGA 92.1 KICB 88.1
Pocatello	KUUZ 96.9 KBGL 88.7 NN-FM 93.7	Moline Monmouth	WHTT	98.9		WEDM 91.1 WICR 88.7 WFBQ 94.7	Grinnell	KBKB-FM 101.7 KDIC 88.5 KQHJN 104.9 KHBT 97.7
	KSIH 94.9 KRBU 104.9 KRIC 90.1	Monticello Morris Morton	WCSJ-FM WTAZ	102.3		WFMS 95.5 WXTZ 103.3 WIAN 90.1	Humboldt Independence Iowa City	KOUR-FM 95.3 KSUI 91.7
	KADQ 94.3 KI-FM 93.5	Morrison Mt. Carmel	WTAZ WMHS WYER-FM	102.3 90.7 94.9		WNAP 93.1 WRFT 91.5 WTLC-FM 105.2	lowa Falls	KRNA 93.5 KICG 100.7 KIEG-FM 95.3
	KMTW 96.5 KEZJ 95.7	Mt. Vernon Murphysboro	WVJC-FM WMIX-FM WTAO	89.1 94.1 104.9	Jasper Jeffersonville Kendaliville	WITZ-FM 104.7 WQHI 95.7 WAWK-FM 95.1	Keokuk Knoxville	KIMI 95.3 KRLS 92.1 KTAV 92.1
ILLINO Alton WO	KZ-FM 100.3	Naperville Normal	WONC	89.1	Knox Kokomo	WKVI-FM 99.5 WHSK 89.1 WWKI 100.1	LeMars Maquoketa	KLEM-FM 99.5 KMAQ-FM 95.3 KFJB-FM 101.1
Anna Artington Heights	RAJ-FM 92.7 WWMM 92.7 WFVH 88.3	Oak Park Olney Ottawa	WGLD-FM WSEI WRKX	102.7		WZWZ 93.5 WKMO 93.5	Mason City Mount Pleasan	KLSS 106.1
	WAUR 107.9 WBPR 88.5	Pana Paris	WKXK	98.3	Lafayette	WASK-FM 105.3 WAZY-FM 96.1 WJJE 91.5	Museatine Newton	KFMH 99.7 KLVN 95.9
Barrington Beardstown WR Belleville	MS-FM 94.3 WBCE 89.7	Park Forest Park Ridge Pekin	WRHS WMTH WSIV-FM	88.5 95.3	La Porte Lehanon	WXUS 92.7 WLOI-FM 98.7 WNON 100.9	Oskaloosa	KDEL-FM 92.3 KBOE-FM 104.9 KIGC 88.7
Beividere	WKWL 104.9 BR-FM 104.9		WZRQ WMBD-FM WCBL WSWT	93.3	Linton Logansport Lowell	WBTO-FM 93.5	Ottumwa	KLEE-FM 97.7 KCUI 89.1
Cahokia	WQRX 106.3 WBNQ 101.5 WESN 88.1 KRTE 89.5	Peru	WWCT	106.9 105.7 100.9	Madison Marion Martinsville	WLCL-FM 107. WORK-FM 96.7 WMRI 106. WCBK-FM 102.5	Perry Sheldon Sioux Center	KPLL 103.3 KDLS-FM 104.9 KIWA-FM 105.5 KDCR 91.3
Canton WB Carbondale	YS-FM 98.5 WSIU 91.9 CIL-FM 101.5	Pittsfield	WBBA-FM WSPY WPOK-FM	077	Michigan City Monticello Muncle	WMCB-FM 95.8 WVTL 95.8 WLBC-FM 104.1	Sloux City	KVDR-FM 94.3 KSEZ 97.9 KBCM 95.5 KTFC 103.3
Carlinviile Carmi	WIBI 91.1 WRUL 97.3	Quincy	WWQC	90.3		WBST 92.1 WWHI 91.5 WNAS 88.1		KW11 90.3
Champaign WD	WRXX 95.3 WS-FM 97.5 WLRW 94.5	Rantoul River Grove	WRTL-FM WRRG WTAY-FM	95.3 88.9	New Albany New Castle N. Manchester	WMDH 102.1	Storm Lake Twin Lakes	KICD-FM 107.7 KAYL-FM 101.5 KTLB-FM 105.5
Charleston WE Chicago WBI	WPCD 88.7 EIC-FM 92.1 BM-FM 96.3	Rochelle Rockford	WRHL-FM WZOK WQFL	102.3	North Vernon Notre Dame Paoil	WOCH-FM 106. WSND-FM 88. WVAK-FM 98. WEEM 91.	Waterloo	KCII-FM 95.3 KNWS-FM 101.9 KFMW 107.9 KXEL-FM 105.7
	WBEZ 91.8 WBHI 88.5	Rock Island	WHBF-FM	98.9	Pendleton Peru	WEEM 91. WARU-FM 98.	Waukon	KNEI-FM 103.9

Location Call MHz	Location Call MHz	Location Call MHz	Location Call MHz
Waverly KWAR 89.1 KWAY-FM 99.3	Monticello WFLW-FM 101.7 Morehead WMOR-FM 92.1	Caribou WFST-FM 97.7 Ellsworth WDEA-FM 95.7	Milton WMLN-FM 91.5 New Bedford WJFD-FM 97.3
Webster City KQWC-FM 95.9 West Des Moines KWDM 88.9	Morganfield WMSK-FM 95.3	Farmington WUMF-FM \$1.9 WKTJ-FM 99.3	Newbury WQLI 88.7
KANSAS	Munifordville WLOC-FM 102.3 Murray WAWW 103.7	Ft. Kent WUFK 90.3 Gardiner WKME 104.3 Gorham WMPG 91.1	Newton WZBC 90.3 N. Adams WMNB-FM 100.1 WJJW 91.1
Abilene KABI-FM 98.3 Baldwin KNBU 88.9	Owenshore WKMS-FM 91.3	Gardiner WKME 104.3 Gorham WMPG 91.1 Houlton WRNE 89.1 WHOU-FM 100.1 Lewiston WCOU-FM 93.9 WRIB 91.5	N. Andover WMMC 90.5 Northampton WHMP-FM 99.3
Chanute KQSM 105.5 Colby KXXX 100.3 KTCC 91.9	Paducah WPAD-FM 96.9 WKYX-FM 93.3	Lawiston, Auburn WRIM 107 5	Orleans WLOM 104.7 Pittsfield WORB 105.5
Concordia KVCO 88.3 Derby KDRS 95.9	Paintsville WSIP-FM 98,9 Paris WBGR-FM 98,7 Pikeville WKHR 92,1	Monticello WLKN-FM 99.3 WXMN 89.5	WUPE-FM 95.9 WBRK-FM 101.7
Dodge City KGNO-FM 95.5 KTTL 91.9	Prestonburg WDOC-FM 95.5 WPRT-FM 105.5	Orono WMEB-FM 91.9 Portageville KMIS-FM 106.3	Plymouth WTBR·FM 89.5 WPLM·FM 99.1 Hockland WRPS 91.5
El Dorado KOYY-FM 99.3 Emporia KLRF 104.9 Garden City KBUF-FM 97.3 Great Bend KBUF-FM 104.3		Lincoln WLKN-FM 99.3 Montheelfo WXMN 89.3 VOXO 92.7 Orono WMEB-FM 91.9 Portageville KMIS-FM 10.5 Portland WDCS 97.9 WPOR-FM 101.9 WGAN-FM 102.9 WMEA 90.1	Salem WMWM 91.7 Sandwich WSDH 91.7 Sheffield WBSL 91.7
Hays KJLS 103.3	Richmond WEKU-FM 88.9 WBZF 101.7	WGAN-FM 102.9 WMEA 90.1 WMGX 93.1 Presque Isle WDHP 96.9 WUPI 91.1	Southbridge WESO-FM 100.1 South Hadley WMHC 90.7
Hiawatha KNZA 103.9 Hillsboro KHHS 88.1	Scottsville WLCK-FM 99.3	Presque Isle WDHP 96.9 WUPI 91.1 WMEM-FM 106.1	Springfield WHYN-FM 93.1 WMAS-FM 94.7 WAIC 91.9
KHCC-FM 90.1 KWBW-FM 102.9	Somerset WSEK 96.7	Rockland WRKD-FM 93.5 Rumford WRUM-FM 96.3	WAQY 102.1 WSCB 88.9
Independence KIND-FM 101.7 Iola KIOL 99.3 Junction City KJCK-FM 94.5	Stanford WRSL-FM 95.9 Stanton WSKV 104.9 Tompkinsville WTKY-FM 92.1	Sanford WSME-FM 92.1 Scarborough WJBQ-FM 106.3 Skowhegan WTOS-FM 107.1	WTRZ 89.1 WTCC 90.7 Stockbridge WCWL 91.3
Kansas City KUDL 98.1 KCKN-FM 94.1	Versaliles WJMM 106,3 Whitesburg WXKQ 103,9 Winchester WKDJ 100.1	Skowhegan WTOS-FM 107.1 Springvale WNCY 91.1 Waterville WTVL-FM 98.3 WMHB 91.5	Taunton WRLM 93.3
Larned KANS-FM 96.7 Lawrence KANU 91.5 KLWN-FM 105.9	LOUISIANA	Westbrook WLDB-FM 100.9	Waitham WBRS 91.7 WCRB 102.5
KJHK 90.7		MARYLAND	W. Yarmouth WOCB-FM 94.9 Wellesley WZLY 91.5 West Barnstable WKKL 91.1
Lyons KLOQ 108.1 Manhatten KMKF 101.7 Marysville KNDY-FM 103.1	Abbeville KROF-FM 104.9 Alexandria KSLI 96.9 KRV 100.3	Annapolis WNAV-FM 99.1 WFSI 107.9	Westfield WSKB 91.5
Manhatten KMKF 101.7 Marysville KNDY-FM 103.1 McPherson KNEX-FM 96.7 Newton KJRG-FM 92.3	Baton Rouge WFMF 102.5	Arnold WACC 89.9 Baltimore WBJC 91.5 WXYV 102.7	Weston WRSB 88.3 Williamstown WCFM 91.9 Winchester WHSR-FM 91.9 Worcester WAAF 107.3
KOFZ 92.3 Oberlin KFNF 101.1 Ottawa KOFO-FM 95.7 Parsons KPPS-FM 91.1 Pittsburg KMRJ 96.9	Alexandria KSLI 96.9 KRRV 100.3 Bastrop KTRY-FM 94.3 KJBS 100.1 Baton Rouge WFMF 102.5 WAFB-FM 98.1 WQXY-FM 100.7 WYNK-FM 101.5 WBRH 90.1	WXYV 102.7 WEAA 88.9 WPOC 93.1 WRBS 95.1	WICN 90.5 WSRS 96.1
Parsons KPPS-FM 91.1 Pittsburg KMRJ 96.9 Pratt KWNS-FM 93.1	Bayou Vista KQKI-PM 95.3	WBAL-FM 97.9 WDJQ 104.3	Worchester WCUW 91.3 WCHC 89.1
Russell KRSL-FM 95.9 Salina KSKG 99.9	Crowley KAJN-FM 102.9 DeRidder KEAZ 101.7 Donaldsonville KSMI-FM 104.9	WLIF 101.9 WLPL-FM 92.3 WMAR-FM 106.5	MICHIGAN
Scott City KYEZ 93.7 KULL 94.5 Topeka KDVV 100.3 KSWT 93.7	Donaldsonville KSMI-FM 104.9 Ferriday KFNV-FM 93.5 Franklin KFRA-FM 95.3	Bel Air WHFC 88.1	Adrian WLEN 103.9 WQTE 95.3 WVAC 88.1 Albion WUFN 96.7
WIDW EM 072	Golden Meadow KZZQ 94.3 Grambling KGRM 91.3 Hammond WTGI 103.3	Bethesda WJMD 94.7 WHFS 102.3 Bladensburg WPGC-FM 95.5 Bradbury Heights WPGC 95.5	Albion WUFN 96.7 Allendale WSRX 88.5
Wichita KTPK -106.9 Wichita KBRA 97.9 KDSA 91.1	WFPR-FM 107.1 KSLU 90.9	Braddock Heights	Albion WUFN 96.7 Allendale WSRX 88.5 Alma WFYC-FM 104.9 Alpena WHSB 107.7 WATZ-FM 93.5 WCML-FM 91.7 WCBN 89.5
KARD-FM 107.3 KEYN-FM 103.7	Houma KCIL (07.1 KHOM 104.1	Cambridge WCEM-FM 106.3 Catonsville WKTK 105.7	Ann Arbor WCBN 89.5 WOUM 91.7
KFDL 101.3 KMUW 89.1 KICT 95.1	Jena KJNA 99.3 Jennings KJEF-FM 92.7 Joneshoro KIOC-FM 104.9	WKG0 106.1	W1Q8 102.9
Winneld KSWC 88.3 KENTUCKY	Jennings KJEF-FM 99.3 Jennings KJEF-FM 92.7 Jonesboro KTOC-FM 104.9 KRVS 88.3 KPEL-FM 99.9 KSMB 94.5	Emmitsburg WMTB-FM 88.3	Auburn Heights WAHS 89.5 Bad Axe WLEW-FM 92.1 Battle Creek WKFR-FM 103.3
Alberty WANY-FM 108 9	Lake Charles KLCL-FM 99.5 KGRA 103.7	Easton WEMD-FM 88.3 Emmitsburg WMTB-FM 89.9 Frederick WFRB-FM 105.3 Glen Burnie WBKZ 95.9 Hagerstown WWMD 104.7	Bay City WHNN 96.1 WCHW-FM 91.3
Barbourville WYWY-FM 93.5	Lake Providence KBED 92.7	Halfway WQCM 96.7	Benton Hrbr. WHFB-FM 99.9 Berrien Springs WAUS 90.9
Bowling Green WLBJ-FM 96.7	Lake Providence KBED 92.7 La Place WCKW 92.3 Lafysette KTDV 99.9 Lessville KVVP 105.5 Mansfield KJVC 92.7 Many KWLV 107.1 Marksville KAPB-FM 97.7 Minden KASO-FM 95.3 Monroe KMLB-FM 104.1	WMSG-FM 92.1	Big Rapids WBRN-FM 100.9
Brandenburg WDNS 98.3 Cadlz WKDZ-FM 106.3 Campbelisville WTCO-FM 103.9 Carroliton WVCM 100.1 Catlettsburg WCAK 92.9	Many KWLV 107.1 Marksville KAPB-FM 97.7	LaPlata WX (R-FM 107.1 Lexington Park WMDM-FM 97.7 Prince Frederick WMJS 82.7	Bloomfield Hills WBFH 88.1 Boyne City WCLX 93.5 Cadillac WWTV-FM 92.9
Carrollton WVCM 100.1 Catlettsburg WCAK 92.9 Central City WNES-FM 101.9	Minden KASO-FM 95.3 Monroe KMLB-FM 104.1 KNLU 88.7	Princess Anne Salisbury WBOC-FM 104.7 WICO-FM 94.3 Tacoma Park WGTS-FM 91.9	WITW 96.7 Caro WIDL (04.9
Corbin WAIN-FM 93.5	KNOE-FM 101.9 KREB 106.1	Tacoma Park WGTS-FM 91.9 Towson WCVT 69.7 Waldorf WSMD-FM 104.1	Charlotte WCER-FM 92.7 Cheboygan WCBY-FM 105.1 Clare WRNN-FM 95.3
Cythlana WCYN-FM 102.3 Danville WMGE 107.1	Morgan City KMRC-FM 96.7 Natenitoches KOBH 97.7 KNWD 91.7	Westminster WTTR-FM 100.7 WIIIIamsport WYII 95.9	Coldwater WANG 98.5
Elizabethtown WQXE 106.3 Elkhorn City WECL 103.1	New Iberia KOEA, 99.1 New Orleans WBYU 95.7	Worton WKHS 90.5	Detroit WDET-FM 101.9 WBFG 98.7 WJZZ 105.9
Ft. Campbell WABD-FM 107.9 Ft. Knox WSAC-FM 105.5	WQUE 93.3 WEZB 97.1 WNOE-FM 101.1	MASSACHUSETTS	WABX 99.5 WDEE-FM 93.1 WDRQ 93.1
Frankfort WKYW 104.9 Fulton WFUL-FM 99.7 Georgetown WAXU-FM 103.1	WRNO 99.5 WTUL 91.5 WWNO 89.9	Amherst WAHM 89.5 WFCR 88.5 WMUA 91.1	WDTR 90.9
Glasgow WGGC 95.1 WOVO 105.5	WYLD-FM 98.5 WWL-FM 101.9 Onkdale KCWR 104.9	Andover WPAA 91.7 Barnstable WORC 99.9	WLDM 95.5 WMUZ 103.5 WMZK 97.9 WJR-FM 96.3
Grayson WGOH-FM 102.3 WKCC 91.5 Greensburg WGRK-FM 103.1	Opelousas KDD1 96.7 Opelousas KOGM 107.1	Boston WBUR 90.9 WBCN 104.1	WOMC 104.8
Hardinsburg WHIC-FM 94.3 Harrodsburg WHBN-FM 99.3 Hartford WLLS-FM 106.3	Ruston KXKZ 107.1 KLP1 89.1 Shrevepert KRMD-FM 101.1	WBZ-FM 106.7 WTTK 100.7 WEEL-FM 103.3 WERS 88.9	WWJ-FM 97.1 WWWW 106.7
Hazard WSGS 101.5 Henderson WKOQ 99.5	KEPT 96.5 KMBQ, 93.7	WCOZ 94.5 WIIR-FM 96.9	WCAR-FM 92.3 Dowaglae WDOW-FM 97.9 E. Lansing WKAR-FM 90.5
HIndman WKCB-FM 107.1 Hodgenville WKMO 106.3	KSCL 91.3 KROK 94.8 KCOZ 100.1 Sildell WVSL-FM 105.3	WRBB 91.7 WROR 98.5 Boxford WBMT 88.3	E. Lansing WKAR-FM 90.5 WFMK 99.J WVIC-FM 94.9
Hopkinsville WHOP-FM 98.7 WKOF 100.3 Jackson WJSN-FM 97.7	Springhill KTKC 92.7	Bridgewater WBIM-FM 91.5 Brockton WCAV 97.7 Brookline-Boston WBOS 92.9	Elsie WOES 91.3 Escanaba WKZY 97.1
Jamestown WJRS 104.9 Jenkins WREM-FM 94.3	Thibodaux KTIB-FM 106.3 KVFG 91.5	Cambridge WGBH-FM 89.7 WHRB-FM 95.3	Farmington Hills WORB 90.3 Filint WFBE 95.1 WGMZ-FM 107.9
Leitchfield WMTL-FM 104.9 Lexington WBKY 91.3 WLAP-FM 94.5	W. Monroe KYEA 98.3 Winnfield KVCL-FM 92.1	Concord WIQH 88.3 Dudley WNRC 91.1	Fremont WSHN-FM 100.1
WLAP-FM 94.5 WKQQ 98.1 WVLK-FM 92.9 Liberty WKD0-FM 105.5	Winnsboro KCRF-FM 95.9	Easton WSHL-FM 91.3	Grand Haven WFMG 92.1 Grand Rapids WFUR-FM 102.9
London WFTG-FM 103.9 Louisville WFPK 91.9	MAINE Auburn WWAV 100.1	Framingham WVBF 105.7 WFSB 91.3	WCSQ 91.3 WGRD-FM 97.9 WJFM 93.7 WLAV-FM 96.9
WFIA-FM 103.9 WAMZ 97.5	Augusta WFAU-FM 101.3 Bangor WBGW 97.1	Franklin WGAO 91.3 Gloucester WVCA-FM 104.9 Greenfield WHAI-FM 98.3	WYON 101.3
WNNS 97.5 WKLO-FM 99.7 WVEZ 106.9	WHSN 89.3 WPBC 92.9 WMEH 90.9	Haverhill WHAV-FM 92.5 Holliston WHHB 91.5 Holyoke WCCH 89.5	W00D-FM 105.7 WVGR 104.1 KXGR 96.7
WLRS 102.3 WUOL-FM 90.5	Bath WWN0 89.9 WWN0 89.9	Hyannis WCOD 106.1 Lawrence WCCM-FM 93.7	WZZR-FM 95.7 WEHB 106.3 Grayling WQON 100.1
Madisonville WFMW-FM 93.9 WSOF-FM 89.9	Blddeford WMOS 91.5 WBSF 91.7 WIDE-FM 94.3	Lowell WSSH 99.5 WJUL 91.5 Lynn WLYN 101.7	Greenville WPLB-FM 107.3 Hancock WMPL-FM 93.5
Manchester WWXL-FM 103.1 Mayfield WX1D 94.7- Maysville WFTM-FM 95.9	Brunswick WBOR 91.1 WBHS 91.9	Marshfield WATD 95.9 maynard WAVM 91.7	Harrison WKKM 92.1 Hastings WBCH-FM 100.1 Highland Park WHPR 88.1
Middlesboro WMIK-FM 92.7	Calais WCME-FM 98.9 WQDY-FM 92.7	medford WWEL-FM 107.9 WMFO 91.8	Hillsdale WCSR-FM 92.1 Holland WJBL-FM 94.5

Location Call MHz	Location Call MHz	Location Call MHz	Location Call MHz
WHTC-FM 98.1 Houghton WGGL-FM 91.1 Houghton Lake WJGS 98.5	KFAI 90.3 KSJN 91.1 Moorhead KIDA 99.9	Bollvar KLTB 106.3 Boonville KDBX 99.3	Havre KPQX 92.5 Helens KHTC 89.5
Howell WHMT-FM 93.5 Interlochen WIAA 88.3	KCCM-FM 91.1 Moorhead KQWB-FM 98.7	Bowling Green KPCR·FM 100.9 Branson KIRK-FM 106.3 Buffalo KBFL 90.3	KCAP-FM 103.1 KSSR 98.5 KALS 97.1
Iron Mountain WJNR-FM 103.9 Ironwood WIMI 99.7	Morris KUMM 89.7 KMRS.FM 107.5	Butler KMOE 105.5 Cabool KVVC-FM 106.3	Livingston KYBS 97.7 Lewistown KLCM-FM 95.9
Ishpeming WJPD-FM 92.3	New Ulm KNUJ-FM 93.1 Northfield WCAL-FM 89.3	Canton KOCA 102.3 Cape Girardeau KGMO-FM 100.7	Missoula KUFM 88.1 KYSS-FM 94.9
Jackson WMQT 107.1 WHFI 94.1 WJOX-FM 106.1	Owatonna KRLX 90.3 KRFO-FM 104.9 Park Rapids KPRM-FM 97.5	KFMP 102.9 KRCU 90.9 Carrollton KAOL-FM 101.1	KYLT-FM 100.1 KDXT 93.3 Plentywood KPWD 100.1
Kalamazoo WMUK 102.1 WIDR 89.1	Pine City WCMP-FM 92.1 Pipestone KLOH-FM 98.7	Carthage KRGK 104.9 Caruthersville KCRV 103.1	Shelby KZIN-FM 96.3 Scobey KCGM 95.7
WCAA 69.9 WQLR 106.5 Lansing WJIM-FM 97.5	Preston KRSW-FM 91.7 KFIL-FM 103.1 Princeton WQPM-FM 106.3	Chillicothe KCHI-FM 103.9 Clayton KFUO-FM 99.1	NEBRASKA
WILS-FM 101.7 WITL-FM 100.7	Red Wing KCUE-FM 105.5 Redwood Falls KLGR-FM 97.7	KHRU 88.1 KWUR 90.3 Clinton KDKD-FM 95.3	Alliance KFAH 92.1
Lapeer WTHM-FM 103.1 Ludington WKLA-FM 108.3	KDWB-FM 101.3	Columbia KWWC-FM 90.5 KBIA 91.3	Auburn KAUB 105.5 Aurora KROA 103.1 Beatrice KWBE-FM 92.9
Maristee WRRK 97.7 marquette WNMU-FM 90.1 WHWL 95.7	Rochester KROC-FM 106.9 KNCV 101.7	KFMZ 98.3 KTGR-FM 96.7	Blair KDCV-FM 91.1
Marshall WELL-FM 104.9	KRKP 89.9 KNXR 97.5 KOLM-FM 96.7	KOPN 89.5 KTGC 96.7	KTLX 91.9 KTTT-FM 93.5
Midland WSVC 99.7 WRC1 93.5 Monroe WEJY 89.5	Rushford KLSE-FM 91.7	Crestwood KSHE 94.7 Dexter KDEX-FM 102.3	Crete KTAP 103.9 Crookston KINI 96.1 Fremont KHUB-FM 105.5
Mount Clemens WBRB-FM 402.7	St. Cloud KCLD-FM 104.7 St. Cloud WWJO 98.1 St. Louis Park KFMX 104.1	Doniphan KOEA 97.7 El Dorado Springs	Grand Island KRGI-FM 96.5 Hastines KICS-FM 93.5
Mt. Pleasant WCMU-FM 89.5 WCEN-FM 94.5	St. Peter KRBI-FM 105.5	Farmington KESM-FM 107.1 Farmington KTJJ 98.5 Ferguson KCFV 89.5	KCNT 88.1 Holdrege KUVR-FM 97.7 Kearney KOVF-FM 91.3
WMHW-FM 91.5 Munising WQXO 98.3 Muskegon WMUS-FM 106.9	Sauk Centre KMSR 94.3 Sauk Rapids WHMH-FM 101.7 Thief River Falls KAVS 89.5	Florissant KSCF 97.1	Kearney-Holdrege KRNY-FM 98.9
WQWQ-FM 104.5 Muskegon Hts. WKJR-FM 101.7	Virginia KOSN·FM 99.3 WIRN 107.1	Greenfield KRFG 93.5 Hannibal KGRC 92.9 Harrisonville KIEE 100.7	Lexington KRVN-FM 93.1 Lincoln KBHL 95.3 KFMQ 101.9
Newberry WNBY-FM 93.5 Niles WNIL-FM 95.3 WAOR 95.3	Wadena KKWS 105.9 Waseca KQDE-FM 92.1	Hillsboro KHKA 88.9 Houston KSCM-FM 99.3	KHAT 106.3 KLIN-FM 107.3
Novi WOVI 89.5 Dak Park WOPR 90.3	Wilimar KQIC 102.5 Windom KDOM-FM 94.3 Winona KAGE-FM 95.3	Jefferson City KJFF 106.9 KLUM-FM 88.9 KJMO 100.1	KRNU 90.3 KUGV 91.3
Orchard Lake WOCR 89.7 WBLD 89.3	Worthington KWOA-FM 95.	Joplin KOBC 91.3 KSYN 92.5	Nebraska City KFOR-FM 102.7 Norfolk KFOR-FM 97.7 WJAG-FM 106.7
Petoskey WJML-FM 98.9 WMBM-FM 96.7	MISSISSIPPI	Kansas City KPCG 102.5 KCEZ 94.9	Omaha KGOR 99.9 KGBI-FM 100.7
Port Huron WSDP 89.3	Aberdeen WHAY 105.5 Amery WAFM 95.3	KBEQ 104.3 KTSR 90.1 KCUR FM 89.3	KIOS-FM 91.5 KOOO-FM 104.5 KVNO 90.7
WSGR-FM 91.3 WORW 91.9 Royal Oak WOAK 89.3	Batesville WBLE-FM 95.9	KLJC 88.5 KMBR-FM 99.7	O'Nell1 KBRX-FM 92.7
Saginaw WKCQ 98.1 W10G 108.3	Biloxi WQID 93.7 Booneville WBIP-FM 99.3	KPRS 103.3 KXTR 96.5 KWKI 93.3	Scottsbluff KNEB-FM 94.1 Seward KSRD 96.9
St. Johns WRBJ-FM 92.1 St. Joseph WIRX 107.1	Brandon WRJH 97.7 Brookhaven WMRQ 92.1 Canton WWLM 101.7	Kennett KTMO 98.9	Sidney KSID-FM 95.3 Superior KRFS-FM 103.9 Wayne KWSC 91.9
Sandusky WMIC-FM 97.7 Sault Ste, Marie WSMM 99.5	Centreville WZZB 104.9 Clarksdale WAID 106.3	Kirksville KRXL 94.5 Lebanon KJEL-FM 103.7	KTCH-FM 104.9 York KAWL-FM 104.9
Southfield WSHJ 88.3	Cleveland WPXI 92.7	Liberty KWPB 91.9 KSAB 106.5	NEVADA
Spring Arbor WSAE 89.3 Sturgis WSTR-FM 99.3 Tawas City WDBI-FM 101.7	### WCLD-FM 103.9 WHJT 93.5 Coldwater WVIM-FM 95.3	Mansfield KTRI-FM 95.9 Marshali KMFL-FM 102.9	Pattle Mountain KLME 88.1
Three Rivers WLKM-FM 95.9 Traverse City WLDR 101.9	Columbia WFFF-FM 96.7 Columbus WJWF 103.1	Maryville KNOS 91.7 Maryville KNIM-FM 95.3	Carson City KKBC 97.3 KNIS 94.7 Fation KVLV-FM 99.3
Waterford WTSD 88.1	WLNK 90.9 WACR-FM 103.9 Corinth WALP 90.5	Mexico KWWR-FM 98.7 Missoula KDXT-FM 93.3	Henderson KONA 94.1 KILA 95.5
Warren WPHS 91.5 West Branch WBMI 105.5	WKCU-FM 94.3 WADI 95.3	Moberly KRES 104.7 Montgomery City KVCM 103.9 Mountain Grove KLRS-FM 92.7	Las Vegal KORK-FM 97.1 KFMS 101.9
Whitehall WLRQ 95.3 Ypsitanti WEMU 88.1 Zeeland WZND 99.3	Drew WDRU 95.3 Ellisville WBSJ 102.3	Overland KRSH 90.1 Osage Beach KRMS-FM 93.5	KRUD 90.9 Krgn 101.9
	Fulton WFTA 101.7 Forest WQST 92.5 Greenville WBAQ 97.9	Parkville KGSP 90.8 Point Lookout KSOZ 91.7	KLUC-FM 98.5 KENO-FM 92.3
MINNESOTA Albert Lea KCPI 95,3	Grenada WDMS 100.7 WRIL 100.1	KMMX 95.5 KIEZ 95.3	KCEP 88.1 KUDO 93.1 Reno KNEV 95.5
Alexandria KXRA-FM 92.7 KCMT-FM 100.7	WROA-FM 107.1 WTAM 102.3	Portageville KMIS-FM 106.3 Rolla KCLU-FM 94.3	KGLR 105.7 KUNR 88.7
Altkin KEZZ 94.8 Austin KAUS-FM 99.9	Hattlesburg WHYS-FM #04.5 WHER 103.7	KMNR 89.7 KZNN 105.3 WUMR 88.5	KSRN 104.5 KRNO 106.9
Anoka KTWN 107.9 Bemidji KBSB 91.9	Hazalburet WMDC EM 100 0	St. Charles KCLC 89.1 Ste. Genevieve KSGM-FM 105.7	NEW HAMPSHIRE
KRHP INI I	Houston WCPC-FM 93.3 Indianota WNLA-FM 105.5	St. Joseph KUSN-FM 105.1 St. Louis - KCFM 93.7 KKSS 107.7	Berlin WECM 106.1 Claremont WECM 106.1
Benson KBMO-FM 93.8 Blue Earth KBEW-FM 100.9 Brainerd KLIZ-FM 95.7 Breckenridge KKWB 104.9	Jackson WZZQ 102.9	KADI-FM 96.3 WIL-FM 92.3	Concord WKXL-FM 102.3 WSPS 90.3
Cloquet WKLK-FM 100.9	WKXI 94.7	KOMR 89.3 KLSR 89.7 KMOX-FM 103.3	Conway WBNC-FM 93.5 Dover WOKQ 97.5 Durham WUNH 91.3
Collegeville KSJR-FM 90.1 KSJU 89.1 Cottage Grove WSWC 88.1	WJSU 90.7 WJMI 99.7	KEZK 102.5 KLPH 89.9	Exeter WPEA 90.5 WKXR-FM 107.1
Detroit Lakes KVLR 95.3	Kosculsko WKOZ-FM 105.1 Laurel WNSL-FM 100.3	KLSQ 98.1 KSLH 91.5	Hanover WFRD 99.3 Henniker WNEC-FM 91.7
Duluth KUMD-FM 89.1 WAKX-FM 98.9	Louisville WLSM-FM 107.1	Salem KWMU 90,7 KETU 95,9 Sedalia KSIS-FM 92.1	Keene WNBX-FM 103.7 WKNH 89.1
KAOH-FM 94.9 WDTH 103.3	Magee WSJC-FM 107.5 McComb WCCA 94.1 WTBI 105.7	Sedalia KCBW 92.1 Springfield KTTS-FM 94.7	Manchester WZID 95.7
E. Grand Forks KRAD-FM 103.9	Meridian WDAL 101.3 WALT 97.1	KTXR 101.5 KWFC 97.3	Mount Washington WHOM 94.9 Nashua WOTW-FM 106.3 Newport WCNL-FM 101.7
Fairmont KFMC 106.5 Faribault KDHL-FM 95.9	Mississippi State WMSB 89.1 Moss Point WKKY 104.9 Natchez WQNX 95.1	KWTO-FM 98.7 KSMU 91.1 Tarkio KTRX 93.5	Peterborough WSLE 92.1 Philippi WQAB 91.3
Fosston KEHG-FM 103.3	New Albany WNAU-FM 103.3 Newton WGOT 106.3	Union KLPW-FM (01.7 Warrensburg KCMW 90.9	Plymouth WPCR-FM 90.3 WPNH-FM 100.1 Portsmouth WHEB-FM 100.3
Golden Valley KQRS-FM 92.5 Grand Rapids KXGR 96.7	Oxford WOSM 103.1 WOOR 97.5	Waynesville KFBD-FM 97.7 KYSD 102.3 West Plains KWPM-FM 93.9	NEW JERSEY
WMI W INI 3 I	Pascagoula WPMO 99.1 WGUD 106.3 Picayune WJOJ 106.3		
Hutchinson KDUZ-FM 107.1	Poptarville WRPM-FM 107.9 Pontotoc WSEL-FM 96.7	MONTANA	Atlantic City WFPG-FM 96.9 WMGM 103.7
Luverne KQAD-FM 95.3 Luverne KQAD-FM 93.7 Mankato KMSU 90.5	Rolla KMNR 89.7 Senatobla WNJC 90.1 Starkville WSMU-FM 106.3	Anatonda KGLM-FM 97.7 Belgrade KGVW-FM 96.7 Billings KURL-FM 97.1	Avalon WWOC 94.3 Blackwood WDBK 91.5
KEEZ-FM 99.1 KYSM-FM 103.5	Tupelo WELO-FM 98.5	KBMS 98.5 KOYN-FM 93.3	Blairstown WFMV-FM 106.3 Bricktown WBGD 91.9
Marshall KMHL-FM 100.1 Minneapolis-St. Paul KBEM-FM 88.5	Tylertown WTYL-FM 97.9 Vicksburg WQMV 98.7 WKYV-FM 106.7	KEMC 91.7 KRER 88.9 Bozeman KGLT 90.1	Bridgeton WSNJ-FM 107.7 Camden WKDN-FM 106.9 Canton WNNN 101.7
WCCO-FM 102.9 WCTS-FM 100.7	Waynesboro WABO-FM (05.5	Butte KBOW 94.1	Cape May WRIO-FM 101.7 Dover WDHA-FM 105.5
KEEY-FM 102.1	West Point WKBB 100.9 WInona WONA-FM 96.7	Dillon KDBM-FM 98.3 Glendive KIVE-FM 96.5	E. Orange WFMU 91.1 Eatontown WHTG-FM 106.3
KTIS-FM 98.5 W1.OL-FM 99.5 KNOF 95.3		Great Falls KOPR-FM 106.8 KANR 98.9 KNUW 94.5	Flomington WRDR 104.9 WCVH 90.5 Franklin WSUS 102.3
KTCR-FM 97.1 WAYL-FM 93.7	MISSOURI Aurora KELE 100.1	Hamilton KLYQ-FM 95.8 Hardin KRWS 95.3	Franklin Lakes WRRH 68.7 Glassboro WGLS-FM 89.7

Location Call MHz	Location Call MHz	Location Call MHz	Location Call MHz
Hackettstown WNTI 91.9 Hanover Highland Park WVHP-FM 90.3 Lawrence Twp WLCR 89.7 Lincroft WBJB-FM 90.5 Long Branch WRLB 107.1 Millville WMVB-FM 97.3	De Ruyter Twp. WOIV 105.1 Dix Hills WHHJ 88.9 Dundee WFLR-FM 95.9 Ellenville WELV-FM 99.3 Elmira WECW 88.1 WEHH-FM 94.3	WONO 107.9 WSYR-FM 94.5 WFLY 92.3 WRP1 91.5 WIBQ 98.7 WOUB 98.9	Williamston WSEC 103.7 Wilmington WPRV 93.9 WAAV 102.7 WL0Z 91.3 WMFD-FM 100.9
Milivile WMVB-FM 97.3 Morristown WJSV 90.5 Newark WFME 05.9 WFME 94.7 WVNJ-FM 100.3 WBG0 88.3 Newton WIXL-FM 103.7	Elmira WLVY 94.3 WENY-FM 92.7 Endleott WMRV 105.5 Floral Park WSHS 90.3 Fredonia WJQL-FM 88.9 Fulton WKFM 104.7 Garden City WLIR 92.7	WZOW 107.3 WKGW 104.3 WIBQ 94.9 WOUR 96.9 WPNR-FM 90.7 WZOW 107.3	WHSL 97.3 WWIL 97.3 WWYY 106.1 WKZL 107.5 WFDD:FM 88.5 WSEZ 93.1 WTQR 104.1
New Brunswick WMGQ 98.3 WRSU-FM 89.1 Obean City WSLT-FM 106.3 Paterson WPAT-FM 93.1 Piscataway WPPH 90.3 Pleasantville WGRF, 99.3	WBAU 90.3 WHPC 90.3 WGSU 89.3 Geneva WEOS-FM 88.7 WECQ 101.7 Glen Falls WWSC-FM 95.9	Walton WTLB-FM 107.3 WDLA-FM 92.1 WALTown WNCQ 97.5 Waverly WAVR 102.3 Wothersfield Township WBIV 107.7 White Plains WWYD 103.9	NORTH DAKOTA Belcourt KEYA 88.5 Bismarck KFYR-FM 92.9 KQDY 94.5 Deviis Lake KDLR-FM 96.7
Princeton	Glens Falls WBZA-FM 107.1 WGFR 91.9 Gouverneur WLUF 92.7 Greece WGMC 90.1 Hammondsport WVIN-FM 90.1 Hempstead WIOK 98.3	NORTH CAROLINA Ahoskie WRCS-FM 99.3 Albemarie WABZ-FM 100.9 Asheboro WCSE 92.3 Asheville WLOS-FM 99.9	Fargo KFNW-FM 97.9 WDAY-FM 93.7 KDSU 91.9 Grand Fork# KYTN 94.7 KKDQ 92.9 KFJM-FM 89.3
Trenton WBJH 101.5 WLGP 89.7 WCHR 94.5 WPST 97.5 WTSR 91.3 Upper Montelair WMSC 105.5 Vineland WDVL-FM 92.1	WVHC 88.7 WRHR 90.5 WITR 89.7 WHO-FM 105.3 Horseheads WUX 100.9 Hudson WHUC-FM 93.5 Hyde Park WHVS 97.7	WUNF-FM 88.1 WBMU-FM 91.3 Bridgeton WSFL 97.7 Black Mountain WMIT 106.9 Boiling Springs WGWG 88.3 Boone WASU-FM 90.5	Jamestown KSJM 93.2 Mandan KNDR 104.9 Mayville KMAV-FM 101.7 Minot KCJB-FM 97.1 KMOT-FM 93.7
West Long Branch WMCX 88.1 Wildwood WCMC-FM 100.7 Zarephath WAWZ-FM 99.1 NEW MEXICO Alamogordo KOTO 105.5	Ithaca	Bridgeton WSFL 106.5 Buies Creek WCCE 90.1 Burgaw WPJC 99.9 Burlington-Graham WBAG-FM 93.9 WNCB 101.1 Chapel Hill WUNC 91.5	Akron WAEZ 67.5 WAPS 89.1 WAUP 88.1 WKDD 96.5 Alliance WFAH-FM 92.5 WRMU 91.1
Albuquerque KXXI 94.3 KANW 89.5 KMPR 99.5 KDEF-FM 94.1 KLYT 88.3 KPIC 91.5 KRST 92.3	Kingston WBPM 94.3 Lake Ronkonkoma WSHF 91.9 Lake Success WTFM 103.5 Lancaster WSMH-FM 89.9 Liberty WVOS-FM 95.9 Liverpool WCNY-FM 91.3	WXYC 89.3 WBT-FM 107.9 WROQ 95.1 WSOC-FM 103.7 WEZC 104.7 WFAE 90.9 Clinton WRZ-EM 107.1	Archbold WHFD 95.9 Ashland WNCO-FM 101.3 WNDL 89.5 Ashtabula WREO-FM 97.1 Athens WQUB-FM 91.3 WYTO 175.5
KLYT-FM 88.3 KLYT-FM 88.3 KFMG 107.9 KHFM 96.3 KPAR-FM 100.3 KOB-FM 93.3 KUNM 90.1 KSVP-FM 92.9	Loudonville WVCR-FM 89.1 Middletown WALL-FM 92.7 Montour Falls WXXY 104.9 Mt. Kisco WNNW 107.1 WARY 88.5 WVIP-FM 106.3 WSUL 93.5	Concord WPEG 97.9 Cutlowhee WWCU 91.7 Davidson WDAV 90.5 Dunn WQTI 103.1 Durham WDEG 105.1 WDBS 107.1 WAFR 90.3	Batavia WCNE 88.7
Aztec KYYK 94,9 Carisbad KBAD-FM 92.1 Clovis KTQM-FM 99.9 KMTY-FM 99.1 Deming KDEM 94.3 Espanota KBSO 102.3	WYLJ 105.5 New Bochelle WFTN 93.5 New York WPLJ 95.5 WBAI 99.5 WCB5-FM 101.1 WEYD-FM 97.9	Eden WEAF 94.5 Edenton WBX B 100.1 Elkin WIFM-FM 100.9 Elizabeth City WMYK 93.7 Elon College WSOE 89.3 Fairmont WXKY 100.9 Farmington KRAZ 96.9	Bowling Green WKIQ 93.5 WBGU 88.1 Bryan WBNO-FM 100.9 Bucyrus WBCO-FM 92.7 Cambridge WILE-FM 98.7 Canton WNWR 90.9 WHBC-FM 94.1
Gallup KRWN 92.9 KGLP 94.5 KQNM 93.7 Farmington KRWN 92.9 Hobbs KSCR 95.7 Humble City KPOE 94.1 Los Alamos KRSN-FM 98.5 La Cruces KGRD 103.9	WFUV 90.7 WKTU 92.3 WKCR-FM 89.9 WBLS 107.5 WNCN 104.3 WNEW-FM 102.7 WNYU-FM 89.1	Farmville WRQR 94.3 Fayetteville WFSS 98.1 WQSM 98.1 Forest City WBBO-FM 93.3 Franklin WFSC-FM 96.7 Frauqusy-Varina WAKS-FM 103.9 Gastonia WGNC-FM 101.9	WHLQ 106.9 WT0F 98.1 Castalia WGGN 97.7 Cedarville WCDR-FM 90.1 Celina WMER 94.3 WCSM-FM 98.7 Centerville WCWT-FM 89.5
La Cruces KGRD 103.9 KRWG 90.7 KASK 103.1 Las Vegas KEDP 91.1 KFUN 100.9 Lovington KLEA-FM 101.7 Mesilla Park KOPE 104.9 Ramah KTDB 89.7	WYNY 97.1 WNWS 97.1 WNYC-FM 98.9 WNYE 91.5 WXLO 98.7 WPIX-FM 196.3 WQXR-FM 96.3	Goldsboro WEQR 96.9 WOKN 102.3 Greensbore WPET-FM 98.7 WQFS 90.7 WQMG 97.1 WUAG 89.9 WNAA 90.5	Chillieothe WBEX-FM 93.3 WCLL 94.3 WLQA 98.5 WLQA 98.5 WUBE 105.1 WEBN 102.7 WAKW 93.3 WGUC 90.9
No. No.	WRFM 105.1 WRVR 106.7 NIagara Falls WHLD-FM 98.5 N. Syracusa WEGG 100.9 Norwich WCHN-FM 93.9 Olean WEBF 95.7 Onelda WMCR-FM 106.3	Greanville WNCT-FM 107.7 Havelock WKV0-FM 104.9 Henderson WXNC 92.5 Hendersonville WKIT 102.5 Hickory WHX-FM 102.9 High Point WHPE-FM 95.5	WKRQ 101.9 WSAI-FM 94.1 WVXU-FM 91.7 WNSD 90.1 WWEZ 92.5 WNRE-FM 107.1 WAIF 88.3
University Park KRWG 91.7 NEW YORK Albany WAMC 90.3 WCDB 90.9	One onta WSRK 103.9 WRHO 89.5 WONT 103.1 WONY 90.9 Ossining WOSS 90.3 Oswego WRVO 89.9 WQHS 101.7	WMFR-FM 99.5 WGLD-FM 100.3 WWIH 90.3 Jacksonville WRCM 92.1 WXQR 105.5 Kannapolie WRB-FM 99.7 Kinston WRNS 95.1	WJVS 88.3 WBOE 90.3 WCRF 103.3 WCLV 95.5 WCSB 89.3 WDOK 102.1 WQAL 104.1 WGC 98.5
W GNA 107.7 W HRL 103.1 W HSH 108.5 W ROW-FM 95.5 W W OM 100.9 W BLI-FM 106.1 Alfred W ALF 89.7	WSCO-FM 105.8 Owego	WQDW 97.7 WKNS 90.5 Laurinburg WSTS 96.5 Lexington WLXN 94.1 Lumberton WTSB-FM 95.7 WJSK 102.3 Mars Hill WVMH-FM 90.5 Morehead City WMBL-FM 95.9	WWWM 105.7 WMMS 100.7 WKSW 99.5 WDMT 107.9 WRUW-FM 91.1 WZZP 106.5
WETD 91.3 Amsterdam WCSS-FM 97.7 Attice WBTF 101.7 Auburn WDWN 88.9 WRLX 106.9 Babylon WBAB-FM 102.3 Binghamton WDVT 98.1	Plainview	Morehead City WMBL-FM 95.9 Morganton WQXX 92.1 Moyock WJLY 22.1 Murfreesboro WWDR-FM 98.3 New Bern WRBK 101.9 North Wilkesboro WKBC-FM 98.1 WYYD 98.1	Cleveland Heights WLYI 92.3 Columbus WCBE 90.5 WFAC 91.5 WBNS-FM 97.1 WLVQ 96.3 WCOL-FM 92.3 WMN1-FM 99.7
WHRW 90.5 WAAL 99.1 WSKG-FM 89.3 Baldwinsville, WSKN-FM 92.1 WEN-FM 92.1 WBXL 90.5 Briareilff Manor, WRNW 107-1 Mt. Kiseo Brentwood WCTO 94.3	WVR.FM 91.3 Rensselear WQRK-FM 103.9 Riverhead WRCM-FM 103.9 Rechester WHFM 98.9 WNWZ 92.5 WMJQ 92.5 WCMF 96.5	WYTD 88.1 WKNC-FM 88.1 WQDR 94.7 WGPE 89.7 WRAL 10.5 WSHA 88.9 Reldsville WWMO 102.1 Roanoke Rapids WPGT 90.1	WOSU-FM 89.7 WYKO-FM 94.7 Conneaut WFIZ 105.5 Coshocton WTNS-FM 99.3 Dayton WHIO-FM 99.1 WDPS 90.1
Brockfort WKBA 88.5 Brockylile WCWP 88.1 Buffalo WBEN-FM 102.5 WBNY 96.1 WADV 106.5 WDCX 99.5	WIRQ 90.9 WEZO 101.3 WD KX 103.9 WPXY 97.9 WRUR 88.5 WVOR 100.5 WXXI-FM 91.5	WPTM 102.3 Rockingham WRSH 91.1 Rocky Mount WRSV 92.1 WFMA 100 7 Roxboro WKRX 96.7 Shallotte WD7D 93.5	WTUE 104.7 WDA0 107.7 WSMR 89.3 WWSU 88.5 De Graff WDEQ-FM 91.1 Delaware WSLN 91.1 Delaphos WDOU 107.1
WBF0 88.7 WBUF 92.5 WRED-FM 94.5 WGRQ 96.9 WWOL-FM 104.1 WHD 103.3 Cananadalgua WFLC 93.5	Home	Salisbury	Dover WJER-FM 101.7
Canton WSLU 96,7 Cazenovia WITC 90,9 Central Square WCSQ 89,3 Cherry Valley WJIV 101,9 Clinton WHCL-FM 88,7 Corning WCLI-FM 106,1 WCEB 91,9	Seneca Falls	Tabor City WKSM 104.9 'arboro WKTC 104.3 Thomasville WTNC-FM 98.3 Wallace WLSE-FM 94.3 Wannese WOBR-FM 95.3	Fostoria
Cortland WKRT-FM 99.9 WSUC-FM 90.7 Depew WBLK-FM 93.7	Syracuse WAER 88.3 WNTQ 93.1 WMHR 102.9	Warrenton WVSP 90.9 Washington WITN-FM 93.3 Whiteville WENC-FM 99.1 Wilkesboro WSIF 90.1	G cenville WGVO 91.7 Hamilton WLWS 96.5 WYCH 103.5

Location Call MHz	Location Call MHz	Location Call MHz	Location Call MHz
WHSS 89.5 Hillsboro WSRW-FM 106.7 Holland WPOS-FM 102.3	KXXY 96.1 KOFM 104.1 KFNB 101.9	Grove City WEDA-FM 95.1 WSAJ-FM 89.5	RHODE ISLAND
Irenton WITO 107.1	KAEZ 107.7 KKNG 92.5	Harrisburg WHP-FM 97.3 WMSP 94.9 WSFM 99.3	Kingston WRIU 91.1 Middletown WOTB 107.1
jefferson VIITwp. WLMB 88.9 Johnstown WWWJ 103.1 Kent WKSU-FM 89.7	Okmulgee KLLS 94.3 Pones City KLOR-FM 99.3	Havertown WHHS 89.3	Providence WPJB-FM 105.1
Kent WKSU-FM 89.7 WKNT-FM 100.1 .Kenton WKTN 95.3	Poteau KLCO-FM 98.3 KINB 11:7.3 Pryor KKMA 104.5	Hazleton WVCD 97.9 Hershey WITF-FM 89.5	WBRU 95.5 WDOM 91.3 WHIM-FM 94.1
Kettering WVUD-FM 99.9 WKET 89.5	Safilsaw KRBB-FM 95.9 Sapulpa KXOJ-FM 100.9	Huntington WKVR-FM 91.7 Huntington WRLR 108.3 Indiana WQMU 103.1	WLKW-FM 101.5 WPRO-FM 92.3
WCXL 88.7 Lancaster WHOK-FM 95.5	Shawnee KBGC 89.9 Stillwater KOSU-FM 91.7	Jenkintown WIBF-FM 91.3	Smithfield WJMF 91.5 Westerly WERI-FM 103.7
Lima WIMA-FM 102.1 WLSR 104.9 WTGN 97.7	KSPI-FM 93.9 KVRO 105.5 Tahleguah KEOK 101.7	Johnstown WJAC-FM 95.5 WFMM 92.1	Woonsocket WWON-FM 106.3
Logan WLGN-FM 98.3 London WSYX 106.3	Tonkawa KAYE-FM 90.5 Tulsa KBEZ 92.9	WJNL-FM 98.5 Laneaster WFNM 88.7 WNCE 101.3	SOUTH CAROLINA
Lorain WZLE 104.9 WVNO 106.1	KRAV 98.5 KWEN 95.5	WDAC 94.5 WLAN-FM 98.9	Alken WLOW-FM 95.9 WAKN-FM 99.3
WCLW-FM 105.3 Marietta WCMO 89.3 WMRT 88.3	KMOD 97.5 KCFO 9815 KKUL 103.3	Lebanon WUFM 100.1	Anderson WCAC 101.1 WANS-FM 107.3 Bamberg WWBD-FM 92-7
Marion WMRN-FM 106.9	Weatherford KWEY-FM 97.3	Lewisburg WVBU-FM 90.5 Lewistown WMRF-FM 95.9	Barnwell WBAW-FM 101.7 Batesburg WBLR-FM 92.1
Medina WDIF 94.3 WDBN 94.9 Mlamisbura WFCJ 93.7	Woodward KSIW-FM 93.5	Lincoln University WLIU 88.7 Linesville WVCC 101.7	Beaufort WBEU-FM 98.7 Camden WPUB-FM 94.3 Cayce WZLD 96.7
Middlenort WMPO-FM 92.1	OREGON	Lock Haven WBPZ-FM 92.1 Mansfield WNTE 89.5	Cayce WZLD 96.7 Charleston WXTC 96.9 WEZL 103.5
Mildletown WPBF 105.9 Milford-Mariemont WLYK 107.1	Albany KHPE 107.9 KRKT-FM 99.9 Ashland KSOR 90.1	Martinshurg WJSM-FM 92.7 McKean WMDI 102.3 Meadville WARC 90.3	WSCI 89.3 WPXI 95.1
Morrow WLMH 88.1 Mt. Vernon WMVO-FM 93.7 Napotean WNDH 103.1	Bend KICE 100.7 KX1Q 34.1	Mercer WW1Z 103.9	Chester WCMJ 99.8 Clemson WSBF-FM 89.3 Cotumbia WCOS-FM 97.9
New Concord WMCO 90.7 Newark WCLT-FM 100.3	Brookings KURY-FM 95.3 Central Point KCHC 91.7 Coryallis KFLY-FM 101.5	Mercersburg WRCV 92.1 Mifflinburg WJJR 98.3 Millersville WIXQ 91.7	WNOK-FM 104.7 WMHK 89.7
New Lexington WNKO 101.7	Corvallis KFLY-FM 101.5 KBVR 90.1 KLOO-FM 106.1	Multon WMLP 100.9	WUSC-FM 91,9 WBCT 90.5
New Lexington WWJM 106.3 New Philadelphia WNPQ 95.9 Norwalk WLKR-FM 95.3 Oberlin WOBC 88.7	Eagle Point KEPO 89.1 Eugene KRVM 91.8	Nanticoke WMJW 92.1 New Kensington WNUF 100.7	WUSC-FM 89.9 WXRY-FM 93.5 WLTR 91.3
Ottawa WPNM 108.3 Oxford WMUB 88.5	KSND 93.1 KFMY 97.9	New Wilmington WKPS 88.9 Norristown WVVE 91.7 North East WHYP-FM 102.3	Conway WLAT-FM 104.1 Darlington WDAR-FM 105.5
Piqua WPTW-FM 95.7 Port Clinton WRWR-FM 94.5	KLCC 90.3 KPNW-FM 99.1 KWAX 91.1	Oil City WDJR 98.5 WRJS 98.5	Dilion WDSC-FM 92.9 Due West WARP 91.7
Portsmouth WPAY-FM 104.1 WNXT-FM 99.3	KBMC 94.5 KZEL-FM 96.1	Palmyra WCTX 92.1 Philiadelphia WCAU-FM 98.1 WDAS-FM 105.3	Easley WELP-FM 103.9 Florence WSTN 103.1 Gaffney WAGI-FM 105.3
Reading WRCJ 89.8 Salem WSOM-FM 105.1 Sandusky WLEC-FM 102.7	Grants Pass KGPO 96.9 KTEC 88.1 Gresham KMHD 88.5	WRCP-FM 104.5 WIOQ 102.1	Georgetown WGMB 97.7 WSHG 106.3
Sandusky WLEC-FM 102.7 Sidney WMVR-FM 105.5 Springfield WBLY-FM 102.9	Klamath Falls KAGM 98.5 KJSN 92.5	WFLN-FM 95.7	Greenville WEPR 90.1 WESC-FM 92.5 WFBC-FM 93.7
WEEC 100.7 WUSO 89.1	La Grande KEOL 91.1 KLBM-FM 89.3	WUNY-FM 90.9 WIFI 92.5 WMMR 93 3	WMUU-FM 94.5 Greenwood WCRS-FM 98.7
Streetsboro WSTB 91.5 Steubenvills WRKY 103.5 Struthers WKTL 90.7	Lake Oswego KMJK 108.7 Lebanon KOMS 103.7 McMinneville KSLC 90.3	WMGK 102.9 WYSP 94.1	Hampton WJBW-FM 103.1 Hitton Head Island WHHR 106.3
Sylvania WXEZ 105.5 Timn WTF-FM 103.7	Medford KBOY-FM 95.3 KTMT 93.7	WPWT 91.7 WRTI 90.1	Honea Path WRIX-FM 103.1 Kingstree WWKT-FM 100.1 Lake City WGFG 93.3
Toledo WSPD-FM 101.5	Milwaukee KQIV 106.7 Newport KNPT-FM 102.5	WKDU 91.7	Lancaster WPAJ-FM 107.1 Laurens WGXL 100.5
WAMP 88.3 WGTE-FM 91.3	Ontario KXBQ-FM 96.1 Pendleton KRBM 90.8 Portland KB00 90.7	WWDB 96.5 WWSH 106.1 WXPN 88.9	Manning WTME 92.1 Marion WATP-FM 94.3
WIOT 104.7 WKLR 99.9 WLQR 161.5	KINK 101.9 KJ1B 99.5	Pittsburgh — KDKA-FM 92.9 WRCT 88.3	Moncks Corner WTWF 105.5 Mullins WCIG 107.1 Myrtle Beach WMYR-FM 92.1
University Heights WJCR 88.9	KGON 92.3 KOAP-FM 91.5	WAMO 105.9 WDVE 102.5 WEEP-FM 107.9	N. Myrtle Beach WNMB 105.5
Upper Sandusky WYAN-FM 95.9 Urbana WGOM-FM 101.7	KYTE-FM 101.1 KPDQ 93.7 KPAM-FM 97.1	WEEP-FM 107.9 WXKX 96.1 WDUQ 90.5	N. Charleston WKTM 102.5 Orangeburg WPJS 106.7
Urbana WCOM-FM 101.7 WUHS 91.7 Van Wert WERT-FM 98.9	KUPL 98.5 KQFM 100.3	WSHH 99.7 WJ01 93.7	Pageland WCPL-FM 102.3
Wapakoneta WERM 92.1 Washington Court House	KRRC 89.3 KXL-FM 95.5 Reseburg KRSB 103.1	WPIT-FM 101.5 WQED-FM 89.3 WPEZ 94.5	Pageland WCPL 102.3 Rock Hill WVPR 88.9 St. George WPWR 95.9
Waverty WIBO 100.0 Waliston WKOV-FM 96.7	Salem KSLM-FM 105.1 The Dalles KCIV 104.5	WYDD 104.7 WYEP-FM 91.5	Senera WBFM 98.1 Spartanburg WSPA-FM 98.9
West Carrellton WQRP 88.1 West Chester WLHS 89.9	PENNSYLVANIA	Pottsville WAVT-FM 101.9 Punxsutawney WPME-FM 105.5 Reading WRFY-FM 102.5	Summerville WWWZ 93.5 Sumter WFIG-FM 101.3 WMPR 88.1
Westerville WOBN 91.5 WBBY 103.9 Witherforce WCSU-FM 88.9	Allentown WFMZ 100.7 WMUH 89.7	Red Lion WGCB-FM 96.1	Surfside Beach-Garden City WYAK-FM 103.1
Wilmington WDHK 102.3 Wooster WWST-FM 104.5	MXKW 104.F	Ridgway WTMX 94.3 Seettsdale WLSW 103.9	Walterboro WALD-FM 100.9 West Columbia WSCQ 100.1
Worthington-Columbus WNCI 97.9	Beaver Falls WFBG-FM 98.1 WWKS 106.7	Seranton WGBI-FM 101.3 WEZX 107.1	SOUTH DAKOTA
Xenia WHBM-FM 103.9 WBZ1 95.3	Bedford WAKM 100.9 Bellwood WHGM 103.9	WVIA-FM 89.9 WVMW-FM 91.5 WWDL-FM 104.9	Aberdeen KASD 90.1 KQAA 94.9
Yellow Springs WYSO 91.5 Youngstown WKBN-FM 98.9 WQOD 98.5	Bethlehem WEZV 95.1 WLVR-FM 91.3	Shamokin WISL-FM 95.3	Brookings KBRK-FM 94.1
WSRD 101.1	Bloomsburg WHLM-FM 106.8 Boyertown WBYO 107.5 Braddock WFFM 96.9	Sharpsville WFAR-FM 95.9	Huron KIJV-FM 92.1
Zanesville WHIZ-FM 102.5	Butter WBUT-FM 97.7	Somerset WVSC-FM 97.7	Mitchell KMIT 102.3 Mobridge KOLY-FM 99.5
OKLAHOMA	Carbondale WCDL-FM 94.3	Starview WRHY 92.7	Rapid City KGGG-FM 188.3 KVSR 97.9
Adu KTEN-FM 93.3 Altus KWHW-FM 93.5	Central City WCCS 101.7 Chambersburg WIKZ 95.1	State College WMAJ-FM 103.1 WDFM 91.1	KKHJ 93.9 KTEQ 88.1 Sloux Fails KAUR 89.1
Ardmore KKAJ 95.7 KRRO 92.1	Charlerol WWFM 98.3 Chester WDNR 89.5	WQWK 96.7 WTLR 89.9 Stroudsbury WVPO-FM 93.5	KELO-FM 92.5 KCFS 90.1
Retheny Will 104 9	Clarion WCUC-FM 91.7 Clearfield WCPA-FM 93.5 Danville WPGM-FM 96.7	Sunbury WICOK-FM 94.1 Swarthmore WSRN 91.5	KNWC-FM 96.5
Chiekasha KXXK 105.5	DuBois WCED-FM 102.4 WDBA 107.3	Tamaqua WZTA 105.5 Telford WBMR 89.7	Spearfish KBHU-FM 89.1
Durant KSEO-FM 107.3 KHIB 91.9	Easton WEST-FM 96.1 WJRH 90.5 WQQQ 99.9	Tyrone WGMR 101.1	Springfield KSTI-FM 88.5 Sturgis KRCS 93.1
Edmund KWHP 97.7 KCSC 90.1	Fast Stroudsberg WESS 90.3	Uniontown WPQR-FM 99.3 Warminater WCJD-FM 89.9	Watertown KDLO-FM 96.9
Enid KOKF 90.9 KNID 96.9 Eufaula KCES 102.3	Elizabethtown WMSH-FM 106.7 Elwood City, Pa. WFEM 92.1	Warren WRRN 92.3 Washington WJPA-FM 95.3 WJCR 88.3	KWAT-FM 96.1 KIXX 96.1
Goodwell KPSU 91.7	Ephrata W10V 105.1 Erie WLVU 99.9 WQLN-FM 91.3	Waynesburg WANB 103.1 WAYZ-FM 101.5	Winner KWYR-FM 93.7 Yankton KQHU 104.1
Idabel KWDG 96.7 Langston KALU 90.7	WCCK 103.7 WERG 89.1	Wellsboro WGCR 97.7 West Chester WLHS-FM 89.9 Wilkes-Barre WBRE-FM 98.5	TENNESSEE
Lawton KLAW 101.5 KCCO-FM 99.1 McAlester KNED-FM 101.3 Mlami KGLC-FM 100.9	Franklin WVEN 99.3 Freeland WACM 103.1	WCLH 90.7 WRKC 88.5	Bolivar WVST 96.7 Bristol WFHG-FM 96.9
muscoeco P. m m m - P m 100.0	Gettysburg WGET-FM 107.7 WZBT 90.3 Glrard WGAE 88.3	WIIIamsport WILQ-FM 105.1	Brownsville WTBG 95.3 Camden WRJB 98.3
Norman KGOU 106.3 Nowata KNFB 94.3	Greenesstie-Wayneshore	WRLC 91.7 WRAK 102.7 York WQXA 105.7	Carthage WRKM-FM 102.3 Centerville WIKA 96.7 Chattanooga WDOD-FM 96.5
Oklahoma City KFJL 98.9 KEBC 94.7 KATT 100.5	Greensburg WOKU-FM 107.1	WVYC 88.1 WSBA-FM 103.3	WDYN 89.7 WMBW 88.9
KZUE 102.7	WTGP 88.1	York-Hanover WYCR 98.5	WYNQ 106.5

Location	Call MHz	Location Call /	MHz Location	Call MHz	Location	Call MHz
	WDEF-FM 92.3	Bia Sprina KFNE	95.8 Mulesnoe	KMUL-FM 103.1	Sprinefield	WCFR-FM 93.5
Dickson Cleveland	WTNQ 102.3 WQLS 100.7	Borger KBBB-FM I Brenham KWHI-FM I	104.3 Nacugaches	KSFA-FM 92.1 K8AU 90.1 KEFM 103.3	St. Albans Stowe	WWSR-FM 102.3 WMTF 91.5
Cilnton Collegedale Columbia	WYSH-FM 104.9 WSMC 90.7 WKOM 101.7		99.3 New Boston 101.5 New Brauntels	KNBO 95.9 KNBT 92.1		WNHV-FM 95.7
Cookeville	WHUB-FM 98.3 WPTN-FM 94.3 WTTU 88.5	Bryan KORA-FM Canyon KWTS	98.8 Odessa 91.1	KKKK 99.1 KQIP 96.9 KOCV 91.3	Windsor	WVPA-FM 89.5
Covington Crossville	WKBL-FM 93.5 WCSV-FM 99.3	Coleman KSTA-FM I	94.9 107.1 Orange	KOYL-FM 97.9 KUBS-FM 104.5		INIA
Dayton Dickson	WNFM 104.9 WDKN-FM 102.3 WTNQ 102.3	College Station KAMU-FM Columbus KULM	90.3 98.3 0zona Palestine	KIOC 106.1 KRCT 94.3 KLIS 94.3		WTTX 107.1 WBBI-FM 92.7 WKDE-FM 105.5
Dyersburg Etowah	WASL 101.1 WMCC 103.3	Conroe KNRO I Cooperas Cove KOOV	108.9 Paris	KHIM 98.3 KACW 99.3 KYND 92.5	Ariington Ashland	WAVA-FM 105.1 WIVE-FW 100.1
Fayetteville Franklin	WIDD-FM 99.3 WYTM-FM 105.5 WIZO-FM 100.1 WFMG 104.5	Corpus Christi KZFM KIOU KSIX-FM	95.5 96.5 93.9 Plains Plainview	KPLN·FM 90.7 KATX 97.3	Big Stone Gap Blacksburg	WUVT-FM 90.7
Galiatin Germantown Greeneville	WEEF 94.3 WOFM 94.9	Corsicana KCIR I	107.9 Pleasanton	KWLD 91.5 KBOP-FM 98.3 KYKR-FM 93.3	Blackstone Charlottesville	WBBC 93.5 WQMC 95.3 WWWV 97.5
Henderson Hendersonville	WFHC-FM 91.5 WBYQ 92.1	Dailas KKDA-FM I	104.5 102.9 Port Lavaca	KPAC-FM 98.5 KGUL-FM 95.9	Chesapeake	WTJU 91.3 WFOS 90.5
Humboldt Huntingdon Jackson	WIRJ-FM 102.3 WPVG 100.9 WKIR 104.1	KCBI	89.3 Rosenberg	KROB-FM 99.9 KFRD-FM 104.9 KWLW 93.9	Chester Covington Crewe	WKEY-FM 100.9 WSVS-FM 104.7
Jamestown Johnson City	WDEB-FM 100.1 WQUT 101.5	KAFM WFAA-FM	94.5 97.9	KIXY-FM 94.7 KSJT 97.5 KISS 99.5	Culpeper Danville	WCUL 103.1 WAKG 103.3 WEXM-FM 107.8
Jefferson City Kingsport	WETS 89.5 WSBM 99.3 WKPT-FM 98.5	KVTT KMEZ I	91.7	KZZY 100.3 WOAI-FM 97.3	Farmville Front Royal	WFLO-FM 95.7 WFFV 99.3
Knoxville	WBIR-FM 103.5 WEZK 97.5 WIVK-FM 107.7	KDTX I KZAG KRSM	102.9 90.1 89.3	KITE-FM 104.5 KITY 92.9 KMFM 96.1	Fredericksburg Galax	WFVA-FM 101.5 WFLS-FM 93.3 WBOB-FM 98.1
1	WKCS 91.1 WUOT 91.9	KERA-FM KCHU	90.1	KRTU 91.5 KQXT 101.9	Gate City Gretna	WGAT-FM 104.9 WMNA-FM 103.8
Lawrenceburg Lebanon	WDXE-FM 95.9 WFMO 91.3 WLCH 88.7	Denison-Sherman KDSQ	94.5 101.7 89.7 San Marcos	KTFM 102.7 KSCW 103.7	Grundy Hampden-Sydney	WNRG-FM 97.7 WWHS-FM 91.7
Lenoir City	WFMQ 88.9 WCOR-FM 107.3 WLIL-FM 93.5	Denton KDNT-FM I	106.1 Seguin 88.5 Sherman	KWED-FM 105.3 KIKM-FM 96.7 KNCN 101.3	Hampton	WVEC-FM 101.3 WHOV 88.3
Lewisburg Lexington	WJJM-FM 94.3 WDXL-FM 99.3	Dumas KMRE Eagle Pass KINL	95.3 92.7 Staton	KOUL 103.3 KJAK 92.7	Harrisonburg	WEMC 91.7 WMRA 91.1 WQPO 100.7
Livingston Lobelville Manchester	WLIV-FM 95.9 WTHJ 94.3 WMSR-FM 99.7	Edinburg KBFM	104.1 Sonora 107.9 Spearman 96.9 Stamford	KVRN-FM 92.1 KBMF-FM 98.3 KDWI-FM 90.1	Kilmarnock Lexington Luray	WKWI 101.7 WLUR 91.5 WLCC 106.3
Martin Mc Kenzie	WCMT-FM 101.7 WUTM 90.3 WKTA 108.9	El Paso KTEP KUOE	88.5 Stephenville 95.5 Sweetwater	KWWM 98.3 KXOX-FM 96.7 KPLE 104.9	Lynenburg	WWOD-FM 100.1 WGOL 98.3
McKenzie McMinnville Memphis	WHNR 103.9 WHRK 97.1	KEZB KINT-FM KLOZ I	96.3 Temple 97.5 Terrell Hills 102.1 Texarkana	KBUC 106.3 KTAL-FM 98.1	Manassas Marlon	WEZR 106.7. WMEV-FM 93.9 WOLD-FM 102.3
	WMC-FM 99.7 WCBC 91.1	KSET-FM KSDL	94.7 Tyler 92.3	KZAK-FM 93.1 KROZ 92.1 KNUE 101.5	Martinsville Mineota	WMVA-FM 96.3 KMOO-FM 96.7
	WEZI 105.9 WSWM 91.7	KAMA-FM KPAS KTSM-FM	99.9 Vernon	KYUF 95.3 KVWC.FM 102.3	Newport News Nortolk	WGH-FM 97.3 WMTI 91.5 WOMS-FM 100.5
	WLYX 89.3 WMPS-FM 97.1 WQOX 88.5	Floresville KWCB Fort Stockton KPJH Ft. Worth KSCS	94.3 Victoria 94.3 96.3 Waco	KTXN-FM 98.7 KCWM 95.1 KEFC 95.5		WNOR-FM 98.7 WOWI 102.9 WKEZ 95.7
	WZXR 102.7 WQUD 104.5 WKNO-FM 91.1	KESS KXOL	93.9	KWTX-FM 97.5 KWBU 107.1 KH00 99.9		WQRK 104.5 WTGM 89.5
Milan	KWAM-FM 101.1 WKBJ-FM 92.3	KNOK-FM I KTCU-FM	107.5 Wichita Falls	KLUR 99.9 KNTO 103.3	Norton	WXRI 105.3 WYFI 99.7 WNVA-FM 106.3
Morristown Murfreesbore	WAZI 95.9 WMTS-FM 96.3 WMOT 89.5	KFJZ-FM	97.1	KBID, 92.9	Orange Petersburg	WJMA 96.1 WPLZ 99.3 WPVA-FM 95.3
Nashville	WZEZ 92.9 WKDF 103.3 WLAC-FM 105.9	Gallatin WHIN-FM (Galveston KUFO	104.5 106.5 Beaver	KBBD 90.1	Portsmouth Pulaski	WNHS 88.7 WPUV-FM 107.1
	WKDA-FM 103.3 WPLN 90.3	Georgetown KGTN-FM Graham KWKQ	96.7 107.1 Brigham City Cedar City	KBUH-FM 107.1 KCOR-FM 88.1 KBRE-FM 94.9	Radford Richlands Richmond	WRAD-FM 101.7 WGTH 105.5 WTVR-FM 98.1
	WNAZ-FM 88.9 WRVU 91.1 WXEX 92.9	Greenville KIKT Haritagen KELT KIWW	93.5 94.5 96.1 Centerville	KSUB-FM 92.5 KCGL 105.5		WEZS 103.7 WRFK-FM 106.5 WRVQ-FM 94.5
Dak Ridge	WSIX-FM 97.9 WSM-FM 95.5 WATO-FM 94.3	Henderson KGRI-FM Hereford KPAN-FM Highland Park-Dallas	100.1 Ephraim	KEPH 89.5 KGVH 91.7 KBLW-FM 92.9	0	WRXL 102.1 WDCE 90.1
Olive Hill	WOKI-FM 100.3 WDNX 89.1	KVIL-FM	103.7	KUSU-FM 91.5 KVWJ 94.5 KSMF 90.7	, Kuanoke	WPVR 94.9 WSLQ 99.1
Oneida Parls Pujaski	WBNT-FM 105.5 WTPR-FM 105.5 WMGL 98.3	Houston KHCB-FM	Of 5 Ouden	KMTP 91.1	Salem South Boston	WVWR.FM 89.1 WJLM 93.5 WJLC.FM 97.5
Red Bank Sevierville Savannah	WSEV-FM 102.1 WORM-FM 101.7	KFMK	97.9	KWCR-FM 88.1 KVFM 95.5	South Hill Staunton	WSHV 105.5 WSGM 93.5 WFOG 92.9
Sewanee Shelbyville	WUTS 91.5 WTCV 93.1	KLOL-FM KODA-FM KPFT KLEF	99.1 90.1 Parowan	KOHS 90.1 KORM 107.1 KPWN 90.9	Suffolk-Norfolk Tappahannock Tasley	WRAD-FM INS 8
Smithville Soddy Daisy Sparta	WJLE-FM 101.7 WZDQ 102.3 WSMT-FM 105.5	KQUE	94.5 102.9 Price	KPGR 88.1 KARB 98.3	Tazeweli Warrenton Warsaw	WESR-FM 103.3 WTZE-FM 100.1 WEER-FM 107.7 WNNT-FM 100.9
Springfield Sweetwater Yuliahoma	WSMT-FM 105.5 WDBL-FM 94.3 WDEH-FM 95.8 WBGY-FM 93.3	KTSU KUHF	90.9 88.7	KRMQ 94.9	Williamsburg	WBCI 96.5 WCWM 89.1 WMBG 96.5
Union City Waverly	WBGY-FM 93.3 WALR-FM 104.9 WVRY 104.9	KRLY KTRU Huntsville KSAM-FM	91.7 101.7 St. George	KRDC-FM 93.5	Winchester	WRFL 92.5 WEFG 102.5
1	TEXAS	Jacksonville KSHU Jacksonville KOOI Jasper KTXJ-FM	89.3 106.5 102.3	ty KCPX-) M 98.7 KALL 94.1	Woodbridge Yorktown	WXRA 105.9 WYCS 91.8 WYVA-FM 94.1
Abliene	KFMN 99.3 KORQ 100.7	Keene KSUC	94.3	KSU-FM 100.3 KSOP-FM 104.3	WASH	INGTON
Alice	KBIC 102.3 KWKC-FM 105.1 KOPY-FM 92.1	Kileen KIXS-FM KNCT-FM Kilgore KKTX KJngsyelje KPUP	95.9	KWHO-FM 93.3 KLUB-FM 97.1	Aberdeen Auburn	KDUX-FM 104.7 KGRG 88.9
Alvin Amarillo	KACC 91.3 KACV-FM 89.9	La Grange KVLG-FM	91.9 104.9 Vernal	KONI-FM 106.3 KUIB 89.1 KVEL-FM 92.7	Bellevue	KZAM-FM 92.5 KASB 89.3
- 44	KZIP 98.7	Lake Jackson KGOL Lamesa KCOT	107.3 104.7 99.3	RWONT	Beilingham	KVGM 92.9 KISM 92.9
	KGNC-FM 97.9 KWAS 101.9 KBUY 94.1 KFRN 98.7	Laredo KOYE Livingston KETX-FM	99.3 92.7 92.1 Barre	WORK 107.1	Bremerton	KERI 104.3 KBRO-FM 106.9
Ariington Atlanta	KWJS 94.9 KLUK 99.3			WHGC 94.3 WKVT-FM 92.7 WTSA-FM 96.7	Centralia Cheney	KEWC-FM 89.9
Austin	KHFI-FM 98.3 KASE 100.7 KMFA 89.5	KLBK-FM KLLL-FM	94.5 Burlington 96.3	WQCR 98.9 WRUV 90.1	Clarkston College, Plate	KG18 91.3 KBIQ 105.3
	KOKE-FM 95.5 KLBJ-FM 93.7	KTXT-FM Lufkin KLUF-FM	91.9 105.1 Castleton Coichester	WEZF 92.9 WIUV 91.3 WWPV-FM 68.7	Edmonds Ellensburg Hoquiam	KBIQ 105.3 KXLE-FM 95.3 KGHD-FM 103.9 KONA-FM 105.3
	KA71 88.7 KUT-FM 90.7 KMXX 102.3	Marlin KLMT Marshali KBWC KMHT-FM	96.7 East Montpel	VISC-FM 91.5	Kennewick Longview	KLYK 105.5 KLVR 90.5
Bailinger Beaumont	KCWB 103.1 KAYD 97.5 KQXY 94.1	MeAllen KQXX KVMV-FM	98.5 Middlebury 96.9	WWLR 91.7 WRMC-FM 91.7 WCVM 100.9 WNCS 96.7	Lynden Mercer Island	KIYN-FM INS 5
	KVLU 91.3	McKinney KAWB Midland KNFM KWMJ	92.3 Northfield 103.3 Plainfield	WNUB-FM 89.1 WGDR 91.1	Mount Vernon Moses Lake Neah Bay	KMIH 90.1 KSVR 90.1 KWIQ-FM 100.3 KRNB-FM 91.1 KUBS 90.5
Beeville	KWIC 107.7 KJDF 104.9 KCWW 104.9 KTON-FM 106.3	Mineola KMOO-FM Mineral Wells KMWT	93.3 Putney 93.7 Randolph Cen 95.9 Rutland	WVU8 88.9	Newport Ocean Shores Olympia	KDUX-FM 104.7
Belton	KTON-FM 106.3	Mount Pleasant KPXI	100.7 Nutranu	WRUT 97.1	Opportunity	KAOS 89.3 KZUN-FM 96.1

Location	Call	MHz
Pasco	KOLU	90.1
Prosser	KACA	101.7
Providence	WPJB-FM	105.1
Pullman Richland	KORD-FM	104.9
	KXDO	106.3
Seattle	KING-FM	98.1
	KEZX	98.9
	KBLE-FM	93.3
	KVI-FM	101.5
	KSEA	100.7
	KISW	96.5
	KNHC	89.5
	KEUT	94.1
	KTW-FM	102.5
	KUOW	94.9
	KIXI-FM KZOK-FM	95.7 102.5
Spokane	KREM-FM	92.9
	KMBI-FM	107.9
	KDNC-FM KEZE-FM	93.7 105.7
	KICN	98.9
,	KSFC	91.1
	KXLY-FM KHO-FM	99.9
	KWRS	90.3
Sunnyside	KREW-FM	96.7
Tacoma	KPEC-FM KLAY-FM	90.9
	KPLU-FM	88.5
	KNBQ	97.3
	KTOY	91.7
	KUPS	1.00
Toppenish	KENE-FM	92.7
Walla Walla	KEXI	92.7
	KWCW	97.1
		00.0
Wenatchee	KPQ-FM	102.1
Yakima	KIAM-FM KUEZ	104.9
Iakima	KFFM	100.3
	KIT-FM	94.5
	KYB0	98.3

WEST	VIRGINIA	
Beckley	WBKW	99.5
	WCIR-FM	103.7
	WVPB	91.7
Berkley Springs	WCST-FM	93.5
Bethany	WVBC	86.1
Bluefield	WHAJ	104.5
	WBDY	106.3
Buckhannen	WYPW	88.9
	WVWC	89.9
Charleston	WQBE	97.5
	WBES	96.1
	WKNA	98.5
	WTIO	102.7
	WVAF	99.9
	WVPN	88.5
Charles Town	WZFM	98.3
Clarksburg	WRGT-FM WPDX-FM	106.5
	WVHF-FM	92.7
Elkins	WCDE	90.3
Fairmont	WWFC	90.9
r an mone	WEGM	97.9
Fort Gay	WEGH	90.7
Huntington	WEMM	107.9
Trainer in grow	WMUL	88.1
	WHEZ	103.3
	WKEE-FM	100.5

Location		Call	MHz			
W. Carren	147	WHPW KLP-FM				
Keyser Logan		OW-FM				
Martinsburg		PM-FM				
Morgantown	W	AJR-FM	101.9			
		LG-FM				
Oak Hill	WI	DAY-FM				
Parkersburg		WQAW				
		WXII				
Pennington Gap	WS	WV-FN	105.8			
Philippi		WQAE				
Princeton		AEY-FN RRL-FN				
Rainelle Romney	W	WIGE				
Salem	w	ITB-FM				
St. Albans	W	KLC.FN	105.1			
Shepherdstown		WSHC				
Welch		WKJO				
Weston	WI	WK-F				
Wilcolling		WCP				
		WTR				
		WPH				
Williamson		WXC	C 96.5			
WISCONSIN						
MISCONSIN						

MISCONSIN							
Antigo	WRLO-FM	104.9					
Appleton	WLFM	91.1					
Approxon	WCXR-FM	105.7					
Ashland	WATW-FM	95.9					
Baraboo	WLVE	94.9					
Beaver Dam	WXRO	95.3					
Beloit Berlin	WBCR-FM WISS	88.1					
Brule	WHSA	89.9					
Burlington	WBSD	89.1					
Chilton	WPNE-FM	89.3					
Chippewa Falls	WCFW	105.5					
Colfax	WHWC	88.3					
Oelafield Dodgeville	WHAD	90.7					
Durand	WDMP-FM WRDN-FM	107.1 95.9					
Eagle River	WERL-FM	94.3					
Eau Claire	WIAL	94.1					
	WBIZ-FM	100.7					
	WAXX-FM	104.9					
Fond du Lac	WUEC	89.7 107.1					
Fort Atkinson	WFAW-FM	107.3					
Green Bay	WIXX	101.1					
	WGBP-FM	90.1					
	WGBW	91.5					
Hartford	WDUZ-FM WTKM-FM	98.3					
Havward	WRLS	92.1					
Highland	WHHI	91.3					
Holmen	WHLA	90.3					
Janesville Kaukauna	WKAU-FM	99.9					
Kenosha	WLIP-FM	95.1					
Kenosna	WGTD	91.1					
Kewaunee	WAUN	92.7					
La Crosse	WLSU	88.9					
	WSPL	95.9 93.3					
	WLXR	104.9					
Ladysmith	WWIB	92.9					
Madison	WERN	88.7					
	WIBA-FM	101.5					
	WISM-FM	89.7 98.1					
	WZEE	104.1					
	WNWC	102.5					
Manitewoc	WKUB	92.1					
Marinette	WHMD	91.5 95.1					
Marshfield	WDLB-FM	106.5					
m ar ar noto	WOLD-LM	100.0					

	Location	Call	MHz	Location
	** ***	water Fee	004	1
	Mauston Medford	WRJC-FM WIGM-FM	92.T 99.3	
	Menomonee Menomonee Falls	WMEM	92.1	Casper Cheyenne
	Menomonee Pans	WVSS WZMF WJMT-FM	90.7 98.3	
	Merrili	WJMT-FM	98.3	Cody
	Middleton Milwaukee	WWAD WFMR WZUU	106.3 96.5	Ethete Gillette
		WZUU	95.7 97.3	Jackson Lander
		WISN-FM WRIT-FM	102.9	Laramie
		WBCS	102.9	Riverton
		WRITER WBCS WAWA-FM WQFM WKTI WVCY WNUW	102.1	
		WKTI	94.5 107.7	Rock Sprin
		WNUW	99.1	1
		WUWM	99.1 89.7	Torrington
	Milton	WMDF	88.9 89.9	
	Minocqua	WEKZ-FM	95.9 9 3.7	
	Monroe Neenah-Menasha	WEMI	100.1	
	** - 111 - 111	WROE	94.3	Agana
	Neillsville New London	WCCN-FM WLIH-FM WIXK-FM	107.5 93.5	
	New Richmond	WIXK-FM	107.1	
	Oconto Oshkosh	WOCO-FM WMKC	96.7	PU
	0311110811	WMKC WRST-FM	90.3	Arecibo
		WOSH	103.9	
	Park Falls	WNRI-FM	98.3	Aguada Aguadilla
	Platteville	WSUP WSWW-FM	90.5 99.3	
	Portage Port Washington	WPDR-FM	100.1	Bayamon
	Port Washington	WGLB-FM	100.1	0
	Prairie du Chier			Caguas
	Racine	WPRE-FM WRKR-FM WFNY	9 4.3 100.7	Carolina
		WFNY	92.1	Cidra
	Reedsburg Rhinelander	WRDB-FM WRHN	104.9	Corozal Fajardo
	Rice Lake	WJMC-FM	96.3	Guayama Hormiguer
	Richland Center Ripon	WJMC-FM WRCO-FM WCWC-FM WRPN	100.9 95.9	Isabela
	River Falls	WRPN WEVR-FM	90.1	Luquitlo Manati
	Hiver Palls	WRFW	106.3 88.7	Maricao
	Sauk City	WRFW WVLR WTCH-FM	96.7	Mayaquez
	Shawano Sheboygan	WWJR WSHS	97.7	
		WSHS	91.7	Ponce
	Shell Lake Sparta	WGMO WCOW-FM	95.3 97.1	
	Stevens Point	WSPT	92.9	QuebradIII San Germa
		WSUS	89.9 89.9	San Juan
	Sturgeon Bay	WWSP WDOR-FM WYXE	95.9	
	Sun Prairie Superior	WSSU	92.1 91.3	
	Suring	WSSU WRVM WTMB·FM	91.3	1.4
	Tomah Two Rivers	WQTC-FM	98.9	
	Viroqua Watertown	WGBM	102.3	Utuado
	Waukesha	WTTN-FM WCCX	94.1 88.1	Vieques
		WDUX-FM	106.1 92.7 99.3	
	Waupaca Waupun	WIKE-FM	99.3	VIR
	Wausau	WDEZ	91.9	1.10
			95.5	Charlotte .
	Wauwatosa West Bend	WEZW	95.5 103.7	Christians
	Whitewater	WEZW WBKV-FM WSUW	92.5 91.7	Frederikst
	Wisconsin Della Wisc. Rapids	WNNO-FM	107.1	St. Thomas
	Wisc. napids	****	103.3	1000
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Mauston	WRJC-F	92. T	WY
Madford	WIGM-FI	M 99.3	
Menomonee	WMF	M 92.1	Casper
Menomonee Falls	WVS	9 90 7	Cheyenne
Merrili			Cody
Middleton	WWA WFM WZU	D 106.3	Ethete
Milwaukee	WFM	R 96.5	Gillette
	WZU	U 95.7 M 97.3 M 102.9	Jackson Lander
	WISN-FI	M 97.3	Laramie
	WBC	8 102.9	
	WAWA-FI	M 102.1 M 93.3	Riverton
	WOF	M 93.3	Rock Springs
	WK	TI 94.5 Y 107.7	Sheridan
	WNUV	W 99.1	
	WUW	M 89.7	Torrington
Mitton	WYM		
Minocqua	WWM	H 95.9	
Monroe	WEKZ-FI WEM	H 95.9 W 93.7	
Neenah - Menasha	WEM	1.00.1	Agana
Neillsville	WRO WCCN-FI	E 94.3	A game
New London	WITH-FI	и 93.5	
New Richmond	WLIH-FI WIXK-FI WOCO-FI	M 107.1	
Oconto	WOCO-FI	W 107.1	PUER
Oshkosh	WMK WRST-F	C 90./	
	WHSIIF	M 90.3 H 103.9	Arecibo
	WOS WYT WNBI-F	L 103.9	A a v. d.
Park Falls	WNBI-F	L 103.9 M 98.3	Aguada Aguadilla
Platteville	WSWW-F	P 90.5	Aguaurtia
Portage	WPDR-F	M 99.3 M 100.1	Bayamon
Port Washingto	n		
	WGLB-F	M 100.1	Caguas
Prairie du Chie	WPRE-F	M 94.3	Camuy
Racine	WRKR-F	M 100.7	Carolina Cidra
	WRKR-F	Y 92.1	Corozal
Reedsburg	WRDB-F WRH	M 104.9	Fajardo
Rhinelander Rice Lake	WINCE	N 107.9 M 96.3	Guayama
Richland Center	WJMC-F	м 100.9	Hormigueros
Ripon	WCWC-F	M 95.9	Isabela Luquillo
River Falls	WRP	N 90.1	Manati
River Pails	WEYN-P	M 106.3 W 88.7	Maricao
Sauk City	WRP WEVR-FI WRF	R 96.7	Mayaquez
Shawano	WILCH-F	M 100.1	
Sheboygan	WWJ	R 97.7	Ponce
Shell Lake	WGM	S 91.7 0 95.3	
Sparta	WCOW-F WSP	M 97.1	Quebradillas
Stevens Point	WSF	T 92.9	San German
	WSU	S 89.9	San Juan
Sturgeon Bay	WOOR	P 89.9 M 95.9	
Sun Prairie	WDOR-F WYX	E 92.1	
Superior	WCD	11 013	74
Suring	WRV WTMB.F WQTC.F	M 102.7 M 98.9	1.9
Tomah Two Rivers	WOTC-F	M 102.3	
Viroqua	WGB	M 102.3	Utuado
Watertown	WTTN-F	M 94.1 X 88.1	Vieques
Waukesha	WTTN-F WCC WMI WDUX-F	L 106.1	
Waupaca	WDUX-F	M 92.7	
Waupun	WLKE-FA WDE WHR	99.3	VIRGI
Wausau	WDE	Z 101.9 M 91.9	,
			Charlotte Ama
Wauwatosa	WEZ	C 95.5 W 103.7	
West Bend	WEZ WBKV-F WSU	M 92.5 W 91.7	Christiansted
Whitewater	WNNO	W 91.7	Frederiksted St. Thomas
Wisconsin Della Wisc. Rapids	WWR	M 107.1 W 103.3	Ot. Filomas
,			1000

Call MHz

WYO	MING	
Casper	KAWY	94.5
Cheyenne	KLEN	106.3
	KFBC-FM	97.9
Cody	KYDZ	90.1
Ethete	KIEA	89.7
Gillette	KOLL-FM	93.5
Jackson	KMTN	96.9
Lander	KDLY	97.5
Laramie	KUWR	91.9
	KIOZ	
Riverton	KCWC	88.1
	KTAK	93.5
Rock Springs	KQSW	96.7
Sheridan	KROE	94.9
	KLWD	96.5
Torrington	KERM	98.3

GUAM

PUERT	O RICO
Arecibo	WCMN-FM 107.3
Annala	WNIK-FM 106.5 WRFE 105.5
Aguada Aguadilla	WIVA-FM 100.3
	WTPM 92.9
Bayamon	WRSJ-FM 100.7
	WEYA 94.7 WXYX 100.7
Caguas	WVJP-FM 103.3
Camuy	WCHQ-FM 102.9
Carolina	WOLA-FM 107.7
Cidra Corozal	WBRQ 97.7 WORO 92.5
Fajardo	WMDD-FM 94.7
Guayama	WXRF-FM 108.8
Hormigueros	WGIT 92.1
Luguillo	WKSA-FM 101.8 WZOL 92.1
Manati	WMLD 96.9
Maricao	WAEL-FM 96.1
Mayaquez	WKJB-FM 99.1 WIOA 97.5
	WOYE-FM 94.1
Ponce	WZAR INI 9
	WPAB-FM 93.3
Quebradillas	WIOC 105.1 WREI 98.3
San German	WRPC 95.1
San Juan	WIPR-FM 91.3
	WIAC-FM 102.5
	WKAQ-FM 104.7
100	WKVM-FM 105.7
	WPRM-FM 98.5
	WIOB 99.9
Utuado	WRTU 89.7 WUPR-FM 104.1
Viegues	WZVS-FM 98.9
VIDGIN	ISLANDS

WIBS 97.9 WCRN 101.1 WIVI-FM 99.5 WVIS 106.7 WIUJ 88.9 WCRN 101.1

Call	Location	MHz
cun	Locarion	WITH
MAAM S	Parroullia AD	107 1
KAAP.F	M Santa Paula,	CA 96 7
KABG (Cambridge, MN	105.5
KABI-F	M Abilene, Kan.	98.3
KABL-F	M San Francisco,	CA 98.1
KACA P	rosser, WA	101.7
KACC A		91.3
KACE In	glewood, CA	103.9
KACO St	Louis. Mo.	107.7
KACV-F	M Amarillo, TX	89.9
KACW F	L. Louis MO	99.3
KADI SI	M Pine Bluff, AR	96.3 94.9
KADO T	exarkana AR	107.1
KADQ-F	M Rexburg, ID	94.3
KADX	enver. CO	105 1
KAEZ O	klahoma City, Ol	107.7
KAFE-F	M Santa Fe, N.	M. 97.3
KAFM D	allas TX	94.5
KAGE-F	M Winona, MN	95.3
	M Crossett AR	104.9
KAGMK	lamath Falls OR	98.5
KAHS A	M Honolulu, HI	91.5
KAID-E	M Tueson AZ	95.5 94.9
KAIN-FI	M Crowley, LA	102.9
KALA D	avenport. IA	90.1
KALF U	kiah. CA	103.3
KALJ Y	ıma AZ	95.1
KALL Sa	It Lake City UT	94.1
KALQ-F	M Alamosa. CO	93.5
KALSK	alispell, MT angston, OK	97.1
KALU L	an Francisco, CA	90.7
KALY B	erkeley, CA	90.7
KAMA-F	M El Pase, TX	93.1
KAMB N	Perced. CA	101.5
KAMO-F	M Rogers AR	94.3
	lammoth Springs	
AR		95,1
KAMU-F	M College Statio	
TX	ngwin, CA	90 3
	reat Falls MT	98.9
naan di	TOOL FAILS MI	30.3

Call	Location	MHz
KANS-F	M Larned, KS Lawrence, KS Ankeny, IA	96.7 91.5
KANY	Ankeny, IA	106.3
KANW	Albuquerque, N FM Duluth, M	M 89.1 N 94.9
	Vauluku, HI	95.1
KAOL-F	FM Carrelton. !	
KAUS C	Dlympia W A FM Marksville,	LA 97.7
KAPR-	FM Douglas, A	2 95.3
KAPX S	San Clemente,	Cal. 107.9
KARA	Santa Clara CA	
KARD.	Price, UT FM Wichita, K	98.3 ans. 107.3
KARN-	FM Little Rock	AR 103.7
KASB B	Bellevue, Wash.	89.3
KASDA	herdeen, S.D.	90.1
KASE A	Alamosa Coto	90.9
KASK I	Austin, Tex. Alamosa, Colo. Las Cruces, Na	1 103.1
KASU	Ionesboro AR Okiahoma City. Plainview, TX	91.9 OK 100.5
KATX	Plainview. TX	97.3
KAUB	Auburn, NE	105,3
KAUD-	FM Windsor.	
KAUG	Salinas, CA Houston, Tex.	90.9 96.5
KAURS	Bloux Falls SD	89.1
KAUS-F	M Austin, MA	99.9
KAVO	Fallbrook, CA	107.1
	M Rocky Ford,	
KATRI	ти мирто чана	102.3
KAVS T	hief River Fall	s. Minn.
VAWD	Mc Kinney, Tex	89.5
KAWL-	FM York, NE	· 95.3
KAWW	Heber Spring	s AR 96.7
	Casper, WY	94.5
KAXE-	FM Grand Rapi	ds, MN 91.7
KAXR	Flagstaff, AZ	88.5
	Beaumont, Tex.	

Call	Location	MHz
KAYE	-FM Tonkawa, OK	90.5
KAYK	-EM Provo, UT	100.3
KAYL	FM Storm Lake, lowa	
	Tueson AZ Austin, TX	94.9 88.7
	Pacific Grove, CA	90.3
KAZY	Denver, CO	106.7
KBAR	-FM Burley. ID	98.3
KBAS	Lake Havasu City. A.	95.9
KBAT	Midland TX	93.3
KBAY	San Jose, CA	100.3
KBAZ	Bisbee, AZ	92.1
KBBB	FM Borger, TX Phoenix, AZ	104.3 98.7
KBBD	Beaver, UT	90.1
KBBF	Santa Rosa CA	1.68
	-FM Boise, ID	92.3
KRRY	Riverside, CA Ventura, Calif.	99.1
PRCA	Ventura, Gailf. Los Angeles, CA Sloux City, IA	105.1
KBCM	Sloux City. IA	95.8
	Boulder, CO FM Steamboat Spring	97.3
CO	rm Steamboat Spring	96 "
KRCS	Bellevue WA	91.3
KBCT	Fairfield, IA. Turlock, CA	95.9
KRDG	Turlock, CA Merced CA	90.9 89.1
KRED	Lake Providence. LA	92.7
KPEE-	FM Modesto, CA	103.3
	Lexington MO	106.3
MN	-FM Minneapolis	88.5
KBEQ	Kansas City MO	104.3
	Tulsa, OK	92.9
KBEW	-FM Blue Earth. MN Forrest City AR	100.9 93.5
	Casa Grande, AZ	105.5
KBFL	Buffalo, MO	90.3
KBFM	Edinburg TX	104.1
KEGL	Pocatello, Ida. FM Caldwell, Ida.	88.7 94.1
KBHI-	FM Modesto. CA	89.9

Call	Location	MHz
KPHL	Lincoln, NF	95.3
KBMP	Lincoln, NE Bemidji MN	101.1
KBHU	FM Hot Springs AR FM Spearfish, SD	96.7 89.1
KBIA	Columbia MO	91.3
KBIC .	Alice, TX Wichita Falls, TX	92.9
KBIG	Los Angeles, CA	104.3
	FM Roswell, NM Edmonds, WA	94.9
KBJC	Great Bend, KS	91.9
KBLE-	FM Fort Madison, IA	93.3
	FM Seattle, WA FM Blackfoot, ID	97.7
KBLU	La Junta, CO -FM Logan, UT	92.1 92.9
KBMC	Eugene, OR	94.5
KRMO.	FM Spearman, TX FM Benson, Minn.	98.3 93.5
KBMS	Billings, Mont.	98.5
KROE.	West Covina, CA FM Oskaloosa, IA	98.3 104.9
KB01-1	M Boise, ID	97.9
KBOD.	Portland, OR FM Pleasanton, TX	90.7
KBOS	Tulare, Cal.	94.9
	Butte MT FM Medford, OR	94.1
KBPI	Denver, CO	105.9
KBPK	Buena Park, Calif. Wichita KS	90.1
KRRD	Tacoma, WA	103.9
KBRE-	FM Cedar City, UT FM Fergus Falls, Min	94.9
		103.3
	San Francisco, CA FM Brinkley AR	105.3
KBRK-	FM Brookings, S.D.	94.3
	FM Bremerton, WA Fort Morgan, CO	106.9
KBUF	FM Garden City, KS	97.3
	FM O'Neill, NE Bemidji, MN	92.7
	Espanola, NM	102.3

Call Location MHz Call Location MHz Call Location MHz Call Location	MHz
KBSU Bolse, ID 90.1 KDLY Lander, WY 97.5 KFMY Eugene, Oreg. KIGC Oskaloosa, IA KRTM.FM Janeshara AR 101.9 KDMI Des Molnes, Iowa KFMZ Columbia, Mo. 98.3 KIK Davenport IA	88.7
KBUC Terrell Hills TX 106.3 KDNC-FM Spekane, WA 93.7 KFNB Oklahoma City. Okia. KilQ-FM Manitou Springs	103.7
107.1 KDNT-FM Denton, TX 106.1 KFNF Oberlin, KS 101.1 KIIS-FM Los Angeles, C KPNV-FM Ferriday, La. 93.5 KIIN-FM Mulron, SD	92.1
KBVL Boulder, Colo. 94.7 KDOM-FM Windom, MN 94.3 KFNW-FM Fargo, N.D. KIKK-FM Houston, Tex. KBVR Corvallis, OR 90.1 KDON Salinas, CA 102.5 KFOG San Francisco, Calif. KIKM-FM Sherman, TX	95.7 96.7 100.3
KBXL-FM Caldwell. Idaho 94. KDPS Des Molnes, Iowa KFRA-FM Franklin, LA 95.3 KIKT Greenville, TX KBYU-FM Prove, UT 88.9 KDRB Derby, KS 95.9 KFRY Fresno, CA 101.9 KILA Henderson, Nev.	93.5 95.5
KCAC Walnut Ridge, AR 106.3 KDSN FM Denison, lowa 107.1 KFGC Lo Angeles, Cal. 96.3 KLT-FM redistribution, Text	95.3
KCBI Dallas, TX 89.3 KDTX Dallas, TX 102.9 KFUN Las Vegas NM 100.9 KINB Potesu, Okla,	98.5 107.3
KCBM Chico, Calif. 93.7 KDUR Durango, CO 91.9 KFWD Ft, Worth, TX 102.1 KING-FM Seattle, Wash.	96.1
KCBX-FM San Luis Oblspo, KDU7-FM Hutbhlason Minn KFYR-FM Bisharck, N.D. KNL Eagle Pass, Tex.	92.7 97.5
KCCM-FM Moorhead, Minn. 91.1 KDVS Davis, Cat. 91.5 KGB-FM San Diego CA 101.5 KIOC Orange, TX KIOC OFM Lawton, Okla. 98.1 KDVV Toneka, KS 100.3 KGB-FM San Diego CA 101.5 KIOC Mesa, AZ	106.1 104.7 101.9
KODC Longmont CO 90.7 KDXT-FM Missoula, MO 93.3 KGBS Los Angeles, CA 97.1 KIDI San Francisco, Cal.	99.3
KCED Centralia. WA 94.3 KDXL St. Louis Park, MN 91.7 KGFM Bakersfield, Call KIQQ-FM Bishop, CA KCEE-FM Tueson AZ 96.1 KDXT Missoula, MT 93.3 KGGG-FM Rapid City, SD 100.3 KIQS-FM Omaha, Neb.	99.7 100.7 91.5
KCES Eufaula, Okla. 102.3 KEAZ DeRidder, LA 101.7 KGGO Des Molnes, IA 94.9 KITE-FM San Antonio. TX KGEV Kansas City, MO 94.9 KEAZ DeRidder, LA 101.7 KGHO-FM Hoquiam, Wash.	104.5
KCFM St. Louis. MO 93.7 KEBR Sacramento, CA 100.5 KGLA Los Angeles, Calif. KIDY Hanford, CA KGLG-FM Miaml, OK 100.9 K1DZ Isramie. WY	103.7
KCFS Sloux Falls, S.D. 90.1 KEDP Las Vegas, N.M. KGLP Gallup, NM 94.5 KIQO Atascadero, CA KCFV Ferguson, Mo. 89.5 KEDP Las Vegas, N.M. 90.7 KGLR Beno, Nev. 105.7 KIQO Las Angeles CA	91.5 104.5 100.3
KCGM Scobey, Mont. 95.7 KEEY-FM Minneapolis-St. Paul. KGLT Bozeman. Mont. 95.7 KEEY-FM Minneapolis-St. Paul. KGLT Bozeman. Mont. KISM Bellingham. WA	92.9 93.7
KCHC Central Point OR 91.7 KEFC Waco, TX 95.5 KGMO-FM Cape Girardeau, Mo. KISS San Antonio, TX	99.5 99.9 94.5
KCH1-FM Chillicothe, MO 103.9 KELA-FM Centralia, Wash. KCH0 Dhico, Cai. Signo-FM Dadge City, Kan. KITR Creston, IA KITR Creston, IA	101.7
KCII-FM Washington, IA 95.3 KELT Harlingen, TX 94.5 KGOL Lake Jackson, TX 107.3 KIWA-FM Sheldon, IA	92.9 105. 5 96.1
KCIR Corsieana TX 107.9 KENA-FM Mena AR 101.7 KGOR Omaha, NE 99.9 KIXI-FM Seattle, Wash. KCIR Corsieana TX 107.9 KENE-FM Toppenish, WA 92.7 KGOT Anchorage AK 101.3 KIXS-FM Kilieen TX (COL) New York (CO	93,3 96.1
KCIZ Springdale, AR 104.9 KEOK Tahleguah, OK 101.7 KGOW Broken Arrow, OK 92.1 KIXY-FM San Angelo TX KCIB-FM Minot, ND 97.1 KEOK La Grande OR 91.1 KGRA Lake Charles, LA 103.7 KIAK Staton, TX	94.7
KCLKN-rm Kansas City, Kan. 39. KEPH Ephralm, Utah 89.5 KGRD Las Cruces, NM 103.9 KJAN-rm Atlantic, IA KCLC St. Charles, MO 89.1 KFPD Facile Polate OP 80.1 KGRE Greeley. Colo.	103.1 103.7 99.3
KCLD-Fm St. Cloud, MN 104.7 KEPT Shreveport, LA 96.5 KGRG Auburn, WA 88.9 KJAZ Alameda, CA KCLK-FM Clarkston WA 94.1 KEQR Chica, Cal. KGRI-FM Henderson, Tex. KIRS Rastron, LA	92.7
KCLU-FM Leavenworth, KS 98. KCLU-FM Rolla, MO 94.3 KERI Bellingham, Wash. KCRRS Burlington, IA 107.3 KJEF-FM Jennings, La. KGRS Parkville MO 90.3 KJEL-FM Lebanon MO	103.7
KCMS indio, CA 103.1 KESD Brookings, S.D. KGUL-FM Port Lavaca, TX 95.9 KJFM Oceanside, CA KCMT-FM Alexandria, Minn. KESI Edinburg, TX 107.9 KGUS Hot Springs AR 97.5 KIHK Lawrence, KS	95.3 102.1 90.7
KCMU Seattle WA KCNM Carlsbad, N. M. KESM-FM El Dorado Springs, Mo. KGVW-FM Belgrade, Mont. KGVW-FM Belgrade, Mont. KHAK-FM Cadar Rapids IA KHAK-FM Cadar Rapids IA	99.5 104.9 102.3
KCOL-FM Cedar Rapids IA 90.9 KETU Salem, Mo. 95.9 KHAT Lincoln NE 106.3 KIML Sacramento, CA	103.3
KCOU Columbia. MO 88.1 KEWB Redding, Cal. 104.3 KHBM-FM Monticello AR 93.5 KJNA Jena, LA KCOU Columbia. MO 88.1 KEWB Redding, Cal. 104.3 KHBR-FM Hillsboro, Tex. 102.5 KJNP-FM North Pole. AK	99.3
KCPI Albert Lea, MN 95.3 KEWT Sacramento CA 105.1 KHCB-FM Houston, Tex. 105.7 KJOK Yuma AZ KEXI Walla Walla, WA 92.7 KHCC-FM Hutchinson KS 90.1 KIOT Roise ID	98.7 93.1 105.1
KCRF-FM Winnshoro, La. 35.9 KEZO Truckee, CA 101.7 KHEN-FM Henryetta, Okla. KIPW-FM Waynesville, Mi KHEN-FM Phoenix AZ 101.5 KIRG-FM Newton, KS	92.5
KCRI Helena, AR 103.1 KEZH-FM Spokane, Wash, 105.7 KHEX Yuba City, CA 103.9 KJSK-FM Columbus, NE KCRV Caruthersville, MO 103.1 KEZH Prescott, AZ 98.3 KHFI-FM Austin, Tex. KJUG Tulare, CA KJUG Tulare, CA KHFI Albuquerque, N.Mex. KJUG Marciald I A	101.1 106.7 92.7
KCRW Santa Morica. Callt. 89.9 KEZK St. Louis MO 102.5 KHHS Hillsboro, KS 88.1 KJVG Mansfield, LA KCSB-FM Santa Barbara, CA 91.9 KEZL San Diego CA 102.9 KHB Durant OK 91.9 KJZZ Anchorage AK KFZL San Diego CA 102.9 KHIG Bergould AP 104.9 KJZZ Anchorage AK	92.7 102.1 95.7
KCSD Chinie. AZ KCSD Chinie. AZ KCSD San Mateo CA 91.1 KEZR San Jose CA 106.5 KH1M Palestins. TX 98.3 KKBC Carson City, NV KCSM San Mateo CA 91.1 KEZU El Dorado, AR 103.1 KH1P Hollister, CA 93.5 KKCA Fulton, Mo.	97.3 97.7
KCSS Turlock, CA 91.9 KEZY-FM Anahelm CA 95.3 KHKA Hillsboro, Mo. 88.9 KKDJ Fresno, CA	104.5 105.9 92.9
KTAC-FM Los Angularif, AZ 93.9 KFAC-FM Los Angularif, AZ 93.0	97.9 92.1
KCUE-FM Hed Wing, MM 100.5 KFAI Minneapolis, MM 90.3 KHOM Houma, LA 104.1 KKFM Colorado Springs, C 104.1 KFAM Ordville, CA 97.7 KHOM Ween TX 90.9 KMLLEM San Francisco	al.
KCWB Blailinger, IA 103.1 KFBD-FM Waynesville, Mo. KHPA Hope, AR 104.9 KKKK Odessa, TX	93.9 101.7 99.1
KFCF Fresno, CA 88. KHPF Albany OR 107.9	98.7 103.9 104.5
KCYS Richland, Wash. KDAB Ogden, UT 101.1 KFIG Fresno, CA 101.1 KHSJ-FM Hemet, Cal. KKNG Oklahoma City OK	95.5 92.5
K DD FM South Parham CA 93.7 KKOS Carlshad, CA	95.9 107.7
KDBM-FM Dillon MT 98.5 KFJB-FM Marshalltown, Ia. KHUI Honolulu, HI 93.9 KKUL Tulsa OK KDBX Boonville, MO 99.3 KFJC Los Altos, Cal. KHUI Honolulu, HI 93.9 KKUL Tulsa OK KKWB Breekenridge, Min	
KDCV-FM Blair NE 91.1 KFIM-FM Grand Forks, ND 89.3 KHYL Auburn, CA 101.1 KKAA Bakersriein, CA CA 101.1 KKAA Bak	107.9
KDEM Deming, NM 94.3 KFMR-Fem San Diago Calif	93.7
KDFC San Francisco CA 102.1 KFMD Dubuque, la. KICD-FM Spencer, la. KICD-FM Control Creek, CA 92.1 KFMD Dubuque, la. KICE Bugene, Ore. KICE Eugene, Ore.	
KDHI-FM Twenty-Nine Palms. KFMH Muscatine. 1A 99.7 KICG lowa City, IA 100.7 KLCL-FM Lake Charles. Cal. 98.3 KICN Stokene, WA 98.9 KLCL-FM Lake Charles.	95.9
KDHS Modesto, Cal. 90.8 KFMM Tueson AZ 99.5 KICS-FM Hastings, Neb. KLCO-FM Poteau, Ukia. KICT Wieblitz MS 08.1 KLEA-FM Lovington, Neb. KICT Wieblitz MS 08.1 KLEA-FM Lovington, Neb. 1 KLEA-FM Lovington	M. 97.7
KDKA-FM Pittsburgh, PA 92.0 KFMQ Lincoln, NE 101.9 KID-FM Idaho Falis, Ida, KLEF Houston, Tex. KDKB-FM Mesa, AZ 93.3 KFMQ Fremont, Cal. KIDA Moorhead, MN 99.9 KLEL San Jose, CA	
KNKO-FM Clinton. MO 95.3 KFMS Las Vegas, NV 101.9 KIEA Ethete, WY 89.7 KLEN-FM Cliebleid, Mir KDLK-FM Del Rio. Tex. KFMU Oak Creek, CO 103.9 KIEE Harrisonville, MO 100.7 KLFD-FM Litchfield, Mir KDLO-FM Watertown, SD 96.9 KFMV Mannolia AR 107.9 KIEL Beaumont, TX 95.1 KLFM Ames, la.	
KOLR-FM Materios IA 107.9 KIEG-FM lowa Falls, Ia. KOLS-FM Perry, Iowa 104.9 KFMX St. Louis Park, MN 104.1 KIEG-FM lowa Falls, Ia. KIEG-FM San Diego, CA 98.1 KLGR-FM Redwood Falls	92.7

U.S. FINI STATION	S BY CALL LETTE	in S	
Call Location MHz	Call Location MHz	Call Location MHz	Call Location MHz
MN 97.7	KNBU Baldwin, Kan.	VDDV FM Suskana WA 61.1	KRMS-FM Osage Beach, MD
KLGS Los Gatos, Cal. KLGT Breckenridge, CO 102.3	KNBY-FM Newport AR 105.5	KPBX-FM Spokane WA 91.1 KPCG Joplin, MO 102.5	KRNA lowa City, IA 93.5
KLHS Lewiston ID 89,1 KLIL Ukiah, Cai.	KNCC Tsaile, AZ KNCN Sinton, TX KNCT-FM Killeen, TX 91.8	KPCH-FM Bowling Green, MO	KRNB-FM Neah Lay, WA 90.1 KRNL-FM Mt. Vernen, Ia.
KLIN-FM Lincoln, Neb. 107.3 KLIR-FM Denver, Colo.	KNCV Rochester, MN 101.7	KPCS Pasadena, Cai. 89.3 KPDJ Eureka, CA 92.3	KRNO Reno, NV 108.9 KRNQ Des Moines, IA 102.5
KLIZ-FM Brainerd, Minn. 95.7	KNCY-FM Nebraska City, NE	KPDQ-FM Portland, Ore. 93.7 KPEC-FM Tasoma WA 90.9	KRNY-FM Kourney-moldrogs, Nebraska
KLLL-FM Lubbock, Tex. 96.3	KNDR Mandan, ND KNDY-FM Marysville KS 103. i	KPEN Los Altos, Cal. 97.7 KPFA Berkeley, Cal. 94.1	KROA Aurora. NE 103-1 KROB-FM Robstown, TX 99.9
KLLS Okmulgee, OK 94.3 KLME Battle Mountain, NV 88.1	KNEB-FM Scottsbluff, Neb. 94.1 KNED-FM McAlester, Okla.	KPFB Berkeley, Calif. KPFK Los Angeles, Calif.	KROC-FM Rochester, MN 106.9 KROE Sheridan, WY 94.4
KLMO-FM Lengment, CA 104.3 KLMR-FM Lamar, CO 93.3	KNEI-FM Wauken, lowa 103.9 KNER Dallas, Tex.	KPFM Kerryllie TX 94.3 KPFT Houston TX 90.1	KROF-FM Abbeville, LA 104.1 KHUG Sonora CA 92.7
KLMT Marlin, TX 96.7 KLOA-FM Ridgecrest, Callf.	KNEV Reno, Nev. KNEW-FM Scottsbluff, Nebr. KNEX-FM McPherson K8 96.7	KPGA Plame Beach, CA 95.3 KPGH Pleasant Grove, UT 85.1 KPGY Ames, Jowa 91.9	KROI Sacramento, CA 98.9 KROK Shreveport LA 94.8
KLOH-FM Pipestone, MN 98.7 KLOL Houston TX 101.1	KNFB Nowata, Okia.	KPIC Albuquerque, NM 91.5	KHOQ-FM Pasadena, CA 106.7 KHUZ Tyler, TX 92.1 KRPL-FM Moscow ID 185.8
KLOM-FM Lompoe, Cal. 92.7 KLON Long Beach, Calif.	KNFM Midland, Tex. KNGT Jackson CA 94.3 KNHC Seattle, Wash. 89.5	KPIK-FM Colorado Springs, Colo, KPIR Duluth MN 98.9	KKPR Rochester, MN 89.9
KLOQ-FM Corvalis, OR 106.1 KLOQ Lyons, KS 106.1	KNHS Torrance, Cal.	KPJH Ft. Stockton, TX 94.3 KPLE Temple, TX 104.9	KRQQ Tucson, AZ 93.7 KRRC Portland, Ore. 89.3
KLOR-FM Ponea City, OK 99.3 KLOS Los Angeles, Calif. 95.5	KNID Enid, OK 96,9 KNIK-FM Anchirage AK 105.5 KNIM-FM Maryville, MO 95.3	KPLL Pella, IA 103.3 KPLN-FM Plains, TX 90.7	KRRO Ardmore, OK KRRV Alexandria, LA 100.3
KLDV-FM Loveland, Colo. KLOZ El Paso TX 102.1	KNIS Carson City, Nev. 94.7	KPLN Del Ray Oaks, Cailf. 107.1 KPLR-FM St. Louis, Mo.	KRSA-FM Salinas-Monterey CA
KLPC-FM Lompoe, CA 92.7 KLPH St, Leuis MD 88.9	KNIX-FM Phoenix AZ 102.5 KNJO Thousand Oaks, Calif. KNLU Monroe LA 88.7	KPLU Tacoma, WA 88.5 KPM (Oxnard, Cai.	KRSB Roseburg, Ore. 103.1 KRSH Overland, MO 90.1
KLPI Ruston LA KLPW-FM Union, Mo. 101.7	KNOB Long Beach, Cal. 97.9 KNOE-FM Menroe, LA 101.9	KPNW-FM Eugene, Ore. 99.1 KPOC-FM Posahontas AR 103.9	KRSI Minneapolis, Minn. KRSJ Durango, CO 101,5
KLQQ Sulphur, LA 100.9 KLRB Carmel, Callf, 101.7	KNOF St. Paul, MN 95.3 KNOK-FM Ft. Worth, TX 107.5	KPOE Humble City, NM 94.1 KPOL-FM Los Angeles, Calif.	KRSL-FM Russell, KS KRSM Dalles, TY 89.8
KLRE Little Rock AR 90.8 KLRF Emporia. KS 104.9	KNOS Marshall. Mo. 91.7	KPOO San Francisco CA 89.5 KPOP-FM Roseville, Cal. 93.5	KRSN-FM Los Alames, N.Mex. KRSP-FM Salt Lake City, Utah
KLRO San Diego, Calif. KLRS-FM Mountain Grove,	KNPT-FM Newport, OR 102.5	KPPL Lakewood, CO 107.5 KPPS-FM Parsons, KS 91.1	KRST Albuquerque, N.M.
MO 92.7 KLSD Lubbook TX 91.1	KNTO Witchite Falls TX 103.8	KPQ-FM Wenatchee, Wash. KPQX Havre, MT 92.5 KPRA Paso Robles, Calif. 94.5	KRSY-FM Roswell, NM 97.1
KLSE-FM Rushford, MN 91.7 KLSN Brownwood TX 99.3	KNTU Denton, Tex. 88.5 KNUE Tyler, Tex. 101.5 KNUJ-FM New Ulm, Minn.	KPRA Paso Robies, Calif. 84.5 KPRI San Diego, CA 106.5 KPRM-FM Park Rapids, MN	KRTH Los Angeles CA 101.1 KRTU San Antonio, TX 91.5
KLSR St. Louis MO 69.7 KLSS Okmulgee. OK 94.3	KNUS Dallas, Tex.	97.5	KRUD Las Vegas, NV 90.5 KRUZ Santa Barbara, CA 103.3
KLTB Belivar, MO KLTD Lampasas, TX 99.3	KNUW Great Falls MT 94.5 KNVR Paradise, CA 96.7 KNWA Fayetteville AR 103.9	KPRS Kansas City, MO 103.3 KPSH-FM Palm Springs, CA 88.3	KRVE Los Gatos, CA 95.3 KRVH-FM Rio Vista CA 90.9
KLUB-FM Salt Lake City UI 97.1	KNWC-FM Sioux Falls, S.D.	KPSH Los Altos. Cal. 91.5 KPSU Goodwell, OK 91.7	KRVM Eugene, OR KRVN-FM Lexington, Neb. 93.1
KLUE-FM Longview, Tex. KLUF-FM Lufkin TX 108.1	KNWD Natchitoches, LA 91.7 KNWS-FM Waterloo, Iowa KNX-FM Los Angeles, Calif.	KPTL Carson City NE 97.8 KPUB-FM Pueble, CO 99.9	KRVS Lafayette, La. 68.1 KRWG Las Cruces, NM 90.7
KLUK Atlanta, TX 89.3 KLUM-FM Jetterson City. Mo.	KNXR Rochester, Minn,	KPWD Plentywood, MT 100.1 KPXI Mt. Pleasant, TX 100.7	KRWS Hardin, MT 95.3
KLUR Wighita Falls, Tex.	KNZA Hiawatha, KS 103.9 KOAP Pertland, Ore. 91.5	KQAA Aberdeen, SD 94.9 KQAD-FM Luverne MN 93.7 KQAL Winena, MN 88.5	KRXL Kirksville, MO 94.5 KSAB Liberty, MO 106.5
KLVA Lake Village, AR 95.9 KLVE Los Angeles, CA 107.5	KOAQ Denver, CO 103.5 KOAT-FM Albuquerque, N.M.	KQCA Canton, MO 102.3	KSAK Walnut CA KSAM-FM Huntsville, Tex.
KLVL Pasadena, Tex. KLVN Newton, IA 95.9 KLVR Longview, WA 90.5	KDAX Dallas, Tex. 105.3 KOB-FM Albuquerque, MN 93.3	KQCR Codar Rapids, IA 102.9 KQDE-FM Waseea MN 92.1	KSAN San Francisco, Cal. 94.9 KSAR Salen, AR 95.9
KLVR Longview, WA 90.5 KLWN-FM Lawrence, Kan. KLYD-FM Bakersfield, Cal. 94.1	KOBC Joplin, MO 91.3 KOBS-FM Orange, Tex. 104.5	KQDY Bismarck, ND 94.5 KQED-FM San Francisco, Cal. 88.5	KSAU Nacogdoches, TX 90,1 KSAY Clinton, IA 96.1
KLYF Des Meines IA 100.3 KLYK Longview. Wash. 105.5	KOCM Newport Beach, Cal. KOCN Pacific Grove, Cal. 184.9	KQEZ Shafter, CA 97.7 KQFM Portland, OR 100.3	KSBR Mission Viejo, CA 88.5 KSBY-FM San Luis Obispo, Cal.
KLYN-FM Lynden, Wash.	KOCY Odessa, Tex. KOCY-FM Oklahoma City. Okla. KODA-FM Houston, Tex.	KQHJ Hampton, IA 104.9	KSCL Shreveport, LA 91.3
KLYQ-FM Hamilton, MT 95.9 KLYR-FM Clarksville, AR 92.7 KLYT Albuquerque, NM 88.3	KOEA Doniphan, MO 97.7	KQHU Yankton SD 104.1 KQIC Willmar MN 102.5 KQIP Odessa, TX 96.9 KQIX Grand Junction CO 93.1	KSCM-FM Houston, MO 89.3 KSCO-FM Santa Cruz, CA 99.1
KLWD Sheridan, WY 96.5 KMAG Fort Smith AR 99.1	KOEL-FM Oelwein, IA 92.3 KUEZ Newton, KS 92.3 KOFA Yuma, Ariz. 91.5	KQIX Grand Junction CO 93.1 KQIZ-FM Amarillo, TX 93.1	KSCD-FM Santa Cruz, CA 99.1 KSCR Hobbs, NM 95.7 KSCS Ft. Woth TX 96.5 KSDN-FM Aberdeen, SD 94.1
KMAQ-FM Maquoketa, Ia. KMAV-FM Mayville, ND 101.7	KOFA Yuma, Ariz. 91.5 KOFM Oklahoma City, Okla. KOFO-FM Ottawa, Kan.	KQKI-FM Bayou Vista, LA 95.3 KQKQ-FM Council Bluffs, IA	KSDN-FM Aberdeen, SD 94.1 KSDL EI Paso, TX 92.3 KSDS San Diego, CA 88.3
KMAX Sierra Madre, Calif.	KOGM Dpelousas, LA 107.1 KOHL Fremont, CA 89.3	KQLH San Bernardino CA 95.1	KSEA Seattle, WA 100.7 KSEL-FM Lubboek, TX 93.7
KMBI-FM Spokane, WA 107.9 KMBQ Shreveport LA 93.7 KMBR-FM Kansas City, Me.	KOHS Drem, UT 90.1 KOIL-FM Dmaha, Neb.	KOMO Honolulu, HI 93.1	KSEO-FM Durant, DK 107.1
KMCR-FM Phoenix AR 91.5 KMCS Gatesville, TX 98.3	KOIT San Francisco, CA 96.5 KOJC Cedar Rapids, IA 89.7	KQNM Gallup, NM 93.7 KQDK Kenai, AK 100.1 KQPD Dgden UT 101.9	KSER Searcy, AR KSET-FM EI Paso, Tex. 04.7 KSEZ Sioux City, IA 97.0
KMEL San Francisco, CA 106.1 KMEO-FM Phoenix AZ 96.8	KOKE-FM Austin, Tex. KOKF Edmond, OK 90.9	KQQQ Puliman, WA 104.9 KQRS-FM Golden Vailey, NM 92.5	KSFA-FM Nacogdoches, TX 92.1 KSFC Spokane WA
KMFT Los Angeles, Cal.	KOKR Newport, AR 105.5 KOLL-FM Gillette, WY 93.5	KQSM Chanute, KS 105.5 KQSW Rock Springs, WY 96.7	KSFH Mountain View CA 90.5 KSFM Woodland CA 102.5
KMEX Dailas, TX 100.3 KMFA Austin, TX 89.5 KMFB-FM Mendocino, Cal.	KOLM-FM Rochester, Minn.	KQUE Houston TX 102.9 KQWB-FM Moorhead, MN 98.7	KSFX San Francisco CA 103.7 KSGM-FM Sto. Genevieve, MD
KMFE Emmett ID 101.7 KMFL-FM Marshall, Mo. 102.9	KOLU Pases, WA KOLY-FM Mobridge SD 99.5 KOME San Jess, Calif. 98.5 KDMR St. Louis, MD 88.3	KQWC-FM Webster City IA 95.9 KQXT San Antonio, Tex. 101.9 KQXX McAllen, Tex.	105.7
KMFM San Antonio. Tex. (8) KMFS Memphis. Tex.	KDMR St. Louis, MD 89.3 KOMS Lebanon, DR 103.7	KQXY Beaumont, TX 94.1	KSHU Huntsville TX #9.3 KSID-FM Sidney, NE 95.3
KMGC Dallas, TX 102.9 KMGK Des Meines, IA 93.3	KOMS Lebanon, DR 103.7 KONG-FM Visalla, Calif. KONI-FM Spanish Fork, Utah	KRAB Seattle, WA 107.7 KRAD-FM E. Grand Forks, MN	KSIM Pocatello, ID 94.9 KSIW-FM Woodward, DK 98.5
KMGD Centerville, IA 98.7 KMHD Gresham, OR 88.5	KOD1 Jacksonville, Tex. 106.5 KOOL-FM Phoenix AZ 94.5	KRAI-FM Craig, CD 93.7 KRAV Tulsa, OK 96.5 KRAY-FM Salinas, CA 103.9	KSIX-FM Corpus Christi, Tex. KSJC-FM Stockton, Calif. 89.5
KMHI Walluku HI 95.1 KMHT-FM Marshall, TX 103.9	KOOM Benton, Ark. 107.1 KOOO-FM Dmaha NE 104.5 KOOV Copperas Cove, TX 103.1 KOPE Mesilla Park, NM 104.9	KRAY-FM Salinas, CA 103.9 KRAZ Farmington, NM 96.9	KSJM Jamestown, ND 93.3 KSJN Minneapolls, Minn. 91.1
KMIH Mercer Island, Wash, 90.1 KMIS-FM Portageville, MO 106.3	KOOV Copperas Cove, TX 103.1 KOPE Mesilla Park, NM 104.9 KDPN Columbia, MO 89.5	KRBB-FM Sallisaw, Okla. 95.9	KSJO San Jose, CA 92.3 KSJR-FM Collegeville, MN 90.1 KSJS San Jose, Cai. 90.7
	KOPN Columbia, MO 89.5 KOPR-FRI Great Fails, Mont. KOPY-FM Alice, TX 92.1	KRBD Ketchikan, AK 105.9 KRBE Houston, TX 104.1 KRBI-FM St. Peter, MN 105.5	KSJU Callegeville, M.N. 89 I
KMIX Turlick, CA 98.3 KMJ-FM Fresno, Calif. KMJK Lake Oswego, OR 106.7	KORA-FM Bryan, TX 98.3 KORJ Garden Grove CA 94.3	KRBM Pendleten, OR 90.9 KRBU Pecatelle, ID 104.9	KSKG Satina, Kan. 98.9 KSKI-FM Sun Valley, ID 98.5
KMKF Manhatten KS 101.7	KORK-FM Las Vegas, NV KORM Drem, UT 107.1	KRCC Colorado Springs. CO 91.5 KRCH Rochester. MN 101.7	KSKR Mena, AR 101.7 KSKU Hutchinson, Kan. 102.4 KSL-FM Salt Lake City, Utah KSLC MeMinqville OR 90.3
KMLA Ashdown AR KMMK Little Rock, Ark, KMMM-FM Muskogee, Okla.	KORU ADIJENO. TX 190.7	KRCS Sturgis, SD 93.1	KSLC MeMinaville OR 90.3 KSLH St. Leuis, MD 91.5
KMMT Mammoth Lakes UA 196.3	KOSE-FM Usceola AR 98.1 KOSI-FM Denver, Cole. KOSN-FM Thief River Falls, MN	KRCU Cape Girardeau, MO 90.9 KRDC-FM St. George UT 90.1 KRDO-FM Colorado Springs, Colo.	KSLI Alexandria, LA 96.9 KSLQ St. Louis, MO 98.1 KSLU Hammond, LA 90.9
KMDD Tulsa, Okia.	99.3	KRDO-FM Colorado Springs, Colo. KRE-FM Berkeley CA 102.0	KSLU Hammond, LA
KMOE Butler, MO KMOO-FM Mineola, TX 96.2	KOSO Patterson, Cal. 93.1 KOST Los Angeles, Cal. KOSU-FM Stillwater, Okla. KOSY-FM Texarkana, Ark. 182.5	KRER Manroe, LA IORI	KSMA-FM Santa Maria, CA 102.5 KSMB Lafayette, LA 94.1 KSMC Meraga, CA 69.1
KMOX-FM St. Louis, Me. KMPX San Francisco, CA 106.9	KUIE Laneaster, Calif. 100.3, 1	KRER Billings, MT 88.9 KRES Moberly, MO 104.7	KSMI-FM Donaldsonville LA 104.9
KMRC-FM Morgan City, LA 96.7 KMRE Dumas, TX 95.3 KMRJ Pittsburg, K8 96.9	KOTN-FM Pine Bluff AR 92.3 KOTO Telluride. CO 91.7	KREX-FM Grand Junction, CO	KSMR-FM Apaene Junetion AZ 106.6
INTERIOR MORRIS, MN 107.5	KOTO Telluride. CO 91.7 KOUL Sinton, TX 103.3 KOUR-FM Independence IA 95.3	KRFG Greenfield, MO 93.5 KRFM Phoenix AZ 95.5	KSMU Springfield MD 9i I KSND Eugene, OR 93.1
KMSM-FM Butte MT 91.5	KOVA Djal GA 105.8 KOVF-FM Kearney, Neb. 91.3	KRFO-FM Owatonna, MN 104.9	KSNM Santa Fe, N.M. KSNR Gilroy CA 94.3
KMSU Mankato, Minn. 90.5	KOWN-FM Escondido, CA 92.1 KOXE Brownwood, TX 101.5 KOYE Laredo, TX 92,7	KRF8-FM Superior, NB 103.9 KRGI-FM Grand Island, NE 96.5 KRGK Carthage. MO 104.9	KSUL San Mateo CA 107.9
KMTP Mt. Pleasant, UI 91.1 KMTW Twin Falls, ID 96.5	KOXE Brownwood, TX 101.5 KOYE Larede, TX 92.7 KOYL-FM Odessa, TX 97.9 KOYN-FM Billings, Mont. 93.3	KRHD-FM Duncan, DK 102.3	KSOM-FM Ontario, CA 93.5 KSON-FM San Diego, CA 97.3 KSOP-FM Sait Lake City. Utah
KMTY-FM Clovis, N.M. 99.1 KMUL-FM Muleshoe, TX 103.1	KOYN-FM Billings, Mont. 93.3 KOYY-FM El Derado KS 99.3 KOZE-FM Lewiston, Idaho	KRHM Lake Havasu City NE 95.9	Utah KSOR Ashiand, Ore. 90.1
KMUW Wichita, KS 89.1 KMXT Kodiak, AK 100.1	KDZN-FM San Diege, CA 103.7	KRII El Dorado AR 99.3	KSOR Ashiand, Ore. 90.1 KSDZ Point Lookout, MO 91.7 KSPC Claremont, Calif.
	KPAC-FM Port Arthur, Tex. KPAK El Paso, Tex.	KRJB Monte Rio, CA 97.7 KRKE-FM Albuquerage, NM 94.1	KSPL-FM Stillwater, Ukla. KSPL-FM Diboli, Tex. 95.5
KMYR Albuquerque, NM 99.5	KPAK El Paso, Tex. KPAM-FM Portland, Ore. 97.1 KPAN-FM Heretord, Tex. 106.8	KRES KROXVIIIE IA 94.1	KSPN Aspen, Colo. 97.7
KMYT Merced, CA 97.5 KNAF-FM Frederleksburg, Tex.	KPAR-FM Albuquerque, NM 100.3 KPAS El Pase, TX 93.9	KRLT South Lake Tahoe, CA 100.1 KRLX Northfield, MN 90.3 KRLY Houston, TX 93.7	KSPZ Colorado Springs, CO 92.9 KSRD Seward, NB 96.9 KSRF Santa Monica, Calif.
KNAS Nashville. AR 105.5 KNBQ Tacoma, WA 97.3 KNBS Mantega. CA 90.3	KPAS EI Paso, TX 93.9 KPAT Stoux Fall SD 97.3 KPAY-FM Chieo CA 95.3 KPBM-FM Poplar Bluff MO 94.5	KRLY Houston, TX 93.7 KRMD-FM Shreveport LA 101.1	KSRN Reno, Nev.
KNBS Manteca, CA KNBT New Braunfels, Tex. 92.1	KPBS-FM San Diego, CA 89.5	KRMQ Provo, UT 94.9	KSRT Tracy, CA KSSR Kalispell, MT 98.5

	0.5.	FM STATIONS BY	CALL LETTERS
Call Location MHz	Call Location MHz	Call Location MHz	Call Location MHz
MOTA EM Ociona TV			
KSTA-FM Coleman, TX 107.1 KSTC-FM Sterling, CD 96.7	KUDE El Paso, TX 95.8 KUDH Honolulu, Hawaii	KWTD-FM Springfield, MO 98.7 KWTS Canyon TX 91.1	WAHS Auburn Heights, MI 89.5 WAIA Miami FL 97.5
KSTG Sikesten, MD 97.7 KSTJ San Angele, TX 97.5	KUDI-FM Moseow, Ida. 89.3 KUDP Stockton, Calif.	KWTS Canyon TX 91.1 KWTX-FM Waco, Tex. 97.5 KWUR Clayton, MD 90.3	WAIC Springfield, Mass. WAID Clarksdale, MS 106.3
KSTK Wrangell, AL 101.7	KUDR-FM Rediands, Cal. KUOW Seattle, Wash.	KWWC-FM Celumbia, Mo. KWWM Stephenville. Tex. 98.3	WAIF Cincinnati, DH 88.3 WAIN-FM Columbia, Ky.
KSTM Apache Junction AZ (07.1 KSTN-FM Stockton, Calif. 107.3	I KUPD-FM lempe AZ 97.9	KWWR-FM Mexico. Mo. KWXY-FM Cathedral City.	WAIV Jacksonville, FL 96.9
KSTO Agana GU 95.5 KSTP-FM Minneapells, Minn.	KUPI-FM Idaho Falis, IO 99.1 KUPL Portland OR 98.5	Cal. 98.5	WAJB Pensacela, FL 107.3 WAJC Indianapolis, Ind.
KSTX Canon City, CD 103.9 KSUB-FM Cedar City, UT 92.5	KUPS Tacoma, WA 90.1 KURL-FM Billings, Mont.	KWYD Security CD 105.5 KWYK Aztec, NM 94.9	WAJP Joliet, III. WAJR-FM Morgantown, W.Va.
KSUC Keene, TX 88.3	KURY-FM Brookings, DR 95.3	KWYN-FM Wynne AR 92.7 KWYR-FM Winner, SD 93.7	WAKG Danville VA 103.3 WAKM Bedford, Pa.
KSUI lows City, lows KSUL Long Beach CA 90.1	KUSC Los Angeles, Calif. KUSO-FM Vermillion, S.Dak.	KWYT-FM Salinas, CA 100.7	WAKN-FM-Aikan, S.C.
KSUT Ignacio, CD 91.3	KUSF San Francisco CA 90.3 KUSN-FM St. Joseph. Mo.	KXBQ Ontario, OR 96.1 KXCV Maryville, Mo. 90.5	WAKO-FM Lawrenceville, III. WAKQ Russelville, KY. 101.1
KSVP-FM Artesia, N.M. KSVR Mount Vernon WA 90.1 KSWC Winneld, Kan	KUSP Santa Cruz, CA 88.9 KUSU-FM Legan, Utah	KXDD Richland, WA 106.3 KXEL-FM Waterloo, Iowa	WAKS-FM Fuquay-Varina.
I KSWH Arkadelphia AR 91.1	KUT-FM Austin, Tex. KUTE Giendale, Cal. 101.9	KXFM Santa Maria, Cal. KXGD Arcata CA 93.5	NC 103.9 WAKW Cincinnati, DH
KSWI Clarinda, IA 106.3 KSWT Topeka KS 83.7	KUUL Madera, CA 92.1 KUUZ Nampa, CO 96.9	KXGR Grand Bapids, MN 98.7	WAKX-FM Duluth, MN 98.9
KSXT Walla Walla, WA 97.1 KSYM-FM San Antonio, Tex. 90.3	KUVR-FM Holdrege, Neb. 97.7	KXII-FM Ualhart, Tex.	WALD-FM Walterbore, S.C. 100.9 WALF Alfred NY 89.7
KSYN Joplin, Mo.	KUWR Laramie, Wye. 91.9 KVCL-FM Winnfield La.	KXJK-FM Forrest City, Ark. KXKX Denver, CD 95.7	WALK-FM Patchogue, N.Y. WALL-FM Middletown, N.Y. WALM-FM Marchall Mich
KTAK Riverton, WY 93.5 KTAL-FM Texarkana, Tex. 98.1	KVCM Montgomery City, MD 103.9	KXKX Denver, CD 95.7 KXKZ Ruston, LA 107.1 KXLE-FM Ellensburg WA 95.8	WALP Corinth, Miss. 90.5
KTAP Crete, NB 103.9 KTAR-FM Phoenix AZ 98.7	KVCD Concordia, KS 88.3 KVCR San Bernardino, Calif.	KXLU Les Angeles, Cal. 88.9 KXLY-FM Spokane, Wash.	WALK-FM Union City, IN 104.9 WALT Meridian, Miss. 97.1
KTAS Taos, NM 101.7 KTAV Knoxville IA 92.1	KVDB-FM Sloux Center IA 94.3 KVEE-FM Conway AR 105.1	I KXU-FM El Centro, CA 107.5	WALX Selma, AL 100.9 WAMD Pittsburgh, PA 105.9
KTAZ-FM Sierra Vista, AZ 100.9	KVDB-FM Sloux Center IA 94.3 KVEE-FM Conway AR 105.1 KVEL-FM Vernal, UT 92.7 KVFG Thibodaux LA 91.5	KXOA Saeramento, Calif. KXOJ Sapulpa, OK 100.9	WAME Albany, N.Y. WAMF Tallahasses, FL 90.5
KTCH-FM Wayne, NE 104.9	KVFM Ugden, UI 93.3	KXDL Fort Worth TX 99.5 KXOX-FM Sweetwater, TX 96.7	WAMI-FM Opp AL 102.3 WAMO-FM Pittsburgh, Pa.
KTCL Fort Collins, CO 93.3 KTCR-FM Minneapolis, MN 97.1 KTCS-FM Fort Smith AR 99.9	KVFS Vacaville, Cal. 95.3 KVGB-FM Great Bend, KS 104.3	KXDW-FM Hot Springs, AR 106.3 KXQR Fresno, Calif.(s)	WAMP-FM Toledo, DH 88.3
KTCS-FM Fort Smith AR 99.9 KTCU-FM Fort Worth, TX 88.7	KVHS Concord, Cal. 91.1 KVI-FM Scattle, WA 101.5	KXRA-FM Alexandria, Minn.	WAMP-FM Toledo, DH 88.3 WAMR-FM Venice, FL 92.1 WAMU-FM Washington, D.C.
I KTOB Ramah NM 89.7	KVIK Travis AFB CA 91.5	KXTC Glendale AZ 92.3 KXTR Kansas City, Mo.	WAMX Ashland, KY 93.7
KTDY Lafayette, LA 99.9 KTEC Klamath Falls, Dre. 88.1	KVIL-FM Highland Park-Dallas, Tex.	KXTZ Henderson, NV 94.1	WANB Waynesburg, PA 103-1
KTEN-FM Ada, DK 93.3 KTEP El Paso, Tex. 88.5	KVIM Coachella, Callf. 93.7 KVIP-FM Redding CA 98.1	KXXI Ft. Smith, AR 100.9	WANG Coldwater, Mich. 98,5 WANS-FM Anderson, S.C.
KTEQ Rapid City, S.D. 88.1	KVLG-FM La Grange, Tex. 104.9	KXXK Chickasha DK 108.5 KXXX-FM Colby KA 109.3	WANY-FM Albany, Ky. WANM Tallahassee, Fia.
KTFC Sioux City, Ia.	KVLR Detroit Lakes, MN 95.3 KVLU Beaument TX 91.3		WADR Niles, MI 95.3
KTFM San Antonio TX 102.7 KTGA Fort Dodge, IA 92.1 KTGC Columbia, MD 96.7	KVLV-FM Failon, Nev. KVMG-FM Coehran, Ga. KVMN Pueblo, Colo.	I KYBS Livingston, MT 97.7	WAUV-FM Vincennes, Ind. WAPC-FM Riverhead, N.Y. WAPI-FM Birmingham AL 94.5
KTHD-FM Tahoe Valley, CA 103.1	KVMN Pueblo, Colo. KVMT Vall, CD 104.7	KYDZ Cody, WY 90.1 KYEA West Monroe, La. 98.3	WAPI-FM Birmingham AL 94.5 WAPS AKTON, UNIO
KTIB-FM Thibodaux, La.	KVMT Vall, CD 104.7 KVMV-FM McAllen, Tex. 96.9 KVNO Dmaha, NE 90.7	KYEZ Salina, KS 93.7	WAPS Akren. Unio WAQT Carrolton, AL 94.1 WAQY Springteld MA 102.1
KTIM-FM San Rafael, Calif. (00.9 KTIS-FM Minneapolis, Minn.	KVPC Fairfield, lowa 89.5	KYFM Bartlesville, Okla. 100.1 KYKR-FM Port Arthur, TX 93.3	WANG Weadville, Pa.
KTJJ Farmington, MO 98.5 KTKC Springhill, LA 92.7	KVPI-FM Ville Platte, La. KVPR-FM Fresno, CA 89.3	KYKR-FM Port Arthur, TX 93.3 KYKX Longview, TX 105.7 KYLD Davis, CA 105.5	WARG Summit, IL 88.9 WARP Due west, S.C. 91,7 WART Plainfield, IN 96.3
KTLB-FM Twin Lakes, IA 105.5 KTLD-FM Mountain Home AR	KVRE-FM Santa Rosa CA 91.5 KVRF Vermillion, S.D.	KYLT-FM Missoula, MT 100.1 KYMS Santa Ana, Cal.	WAHU-FM Peru, Ind.
KTLQ-FM Tahlequah, Okia.	KVRH-FM Salida, Calif. 92.1	KYND-FM Pasadena TX 92 K	WARY Mt. Kisee NY 88.5 WASH Washington, D.C.
KTLX Columbus NE 91.9 KTMD Kennett MG 98.9	KVRN-FM Sonora, TX 92.1 KVRO Stillwater, Okla. KVSR Rapid City, S.D. 97.9	KYNO-FM Fresno, CA 95.5 KYDR-FM Blythe, CA 100.3	WASK-FM Latayette, Ind.
KTMS-FM Santa Barbara, Cal.	KVTT Dallas, Tex.	KYSM-FM Mankato. Minn. KYSS-FM Missoula MT 94.9	WASL Dyersburg, TN 101.1 WASU-FM Beene NC 90.5
1 KTNM-FM Tucumcari, N.M. 92.7	KVVC-FM Cabool, MD 106.3 KVVP Leesville, LA 105.5	KYTE-FM Portland, OR 101.1 KYTN Grand Forks ND 94.7	WATD Marshfield, MA 95.9 WATM-FM Atmore AL 104.1
KTOC-FM Jonesboro, La. KTOF Cedar Rapids, Jowa 104.5	KVWC-FM Vernon TX 102.3	KYUF Uvalde, TX 95.3	WAID-FM USK KIDDE, Tenn.
KTDN-FM Belton, Tex. 106.3 KTDD Juneau AK 104.3	KVWM-FM Show Low AZ 93.5	KYXY, San Diego CA 96.8	WATW-FM Ashland, Wis. 95.9
KTOT-FM Big Bear Lake, CA	KVYN St. Helena, CA 99.3	KYYS Kansas City, MD 102.1 KYYX Seattle, WA 96.5	WAIZ-FM Alpena, Mich. 93.5 WAUG-FM Augusta, Ga. WAUN Kawaunce WI 92.7
KTOY Tacoma, Wash	KWAR Waverly, IA 89.1	KYZM-FM Cape Girardeau, Mo. 102.9	WAUP Akron, Ohio
KTPK Topeka, KS 106.9 KTQM-FM Clovis, N.M.	KWAS Amarillo, TX 101.9 KWAT-FM Watertown, 8.D. 96.1	KZAG Dallas TX 90.1 KZAM-FM Bellevue, WA 92.5	WAUR Aurora, III. 107.9 WAUS Berrien Springs, MI 90.9
KTRU Houston, TX 91.7 KTRX Tarklo, MO 93.5	KWAV Monterey, CA 96.9 KWAX Eugene, DR 91.1	KZAP Sacramento, Cal. 98.5 KZEL-FM Eugene, Ore.	WAVA-FM Arlington, Va. WAVM Maynard, MA 91,7
KTRY-FM Bastrop, LA 94.3 KTSC-FM Pueblo, Colo. 89.5	KWBE-FM Beatrice, NE 92.9 KWBG-FM Boone, IA 98.3 KWBI Morrison, Colo. 91.1	KZEN Seaside CA 107.1 KZFM Corpus Christi. Tex.	WAVR Waverly, NY 102.3 WAVV Vevay, IN 95.9 WAWA-FM Milwaukee, Wis.
KTSM-FM El Paso, Tex. 99.9	KWBI Morrison, Colo. 91.1 KWBU Waco, TX 107.1	I RZIN-PM Shalby, MI 96.3	WAWA-FM Milwaukee, Wis. WAWK-FM Kendallville, Ind.
KTSR Kansas City, Me. KTSU Houston TX 90.9	KWBW-FM Hutchinson, KS 102.9	KZIP Amarillo, TX 98.7 KZIQ-FM Ridgecrest, CA 92.7	WAWW Murray, Ky. WAWZ-FM Zarephath, N.J.
KISH Kansas City, Mo. KTBU Houston TX 90.9 KTDT-FM Big Bear Lake CA 101,7 KTTL Dodge City, Kg 91.9 KTTS-FM Springfield, Mo.	KWCB Floresville, TX 94.3 KWCR-FM Ogden, Utah KWCW Walla Waila, Wash, 90.5	KZLD Pueble, CD 100.7 KZNN Relia MO 105.3	WAXI Rockville, IN 104.9
KTTS-FM Springheld, Mo. KTUH Honolulu, HI 90.3	KWCX Willeox, AZ 98.3	KZDK-FM Seattle, WA 102.5	WAXO Kenosha, Wis, WAXU-FM Georgetown KY 103.1 WAXX-FM Eau Claire, WI 104.5
KTW-FM Seattle, Wash.		KZSC Santa Cruz CA 88.1	WAXY Ft. Lauderdale, Fla. 103.9
KTXJ-FM Jasper, TX 102.3 KTXN-FM Victoria, Tex. 98.7 KTWR Tacoma, Wash.	KWDM West Des Moines, IA 28.9 KWED-FM Seguin, Tex. 105.3 KWEH Camden AR 97.1	KZST Santa Rosa, Calif. 100.1 KZSU Stanford, CA 90.1 KZUE Oklahoma City, OK 102.7	WAYD-FM Ozark AL 103.9 WAYL-FM Minneapolis, MN 93.7
KTWR Tacoma, Wash.	KWEH Camden AR 97.1 KWEY-FM Weatherford, DK 97.3	I KZUN-FM Descriptiv Wash	WAVY AMERICA CHE MI OF I
KTXR Springfield, Mo. 101.5 KTXT-FM Lubbock, Tex.	KWEN Tuisa OK 95.5	KZZL Lemars, IA 99.5	WAZI Merristown TN 95.9
I KTYD Manta Marhara CA 99.9	KWFC Springfield, MD 97.3	KZZY San Antonio, TX 100.3	WAYZ-FM Waynesboro, Pa. WAZI Merristown TN WAZY-FM Lafayette, IN 96.5 WBAB-FM Babylon, N.Y.
KTYL Tyler, TX 93.1 KUAC College AV 104.7 KUAD-FM Windsor, CD 99.1 KUAF Fayetteville AR 88.9	KWFM Tueson AZ 92.9 KWFR-FM San Angelo, Tex.	WAAF Worcester, Mass.	WRAG.FM Rurlington-Graham
KUAF Fayetteville AR 88.9 KUAT-FM Tueson, AZ 90.5	KWFR-FM San Angelo, Tex. KWGN-FM Abernathy, Tex. KWGS Tulsa, DK 89.5	WAAL Binghamton NY 99.1 WAAM-FM Parkersburg, W.Va.	N.C. 93.9 WBAI New York, N.Y.
KUBB Mariposa, CA 96.3	KWGS Tuisa, DK 89.5 KWHC Forrest City AR 102.3 KWHI Brenham, TX 108.3	WAAM-FM Parkersburg, W.Va. WAAZ-FM Crestview, Fig. WABB-FM Mobile AL. 97.5 WABD-FM Ft. Campbell, Ky.	WBAL-FM Baltimore, Md. WBAU Garden City NY 90.3
KUBS Newport WA 80.5	KWHO-FM Salt Lake City, Utah	107.9	WOAW.EM Repowell Q.C.
KUAM-FM Agana GU 93.9 KUCA Conway, AR 91.5 KUCR Riverside, Cal.	KWHS W. Sacramento, CA 91.7	WARE-FM Fairbane At 42 t	WBBC Blackstone, VA 93.5
KUCV Lincoln, Neb.	I KWIC Beaumont IX 197./	WABK-FM Gardiner ME 104.3 WABD-FM Waynesberg MS 105.5 WABR-FM Tifton, GA 90.5	WBBF Rochester, NY 92.5 WBBI-FM Abingdon, Va.
KUDL Kansas City, KS 98.1 KUDD Las Vegas, NV 98.1	KWIQ.FM Moses Lake, Wash.	WABR-FM Tiften, GA 90.8	WBBM-FM Chicago, III. WBBO-FM Forest City, N.C.
KUDU-FM	KWIT Sioux City, IA 90.3	WABX Detroit, Mich. 99.5 WABZ-FM Albemarie, N.C.	WBBQ-FM Augusta, Ga. WBBY Westerville, 0, 103,9
Ventura-Oxnard, Calif, KUDY-FM Spokane, Wash, KUER Salt Lake City, Utah	KWIZ-FM Santa Ana, Cailf. KWJS Ariington, TX 94.9	WABZ-FM Albemarie, N.C. WACC Arnold, MD WACE Paris IL 98.3	WBB' Ruenester, was was a was
KUFZ Yakima, WA 106.3	KWKC.FM ADIIADA, TAX.	WACI Freeport, III. 92.1	
KUFM Missoula, MT 89.1 KUFD Galveston, TX 106.5	KWKI Kansas City, MD 93.3 KWKK Dardanelle, AR 102.3 KWKD Anchorage AK 102.1	WACL-FM Wayeress, GA 103.3 WACM Freeland, PA 103.1	WBCL Fort Wayne, IN WBCM-FM Bay City, Mich.
KUGS Bellingham, WA 89.3 KUHF Houston, Tex.	KWKQ Graham, TX U/.	WACM Freeland, PA 103.1 WACR-FM Columbus, MS 103.9 WACT-FM Tuscaloss AL 105.5 WADB Point Pleasant, N.J. 95.9	WBCN Boston, Mass. WBCO-FM Bueyrus, O. WBCR-FM Beloit, Wis.
KUIS Vernal UT 89.1	KWLD Plainview, TX 91.5 KWLV Many, LA 107.1		WBCS Milwaukee WI 102.9
KUIC Vacaville, CA 95.3 KUID Moseow, ID 91.7	WWW. W. Con Annala Tax	WADM-FM Decatur, Ind. WADV Buffalo, N.Y. WAEL-FM Marieso, P.R. 96.I WAER Syracuse, N.Y.	WBCT Columbia, SC 90.5 WBCX Gainesville, GA 89.1 WBOC Huntingburg, IN 100.9
KULA Waipanu HI 92.3	KWMD St. Louis, Mo. 90.7 KWMU St. Louis, Mo. 90.7	WAEL-FM Marieao, P.R. 96.1	WBOC Huntingburg, IN 100.9
KULL Scott City, KS 94.5 KULM Columbus TX 98.3	KWNS-FM Pratt. Kan.	WAEY-FM Princeton WV 95.9	
KULP-FM El Campo, Tex. 96.9 KUMD-FM Duluth, Minn.	KWLW Sha Angeol, 12A. KWMD Midland, TX. KWMD St. Louis, Mo. 90.7 KWMU St. Louis, Mo. 90.7 KWNS-FM Pratt, Kan. KWNT-FM Davenport, Ia. KWOA-FM Worthington, Minn	WAEY-FM Princeton WV 95.9 WAEZ Akron DH 97.5 WAFB-FM Baton Rouge, La. 98.1	WBEA Elyria. 0. WBEN-FM Buffalo. NY 102.5
	KWOD Sacramento, CA 106.5 KWPB Liberty, MD 91.9	WAFC Clewiston, FL 106.3 WAFG Ft. Lauderdale FL 90.3	WEED CHARGESTON WV PO.
KUMU-FM Honolulu, H1 94.7 KUNA San Luís Oblspo CA 96.1 KUNC-FM Greeley, Cole. 91.8 KUNF La Canada, Cal. 91.8	KWDD Sacramente, CA 106.5 KWPB Liberty, MD 91.9 KWPM-FM West Plains, MD 93.9 KWRF-FM Warren, AR 105.5	WAFL Milford DE 97.7 WAFM Amory, MS 95.3	WBET-FM Brockton, Mass. WBEU-FM Beaufort, S.C. WBEX-FM Chilitecthe, Ohio
KUNF La Canada, Cal. 88.9	KWRS Spokane, WA 90.3	WAFR Durham, NC 90.3	WBEZ Chicago, III. WBFG Detroit, Mich.
KUNI Cedar Falls, IA 90.9 KUNM Albuquerque, N.M. 90.1	KWSB-FM Gunnison, Cole. KWSC Wayne NE 91.9	WAGI-FM Gaffney, SC 105.3	WBFH Bloomfield Hills, MI 88.1
KUNA Rene NV KUDA-FM Sileam Springs AR	KWST Los Angeles, Cal. 105.9	WAGQ Athens, GA 104.7 WAHM Amherst, Mass. 89.5 WAHR Huntsville AL 99.1	WBFM Senera, S.C. WBFO Buffale, NY 88.7
105.7	KWTC-FM Barstow. CA 94.3	WAHR Huntsville AL 99.1	WBGD Bricktown, NJ 91.9

U.S. FIVI 31	A 110
Call Location	MHz
WBGM.FM Tallanassee, Fla	1
WBGM·FM Tallahassee, Fla WBGO Newark, N.J. WBGR-FM Paris KY	96.7
WBGO Newark, N.J. WBGF-FM Paris KY WBGU Bowling Green, OH WBGW Bangor ME WBGY-FM Tullahoma, TN WBHI Chleago IL WPHM Birmingham, AL WBHR Bellair, OH WBHS Brunswick ME WBIE Marletta, GA WBIF Bedford, IN WBIM-FM Bonneville, MS WBIR-FM Knoxville, Tenn. WBIV Wethersfield Townshi N.Y. WBIZ-FM Eau Claire, Wis.	88.1 97.1
WBGY-FM Tullahoma, TN WBHI Chicago IL	93.3 88.5
WPHM Birmingham, AL WBHR Bellair, OH	90.3 88.7
WBHS Brunswick ME WBIE Marietta, GA	91.1
WBIF Bedford, IN WBIM-FM Bridgewater MA	105.5 91.5
WBIP-FM Booneville, MS WBIR-FM Knoxville, Tenn.	99.3
WBIN-FM Knoxville, 1 enn. WBIV Wethersfield Townshi N.Y. WBIZ-FM Eau Claire, Wis. WBJB Lineroft NJ WBJC Baltimore, Md. WBJH Trenton, N.J. WBJW Orlando, FL WBKE-FM North Mancheste	107.7
WBIZ-FM Eau Claire, Wis. WBJB Lineroft NJ	90.5
WBJC Baltimore, Md. WBJH Trenton, N.J.	
WBJW Orlando, FL WBKE-FM North Manchesto	105.1
Ind. WBKR Owensboro KY	89.5 92.5
WBKT Brockport, NY WBKV-FM West Bend, WIs	90.5
WBKW Beckley, W.Va. WBKY Lexington, Ky.	
WBKZ Glen Burnie, MD WBLD Orchard Lake, MI	95.9 6 9.3
WBLE.FM Batesville, MS WBLI Patchogue NY	95.9 106.1
WBLK-FM Buffalo, N.Y. WBLM Lewiston-Auburn ME	107.5
WBJW O'Irando, FL WBKE-FM North Mancheste Ind. WBKR Owensboro KY WBKT Brockport, NY WBKV-FM West Bend, WIs WBKV-FM West Bend, WIs WBKV Beckley, W. Va. WBKY LexIngton, Ky. WBKZ Glen Burnle. MD WBLD Orehard Lake, MI WBLE-FM Batesville, MS WBLI Patehogue NY WBLK-FM Buffalo, N.Y. WBLM LewIston-Auburn ME WBLR-FM Batesburg, S.C. WBLS New York NY WBLK Mobile AL. WBLS HENDER WBLY-FM Springeid. Ohle WBMI West Branch, MI WBMP Elwood, IN WBMR Telford, PA WBMT Telford, PA WBMU-FM Ashewille, NC, WBMB-FM Charlotte Amail	107.5
WBLY-FM Springfield, Ohlo	92.9
WBMP Elwood, IN	105.5 101.7 89.7
WBMR Telford, PA WBMT Boxford, MA	89.7 88.3
WBMU-FM Asheville, NC. WBNB-FM Charlotte Amali	91.3 e. V.I.
WBMU-FM Asheville, NC, WBNB-FM Charlotte Amaii WBNC-FM Conway, N.H. WBNL-FM Boonville, Ind.	
WBNO-FM Bryan, Ohlo WBNQ Bloomington, III.	100.9
WBNL-FM Boonville. Ind. WBNO-FM Bryan, Ohlo WBNO-FM Bryan, Ohlo WBNO-FM Bryan, Ohlo WBNT-FM Onelda, Tenn. WBNY-FM Onelda, Tenn. WBNY-FM Pensacola, FL WBOC-FM Sallsbury, Md. WBOC-FM Sallsbury, Md. WBOC-FM Sallsbury, Md. WBOC-FM Sallsbury, Md. WBOC-FM Pensacola, FL WBOQ Terre Haute, IN WBOR Brunswick, Malne WBOS Brookline-Boston MA WBPM Kingston, MA WBPM Kingston, MA WBPM Kingston, MA WBPM Barrington, IL WBPZ-FM Lock Haven, Pa. WBRM-FM Mt. Clemens, M WBRE-FM Wilkes-Barre-F WBRH Baton Rouge, LA WBRK-FM Pittsheid, Mass WBRN-FM Big Rapids, Mi WBRC Clidra PR WBRS Wallham, Mass.	105.5
WBOC-FM Salisbury, Md. WBOE Cleveland, Ohlo	104.7
WBOP-FM Pensacola, FL WBOQ Terre Haute, IN	101.5
WBOR Brunswick, Maine WBOS Brookline-Boston MA	92.9
WBPM Kingston, NY WBPR Barrington, IL	94.3 88.5
WBPZ-FM Lock Haven, Pa. WBQM Decatur, AL	91.7
WBRB.FM Mt. Clemens, M WBRE.FM Wilkes-Barre, P	ich. a.
WBRH Baton Rouge, LA WBRK-FM Pittsheid, Mass	90.1
WBRN-FM Big Rapids, Mil WBRQ Cldra PR	97.7
WBSD Burlington, WI WBSF Biddeford ME WBSJ Ellisville MS WBSL Sheffield MA	89. I 91.7
WBSL Sheffield MA WBST Muncle, IN WBTF Attlea, NY	102.3 91.7 92.1
WBSL Sements ma WBST Muncie, IN WBTF Attlca, NY WBT-FM Charlotte, N.C. WBTO-FM Linton, Ind. WBTR-FM Carrollton, Ga. WBUF Buffato, N.Y. WBUK Calumbus, O.	101.7
WBTO-FM Linton, Ind.	93.5 92.1
WBTR-FM Carrollton, Ga. WBUF Buffaio, N.Y. WBUK Columbus, O. WBUR Boston, MA WBUT-FM Butler, PA WBWC Berea, OH WBXB Edenton, NC WBXL Baldwinsville, NY WBYC Kankakee, II	96.3
WBUR Boston, MA WBUT-FM Butler, PA	0.00
WBWC Berea, OH	88.3 100.1
WBXL Baldwinsville, NY	90.5 99.9
WBUT-FM Butter, PA WBWC Berea, O. H. WBWB Edenton, NC WBWB Edenton, NC WBWB Edenton, NC WBWB Edenton, NC WBWG Bankakes, IL WBWG Bankakes, P.R. WBWG Boyrrown, Pa. WBWS-FM Canton, Ill, WBYQ Hendersonville TN WBYU New Orleans, La. WBZ-FM Boston, Mass. WBZ-FM Boston, Mass. WBZ-FM Boston, Mass. WBZ-FM Genes Falls, NY WBZI Kenla, O. WCAA Kalamazoo MI WCAA Kalamazoo MI WCAA Kalamazoo MI WCAA-FM Northfield, Minr WCAA-FM Northfield, Minr WCAA-FM Northfield, Minr WCAA-FM Solen Balls ingress. MD	1100
WBYS-FM Canton. III. WBYQ Hendersonville TN	98.5 92.1
WBYU New Orleans, La. WBZ-FM Boston, Mass.	95.7
WBZA-FM Glens Falls, NY WBZF Richmond, KY	107.1
WBZI Xenia, 0. WCAA Kalamazoo MI	89.9
WCAK Catlettsburg KY WCAL-FM Northfield, Minn	02.0
WCAA Kalamazoo MI WCAK Catlettsburg KVI WCAL-FM Northfield, MInn WCAO-FM Baltimore, MD WCAR-FM Detroit, MI WCAS Knoxytile, Tenn. WCAU-FM Philadelphia, P	102.7 92.3
WCAS Knoxville, Tenn. WCAU-FM Philadelphia, P	A 98.1
WCAU-FM Philadelphia, P WCAV Brockton, MA WCBC Memphis. Tenn. WCBE Columbus, Ohio WCBK-FM Martinsville, In	97.7
WCBK-FM Martinsville, In	d.
WCBL-FM Benton, Ky.	102.3
WCBS-FM New York, N.Y.	80.0
WCBW Columbia, III,	. 105.1
WCCA McComb, Miss.	94.1
WCBL-FM Benton, Ky. WCBN Ann Arbor MI WCBS-FM New York, N.Y. WCBU Peorla IL WCBW Columbia, III, WCBY-FM Cheboygan, Mich WCCA McComb, Miss, WCCC-FM Hartford, Conn. WCCE Buies Creek, NC WCCF-FM Punta Gords.	90.1
WCCH Holyoke, MA	92.7 89.5
WCCI Savanna iL WCCK Erie, Pa.	100.1
WCCM-FM Lawrence, Mass WCCN-FM Neillsville, Wis	- N
WCCH Holyoke, MA WCCI Savanna IL WCCK Erie, Pa. WCCM-FM Lawrence, Mass WCCN-FM Meillsville, Wis WCCO-FM Minneapolls, Mi	Inn. 102.9
WCCQ Crest Hill, IL WCCS Central City PA	98.3
WCCQ Crest Hill, IL WCCS Central City PA WCCW-FM Traverse City, WCCX Waukesha, WI WCDB Albany, NY	Mich. 88.1
WCCX Waukesha, WI WCDB Albany, NY WCDE Elkins, WV	90.9
WCDB Elkins, WV WCDL-FM Carbondale, Pa. WCDR-FM Cedarville, O. WCDE Elkins, WV WCDA-FM Immokales FL	94.3
WCDE Elkins, WV WCEA-FM Immokalee FL	90.3 95.0

3 0	CALL		•
Call		MHz	
WCED-	Corning, NY FM Dubois, Pa. FM Hawkinsville, Ga	91.9	
WCEN-F	M Dubois, Pa. M Hawkinsville, Ga M Hawkinsville, Ga M Hawkinsville, Ga M Charlotte. Mich. Milliamstown. Mass. M Springfield, Vt. Chippewa Falls. Wis. Vorchester. MA FM Canton, Ga. M Canton, Ga. M Camuy. P.R. FM Bay City M Camuy. P.R. FM Bay City M Camuy. P.R. M Lakeland, F. M Ullins. SC M Washington, IA M Carbondale, III. M Beckley. W.Va. V. Point. Ga. Compano Beach. Fla. Caplace, La. FM Claxton GA FM Cleveland MS M Cleveland, Tenn. FM Morgantown, Wilkes-Barre, Pa. M Ciroling, NY	103.9	
WCER-F	M Charlotte. Mich. Williamstown, Mass.	02 #	
WCFW (Chippewa Falls. Wis.	105.5 89.1	
WCHK-	FM Canton, Ga. FM Norwich, N.Y.		
House, WCHQ-I	O. FM Camuy. P.R.	102.9	
WCHR-	FM Bay City MI	94.5	
WCIE - F	M Lakeland, FL	91.3	
WCIL-F	M Carbondale, III. M Reckley, W.Va.	95.3 101.5 103.7	
MCNO I	V. Point, Ga. Compano Beach, FL	102.7	
WCKW WCLA-I	La Place, La. FM Claxton GA	107.1	
WCLE-F	M Cleveland MS	103.9	
WCLH	Wilkes-Barre, Pa.	100.1	
WCLI-F	M Corning, NY Atlanta, GA	91.9 94.3	
WCLO-	M Janesville, Wis.	101.9	
WCLV (Wilkes-Barre, Pa. M Corning, NY Atlanta, GA hillicothe, 1L M Janesville, Wis. kokie, III. M Newark, Ohio Cleveland, O., FM Mansheld, Ohio Boyne City, MI		
WCLX I	Boyne City, MI FM Wildwood, N.J.		
WCME-I WCMI	FM Brunswick, Main FM Rochester, N.Y. Chester, S.C.	99.3	
WCML- WCMN-	FM Alpena, MI FM Arecibo, P.R.	91.7	
WCMP- WCMQ-	FM Pine City, MN FM Hialeah, FL	92.1 92.1	
WCMS-I	FM Norfolk, Va. FM Martin, Tenn. FM Mt Pleasant M	101.7	
WCMX WCNA-	Ft. Wayne, Ind. FM Scottsboro AL	101.7 98.3	
WCNB-I	FM Connersville, Ind FM Quincy, Fla. lew London CT	91.5	
WCNY-	FM Newport, NH FM Liverpool NY	91.3	
WCOL-F	FM Newnan, Ga.	100.1	
WCON-I	FM Urbana, O. FM Cornella, Ga. FM Columbia, S.C.		
WCOW-	FM Lewiston. Maine FM Sparta. Wis.		
WCPA-I	M Clearfield, Pa.	93.5	
WCPI V	Raleigh, NC Vheeling, WV	89.7 98.7	
WCRB WCRC E	Waltham, MA	102.5	
WCRF (Cleveland, OH Williamsport, MD	103.3	
WCRQ.	Charlotte Amalie. VI FM Arab, AL	92.7	
WCRT WCRY-	Danville, IN FM Macon GA	107.1	
WCSB-	Cleveland, OH FM Warminster, PA	89.3 89.9 92.3	
WCSG (m Columbus, Ind.	91.3	
WCSM-	FM Celina, O. Central Square, NY	89.3	
WCSS-F	FM Hillsdale, Mish, M Amsterdam, NY	92.1 97. 7	
W.Va.	FM Wilberforce, O.		
WCTL WCTM-	Union City PA FM Eaton. Ohio	99.3 106.3 92.9	
WCTS.	Brentwood, N.Y. FM Minneapolis-St.	94.3 Paul,	
WCTX	Boyne City, MI M Wildwood, N.J. FM Brunswick, Main FM Rochester, N.Y. hester, S.C. FM Alpena, MI FM Arecibo, P.R. Marletta, Ohlo FM Pine City, MN FM Haleah, FL FM Norfolk, Va. FM Martin, Tenn. FM Mt. Pleasant. FM Merin, Tenn. FM Mt. Pleasant. FM Seottsboro AL FM Scottsboro AL FM Connersville, Ind FM Quincy, Fla. We London CT FM Newport. NH FM Liverpool NY Hyannis. Mass. FM Columbus, Ohlo FM Columbus, Ohlo FM Columbus, Ohlo FM Columbia, S.C. FM Certana, O. FM Columbia, S.C. FM Lewiston. Maine FM Grenta. Williamsont. M Columbia, S.C. Waltham, MA Williamsont, Mass. Taleigh, NC Waltham, MA Williamsont, Mass. The Morens Mass. The Mo	92.1	
WCUC-	Norwich, CT FM Clarion, PA Akron, Ohio	97.7	
WCUL	Culpepper VA Tifton, GA	103.1	
WCVH	Worcester MA Flemington, NJ Middlebury, VT	91.3 90.5 100.9	
	Gahanna OH Towson, MO Naples-Ft. Meyers, F		
WCVU	Naples-Ft. Meyers, F	F L	
WCWL WCWM	Stockbridge, MA Williamsburg, Va.	91.3	
WCWP WCWS WCWT-	Brookville, N.Y. Wooster, O. FM Centerville, Ohl	0 89.5	
WCXL WCXR-	Kettering, OH FM Appleton, W1	88.7 105.7	
WCYN- WDAC	FM Cythiana, Ky. Lancaster, Pa.	102.3	
WDAL	Chicago, III. Meridian, MS Dayton, OH	101.3	
WDAR-	FM Ripon, WI Stockbridge, MA Williamsburg, Va. Brookville, N.Y. Wooster, O. FM Centerville, Ohl Kettering, OH FM Appleton, WI Chicago, Ill. FM Cythiana, Ky. Lancaster, Pa. Chicago, Ill. Meridian, MS Dayton, OH FM Darlington, S.C FM Philadelphia. Pt	i.	

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C	all	Location	MHz
w	DAV	Davidson NC	90.5
WW	DAY	-FM Fargo, N.D. Dubols, PA	107.3
W	DBI	Davidson NC FM Fargo, N.D. Dubols, PA FM Tawas City MI FM Roanoke, Va. Blackwood, NJ FM Springfield, Tenn Medina, O. FM Orlando, Fla. FM Dubuque, Iowa Springfield IL Durham, NC Glen Ellyn, IL FM Sanford NC Richmond, VA Durham, NC FM Hanover, NH Portland, Me. FM Carlisle PA Buffale, N.Y. Chicago, IL Marlon, III. Hamden, Conn. FM Carlisle PA FM FILINGROUPH, Me. FM Carlisle PA FM Carlisle PA FM FILINGROUPH, Me. FM Carlisle PA FM FILINGROUPH, Me. FM Carlisle PA FM FILINGROUPH, Me.	101.7
W	DBK DBL	Blackwood, NJ -FM Springfield, Tenn	91.5
w	DBM DBO	- FM Orlando, Fla.	
WW	DBR	Springfield IL	103.7
**	DCB	Glen Ellyn, IL	90.9
**	DCE	Richmond, VA	90.1
**	DCR	-FM Hanover, NH	99.3
w	DCV	FM Carlisle PA	88.3
WW	DDC	Chicago, IL Marion, III.	89.3 107.1
WW	DDE	Hamden, Conn. -FM Chattanooga, Ter	ın.
w	DEA	-FM Elisworth, Me.	92.3
W	DEB	-FM Jamestown, Tenn -FM Chattanooga, Ten	n.
W	DEN	-FM Sweetwater, Ien	105.3
W	DEQ	FM De Graff, Ohlo	92.5 91.1
8	DEZ	Wausau WI	101.9 95.3
W	D GC	-FM Elisworth, MeFM Jamestown. Tenn -FM Chattanoga, Ten -FM Sweetwater, Teni -FM Macon, Ga. Dekaib, IL -FM De Graff, Ohio -FM Detroit. Mich. Wausau Wi -FM Detroit. MichFM Detroit. Greek, Mi -FM Downers Grove. I	II. 88.3
w	DHA	FM Dover, N.J.	102.3
WW	DHP	Presque Isia ME Gaston, IN	96.9 90.9
W	DIF	Marion, OH Orlando, Fla.	94.3
w	DIE	Westport, CT	93.7
**	DIG	Baitimore, MD	104.3
W	DLA	FM Walton NY	02.1
**	DLC	-FM Port Jervis. N.Y.	96.7 89.3
**	DLT	Cleveland MS	92.7
w	DMO	-FM Douglas, GA	99.5 107.1
WW	DMI	Cleveland, OH Miaml, FL	107.9 88.9
W	DNR	Chester, PA Bowling Green KY	89.5 98.3
W	DN)	Olive Hill TN -FM Prestonsburg, Ky	69.1
W	DOD	-FM Chattanooga, Ten Delphos OH	107.1
**	DOK	Providence, R.1.	le.
**	DOW	-FM Sturgeon Bay, W	97.9
**	DON	-FM Du Quoin, III.	95.9
W	DRL	Monmouth, IL	97.7
WW	DRU	Detroit, Mich.	93.1 95.3
WW	DSC	-FM Dillon, S.C. Dover, Dela.	94.7
WW	DSO	Duluth, Minn.	89.1 103.3
**	DUE	Granville, Ohio	00.9
**	DUG	Pittsburgh, Pa.	ine s
W	DUX	FM Waupata, Wis.	103.0
WW	DVE	Pittsburgh, Pa.	102.5
W	DVR	Philadelphia, Pa.	92.1
WW	DW	Auburn NY S-FM Champaign, III.	88.9
WW	DXE	-FM Lawrenceburg, T -FM Lexington, Tenn.	enn.
WW	DYN	Chattanooga, Tenn.	89.7
**	DZQ	Decatur, IL	95.1
E & 3	EAF	Eden, N.C.	94.5
**	EAT	-FM West Paim Beach	, Fla.
WW	EAV	-FM Plattsburgh, N.Y	88.3
WW	EBF	Olean, NY Camilla, GA	95.7 105.5
*	EBO	-FM Owego NY	102.7
W	ECI	Richmond, Ind.	103 5
8 8 8	ECH	Claremont NH	106.1
283	ECW	Elmira, NY	88.1
WW	EDR	Indianapolis, Ind.	91.1
W	EEC	Springfield, O.	92.7
£ 8.3	EEF	Germantown, TN	94.3
W.W.	EE	Port Charlotte, FL	100.1
WW	EEP	-FM Pittsburgh, Pa.	
W	EF G	Waukegan, Ili. Winchester, Va.	
W	EFN	Chicago, IL	99.5
W	EGL	-FM AUDUIN AL	100.7
***	EGL	-FM Dover, N.J. (Wilmington, OH Presque isle ME Gaston, IN Marlon, OH Orlando, Fia. Birmingham AL Westport, CT Atlanta, Ga, Baltimore, MD Rochester, NY -FM Walton NY -FM Walton NY -FM Marshheld, Wis. -FM Port Jervis. N.Y. -FM Bast Molline, IL Cleveland MS -FM Douglas, GA -FM Douglas, III -FM Sturgeon Bay, W -FM Chattanooga, Ten Delphos OH Cleveland, OH Delphos OH -FM Douglas, GA -FM Chattanooga, Ten -FM Chattanooga,	106.3

1	Call	Location	MHz
	WEIZ Pheni WEJY Mon	ix City. AL roe, Mi Richmond, Ky. Monroe, Wis. Liverpool, OH Tupelo. Miss. Detand, FL Easley. S.C. Roanoke AL risonburg, Va. Easton, MD Cullman AL Lah-Menasha, WI Holling, IL Lah-Menasha, WI Holling, Montal Lah-Menasha, WI Holling, Montal Lah-Mesterly, RI Eagle River, WI Lakoneta, Ohio Lison, WI Land, Mass. Van Wert, Ohio Greenville, S.C. mington IL Southbridge, Mai Cambridge, Mai Cambridge, Mai	100.1 89.5
	WEKU-FM WEKZ-FM	Monroe, Wis.	88.9
	WELD-FM WELE-FM	Tupelo, Miss. DeLand, FL	105.9
	WELO-FM WELP-FM	Tupelo, Miss. Easley, S.C.	98.5
	WELR-FM WEMC Har	Roanoke AL risonburg, Va.	95.3
	WEMH-FM WEMI Neer	Cullman AL	101.1
	WEMM Hu	ntington, WV t Moline, IL	107.9
	WEMU YPS	lianti, Mich. Birmingham AL	107-7
	WENY-FM WEOL-FM WEOS-FM	Elmira, N.Y. Elyria, Ohio Geneva, N.Y.	89.7
	WEPM-FM WEPR Gree	Martinsburg. W.	Va. 90.1
	WEQR Gold WERG Erle	sbero, N.C.	89.1
	WERH-FM WERI-FM	Hamilton AL Westerly, RI Facia River WI	92.1
	WERN Mad	akoneta, Ohio	88.7
	WERT-FM WESC-FM	Van Wert, Ohio Greenville, S.C.	
	WESN Bloc WESO FM	omington IL Southbridge, Mas	88.1
	WESP-FM WESR-FM	Cambridge, MD Tasley, Va, Stroudsherg, PA Easton, Pa, lletown, Conn. Washington, D.C ed NY 1 Bend, Ind. laton, Ill. son City TN New York, N.Y.	106.3
	WESS East	Stroudsherg, PA Easton, Pa.	90.3
	WETA-FM WETD Alfr	Washington, D.C	91.3
	WETL South	Bend, Ind.	88.1
	WEVD-FM WEVL Men	New York, N.Y.	90.3
	WEVR-FM WEXM-FM	River Falls, Wis. Exmore, VA	106.3
	WEZB New WEZC Char	Orleans LA	97.1 104.7
	WEZF Burl	Ington VT Syracuse NY	100.0
	WEZK Knor WEZL Char	cville, Tenn. leston, S.C.	103.5
	WEZN Brid WEZO Roch WEXP Gad:	ester, NY	101.3
	WEZR Mana WEZV Beth	Issas, Va.	95.1
	WEZX Scr WEZY-FM	son City TN, New York, N.Y. iphis, TN River Fails, Wis. Exmore, VA sden, AL Orleans LA lotte NC Ington VT Syracuse NY phis TN (ville, Tenn, leston, S.C. Igeport CT ester, NY sden, AL usasa, Va. lehem PA watosa, Wis. Alwatosa, Wis.	107.1
	WEZZ Clan WFAA-FM WFAC Colu	Dallas, Tex. mbus, OH	91.5
	WFAH Char	Alliance, Ohlo	90.9
	WFAR-FM WFAU-FM	Sharpsville, PA Augusta, Maine	95.9
	WFBC-FM	Greenville, S.C.	107.3
	WFBG-FM WFBO Indi	Altoona, Pa.	94.7
	WFCI Frank	din, Ind. hisburg, OH	93.7
	WFCS New WFDD-FM	Britain CN Winston-Salem,	90.1 N.C.
	WFDR-FM WFDS-FM WFDT Colu	Manchester, Ga. Baltimore, Md. mbia City, Ind	106.3
	WFOU Teal	rood City. Pa.	89.1 92.1
	WFFM Bra	ddock, PA it Royal VA	96.9 99.3
	WFGH Fort	Gay, WV Henderson, Tenn. Louisville KY	90.7
	WFID Rio I	er, S.C.	07.0
	WFHG-FM WFIT Mell	Bristol, TN	96.9 91.1
	WFIU Bloo WFIW-FM WFIZ Conn	mington, Ind. Fairfield, III. eaul. O.	
	WFIA San	ford, NC Tampa, Fla.	105.5
	WFLM Cro	wn Pt. IN Philadelphia, Pa	103.9
	WFLO-FM WFLR-FM WFLS-FM	Dundee, N.Y. Fredericksburg.	95.7 95.9
	WFLT-FM WFLW-FM	Augusta, Malne Ft. Atkinson, W Greenville, S.C., Mich Altoona, Pa. Janapolis IN Kiln, Ind. Janapolis IN Ky Ky Ky Ky Kount IN Ky Ky Ky Ky Kount IN Ky Ky Ky Kount IN Ky Ky Ky Kount IN Ky Ky Ky Ky Kount IN Ky Ky Ky Kount IN Ky Ky Ky Kount IN Ky Ky Ky Ky Kount IN Ky	93.3
	WFLY Troy WFMA Roc	ky Mount, N.C.	
	WFMD-FM WFME Net	Frederisk, Md.	94.7
	WFMF Bat WFMG Gra	on Rouge, LA and Haven, MI Montgomery Al	102.5 92.1 98.9
	WFML Was	hington, Ind.	92.1
	WFMO Leb	anon, Tenn.	91.3 104.5 88.7
	WFMQ Leb WFMS Indi WFMT.FM	anapolis, Ind. Chicago, IL	98.7
1		Imr. T	

Call Location MHz	Call Location MHz	Call Location MHz	Call Location MHz
WFMU East Orange, N.J. WFMV-FM Blatrstown NJ 106.3 WFMV-FM Madisonville, Ky.	WGTS-FM Takoma Park, Md. WGUC Cinelnnati, Ohio WGUD Paseagoula, MS 106.3	WIAA Interlochen, Mich. 88.3 WIAC-FM San Juan, P.R. WIAI Danville, III. 99.4	WJFD-FM New Bedford, MA 97.3 WJFM Grand Rapids, Mieh. WJFR Jackson, MS 96.3
WFMX Statesville, N.C. WFMZ Allentown, Pa. WFNE Forsyth GA 97.1	WGUE-FM Gulfport, MS 96.7 WGUL-FM New Port Richey, Fla.	WIAL Eau Claire, Wis. WIAN Indianapolis, IN 90-1 WIBA-FM Madison, WI 101-5	WJGA Jackson, GA 92.1 WJGS Houghton Lake, Mich. 98.5 WJHD Portsmouth Ri 90.7
WFNM Lancaster PA 88.7 WFNN Escanaba, MI 104.7 WFNY Racine. Wis.	WGUS-FM Augusta, Ga. WGVE Gary, Ind. WGVL Gainesville FL 108.8	WIBG-FM Jenkintown, Pa. WIBG-FM Philadelphia, Pa. WIBI Carlinville, IL 91.1	WJHL-FM Johnson City, Tenn. WJHR Minml, Fla. 94.3 WJIB-FM Boston MS 96.0
WFOB-FM Fostoria, Ohio WFOG Suffolk-Norfolk, VA 92.9 WFON Fond du Lac. Wis.	WGVO Greenville, OH 91.7 WGWG Boiling Springs, NG 88.3	WIBM-FM Jackson, Mich. WIBO Waverly, Ohio 100.9 WIBQ Utica, NY 94.9	WJIG-FM Tullahoma, Tenn. WJIM-FM Lansing, Mich. WJIQ Pensacola, FL 100.7
WFOS Chesapeake, Va. WFOX Gainsville, Ga. 97.1 WFOY-FM St. Augustine, Fla.	WGXL Laurens, SC 100.5 WGXM Dayton OH 88.1 WGYL Vero Beach, Fla. 93.5	WIBS Charlotte Amalle, VI 97.9 WIBW-FM Topeka, Kan. WIBZ Parkersburg, WV 99.3	WJIV Cherry Valley, N.Y. WJIZ Albany, Ga. WJGF Romney WV 91.5 WJJE Lefayette IN 91.0
WFPG.FM Atlantic City, N.J. 96.9 WFPK Louisville, Ky.	WHAD Delafield, Wis. WHAI-FM Greenfield, Mass. WHAJ Bluefield, WV 104.5	WICB Ithaca, N.Y. WICN Worcester, Mass. 90.5 WICO-FM Salisbury, Md. 94.3	WJJE Lafayette IN 01.0 WJJM-FM Lewisburg, Tenn. 94.3 WJJR Mifflinburg, PA 98.3
WFPL Louisville, Ky, WFPR-FM Hammond LA 107.1 WFRB-FM Frostburg, Md.	WHAV-FM Haverhill, Mass. WHAY Aberdeen, MS 105.5 WHBB-FM Selma, Ala.	WICR Indianapolis, IN 88.7 WIDD-FM Elizabethton, TN 99.3 WIDE-FM Biddeford ME 94.3	WJJW North Adams MA 91.J
WFRD Hanover, NH 99.3 WFRE-FM Fresno, Cal. WFRI Auburn AL 97.7	WHBF-FM Rock Island, III. WHBM-FM Xenia, Ohio	WIDL Caro, ML 104.9 WIDR Kaiamazoo, Mi 89.1 WIFF-FM Auburn, Ind.	WJLC-FM South Boston VA 97.5 WJLE-FM Smithville, Tenn. 101.7 WJLK-FM Asbury Park. N.J.
WFRL-FM Freeport, IL 98.5 WFRO-FM Fremont, Ohlo WFRX-FM W. Frankfurt IL 97.7	WHCG Metter, GA 104.9 WHCJ Savannah, GA 88.5 WHCL-FM Clinton, NY 88.7	WIFI Philadelphia, Pa. WIFN Franklin, Ind. WIFO-FM Jesup, GA 105.5	WJIM Salem, VA 93.5 WJLN Birmingham AL 104.7 WJLY Moyock, NC 92.1
WFSB Framingham, MA 91.3 WFSC-FM Franklin, N. C. WFSI Annapolis MD 107.9	WHCN Hartford, Conn. WHCU-FM Ithaca, NY WHDG Havre De Grace MD 103.7	WIGL Miami, FL 107.5 WIGM-FM Medford, WIA. 99.9	WJMA Orange VA 96.i WJMC-FM Rice Lake, Wis. WJMD Bethesda, MD 94.7
WFSS Fayetteville, NC 88.1 WFST-FM Caribou, Maine WFSU-FM Tallabassee, Fig.	WHEB-FM Portsmouth, NH 100.3 WHEI Timn OH 88.9	WIGY Bath, ME 105.9 WIHN Normal IL 96.7 WIHS Middletown, Conn. WIIU Chicago, IL 88.9	WJMF Smithfield, Ri 91.5 WJMI Jackson, MS 99.7 WJMJ Hartford CN 88.9
WFTA Fulten, MS 101.7 WFTG-FM London, Ky. 103.8 WFTM-FM Maysville, Ky.	WHER Hattiesburg, MS 103.7 WHEZ Huntington, WV 103.3 WHFB-FM Benton Harbor, MI	WIRZ Chambersburg, PA 95.1	WJML-FM Petoskey, Mich. 98.9 WJMM Versailles, KY 106.3 WJMT-FM Merrill Wt 93.5
WFTU-FM Orlando, FL 89.9 WFTW-FM Fort Walton Beach, FL 99.\$	WHFC Bel Air MD 99.9	WIKA Centerville, TN 98.7 WIKI-FM Chester, Va	WJMU Decatur, III. 89.9 WJNJ-FM Atlantic Beach, Fla. 104.9
WFUL-FM Fulton KY 99.7 WFUR-FM Grand Rapids, Mich.	WHFD Archbold, OH 95.5 WHFH Flossmoor, III. WHFI Jackson, MI 94.1 WHFL Winter Haven, FL 97.8	WIKY-FM Evansville, Ind. WIL-FM St. Louis, MO 92.3 WILE-FM Cambridge, O.	WJNL-FM Johnstown PA 96.5 WJND-FM Paim Beach FL 97.9 WJNR Iron Mt. MI 103.9
WFUV New York, N.Y. WFUZ Ocala FL WFVA-FM Fredericksburg, Va.	WHFM Rochester, N.Y. WHFS Bethesda, Md. WHGC Bennington, VT 94.3	WILL-FM Urbana, ili. WILO-FM Frankfort, Ind. WILQ-FM Williamsport PA 105.1	WJNS Yazoo City, MS 92.1 WJOF Athens AL 104.3 WJOI Pittsburgh, PA 93.7
WFVH Arlington Heights, IL 88.3 WFWA Sullivan, IL 106.3 WFYC-FM Alma, Mich.	WHGM Bellwood, Pn. WHHB Holliston, MA 91.5 WHHI Highland, Wis.	WILS-FM Lansing, Mich. WIMA-FM Lima, Ohio WIMI Ironwood, MI 99.7	WJOJ Picayune MS 106.8 WJOX-FM Jackson, MI 106,1 WJPA-FM Washington, PA 95.3
WFYN-FM Key West, Fla. WFYR Chiengo IL 103.5 WGAE Girard, PA 88.3	WHHJ Dix Hills, NY 88.9 WHHO-FM Hornell, N. Y. 105.3 WHHR Hilton Head 8C 106.3	WINK-FM ft, Myers, Fla. WIOA Mayaguez, PR 97.5 WIOB San Juan, PR 99.9	WJPD Ishpeming MI 92.3 WJLQ.FM Fredonia. NY 88.9 WJR.FM Detroit, MI 96.3
WGAG-FM Oriando, FL 89.3 WGAN-FM Portland, Me. WGAO Franklin, MA 91.3	WHHS Havertown, Pa. WHHY-FM Mongomery AL 101.9 WHIM-FM Providence, RI 94.1	WIOC Ponce, PR 105.1 WIOF Waterbury CT 104.1 WIOG Saginaw, M1 106.3	WJRH Easton, PA 90.5 WJRS Jamestown, KY 104.9 WJRZ Ship Bottom, NJ 100.1
WGAR-FM Cleveland, Ohlo WGAT-FM Gate City, Va, 104.9 WGAY-FM Washington DC 99.5 WGBE-FM Columbus, Ga.	WHIN-FM Gallatin TX 104.5 WHIO-FM Dayton, Ohlo	WIOK Hempstead, NY 98.3 WIOQ Philadelphia, PA 102.1 WIOT Toledo OH 104.7	WJSC-FM Johnson VT 91.5 WJSK Lumherton, N. C. 102.3
WGBE-FM Columbus, Ga. WGCW Port St. Joe, FL 93.5 WGBH-FM Cambridge, Mass.	WHIR-FM Danville, Ky. 107.1 WHIZ-FM Zanesville, Ohlo WHJZ-GZmeel, Ind. 91.3 WHJT Clinton MS 93.5	WIOV Ephrata, Pa. 105.1 WIOZ Southern Pines NC 107.1 WIPE Americus GA 94.3	WJSN-FM Jackson, KY 97.7 WJSU Jackson, MS 90.7
WGBM Virgua, WI 102.3	WHKK Erlanger, Ky. 103.1	WIPR-FM San Juan, PR 91.3 WIPU Fort Wayne, IN 89.1	WJSV Morristown. N.J. 90.5 WJUL Lowell, MA 91.5
WGBP-FM Green Bay, W1 90.1 WGBW Green Bay, W1 91.5 WGCB-FM Red Lion, Pa. WGCI Chicago, IL 107.5	WHKW Fayette, AL 98.1 WHKY-FM Hickory, N. C. WHLA Holmen, Wis.	WIGB Ann Arbor, MI 102.9 WIGH Concord, Mass. 88.3 WIRB-FM Enterprise AL 96.9 WIRK-FM Wost Palm Beach, Fla.	WJVM Sterling, 1L 94.3 WJVS Cincinnati, OH 88.3 WJWF Columbus MS 103.1
WGCL Cleveland, Ohio 98.5 WGCR-FM Wellsboro, Pa. 97.7 WGCS Goshen, Ind.	WHLD-FM Niagara Falls. N.Y. WHLM-FM Bloomsburg, Pa. WHLQ Canton OH 106.9	WIRN Virginia MN 107.1	WJYW Tampa, FL 100.7 WJZZ Detroit, MI 105.9 WKAI-FM MaComb, III.
WGDR Plainfield VT 91.1 WGEA-FM Geneva AL 93.5 WGEC Springfield, GA 103.9	WHLT-FM Huntington, Ind. WHLY Leesburg, FL 106.7 WHMA-FM Anniston AL 100.5	WIRQ Rochester, NY 90.9 WIRX St. Joseph, Mi 107.i WISM-FM Madison, Wis. WISN-FM Milwaukee. Wis.	WKAJ-FM Saratoga Springs, N.Y. 102.3 WKAQ-FM San Juan, P.R.
WGEM-FM Quincy, III.(s) WGER-FM Bay City, Mich. 102.5 WGET-FM Gettysburg, Pa.	WHMD Hammond, LA 107.1 WHME South Bend, Ind. WHMH-FM Sauk Rapids, MN	WISS-FM Berlin WI 102.3 WISU Terre Haute, Ind. WITA-FM San Juan, P.R.	WKAR-FM E. Lansing, Mich. WKAU-FM Kaukauna WI 104.9 WKAY-FM Glasgow, Ky.
WGEV Beaver Falls, Pa. WGFG Lake City, SC 93.3 WGFM Schenectady, N. Y.	WHMT-FM Howell, MI 93.5 WHMP-FM Northampton, MA 99.3	WITB-FM Salem, WV 91.1 WITC Cazenovia, NY 90.9	WKAY-FM Glasgow, Ky. WKBB West Point, MS 100.9 WKBC-FM N. Wilkesboro. N.C. WKBJ-FM Milan, Tenn.
WGFR Glen Falls, NY 91.9 WGFS Greensboro, N. C. 90.7	WHMQ Findlay, OH 100.5 WHMT-FM Howell, MI 93.5 WHNN Bay City MI 96.1	WITL-FM Lansing, Mich. WITO Ironton OH 107.1	WKBL-FM Covington, Tenn. WKBN-FM Youngstown. Ohlo WKCB-FM Hindman, KY 107.1
WGGL-FM Houghton, Mich. WGGN Castalia, OH 97.7 WGGO Buford, Ga. 102.3	WHNR McMinnville, Tenn. 103.9 WHOD-FM Jackson AL 104.9 WHOK-FM Lancaster, Ohio	WITR Henrietta, NY 89.7 WITT Tuscola, IL 93.5 WITW Cadillae, MI 98.7 WITZ-FM Jasper, Ind.	WKCC Grayson, KY 91.5 WKCI Hamden CT 101.3 WKCO Gambier OH 91.9
WGGQ Waupin, WI 99.3 WGGR Duluth, Minn. 105.1 WGH-FM Newport News, Va.	WHOM Mount Washington, NH 94.9 WHOO-FM Orlando, Fla.	WIUG Winchester, Ind. WIUJ St. Thomas, VI 88.9	WKCQ Saginaw MI WKCR-FM New York, N.Y. WKCS Knoxville, Tenn.
WGHS Glen Ellyn, III. 88.5 WGIL-FM Galesburg, III. WGIR-FM Manchester NH 101.1	WHOP-FM Hopkinsville, Ky. WHOU-FM Houlton, ME 100.1 WHOV Hampton, Va.		WKCU-FM Corinth, Miss. WKDD Akron, OH WKDE-FM Altavista, VA 105.5 WKDF Nashville, TN 103.3
WGLT Hormigueros, PR 92.1 WGLB-FM Port Washington, Wis.	WHOW-FM Clinton, IL 95.9 WHP-FM Harrisburg, Pa. WHPC Garden City NY 90.3	WIUV Castleton, VT 91.3 WIVA-FM Aguadilla, P.R. 100.3 WIVC Peorla, 181. WIVE-FM Ashland, Va. WIVI-FM Cristlansted,	WKDN-FM Camden, N.J.
WGLD-FM High Point, NC 100.3 WGLO Ft. Lauderdale FL 106.7 WGLS-FM Glassboro, N. J.	WHPE-FM High Point, N.C. WHPH Hanover, N.J. WHPK-FM Chicago, III.	St. Crolx, V.I. WIVK-FM Knoxville. Tenn. WIVQ Peru, IL 100.9	WKDQ Henderson, KY 99.5 WKDU Philadelphia, PA 91.7
WGLT Normal, IL 89.1 WGLY Goulds, FL 98.3 WGMB Georgetown, SC 97.7	WHPR Highland Park, MI 88.1 WHPW Huntington, WV 89.3 WHRB.FM Cambridge, Mass.	WIVY-FM Jacksonville, Fla. WIXK-FM New Richmond, Wis. 107.1	WKEE-FM Huntington, WV 100.5 WKEI-FM Kewanee, III.
WGMC Greece NY 90.1 WGMO Shell Lake, W1 95.3	WHRK Memphis, TN 97.1 WHRL Albany, N.Y. WHRM Wausau, Wis.	WIXL-FM Newton, N. J. WIXN-FM Dixon. III. WIXQ Millersville, PA 91.7	WKES St. Petersburg FL 101.8 WKET Kettering, DH 89.5 WKEU-FM Grimn, Ga. WKEY-FM Covington, Va.
WGMS-FM Washington, D.C. WGMW Riviera Beach, Fin. 94.3 WGN7 Files M. 107.9	WHRS Boynton Beach, FL 90.7 WHRW Bingnamton, N.Y. WHRZ Providence, KY 97.7	WIXX Green Bay, WI 101.1 WIYD-FM Palatka FL 99.9	WKEZ Nortolk, VA 95.7
WGNA Albany, NY WGNB St. Petersburg, Fla. WGNC-FM Gastonia, N.C. WGNU-FM Granite City, III.	WHSA Brule, Wis. 89.9 WHSB Alpena, Mich. WHSD Hinsdale, III. 88.5 WHSH Albany NY 106.5	WIYQ Ebensburg PA 99.1 WIZM-FM La Crosse, WI 93.3 WIZR-FM Johnstown, N.Y. 104.9 WJAC-FM Johnstown PA 95.5	WKFR-FM Battle Creek, MI 103.3 WKGC-FM Panama City, FL 90.7 WKG0 Cumberland, Md. 106.1
WGNU-FM Granite City, III. WGOH-FM Grayson, Ky. WGOL Lynehburg, VA 98.3 WGOS-FM Miami, Fla.	WHSK Kokomo, IN 89.1 WHSN Bangor, ME 89.3	WJAD Bainbridge, GA 97.3 WJAG-FM Norfolk, NE 106.7 WJA1 Eaton, OH 92.9	WKGW, Utlea, NY WKHR Balnbridge, DH 88.3 WKHR Pikeville KY WKHS Worton MD 90.5
WGOS-FM Miami, Fla. WGOT Newton, MS WGOV-FM Valdosta. Ga. WGPA-FM Bethlehem. Pa.	WHSS Hamilton, DH 89.5 WHSY-FM Hattleshurg, Miss.	WJAQ Marianna, FL 100 5 WJAT-FM Swainsboro, Ga. WJAX-FM Jacksonville, Fla.	WKIQ-FM Glenville, GA 106.3 WKIQ Bowling Green, OH 93.5
WGPC-FM Albany, Ga. WGPR Detroit, Mish. 107.5	WHTB Talladega AL 92.7 WHTC-FM Holland, Mich. WHTG-FM Eatontown, N.J. 106.3	WIAZ Albany, Ga. WIBD-FM Salem IL 100.1 WJBI Clarksdale MS 101.7	WKIR Jackson, TN 104.1 WKIT Hendersonville, NC 102.5 WKJB-FM Mayaguez, P. R. WKJR-FM Muskegon Heights MI
WGPS Greensboro, N.C. WGRD-FM Grand Rapids, Mich. 97.9	WHTT Moline, IL 98.9 WHUB-FM Cookeville, Tenn. WHUC-FM Hudson, N.Y.	WJBK-FM Detroit, Mich.	WKKC Chicago, IL 89.3
WGRE Greeneastle, Lnd. WGRF, Pleasantville NJ 99.3 WGRK-FM Greensburg, KY 103.1	WHUD Peekskill NY 100.7 WHUG Jamestown NY 101.7 WHUR Washington DC 96.3	WJBM-FM Jerseyville, III. WJBQ-FM Searborough, ME WJBR Wilmington, Del.	WKKD-FM Aurora, III. WKKJ Green Cove Springs, FL 92.7
WGRN Greenville, III. WGRP-FM Greenville, Pa. WGRQ Buffalo NY 96.9	WHUS-FM Storrs, Conn. WHVS Hvde Park, NY 97.7 WHWB-FM Rutland, Vt. 98.1	WJBR Wilmington, Del. WJBW-FM Hampton, S.C. 103.1 WJCC Angola, Ind. 100.1 WJCD-FM Seymour, Ind.	WKKL West Barnstable, MA 91.1 WKKM Harrison, MI 92.1 WKKY Moss Point, MS 104.9
WGRT Danville, IN 107.1 WGSU Genesco, N.Y. WGTB-FM Washington, D.C.	WHWE Howe, Ind. 89.7	WJCK-FM Seymour, ind. WJCK-Rensselaer IN 97.7 WJCL-FM Savannah GA 96.5 WJCR Washington PA 88.3 WJCT-FM Jacksonville, FL 89.9 WJDB-FM Thomasylle AL 95.3	WKLA-FM Ludington, Mich. 106.3 WKLC-FM St Albans, W.Va. WKLD Onconta AL 97.7
WGTC Bloomington, IN 92.3 WGTM Richlands, VA 105.5 WGTD Kenosha, Wi 91.1	WHYD-FM Columbus, Ga. 107.3 WHYL-FM Carliste, Pa.		WKLF-FM Clanton, Ala. WKLH Montgomery AL 92.3 WKLK-FM Cloquet MN 100.9 WKLN Gullman AL 92.1
WGTE-FM Toledo; OH 91.3 WGTG Germantown, TN 94.3 WGTH Richlands, VA 105.5	WHYN-FM Springfield, Mass. WHYP-FM North East, Pa. 100.9 WHYS-FM Hattlesburg, Miss. 104.5	WJEL Indianapolis, IN 89.1 WJER-FM Dover, OH 101.7 WJEZ Chicago, IL 104.3	WKLP-FM Keyser WV 94.1 WKLP Toledo, 0. 99.9 WKLS Atlanta, Ga.
	1357.0		

Call Location MHz	Call Location MHz	Call Location MHz	Call Location MHz
WKME Gardiner, ME 104.3 WKMH-FM Dearborn, Mich. WKMO Hodgenville, KY 406.3	WLNG-FM Sag Marbor, NY 92.1 WLNM-FM Latonia. N.M. WLNK Columbus, MS 90.9 WLNO London, Ohio	WMIT Black Mountain, N.C. WMIV S. Bristol, N.Y. WMIX-FM Mt. Vernon, III.	WNOB Cleveland, Ohio WNOE-FM New Orleans, La.
WKMS-FM Murray, Ky. 91.3 WKMX Enterprise, AL 106.7 WKNH Keene, NH 89.1	WENR Lansing IL 106.3 WENX Lincoln, IL 91.1	WMJC Birmingham, MI 94.7 WMJM-FM Cordele, Ga. 98.3 WMJQ Rochester, NY 92.5	WNOF St. Paul, Minn. WNOI Flora, iL WNOK-FM High Point, N.C.
WKNC-FM Raieigh NC 88.1 WKNO-FM Memphis, TN 91.1 WKNS Kinston, NC 90.5	WLOB-FM Westbrook, ME 100.9 WLOC-FM Munfordville, Ky. WLOI-FM La Porte, Ind. WLOI-FM Minneapolis, Minn.	WMJS Prince Frederick MD 82.7 WMJW Nanticoke PA 92.1 WMJX Miami, FL 96.3 WMKC Oshkosh, Wis.	WNON Lebanen, Ind. WNOR-FM Norfolk, Va. WNPQ New Philadelphia. Ohio 95.9
WKNT-FM Kent. OH 100.1 WKNU Brewton, AL 106.3 WKOC Kankakee, IL WKOF Hopkinsville, Ky.	WLOM Orleans, MA 104.7 WLOO Chicago, IL 100.3	WMKY Morehead, Ky. 90,3 WMLD Manati PR 96,9 WMLN-FM Milton, MA 91.5	WNRC Dudley, MA 91.1 WNRE Circleville, O, 107.1 WNRG-FM Grundy, Va.
WKOG-FM Gordon, GA 107.1 WKOK-FM Sunbury, Pa. WKOM Columbia TN 101.7	WLOQ Winter Park, FL 103.1 WLOS-FM Asheville, N.C. 99.9 WLOW-FM Alken SC 95.9 WLOZ Wilmington, NC 91.3	WMLP-FM Milton, Pa. WMLS-FM Sylacaupa AL 98.3 WMLW Milwaukee, Wis.	WNRR Bellevue OH 92.1 WNSD Cincinnati OH 90.1 WNSL-FM Laurel, Miss.
WKOZ-FM Wellston, OH 96.7 WKOZ-FM Kosciusko, Miss. WKPS New Wilmington, PA 88.9	WLPO-FM La Salle, iil. WLPR Mobile AL 96.1 WLQA Cincinnati OH 98.5	WMMC N. Andover MS 90.8 WMLW Grand Rapids, MN 101.3	WNTE Mansfield, Pay 89.5 WNTH Winnetka, III. WNTI Hackettstown, N.J.
WKPT-FM Kingsport, TN 98.5 WKQD Henderson KY 92.5	WLQR Toledo, Ohio 101.5 WLQY Ft, Pierce, FL 98.7 WLRA Lockport IL 88.1	WMMR Philadelphia, Pa. WMMS Cleveland, O. 100.7 WMNA-FM Gretna, Va	WNTU Naples, FL 92.1 WNTQ Syracuse, NY 93.1 WNUB-FM Northfield, Vt.
WKQX Chleago, IL 101.1 WKRA-FM Holly Springs, MS 92.7	WLRB Rehoboth Beach, DE 92.7 WLRC-FM Whitehall MI 95.8 WLRH Huntsville, AL 89.3 WLRJ Roanoke VA 92.3	WMNB-FM North Adams, Mass, WMNI-FM Columbus, Ohlo WMNR Monroe CN 88.1 WMOA-FM Marietta, OH 94.3	WNUF New Kensington PA 100.7 WNUR Evanston. IL 89.3 WNVA-FM Norton. Va. 106.3 WNWC Madison WI 102.8
WKRG-FM Mobile AL 99.9 WKRG Cineinnati OH 101.9 WKRT-FM Cortland, NY 99.9 WKRV Vandalla, IL 107.1	WLRN-FM Miami FL 91.3 WLRQ Whitehall, MI 95.3 WLRS Loutsville, KY 102.3	WMOR-FM Morehead, Ky. 92.1 WMOS Bath, ME 91.5 WMOT Murfreesboro, Tenn. 89.5	WNWY-FM Norway, Ma. 105.5
WKRX Roxboro, NC 96.7 WKSA-FM Isabela, PR 101.5 WKSI Eldorade, IL 102.3	WLRW Champaign, III. WLSD-FM Big Stone Gap VA 93.5 WLSE-FM Wallace NC 94.3	WMPG Gorham ME 91.1 WMPH Wilmington, Del. 91.7 WMPi Scottsburg, ind.	WNKT-FM Portsmouth, O. WNYC-FM New York, N.Y. WNYE New York, N.Y. WNYN-FM Canton, D. WNYU-FM New York NY 89.1
WKSJ-FM Mobile, AL 94.9 WKSL Greencastle- Waynesboro PA 94.3	WLSM-FM Louisville, Miss. WLSR Lima. Ohlo WLST Marinette, WI 95.1 WLSU La Crosse, Wis. 88.9	WMPL-FM Hancock, MI 93.5 WMPO-FM Middleport DH 92.1 WMPR Sumter SC 88.1	WOAL-FM San Antonio, TX 97.3
WKSS Hartford-Meriden, CT 95.7 WKSU-FM Kent, Ohio WKSW Cleveland, OH 99.5	WLSW Scottdale, PA 103.9 WLTA Atlanta, GA 99.7	WMPT-FM South Williamsport. Pa. 99.3 WMQT Ishpeming, MI 107.1 WMRA Harrisonburg, Va. 91.1	WOAK Royal Oak, Mich. WOAP-FM Owosso. Mich. WOAY-FM Oak Hill, W.Va. WOBC Oberlin. D.
WKTA McKenzie, TN 106.9 WKTC Tarboro, NC 104.3 WKTI Milwaukee, WI 94.5	WLTE Wayeross, GA 102.5 WLTL La Grange, III. 88.1 WLTR Columbia, SC 91.3 WLUF Governeur, NY 92.7	WMRA Harrisonburg, Va. 91.1 WMRF-FM Lewistown, Pa. WMRI-FM Marion, Ind. WMRN-FM Marion, Ohio	WOBM Toms River. N.J. WOBN Westerville, Ohio WOBR-FM Wanchese NC 95.3
WKTJ-FM Farmington ME 99.3 WKTK Catonsville, MO 105.7 WKTL Struthers, OH 90.7 WKIM Charleston, SC 102.5	WLUP Chicago, IL 97.9 WLUR Lexington, Va. WLUV-FM Loves Park, III.	WMRQ Brookhaven, MS 92.1 WMRT Marietta. OH 88.3 WMRV Endicatt. N.Y. 105.5	WOCG Huntsville, AL 90.1 WOCH-FM North Vernon, Ind.
WKTN Kenton, Ohio 95.3 WKTU New York, NY 92.3 WKTZ-FM Jacksonville, Fla.	WLUW Chicago, IL 88.7 WLVE Baraboo, Wis. 94.9 WLVH Hartford CT 93.7	WMRY E. St. Louis. 181. WMSB Mississippi State, MS 89.1	WOCO Oconte, Wis. 107.1
WKUB Manitowoc, Wis.	WLVL Louisville, Ky. WLVQ Columbus, OH WLVR-FM Bethlehem PA 91.3 WLVU Frie. PA 99.9	WMSC Upper Montelair, NJ 105.5 WMSG-FM Onkland, Md. WMSH-FM Elizabethtown, Pa.	WOCR Olivet, MI 89.7 WOEL-FM Elton, MO 88.3 WOES Elsie, MI 91.3 WOFM Greeneville, Tenn.
WKVI-FM Knox, Ind. WKVM-FM San Juan. PR 105.7 WKVO-FM Havelock, NC 104.9 WKVR-FM Huntingdon, PA 91.7	WLVU Erie. PA 99.9 WLVV Fairfield, OH 94.9 WLVY Elmira, NY 94.3 WLWS Hamilton, OH 96.5	WMSK-FM Morganfield, Ky. WMSP Harrisburg, Pa. WMSR-FM Manchester, Tenn.	WOGM Bellefontaine, O. 98.3 WOHS-FM Shelby, N.C. WDI-FM Ames, Iowa
WKVT-FM Brattleboro, VT 92.7 WKWI Kilmarnock, VA 101.7 WKWK-FM Wheeling, W.Va. WKWZ Syosset NY 88.5	WLXN Lexington. N.C. 94.1 WLXR La Crosse, WI 104.9 WLYF Miami, Fin. 101.5	WMSU Hattiesburg MS 91.1 WMT-FM Cedar Rapids, la. 96.5	WOIV De Ruyter Twp., NY 105.1 WOJO Evanston IL 105.1 WOKA-FM Douglas, GA 106.7
WKXI Jackson, Miss. 94.7 WKXK Pana, IL 100.9 WKXL-FM Concord, NH 102.3	WLYK Milford- Marlemont OH 107.1 WLYN Lynn, MA 101.7	WMTB Emmitsburg, MO 89.9 WMTF Stowe, VT 91.5 WMTH Park Ridge, III. WMTL-FM Leitchfeld, Ky.	WOKO Areadia, FL 98.3 WOKF Clearwater, FL 95.7 WOKI-FM Oak Ridge TN 100.3 WOKN Goldsboro NC 102.3
WKXN Greensville, AL 95.9 WKXR-FM Exeter NH 107.1 WKXX Birmingham, AL 106.9	WLYQ Norwalk, CO 95.9 WLYT Cleveland Heights OH 92.3 WLYX Memphis TN 89.3	WMTM-FM Moultrie, Ga. WMTS-FM Murfreesboro, Tenn. WMUA Amherst. Mass.	WOKU-FM Greensburg, Pa. WOKZ-FM Alton, III
WKYN-FM San Juan, P. R. 99.9 WKYS Washington, OC 93.9 WKYW Frankfort, Ky.	WMAJ-FM State College, Pa. WMAL-FM Washington, O.C. WMAR-FM Baltimore, Md. 106.5	WMUB Oxford, Ohio WMUH Allentown, Pa. WMUK Kalamazoo, Mich.	WOLA-FM Carolina, P.R. 107.7 WOLC Princess Anne. MO 102.5
WKYX-FM Paducah, Ky. WKZL Winston-Salem, NC 107.5 WKZM Sarasota FL 105.5 WKZN-FM Zlon, IL 96.9	WMAS-FM Springfield, MA 94.7 WMAZ-FM Macon, Ga. WMBD-FM Peorla, III.	WMUL Huntington, W.Va. WMUM Marathon, FL 94.3 WMUN Munele, Ind. WMUU-FM Greenville, S. C.	WOMA Tallahassee, Fla. WOMC Detroit, Mich. 104.3 WOMP-FM Beltaire, Ohio
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WLBE-FM Leesburg, Fla. 106.7 WLBH-FM Mattoon. III. WLBJ-FM Bowling Green, Ky.	WMCU Miami, Fla. 89.7 WMCX W. Long Branch,	WNAN Demopolis, AL 106.3	WORG-FM Orangeburg, SC: 103.9
WLCA Godfrey, IL 89.9 WLCC Luray, VA 106.3 WLCF Southport, NC 107.1 WLCH Lebanon TN 88.7	WMDC-FM Hazelhurst, MS 100.9 WMDD-FM Fajardo, P.R. WMDE Greenshore, N.C.	WNAS New Albany, Ind. WNAT-FM Natchez, Miss. WNAU-FM New Albany, MS 103.3 WNAV-FM Nanapolis, Md. WNAZ-FM Nashville, Tenn.	WORJ-FM Mt. Dora, Fta. 107.7 WORK Barre, VT 107.1 WORM-FM Savannah, Tenn. WORO Corozat, P.R. 92.5
WLCK-FM Scottsville, Ky, WLCK-FM Lowell IN 107.1 WLCR Lawrence Twp, NJ 89.7	W M DE Greensboro, N.C. W M DF Milton, WI W M DH New Castle IN 102.5 W M DI McKean, Pa. 102.3	WNAZ-FM Nashville, Lenn. WNBD-FM Daytona Beach, Fla. WNBI-FM Park Falls, WI 98.3 WNBX-FM Keene. NH 103.7 WNBY-FM Newberry, MI 93.5	WORT Madison, WI 89.7 WORW Port Huron MI 91.9 WORX-FM Madison, Ind. WOSH Oshkosh, WI 103.9
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WLFQ Crawfordsville, IN 103.9 WLGA Valdosta, GA 95.9 WLHI Fort Wayne, IN 88.3	WMEV-FM Marion, Va. WMEV-FM Marion, Va. WMEZ Pensacota FL WMFC-FM Monroeville AL 99.5 WMFD-FM Wilmington, N.C.	WNDH Napolean OH 103.1 WNDN-FM Salisbury, NC 91.1 WNDU-FM South Bend, Ind.	WOVO Glasgow KY 105.5
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WLIF Baltimore, Md. vis. WLIH-FM New London, Wis. WLIH-FM Lenoir City, Tenn. WLIN Jackson MS WLIP-FM Kenosha. Wis. 95.1	WMFO Medford, Mass. 91.5 WMFP Ft. Lauderdale, Fta.	WNES-FM Central City, KY 101.9 WNEW-FM New York, N.Y. WNEX-FM Macon, Ga.	
WLIR Garden City NY 92.7 WLIU Lincoln Univ., PA 88.7 WLIV-FM Livingston, Tenn.	WMFR-FM High Point, N.C. WMGH Vevay, IN 95.9 WMGK Philadelphia, PA 102.9	WNFM Dayton, TN 104.9 WNGC Athens, Ga. 95.5 WNHS Portsmouth VA 88.7 WNHU West Haven CT 88.7	WPAA Andover. Mass. WPAB-FM Ponce. P.R. WPAC-FM Patchoque. N.Y. WPAD-FM Patdueah, Ky.
WLJC Beattyville, KY 102.3 WLJE Valparaiso, IN 105.5 WLJS-FM Jacksonville, AL 91.9	WMGL Pulaski, Tenn. 98.3 WMGM Atlantic City, N.J. WMGQ New Brunswick, NJ 98.3	Vt. While Chicago III.	WPAG-FM Ann Arbor, Mich, 107.1 WPAJ-FM Lancaster, SC 107.1 WPAP-FM Panama City, Fta.
WLKI Angola, IN 100.1	WMGW-FM Meadville, Pa. WMGX Portland, ME 93.1 WMHB Waterville ME 91.5 WMHC South Hadiay Mase	WNIC-FM Dearborn MI 100.3 WNIK-FM Arecibo, P.R. WNIL-FM Nifes, Mich. 95.3	WPAT-FM Paterson, N.J. WPAY-FM Partsmouth, Ohio
WLKM-FM Three Rivers, MI 95.9 WLKN-FM Lincoln, ME 99.3 WLKN-FM Morfolk, OH 95.3 WLKW-FM Providence, RI 101.5 WLLI-FM Joilet, 1L 96.7	WMHC South Hadley, Mass. WMHE Toledo, Ohio WMHK Columbia, SC 89.7 WMHR Syraeuse, N.Y. 102.9	WNIU-FM Dekalb. III. 89.5 WNIG-FM Senatobia, Miss. 90.1 WNKO Nawark OH	WPRC-FM Banoor, ME 92.9 WPBF Middletown, OH 105.9 WPCD Champaign, IL 88.7 WPCH Decatur GA 94.9
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WLMC Okeechobee, Fla. WLMH Morrow, Ohio 88.1 WLMJ Jackson OH 94.7	WMIC-FM Sandusky, Mica. WMIK-FM Middlesboro, Ky. 92.7 WMIL Waukesha, WI 106.1	WNNO-FM Wisconsin Dells, WI WNNT-FM Warsaw, Va.	WPDR-FM Portage, Wis. WPDX-FM Clarksburg, WV 104.9

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WQCY Quincy, IL	WRHN Rhinelander, WI 90.5 WRHR Henrietta, NY WRHS Park Forest. IL 88.1 WRHY Starview PA 92.7 WRIA Richmond, IN 101.3 WRIF Detroit, Mich. 101.1 WRIL Grenada, MS 100.1 WRIL Grenada, MS 100.1 WRIU Kingston, RI 91.1 WRIV-FM Honeapath, SC 103.1 WRJB Camden, TN 98.3 WRJB Camden, TN 98.3 WRJB Camden, TN 98.5 WRJB Brandon, MS 99.7 WRJR Lewiston, ME 91.5 WRJH Brandon, MS 97.7 WRJR Lewiston, ME 91.5 WRKD FM KANANADOLIS, NC 99.7 WRKC WILKES-Barre, PA 88.5 WRKD FM KANANADOLIS, NC 99.7 WRKT Brookfield, CO 95.1 WRKM FM Carthage, TN 100.7 WRKT Racine, WIS. 100.7 WRKT Racine, WIS. 100.7 WRKT Steubenville, OH 103.5 WRKD Steubenville, OH 103.5 WRKD Cwilliamsport, PA 91.7 WRLM Taunton, Mass. 93.3 WRLM Taunton, Mass. 93.3	WSEI Olney, III. 92.9 WSEK Somerset. Ky. WSEL-FM Pontotoc, Miss. WSEN-FM Baldwinsville, N.Y. WSEV-FM Sevierville, TN WSEZ Winston-Salem, NC WSFL Bridgeton, NC WSFL Bridgeton, NC WSFM Harrisourg, Pa. WSG-FM Savannah GA WSGH-FM Winston-Salem NC WSGM Staunton, Va. WSGO-FM Oswego NY WSGH-FM Port Huron, Mich. 91.3 WSGS Hazard, Ky. WSGS Hazard, Ky. WSHA Raleigh, N.C. WSHC Shepherdstown, WV WSHE Ft. Lauderdale FL WSHC Shepherdstown, WV WSHE Ft. Lauderdale FL WSHC Shepherdeld, MI WSHL-FM Easton, MA WSHN-FM Fremont, MI WSHL-FM Easton, MA WSHN-FM Fremont, MI WSHL-FM Easton, MA WSHN-FM Fremont, MI WSHL-FM Sheboyan WI WSHS Sheboyan WI WSHS Sheboyan WI WSHS Sheboyan WI WSHU Fairfield, CT WSHU South HII VA WSHU SOU	WIAZ MORTON. IL 102.3 WTBG Brownsville, TN 95.3 WTBI McComb MS 105.7 WTBO-FM Cumberland. Md. WTBR-FM Pittsfleld, MA 89.5 WTCS Cambridge. Mass. WTCA-FM Plymouth. IN 94.3 WTCC Sprinafield, MA 100.1 WTCH-FM Shawano, W 100.1 WTCM-FM Traverse City. Mich. WTCD-FM Campbellsville, Ky. WTCQ Vidalia, GA 97.7 WTCY Shelbyville, TN 93.1 WTDL-FM Lake Success, NY 103.5 WTGI Hammond. LA 103.3 WTGI Norfolk VA 89.5
WQMF Babylon, N.Y. WQMG Greensboro, N.C. WQMT Chatsworth. GA 99.3 WQMU Indiana, Pa. 103.1 WQMV Vicksburg, Miss. WQNX Natchez, MS 95.1 WQOD Youngstown OH 93.3 WQOD Grayling, M1 100.1 WQOX Memphls TN 88.5 WQPO HarrIsonburg, VA 100.7 WQQQ Easton PA 99.9	WRLR Huntingdon, PA 106.3 WRLS Haywood, Wis. 92.1 WRLX Auburn NY 108.9 WRMB Boynton Beach, FL 88.7 WRMC-FM Middlebury, VT 91.7 WRMF-FM Titusville, Fla. 98.3 WRMS-FM Beardstown IL 94.3 WRMS-FM Beardstown 10 91.1 WRNE Houlton, ME 89.1 WRNN-FM Clare, MI 95.3 WRNO New Orleans, LA 99.5 WRNS Kingston, NC 95.4	WSHY-FM Shelpyville, III. 104.9 WSID-FM Baltimore, Md. WSIE Edwardsville, III. 88.7 WSIF Wilkesboro, NC WSIM Red Bank TN WSIP-FM Paintsville, Ky. WSIU Carbondale, III. WSIV-FM Pekin, III. WSIX-FM Nashville, Tenn. WSIC-FM Magee, Miss. WSJG Hatlandale, Fta. WSKB Westfield, MA 91.5	WTIO Charleston, W. Va. WTJM Pineville KY WTJU Charlottesville, Va. WTKM-FM Hartford WI WTKY-FM Tompkinsville, Ky. 92.1 WTLB-FM Utica, NY WTLC Indianapolis, Ind. WTLN-FM Apopka, Fla. WTLN-FM Apopka, Fla. WTLR State College, PA WTMB-FM Tomah, WI WTME Manning SC 92.1

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WTWC UP	bana, III.	105.5
WTWX GI	untersville AL w London, Conn.	95.9
WTYL-FM WTZE-FM	Tazeweil, Va.	97.9
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WUCJ Uni	versity Heights,	Ohlo 88.9
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WUOG At	hens GA	95.7
WUOM AT	oxyllle, TN	90.5
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WUSB Sto	ony Brook, NY	97.7
WUSF Tar	mpa. FL Hadelphia. PA	88.7 98.9
WUSM N. WUSO Spi	Dartmouth, MA	90.5
WUST-FM WUTM Ma	pergetown. OH pory Brook, NY Columbia, SC mpa, FL Iladelphla, PA Dartmouth, MA ringfield, OH I Bethesda, Md. artin, TN vance, TN arquette, MI I Blacksburg, Va Illwaukes, Wis. If Charleston, M Paoli IN M Altoona, Pa. thany, W.Va, amingham, MA I Ilhaca, N.Y, M Lewisburg, Pa Izleton, Pa. I Winnfield, LA	90.3
WUUN M	arquette. MI	100.1
WUWM M	Illwaukee, Wis.	. 50.8
WVAF-FN W.Va.	Charleston.	
WVAK-FI	M Altoona, Pa.	95.3
WVBF Fr	amingham, MA	105.7
WVBU-FI	M Lewisburg, PA	90.5
WVCD Ha	zleton, Pa. Winnfield, LA	97.9 92.1

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WVEY WVEC	Milwaukee Wi FM Hampton, Va. Atlanta, GA	107.7
WVEN	Springfield, III. Franklin, Pa, East Montpeller VT	99.3
WVEZ WVFK WVFM	Louisville, KY Key West, FL Lakeland, Fla	106.9 95.5
WVFV WVGR WVGS	Dundee, III. Grand Rapids, Mici Statesboro, GA	h. 104.1
WYHE	Hempstead, N.Y. -FM Clarksburg, W Evansville, Ind.	V 92.7
WVIA-	-FM Highland Park FM Scranton PA	90.3 89.9
WVIC-	FM Scranton PA FM E. Lansing, Mi Rock Island IL -FM Coldwater, MS FM Hammondsport,	91.1 95.3
WVIN-	FM Hammondsport, FM Mount Kisee, N	NY 98.3
WVIS WVJC WVJP-	Frederiksted VI Mt. Carmel IL FM Caguas, P.R.	106.7 89.1
WVJS- WVKC- WVKO	FM Hammondsport, FM Mount Klseo, N Frederiksted VI Mt. Carmel IL FM Caguas, P.R. FM Owensboro, Ky. FM Galesburg, III. -FM Columbus, OH. -FM Poughkeepsle, Eveleth, MN	94.7
WVKR	·FM Poughkeepsie,	91.3
WYLC.	FM Orleans, MA Monticello, IL	104.7
WVLR	Sauk City. Wis.	91.5
WVMG	FM Cochran. Ga.	96.7 90.5
WVMS	Chattanooga, Tenn. -FM Scranton, PA	88.9 91.5
WVMW	-FM Scranton PA -FM Tuscumbla AL	91.5 100.3
WVNO-	FM Newark, N.J. -FM Mansfield, Ohlo Tuskegen, AL	95.9
WVOF	Fairfield, CT -FM Hazlehurst, G	88.5 A 93.5
WVOR WVOS-	Rochester, N.Y.	101.0
WVPA- WVPB	-FM Logan, W. Va. -FM Windsor, VT Beckley WV	89.5 91.7
WVPE	Elkhart, IN Piscataway, NJ Charleston, WV	88.1 90.3 88.5
WVP0-	FM Stroudsburg, Pa Rock Hill, SC	88.9
WVRY WVSC-	Waverly, Tenn. FM Somerset, Pa.	104.9
WVSL- WVSP	FM Slidell, La.	105.3 90.9
WVSK WVSS WVST	Menomonie, WI Bolivar, TN	90.7 96.7
WVSU- WVSV WVTC	. FM Calesburg, IIIFM Columbus, OH -FM Poughkeepsie, Eveleth, MN -FM Orleans, MA Monticello, IIFM Lexington, Ky. Sauk City. Wis. Jaekson, MS -FM Gochran, GFM Mars Hill, NC Monroe, Mich. Chattanooga, TennFM Scranton, PA -FM Scranton, PA -FM Scranton, PA -FM Seranton PA -FM Tuscumbla AL -FM Mowark, N.JFM Liberty, N.JFM Liberty, N.JFM Lalehurst, GFM Hazlehurst, GFM Hazlehurst, GFM Birmingham, Younder, N.YFM Liberty, N.YFM Logan, W. VaFM Windsor, VT Beckley WV Elkhart, IN Piscataway, Charleston, WV -FM Stroudsburg, Pa Rock Hill, SC Buckhannon, WV -FM Stroudsburg, Pa Rock Hill, SC Buckhannon, WV -FM Sildell, LaWarrenton, NC Rapid City, S.DFM Sildell, LaWarrenton, NC Rapid City, S.DFM Sildell, LaYuricennes, IN -FM Kettering, FlaYalparaiso, IndFM Kettering, Ohic Coral Gables, FlaYalparaiso, IndFM Highland Park -FM Highland Park -FM Highland Park -FM Highland Park -FM Suckbaron, WC -FM Buckbaron, WC -	101.7
WVTL WVTS WVUR	Monticello, Ind. Terre Haute, Ind. Vincennes, IN	91.1
WVUD	-FM Kettering, Ohlo Coral Gables, Fla. Valparaiso, Ind.	
WVUS	Putney VT Norristown, PA	88.9 91.7
WVVV	Valdosta, GA Blacksburg, Va. -FM Highland Park	1L 103.1 89.9
WVWB	R. FM Roanoke, VA	89.1
WVXU WVYC WWAD	Buckhannon, WV R-FM Roanoke, VA -FM Cincinnati, Oh York, PA Middleton, WI	BB. I
WWAV	Auburn, ME FM St. Petersburg,	100.1 Fla. 107.3
W W B D	FM Bamberg, S.C. La Grange, GA	104.1
WWCL	Wesson, Miss.	91.1 97.7 106.9
WWCS WWCT WWCU WWCW	Peoria. IL	105.7
wwcv	V Albany G.A	101.7
0 -	TI / CTA	TIO

	Call	Location	MHz
	WWDB	Philadelphia. Pa. FM Washington. D. FM Scranton. Pa. Wallingford. CT FM Medford MA Cincinnati. Ohio Fairmont WV Charleroi. PA Waynesboro. GA Carroliton GA FM Sanford. N.C. Hartford City, Ind. Muncle. IN FM Hampden-Syd	96.5
	WWDL	FM Scranton. Pa.	104.9
	WWEB	Wallingford, CT	89.9
	WWEZ	Cincinnati. Ohlo	92.5
	WWFC	Charleroi. PA	90.9
	WWGA	Waynesboro, GA	100.9
	WWGP	EM Sanford, N.C.	89.3
	WWHC	Hartford City, Ind.	01 8
	WWHS	FM Hampden-Syd	91.5 ney V A 91.7 92.9 106.7 90.3
	WWID	L'advemith WI	91.7
	WWID	Gainesville, GA	106.7
	WWIH	High Point, NC	90.3
	MLWW	New Lexington, Ol	H 106.3
	WWIR	St. Cloud, MN	98.1
	WWJY	South Bend. IL	100.5
	WWKS	Beaver Falls, PA	100.5
	WWKT	-FM Kingstree. S	C 100.1
	WWLR	Lyndonville, VT	91.7
	WWLV	Daytona Beach, FL	94.5
	WWMD	Hagerstown, MD	104.7
	WWMA	Reidsville, N.C.	IL 92.7
	WWMS	-FM Bryan, O.	
	WWNO	New Orleans, La.	94.3
	WWOD	-FM Lynchburg, Va	
	WWOL	FM Buffalo, N.Y.	
	WWOM	Albany NY	100.9
	WWOO	Avalon, NJ	94.3
	WWOS	Princeton Junction.	NJ 90.3
	WWPT	Westport CN	90.3
	WWQC	Quincy, IL	90.3
	WWRH	Columbus, Ga.	95.3
	WWRK	Elberton, GA	92.1
	WWRN	West Paim Beach.	FL 92.1
	WWSC	FM Glens Falls. N	Y. 03 3
	WWSH	Philadelphia, Pa.	106.1
	WWSM	Stevens Pt WI	89.9
	WWSR	St. Albans VT	102.3
	WWSU	Dayton, OH	88.5
	WWTR	-FM Bethany Bear	95.9
	WWTV	-FM Cadillac. Mich	١.
	WWUL	W. Hartford CT	91.3
	WWVR	W. Terre Haute, II	102.5
	WWW	Johnstown, OH	103.1
	WWW	M Cleveland OH	105.7
	WWWS	Ladysmith WI Gainesville, GA High Point, NC M Detroit, Mich. New Lexington, Olst. St. Cloud, MN Sheboygan, WI South Bend. IL Kokomo, Ind. Beaver Falls, PA -FM Kingstree. S Canton, MS Lyndonville, VT Daytona Beach. FI Minocoua, WI Hagerstown, MD Arlington Heights Reidsville, N.CFM Bryan, O. New Orleans, La. Avalon, NJ -FM Lonehburg, Va Boea Raton, Fla. FM Bufailo, N.Y. Albany NY -FM Woonsocket, R Avalon, NJ -FM Colchester VI Quincy, IL Columbus, Ga. FM Bufailo, N.YFM Woonsocket, R Avalon, NJ -FM Woonsocket, R Avalon, NJ -FM Woonsocket, R Avalon, NJ -FM Golichester VI Quincy, IL Columbus, Ga. Southampton, NY -FM Woonser, OH Dayton, OH -FM Gelons Falls. N Jamestown NY -FM Bethany Beach -FM Galliac, Mich Corinth, Miss. W Hartford CT W. Terre Haute, II 3FM Jasper AL Johnstown, OH Later Michael -FM Gelons Falls, NY -FM Golichester, K W Cerritt, Mich. Charlottesville, V W Detroit, Mich. Charlottesville, V W Cerritt, Mich. Charlottesville, V R Columbus, IN Colu	A 97.5
	WWW	W Detroit. Mich.	104.0
	WWW	Summerville. SC	93.5
	WWXL	-FM Manchester, K	y. 103 9
	WWYN	-FM Erie, Pa.	100.5
	WWYZ	Waterbury CT	92.5
	WXAX	Elkhart, Ind.	00 5
	WXBM	-FM Milton, Fla.	80.3
	WXCC	Williamson, WV	96.5 91.7 91.3
	WXDR	Newark, DE	91.3
	WXEZ	Sylvania OH Elmwood Park, II	105.5
	WXGC	Williamson, W Danbury CT Newark, DE Sylvania OH Elmwood Park, Il Milledgeville, GA Mayfield, KY Parkersburg, W V Erwin, Tenn, Bay Springs, MS	88.9 94.7 95.1
	WXIL	Parkersburg, WV	95.1
	WXIS	Erwin, Tenn, Bay Springs, MS	103.9
	WXKE	Erwin, Tenn, Bay Springs, MS -FM Fort Wayne, Whitesburg, KY	103.9 93.5 1N 103.9 103.9
	WXKV	Altentown, Pa.	104.1
	WXKX	Pittsburgh, PA	96.1 100.9
	WXBCC WXCI WXCI WXXEZ WXXIL WXXIV WXXKV WXXKV WXLI WXLI WXLI WXLI WXLI WXLI	Fairmont. NC Abbeville, AL FM Dublin. Ga.	94.3
	WXLI	FM Dublin. Ga. Savannah, Ga. New York NY	97.3
	WXLO	New York NY Willimantic, CT	97.3 98.7 98.3 89.5
	WXMI	Monticello, ME	89.5
	WXNC	Henderson NC	92.5
5	B	/ LOCA	TIO
			11

Call Location	MINIZ
WXOS Plantation Key, Fla	100.3
WXOS Plantation Key. Fla. WXPN Philadelphia. Pa. WXQR Jacksonville. N.C. WXRA Woodbridge, Va. WXRC Hickory, NC. WXRF-FM Guayama, P. R. WXRO Beaver Dam, WI WXRT Chicago, III. WXRY-FM Columbia. S.C. WXTA Greencastle, Ind. WXTC Charleston SC WXTQ Athens, OH WXTR-FM LaPlata. MD WXTZ Indianapoils IN WXUS-FM Lafayette. Ind. WXYV Baltimore, MD WXYW Montour Falls NY WXYY Montour Falls NY WXYY Mayamon. PR WXYY WISOR, NC WYAK-FM Surfside Beach WXYA Bayamon. PR WXYY WISOR, NC WYAK-FM Surfside Beach Garden City, S WAN-FM Upper Sandus OH WYBC-FM New Haven, L.	105.5
WXRA Woodbridge, Va.	95.7
WXRF-FM Guayama, P. R.	30.7
WXRO Beaver Dam, WI	95.3
WXRY FM Columbia, S.C.	93.5
WXTC Charleston SC	96.9
WXTR-FM LaPlata. MD	105.5
WXTZ Indianapolis IN WXUS-FM Lafayette. Ind.	92.7
WXXI-FM Rochester NY WXXY Montour Falls NY	104.9
WXYC Chapel Hill, NC WXYV Baltimore, MD	102.7
WXYW Suffolk, Va. WXYX Bayamon, PR	100.7
WXYY Wilson, NC WYAK-FM Surfside Beach	106.1
Garden City, S WYAN-FM Upper Sandus	C 103.3
OH WYBC.FM New Haven, CT	95.9 94.3
WYBR Belvidere, IL	104.9
WYCR York-Hanover, Pa.	
WYCA Hammond, Ind.	
WYCS Yorktown, Va,	104.7
WYER-FM Mount Carmel.	IL 94.9
WYEP-FM Pittsburgh PA	91.5
WYFE-FM Winnebago IL	95.3
WYFM Sharon PA WYGO-FM Corbin, Kv.	102.9
WYII Williamsport MD	95.9 A 98.5
WYMS Milwaukee WI	88.9 94.9
WYNK-FM Baton Rouge, L. WYNO Chattanooga TN	106.5
WYNR-FM Brounwick, Ga.	
WYNY New York, NY WYOO-FM Richfleid, MN	97.1
WYOR Corat Gables, Fla.	101.5
WYRL Melbourne, Fla.	104.9
WYSO Yellow Springs OH WYSP Philadelphia, PA	91.5 94.1
WYSU Youngstown, O. WYVA-FM Yorktown, VA	88.5 94.1
WYWY FM Barbourville K WYXE Sun Prairie, WI	Y 93.5 92.1
WYYD Raleigh NC WYZZ Wilkes-Barre, Pa.	96.1
WZAK Cleveland, OH WZAR Ponce, P.R.	93.1
WZAT Savannah. GA WZBC Newton, MA	90.3
WZBT Gettysburg, PA WZDC Soddy-Dalsy, TN	90.3 102.3
WZDQ Soddy-Daisy, TN WZEE Madison, WI	102.3
WZEP-FM DeFuniak. Springs, Fla.	
WZEZ Nashville, TN WZFM Charlestown, W.Va.	92.9
WZGC Atlanta GA WZID Manchester, NH	92.9 95.7
WZLD Cayce, SC WZLE Lorain, OH	104.9
WZMF Menomonee Falls, V	91.5 Vis.
WZND Zeeland. Mich. WZOK Rockford. IL	99.3 97.5
WZOL Luquillo. PR WZOT Rockmart. Ga.	107.1
WZOW Goshen, IN WZPR Meadville, Pa.	97.7
WZRO Pekin IL	104.9
WZIA Iamaqua PA WZUU-FM Milwaukee WI	95.7
WZWZ Kokomo, IN	98.9 93.5
WYAN-FM Upper Sandus OH WYBC-FM New Haven, CT WYBR Belvidere, IL WYCH Hamllton OH WYCR York-Hanover, Pa. WYCA Hammond, Ind, WYCE Warwick, R.I. WYCS Yorktown, Va. WYCA Hammond, Ind, WYCE Warwick, R.I. WYCS Yorktown, Va. WYCH Des Plaines, III. WYEN-FM Mount Carmel, WYFI Norfolk, Va. WYFM Sharon PA WYEZ-Ekhart, IN WYFI-FM Williamsport MD WYLD-FM Corbin, Ky. WYII WIIIIamsport MO WYLD-FM Mew Orleans, WYMS Milwaukee WI WYN FM Baton Rouge, L WYNG Chattanooga TN WYN F-M Brounwlek, Ga. WYNG Grand Rapids, Mich WYNG Rorand Rapids, Mich WYNG Rorand Rapids, Mich WYNG Morand Rapids, Mich WYNO-FM Richfield, MN WYOR Coral Gables, Fla. WYOO-FM Richfield, MN WYO-FM Barbourville KI WYYD Raleigh NC WYX-FM Morktown, VA WYW-FM Barbourville KI WYD Raleigh NC WYZE Madison, WI WZEP-FM DeFunlak, Springs, Fla. WZEZ Nashville, TN WZEZ Nashville, PR WZDL Cockmart, Ga. WZOW Goshen, IN WZER Memohils, TN WZYQ-FM Braddock Heig WO WZB Centreville, MS	102.7 hts.
WZZB Centreville, MS	103.9 104.9 88.7
MD WZZB Centreville, MS WZZE Hockessin, DE WZZP Cleveland, OH	106.5
WZZB Centreville, MS WZZE Hockessin, DE WZZP Cieveland, OH WZZR-FM Grand Rapids, WZZQ Jackson MS WZZW Augusta, GA	106.5 M1 95.7 102.9
WZZW Augusta, GA	103.1

Call

Location

MHz

U.S. TV STATIONS BY LOCATION

Location

Location C.L. Chan.

ALABAMA

ALADA	OIM	
Anniston	WHMA-TV	40
BirmIngham	WBRC-TV	6
	†WBIQ	10
	WAPI-TV	13
	WBMG	42
Demopolis	tWILD	41
Dothan	WTVY	4
Dottilali	WDHN	18
Dozier	tWDIQ	2
F-lorence	WOWL-TV	15
* 101 01100	TWFIQ	36
Huntsville-Decatur	WAAY-TV	31
Huntaring-Decardi	WYUR-TV	48
Huntsville	WHNT-TV	19
Linutaattia	TWHIQ	
4 t ttl .	twald	
Louisville		43
Louisviire	WERDTY	43

Location	C.L. Chan.
Montgomecy	WALA-TV 10 †WEIQ 42 WSFA-TV 12 WCOV-TV 20 †WAIQ 26 WKAB-TV 32
Mount Cheaha State Park	
Selma Tuscaloosa	WSLA 8 WCFT-TV 33
ALA	SKA
Anchorage	KENI-TV 2 KTVA II

Bethel Fairbanks

	†KUAC-TV 9
Juneau	KINY-TV 8
Sitka	KIFW-TV 13
ARIZ	ONA
Fayettesville	KTVP 36
Flagstaff	KOAI 2
Phoenix	KTVK 3
	KOAI 2 KTVK 3 KPHO-TV 5 †KAET 8
	KOOL-TV 10
mi 1 mi	KPAZ-TV 21
Phoenix-Mesa	KTAR-TV 12 KVOA-TV 4
Tucson	TKUAT-TV 6
1	KOLD-TV 13

Location	C.L. Chan.
Tueson Nogales Yuma	KZAZ (1 KBLU-TV 13
ARKAN	VSAS
El Dorado- Monros. La. Fayettevillo- Springdale Fort Smith Jonesboro	KTVE 10 †KAFT 13 KGTO-TV 36 KFSM-TV 5 KLMN 24 KFPW-TV 40 KAIT-TV 40 †KTEJ 19 †KETS 2 KARK-TV 4

				0.3. 1	STATION	3 BT LOC	
Location C.L	L. Chan.	Location	C.L. Chan.	Location	C.L. Chan.	Location	C.L. Chan.
CALIFORNI	IA		WIIG 5 WJLA-TV 7		WFLD-TV 32 WSNS-TV 44	Laka Charter	KLFY-TV 10 KPLC-TV 7
A nahel m Bakersfield	KGOF 56 KJTV 17		WTOP-TV 9 WDCA-TV 20	Description	WTTW II	Lake Charles Monroe	+KLTM 13
K	ERO-TV 2: BAK TV 29		TWETA-TV 26	Decatur Freeport-	WAND 17	Monice- W. Monroe	KNOE-TV 8
Chico K	HSL-TV 12	FLOR	RIDA	Rockford Harrisburg	WCEE-TV 23 WSIL-TV 3	Monroe- El Dorado, AR	KTVE 10
Angeles K	BSC-TV 52	Oaytona Beach-		Moline	WQAD-TV 8 †WQPT 24 †WUSI-TV 16	New Orleans	WWL-TV 4 WDSU-TV 6
El Centro K	ECC-TV 9	Orlando Ft. Lauderdale	WESH-TV 2 WKID 51	Olney Peorla	WRAU-TV 19		TWYES-TV 12
Mexicall XI	HBC-TV 3	Fort Myers	WINK-TV II WBBH-TV 20		WEEK-TV 25 WMBD-TV 31	Shreveport	WGNO-TV 26 KTBS-TV 3
	TREET 13	Fort Plerce- Vero Beach	WTVX 34	Quincy-	WTVP 47 WGEM-TV 10		KSLA-TV 12 †KLTS 24
Fontana-Los Angeles KI	LXA-TV 40	Gainesville	WUFT 5 WCJB 20	Rockford	WREX-TV 13	Shreveport-	KTAL-TV 6
Fresno	KMJ-TV 24 KAIL 53	Jacksonville	WJXT 4 tWJCT 7	Rock Island Springfield	WTVO 17 WHBF-TV 4 WICS 20	Texarkana	
К	FSN-TV 30 KJEO 47		WTI V 12	Urbana-	1	MAI	
Guasti Hanford	KBSA 46 KFTV 21	Miami	WJKS-TV 17 TWTHS-TV 2 WTVJ 4	Champaign	†WILL-TV 12	Augusta Bangor	WLBZ-TV 2
Huntington	OCE-TV 50		WCIX-TV 6	INDI			WABI-TV 5 WVII-TV 7
Los Angeles	KNXT 2 KNBC 4		WCKT 7	Bloomington Bloomington-	fWTIU 30	Biddeford Calais	+WMEG-TV 26
	KTLA 5		WPLG-TV IO	Indianapolis	WTTV 4	Orono Poland Spring	WMEB-TV 12
K.	ABC-TV 7 KHJ-TV 9		WLTV 23 WHFT 45	Elkhart- South Bend Evansville	WSJV 28 WTVW 7	Portland	WCSH-TV 6 WGAN-TV 13
	KTTV II KCOP I3	Naples Ocala	WEVU 26 WOCA 51		TWNIN 9	Presque Isle	WAGM-TV 8
	WHY-TV 22 †KCET 28	Orlando	WDBO-TV 6 WFTV 9	Fort Wayne	WEHT 25 WANE-TV 15		
	MEX-TV 34 †KLCS 58 LOC-TV 19	4	TWMFE-TV 24 WSWB-TV 35		WFFT-TV 55 WPTA 21	MARYI	
Monterey	KMST 46	Palm Beach Panama City	WPTV 5 WMBB I3	Indiananalia	WKJG-TV 33	Annapolis Baltimore	WMAR-TV 2
Oakland-San Francisco	KTVU 2	Pensacola	WJHG-TV 7	Indianapolis	WISH-TV 8	THE PROPERTY.	WBAL-TV II WJZ-TV I3
Oxnard Palm Springs K	MIR-TV 38	Aberdeen	KABY-TV 9		WTHR 13 †WFYI 20		WBFF 45 +WMPB 67
KI	PLM-TV 42	Pensacola- Mobile	WEAR-TV 3 WXLT-TV 40	Lafayette	WHMB-TV 40 WLFI-TV 18	Hagerstown	WHAG-TV 25
Redding-Chico KI	RCR-TV 7	Sarasota St. Petersburg		Marion Muncie	WTAF-TV 31 TWIPB 49	Sallsbury	WBOC-TV 16
Sacramento K	TKVIE 6	Tampa Tallahassee	WTOG 44 tWFSU-TV 11	South Bend	WNDU-TV 16 WHME-TV 46		
Sacramento-	MUV-TV 31	Tallahassee-	WECA-TV 27		WSBT-TV 22 †WNIT-TV 34	MASSACI	
Stockton	KTXL 40 KXTV 10	Thomasville Tampa	WCTV 6 twusp-tv (6	Terre Haute	WTWO 2 WTHI-TV 10	Adams Boston	WCDC 19
	SRW-TV B	Tampa-St. Petersburg	tWEDU 3	Vincennes	WBAK-TV 36 †WVUT 22		WBZ-TV 4 WCVB-TV 5
San Bernardino †K	VCR-TV 24 HOF-TV 30	'H_	WFLA-TV 8			T 11 E	WNAC-TV 7 WSBK-TV 38
К	KSCI 18	West Palm Beach	WTVT 13	Anies-Des	WA		WQTV 68
	FMB-TV 8 KGTV 10			Anies-Des Moines	WOI-TV 5	Cambridge-	WXNE-TV 25
†K	PBS-TV 15 KCST 39	GEOF	WALB-TV 10	Cedar Rapids-	WMT-TV 2	Boston Greenfield	WLVI-TV 56 WRLP 32
San Francisco Ki	RON-TV 4	Albany Athens	WALB-TV 10 †WGTV 8 WSR-TV 2	Council Bluffs	KCRG-TV 9	New Bedford	WTEV-TV 6
	KPIX 5 KGO-TV 7	Atlanta	WSB-TV 2 WAGA-TV 5	Davenport Des Moines	WOC-TV 8	Springfield	WWLP 22
	†KQEC 32 †KQED 9		WATL-TV 36 WANX 46		WHO-TV II	Springfield- Holyoke	WHYN-TV 40
K1	EMO-TV 20 (TSF-TV 26 VOF-TV 38		WXIA-TV II WTCG I7	Dubuque Fort Dodge	KDUR-TV 40	Worcester	WSMW-TV 27
K	BHK-TV 44		TWETV 30	Fort Dodge Iowa City Mason City	†KTIN 46 †KIIN-TV 12 KIMT 3	місн	
San Jose	KDTV 60 KNTV II	Augusta	WRDW-TV 12		†KYIN 24	Allen Park Alpena	WXON 20 twcmL-TV 6
" К	GSC-TV 36 FAS-TV 48	Chatsworth	WATU-TV 26	Red Oak Sioux City	KTIV 4	H with the	WBKB-TV II
San Luis	†KTEH 54	Coehran Columbus	TWDCO-TV I5	W-4	KCAU-TV 9 KMEG 14	Ann Arbor Battle Creek	WRHT 31 WUHQ 41
Oblispo K3	SBY-TV 6 CSM-TV 14		WTVM 9	Waterloo- Cedar Rapids	KWWL-TV 7	Bay City-Sag- inaw-Flint	WNEM-TV 5
		Dawson	WYEA 38 †WJSP-TV 28 †WACS-TV 25	KAN		Cadillare	WWTV 9
Santa Maria Santa Rosa Stockton-	COY-TV 12 KFTY 50	Macon	WMAZ-TV 13 WCWB-TV 41	Ensign Garden City	KTVC 6 KGLD II	Traverse City Cheboygan Detroit	WTOM-TV 4 WJBK-TV 2
Stockton- Sacramento Tijuana-	KOVR 13	Pelham Savannah	WABW-TV 14	Goodland	KUPK-TV 13 KLOE-TV 10		WWJ-TV 4 WXYZ-TV 7
San Diage	XETV 8 EWT-TV 12	The state of the s	WTOC-TV 11 WJCL 22	Great Bend Hays	KCKT 2		WXON 20 WKBD-TV 50
Tulare	KMPH 28	Savannah- Pembroke	tWVAN-TV 9	Hutchinson	KAYS-TV 7		†WTVS 56 WGPR-TV 62
Visalia (Fresno) K	CICU-TV 43-	Wayeross	TWXGA-TV 8	Hutchinson- Wichita	KTVH 12	East Lansing	†WKAR-TV 23
	11	Wrens		Pittsburg - Joplin	KOAM-TV 7	Escanaba Flint Grand Ranks	KJMN-TV 3 WJRT-TV 12
COLORAD	0	HAV	WAII KGMD-TV 9	Topeka	WIBW-TV 13	Grand Rapids	WOTV 8 †WGVC 35
COLORADO Colo, Springs-		***************************************	KHAW-TV II KHVO I3	Wichita	KARD-TV 3	Jackson	WZZM-TV 13
Pueblo KF	KKTV II RDO-TV I3	Honolulu	KHON-TV 2		KAKE-TV 10	Kalamazoo Lansing	WKZO-TV 3 WJIM-TV 6
Denver KW	VGN-TV 2 KOA-TV 4		KGMB-TV 9	KENT		Marquette	WILX-TV 10 WLUC-TV 6
† K R	RMA-TV 6	. A46-11 A	KIKU-TV 13	Ashland Bowling Green	TWKAS 25 WBKO 13	Mt. Pleasant	TWCMU-TV 13
	KBTV 9	Wailuku	KGME-TV 3	Coving Green	TWKGB 53	Saginaw Sault Ste.	WEY1-TV 25
Grand			KMEB-TV 10 KMV1-TV 12	Elizabethtown Hazard	†WKZT 23 †WKAT 35	Marie	WWUP-TV 10 WGTQ 8
Junction KF Montrose KF	REX-TV 5	IDA			WKYH-TV 57	Traverse City	WPBN-TV 7 WGTU 29
Pueblo - Colo.	TRTSC 8	Boise	KBOI-TV 2	Lexington	WKYT-TV 27	University Ctr. (Bay City)	WUCM-TV 19
Springs KC Sterling	OAA-TV 5 KTVS 3		†KAID 4 KTVB 7	Leulentit	WTVQ-TV 62		
CONNECTIC	:UT	Idaho Falls- Pocatello	KID-TV 3	Louisville	WHAS-TV II	Appletos	SOTA
Bridgenort	TWEDW 49	Lewiston	KIFI-TV 8		WLKY-TV 32	Appleton Alexandria	KCMT 7 KAUS-TV 6
Hartford W	FSB-TV 3	Moscow Nampa	†KUID-TV 12 KIVI 6	Carray All July 14	WDRB-TV 41 †WICMJ 68	Austin	†KAVT-TV 15
New Britain-	TWEDH 24	Pocatello	†KBGL-TV 10 KPVI 6	Madisonville Morehead	TWKMA 35	Duluth	WDIO-TV 10 KDAL-TV 3
Hartford WH	HNB-TV 30	Twin Falls	KMVT II	Murray Newport	WXIX-TV 19	110:1:1	WDSM-TV 6
Hartford W1	TNH-TV 8	ILLIN	IOIS	O wenton Paducah	†WKON 52 WPSD-TX 6	Hibbing Mankato	KEYC-TV 12
Norwich Waterbury Wa	TWEDY 65 TWEDN 53 ATR-TV 20	Bluffs	WJPT 14	Pikeville Somerset	†WKPI 22 †WKSO 29	Minneapolis- St. Paul	WCCO-TV 4
		Carbondale Champaign	#WSIU-TV 8 WCIA 3	LOUIS			WTCN-TV 11
DELAWAR Wilmington †WI	HYY-TV 12	Chicago	WBBM-TV 2	Alexandria	KALB-TV 5	Rochester	KTMA-TV 23 KTTC 10
			WMAQ-TV 5 WCFC 38	Baton Rouge	WAFB-TV 9	St. Paul St. Paul-	†KTCI-TV 17
DISTRICT C			WCFC 38 WLS-TV 7 WGN-TV 9		†WLPB-TV 27 WRBT 33	Minneapolis	†KTCA-TV 2 KSTP-TV 5
	WRC-TV 4		WCIU-TV 26 +WCME 20	Houma Lafayette	KHMA II KATC 3	Walker	WGTC 29 KNMT 12
Manual Ma			, 17 Jin E 20		3		

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Location	C.L. Chan.	Location	C.L. Chan.	Location	C.L. Chan.	Location	C.L. Chan.
141664	CCIPPI		KDAT-TV 7		WEWS 5		WOLO-TV 25
Biloxi	SSIPPI		KGGM-TV 13 KMXN-TV 23		WJKW-TV 8 WCTF 19	Florence	TWRLK-TV 35
	WLDX-TV 13 TWMAH 19 WMAE 12	Carlshad	KAVE-TV 6	Columbus	TWVIZ-TV 25 WCMH-TV 4	Greenville	†WJPM-TV 33 †WNTV 29
Bude Bude	†WMAU 17	Clovis Farmington	KIVA-TV 12		WENS TV IN	Greenville-	WGGS-TV 16
Columbus Greenwood	WCBI-TV 4	Las Cruces Portáles	†KRWG-TV 22 †KENW 3 KSW8-TV 4	Dayton	†WOSU-TV 34	Spartanburg & Asheville	WFBC-TV 4
Greenwood- Greenville	WABG-TV 6	Roswell	KSW8-TV 4	Dayton	WHID-TY 7 WKEF 22	Walleatite	WSPA-TV 7
Jackson	WLBT 3 WJTV 12	NEW	YORK	Kettering	†WPTD 16	Rock Hill	TWNSC-TV 30
	WAPT 16 TWMAA 29	Albany Albany-Trey-	WTEN 10	Lima	WLIO 35 †WBGU-TV 57	Sumter	
Laurel- Hattiesburg	1	Scheneetady	WAST IS WRGB 6	Lorain- Cleveland	WUAB 48	SOUTH I	
Meridian	WDAM-TV 7 WTOK-TV II tWMAW I4		T TWMHT 17	Oxford Portsmouth	WPT0 14 †WPB0-TV 42	Aberdeen	KABY-TV 8
Oxford	WHTV 24	Binghamton	WBJA-TV 34 WBNG-TV 12	Staubenville- Wheeling	WSTV-TV 9	Brookings Deadwood-	TKESD-TV 8
State College	TWMAV IS TWMAB 2 WTWV 9		WICZ-TV 40 †W8KG 46	Toledo	WTOL-TV II WSPD-TV I3	Lead Florence-	KDSJ-TV 5
Tupelo	WTWV 9	Buffalo	WGR-TV 2 WBEN-TV 4 WKBW-TV 7		WDHO-TV 24	Watertown	KDLO-TV 3 KHSD-TV II
	OURI		WNED-TV 17	Youngstown	WGTE-TV 30 WFMJ-TV 21	Lead	KIVV-TV 5
Girardeau	KFV8-TV 12	Carthage-	WUTV 29		WKBN-TV 27 WYTV 33	Lowry Martin	†KSZD-TV 8
Columbia	KOMU-TV 8 KCBJ-TV 17	Watertown	WWNY-TV 7 WENY-TV 36	Zanesville	WHIZ-TV 18	Mitchell Pierre	+KTSD-TV ID
Hannibal-	KHQA-TV 7	Elmira- Corning		OKLAH		Rapid City	KPRY-TV 4 KOTA-TV 3
Jefferson City Jopin	KRCG 13 KDDE-TV 12	Garden City	WSYE-TV 18 †WLIW 21 WCBS-TV 2	Ada-Ardmore Ardmore &	KTEN 10		KEVN-TV 7
Kansas City	KTVJ 16	New York	WNBC-TV 4	Sherman- Denison	KX11 12	Reliance Sioux Fails	KPLO-TV 6 KELO-TV II
Kansas Oity	KCMD-TV 5		WABC-TV 7	Eufaula	†KOET 3	Vermillion	KSFY-TV 13
	KMBC-TV 9 †KCPT 19		WOR-TV 9	Lawton (Wichita Falls)	KSWD-TV 7		
	KBMA-TV 41 KYFC 50		WTVG 68	Okiahoma City	KTVY 4	TENNE	
Kirksville- Ottumwa	KTVD 3 KQTV 2	New York-	TWNYC 31		KWTV 9	Chattanooga	WRCB-TV 3 WTVC 9 WDEF-TV 12
St. Joseph St. Louis	KTVI 2	Newark	TWNET 13 WBTB 68		†KOKH-TV 25		†WTCI 45
	KMOX-TV 4 KSD-TV 5	New York-	WBTB 68 WNJU-TV 47	Sayre Tulsa	KVIG-TV 8 KTEW 2	Crossville	WRIP-TV 61 WCPT-TV 55 WBBJ-TV 7
	KPLR-TV II KDNL-TV 30	Paterson Nurwood	WXTV 41 †WNPI-TV 18 WPTZ 5	•	KTEW 2 KOTV 6 KTUL-TV 8	Jackson Johnson City-	WBBJ-TV 7
Sedalla	KMDS-TV 6	Plattsburgh	WPTZ 5		TROED-TV II	Bristol- Kingsport	WJHL-TV II
Springfield	KOLR-TV 10	Rochester	TWCFE-TV 57 WROC-TV 8 WHEC-TV 10	OREC	SON	Kingsport Knoxville	WKPT-TV 19 WATE-TV 6
	KMTC 27 †KOZK 21		WOKR 13 TWXXI 21	Bend Coes Bay	KCRY-TV II		WBIR-TV 10 WTVK 26
	- 1	Schnectady- Albany-Troy	WRGB 6	Corvallis Eugene	KCBY-TV II †KOAC-TV 7 KEZI-TV 9	Lexington Memphis	WREC-TV 3
Blilings	TANA KTVQ 2		WHT 17	Klamath Falls	KVAL-TV 13		TWKNO-TV IO
10.000	KULR-TV 8	Syracuse	WTVH 5 WNYS-TV 9	Medford	KOT1 2 KOBI 5 KSYS 6		WHBQ-TV IS WMTU-TV 30
Butte	KTVM 6		WONH 43		KTVL 10	Nashville	TWDCN-TV 8
Glendive Great Falls	KXGN-TV 5 KRTV 3	Utica	†WCNY-TV 24 WKTV 2 WUTR 20	Portland	KATU 2 KOIN-TV 6		WSM-TV 4
Helena	KFBB-TV 5 KTCM 12	Watertown	TWNPE-TV IS		KGW-TV 8	O tottle	WTVF 5 WNGE 2 tW8JK-TV 2
Kalispeli Miles City	KCFW-TV 9 KYUS-TV 3		AROLINA	Roseburg	KPTV 12 KPIC 4	Sneedville	
Missoula	KGVO-TV 13 KPAX-TV 8	Asheville	TWUNF-TV 33 WANC-TV 21	Salem	KVOO-TV 3	TEX.	AS KRBC-TV 9
NERR	ASKA	Chapel Hill	tWUNC-TV 4	PENNSY		Amarillo	KAMR 4 KVII-TV 7
Albion		Charlotte	WBTV 3 W80C-TV 9	Allentown- Bethichem	WFMZ-TV 69 †WLVT-TV 89 WTAJ-TV 10	Austin	KFDA-TV 10 KTBC-TV 7
Alliance Bassett	KCNA-TV 8 †KTNE-TV 13 †KMNE-TV 7		WCCB IS 1	Altoona	WTAJ-TV 10 WDPC 38	Austin .	†KLRU-TV 18 KTVV 36
Grand Island Hastings	KGIN-TV II KHAS-TV 5	Columbia	WRET-TV 36 †WTV1 42 †WUND-TV 2	Clearfield Erie	WOPC 38 †WPSX-TV 3 WICU-TV 12	Day of the	KVUE 24
Hayes Center	KWNB-TV 6 KOUH-TV 4	Concord Durham	WRDU-TV 58		WSEE 35	Beaument	KFOM-TV 6 KBMT 12
Hay Springs Kearney-	KOUR-TV 4	Durham- Raleigh	WTVD II	Greensburg	TWQLN 54 WPFO-TV 40	Belton Big Spring	KWAB-TV 4
Holdrege Lexington	KHGI-TV 13	Greensboro Greenville	WFMY-TV 2 WNCT-TV 9	Harrisburg	WHP-TV 21	College Station Corpus Christi	TRAMU-TV IS
Lineota	KOLN-TV 10	Hickory	TWUNK-TV 25 WHKY-TV 14	Hershey Johnstown	WTPA 27 †WITF-TV 33 WJAC-TV 6	Corpus Christi	KIII 3
McCook- Oberlin		High Point Greensbore &		Lancaster	WJAC-TV 6 WJNL-TV 19 WGAL-TV 8		KRIS-TV 6 KZTV 10
Merriman Norfolk	KOMC 8 †KRNE-TV 12 †KXNE-TV 19	Winston-	WGHP-TV 8	Lancaster- Lebanon	WLYH-TV 15	Dallas Dallas-Ft. Worth	KDFW-TV 4
North Platte Omaha	KNOP-TV 2 KMTV 3	Salem	WX11 12 WLN8-TV 19	Philadelphia	KYW-TV 3 WPVI-TV 6		WFAA-TV 8 KXTX-TV 39 KOBC-TV 4
	†KPNE-TV 9	Linville	WUNE-TV 17		WCAU-TV 10 WPHL-TV 17	Ei Paso	†KCDS 7
	WOWT 6 KETV 7 †KYNE-TV 26	New Bern Raleigh	WJHF 22	MbH-d-f-bi-	WTAF-TV 29		KTSM-TV 8 KVIA-TV 13 KCIK 14
Scottshiuff- Gering	KSTF IO	Raleigh- Durham	WRAL-TV 5 WITN-TV 7 WWAY 3	Philadelphia (Burlington,	W KBS 48	El Paso-	
Superior	KSNB-TV 4	Washington Wilmington	WWAY 3 WECT 6	N.J.) Pittsburgh	KDKA-TV 2 WTAE-TV 4	Juarez	XEPM-TV 2 XEJ-TV 5
	ADA ·	M41. 4	TWUNJ-TV 89		WPGH-TV 53	Fort Worth- Dallas	WBAP-TV 5
Henderson Las Vegas	KLAS-TV 8	Winsten-Salent			WIIC-TV II	Harlingen	KTVT II
	KSHD-TV IS		DAKOTA		TWOED 13 TWOEX 16 WPGH-TV 53	Houston	KPRC-TV 2
Rene	KTVN 2 KCRL-TV 4	Bismarck	KFYR-TV 5 KXMB-TV 12 WDAZ-TV 8	Scranton &			KHOU-TV II KTRK-TV I3
	KOLO-TV 8	Devils Lake Dickinson	KDIX-TV 2	Wilkes-Barre	WNEP-TV 16 WDAU-TV 22		KDDG-TV 26
NEW HA	MPSHIRE	Fargo	WDAY-TV 6	State College	TWVIA-TV 44 WTIE-TV 29	Laredo	KHTV 39 KGNS-TV 8 KVTV I3
Berlin Durkam	TWEOB-TV 40	Fargo-Grand Forks	KTHI-TV II	Wilkes-Barre & Scranton	WBRE-TV 28	Laredo (Nuevo Laredo)	XEFE-TV 2
Hanover	IWHED-TV 15	Grand Forks Minot	†KGFE 2 KMDT 10	York	WSBA-TV 43	Longview	KICH 51
Keene	TWEKW-TV 52	Valley City	KMOT 10 KXMC-TV 13	RHODE		Lubbock	KCBD-TV II KLBK-TV I3
Littleton Manchester	TWLED-TV 49	(Farge) Williston	KXJB-TV 4 KUMV-TV 8	Providence	WJAR-TV 10 WPRI-TV 12	Lufkin	KSEL-TV 28 KTRE-TV 9
V To	WXPO-TV 50		KXMD-TV II	Providence	tWSBE-TV 36	Midland	KDCD-TV 18
	JERSEY	01	110	(New Bedford)	WTEV 6	Midland & Odessa	KMID-TV 2
Camgen Montelair	TWNJS 23	Akren	WAKR-TV 23 †WEAO 49 †WNEO-TV 45			Monahans Odessa	KMOM-TV 9 KOSA-TV 7
Newark	WNJU 47 WBTB-TV 68	Alliance Athens	TWNED-TV 45	SOUTH C.		Port Arthur- Beaumont	KJAC-TV 4
New Brunswick New York-Newer	†WNJB 58	Athens Cambridge Canton	TWOUB-TV 20 TWOUC-TV 44 WJAN 17	Ailendale Anderson	WEBA-TV 14 WAIM-TV 40	San Angelo	KACB-TV 3 KCTV 8
Trenton Wildwedd	WNET 13 †WNJT 52 WCMC-TV 40	Cincinnati	WJAN 17 WLWT 5 WCPO-TV 9	Beaufort Charleston	WCBD-TV 2	San Antonio	KMOL-TV 4 KENS-TV 5
			WKRC-TV 12 WCET 48		WCIV 4 WCSC-TV 5 TWITV 7		K8AT-TV 12 KWEX-TV 41
NEW N	MEXICO KOR-TV 4	Cincinnati- Newport, Ky.	WXIX-TV 19	Columbia	WIS-TV IO	San Antonio- Austin	tKLRN-TV 9
quai quo	KOB-TV 4	Cleveland	WKYC-TV 3		WNOK-TV 19	Sweetwater-	

Location	C.L. Chan.	Location	C.L. Chan.	Location	C.L. Chan.	Location	C.L. Cha	ın.
Abilene Temple-	KTXS-TV 12	Reanoke Nerfolk	WLVA-TV 13 WTAR-TV 3	WEST V	IRGINIA WHIS-TV 6	Wausau	WSAU-TV WAOW-TV tWHRM-TV	9
Waco Tyler-	KCEN-TV 6	Norton Portsmouth Portsmouth-	TWSVN-TV 47 WYAH-TV 27	Charleston- Huntington	WCHS-TV 8	WYON	AING	
Longview Victoria Waco	KWTX-TV 10	Norfolk-New- Port News	WAVY-TV 10	Clarksburg Grandview Huntington	WBOY-TV 12 WSWP-TV 9 WMUL-TV 83	Casper Cheyenne	KTW0-TV KYCU-TV	2 5
Weslaco Wichita Fails	KRGV-TV 5 KFDX-TV 3 KAUZ-TV 6	Richmond	WTVR-TV 6 WWBT 12 tWCVE-TV 23	Huntington- Charleston	WSAZ-TV 3	Lander- Riverton-		
	TRIDZ-TV 24	Richmond-	TWCVW 57	Morgantown Oak Hill-	TWWVU 24	Thermopolis- Worland Sheridan	KWRB-TV KSGW	10
-	TAH +KOET 9	Petersburg Roanoke	WXEX-TV 8 WDBJ-TV 7 WSLS-TV 10	Beckley Parkersburg-	WOAY-TV 4			
Ogden	TKWCS-TV IS	Staunten	TWBRA-TV 15	Marietta Weston- Clarksburg	WDTV 5	U.S. POSS	ESSIONS	
Salf Lake City	KUTV 2 KTVX 4 KSL-TV 5			Wheeling- Steubenville	WTRF-TV 7	GU		
	TKUED 7	WASHIN Bellingham	KV08-TV 12	WISC	ONSIN	Agana	KUAM-TV †KGTF	
VER	MONT	Kennewick Passo-	KVEW 42	Colfax	†WHWC-TV 28	PUERTO	PICO	
Burlington	WCAX-TV 3 WVNY-TV 22	Kennewick- Richland	KEPR-TV 19	Eau Claire Green Bay	WEAU-TV 13 WBAY-TV 2 WFRV-TV 5	Aquadilla-		
Rutland	TWETK 33	Pullman Richiand-Pasco-	TKW8U-TV 10		WFRV-TV 5 WLUK-TV II †WPNE 38	Mayaguez	WOLE-TV WVEO	12
St. Johnsbury Windsor	WVTB 20 WVTA 41	Kennewick Seattle	KNDU 25 KOMO-TV 4	LaCrosse	WKBT 8 WXOW-TV 19	Caguas- San Juan Mayaguez	WKBM-TV	11.
VIR	SINIA		KING-TV 5 KIRO-TV 7 †KCTS-TV 9	Madison	WISC-TV 3	Ponce	WORA-TV WRIK-TV	5 7
Bristol. Kingsport &		Spokane	KREM-TV 2 KXLY-TV 4		WMTV 15 †WHA-TV 21 WKOW-TV 27	San Juan	WSUR-TV WKAQ-TV	2
Johnson City Charlottesville	WCYB-TV 5 WVIR-TV 29		KHQ.TV 6	Milwaukee	WITI-TV 6		WAPA-TV	1
Fredericksburg Goldvein Hampton-	WHFV 69 †WNVT 53	Tacoma	KSTW II KCPQ-TV I3 †KTP8 62		WMVS 10 WISN-TV 12 WVTV 18	VIRGIN I	SLANDS	
Norfolk	WVEC-TV I3 †WHRO-TV I5	Yakima	KNOO 23 KIMA-TV 29		WCGV 24 tWMVT 36	Charlotte Amalie	WBNB-TV	10
Harrisonburg Lynchburg-	WHSV-TV 3		†KYVE-TV 47	Rhinelander (Wausau)	WAEO-TV 12	Charlotte- Amalle	†WJTX-TV	12

CANADIAN AM STATIONS BY FREQUENCY

OANA	DIAM AIM STATI	DIAS BITIKEQUE	-140
Call Location W.P.	Call Location W.P.	Call Location W.P.	Call Location W.P.
540555.5	CHNC New Carlisle, Que. 10,000d 5.000n	CHSR Fredericten, N.B. 20 CKVM Ville-Marie, Que. 10,000d	900333.1
CBEF Windsor, Ont. 2,500d 5,000n	CHNL Kamloops, B.C. 10,000d 5,000n	CJRN Niagara Falis, Ont. 5,000d	CROJ Geraldton, Ont. 40
CBK Regina, Sask. 50,000 CBT Grand Falls, Nfld. 10,000	CKML Mount Laurier, Que. 1,000	2.500a CKVO Clarenceville. Nfld. 10,000	CFBR Sudbury, Ont. 10,000d
550545.1	CJAT Trail, B.C. 10,0000	730-410.7	CHML Hamilton, Ont. 5.000 CJBR Rimouski Que. 10.000
CFNB Fredericton, N.B. 50.000 CHLN Trois-Rivieres, Que. 10,000d 5.000n	CJOX Grand Falls. Nfld. 10,000 CKRW Whitehorse, Y.T. 1,000 CKTB St. Catharines. Ont. 10.000d 5,000n	CHYR-7 Leamington, Ont. 500n CJNR Blind River, Ont. 1,000 CKAC Montreal, Que 50,000d	CHML Hamilton, Ont. 5.000 CJBR Rimouski Que. 10.000 CJVI Vietoria, B.C. 10.000 CKBI Prince Albert, Sask. 10.000 CKDR Orydes Ont. 2510
CHNO Sudbury, Ont. 10.000d 2,500n	CKYL Peace River, Alta. 10.000d	CKDM Dauphin, Man. 10.000d 5.000n	CKDH Amherst, N.S. 1,000 CKTS Sherbrecke, Que. 10,000
CKPG Prince George, B.C. 10,000	620—483.6	CKGA Gander, Nfld. 1,000d CKLG North Vancouver, B.C.	CKVO Val D'Or, Que. 10,000d 2,500n
560-525.4 CFOS Owen Sound, Ont. 1,000	CFCL Timmins, Ont. 10.000d 5,000n CJC1 Prince George, B.C. 10.000	10.000d	CJEN St-Jerome, P.Q. 1,000
CHCM Marystown, Nfld. 1.000d 500n	CKCK Regina, Sask. 5,000 CKCM Grand Falls, Nad. 10,000	740-405.2 CBL Toronto. Ont. 50,000	910-329.5
CHTK Prince Rupert, B.C. 1,000d 250n	630-475.9	CBNM Marystown, Nfld. 10,000 CBX Edmonton, Alta. 50,000	CBO Ottawa, Ont. 5,000 CFJC Kamleops, B.C. 10,000d 1,000n
CJKL Kirkland Lake, Ont. 5,000 CKCN Sept-lies, Que. 10,000d 5,000n	CFCO Chatham, Ont. 10,000d	770—389.4	CFSX Stephenville, Nfld. 500 CHRL Roberval, Que. 10,000d
CKNL Fort St. John, B.C. 1,000	CFCY Charlottetown, P.E.I. 10,000 CHED Edmonton, Alta. 10,000	CHSR Fredericton, N.B. 20	CJDV Drumheller, Alta. 5.000 CKLY Lindsay, Ont. 10,000d
570526.0	5,000n	790—379.5	5,000m
CFCB Corner Brook Nfld. 1,000 CFWH White Horse, Y.T. 1,000 CJEM Edmundston, N.B. 5,000d 1,000n	CJET Smiths Falls, Ont. 10,000 CJLA Lachute, Que. 500d 1.000m CKAR Huntsville, Ont. 1.000	CFDR Dartmouth, N.S. 5,000 CFCW Camrose, Alta. 50,000 CKSO Sudbury, Ont. 10,000d 5,000n	920-326.9 CBO Ottawa, Ont. 50,000 CBQE Fort Good Hope, N.W.T.
CKCQ Quesnel, B.C. CKEK Cranbrook, B.C. 10.000d	CKOV Kelowna, B.C. 5,000d 1,000n CKRC Winnipeg, Man. 10,000	CFAN Newcastle, N.B. 1,000 CHIC Brampton, Ont. 5,000 CFNW Port Aux Choix, Nfld. 1,000	CBQU Fort Goodhope, N.W.T. 40 CFRY Pertage La Prairie,
CKWL Williams Lake, B.C. 1000	640468.5	800-374.8	CJCH Haiifax, N.S. 10,000d
580516.9 CFRA Ottawa, Ont. 50.000d	CBN St. John's Nfld. 10.000	CBQ Thunder Bay, Ont. 10.000d 5.000n	CJCJ Woodstock, N.B. 1.000 CKCQ Quesnel B.C. 1,000
CHLC Hauterive, Que. 5,000d	650-461.3	CFOB Fort Frances, Ont. 1,000d 500n CHAB Moose Jaw, Sask. 10,000	CKCQ Quesnel B.C. 1,000 CKCY Sault Ste. Marie, Ont.
2,500m CJFX Antigonish, N.S. 10,000 CKAP Kapuskasing, Ont. 10,000d CKPR Thunder Bay, Ont. 5,000d	CITR Vancouver, B.C. 20 660-454.3	CHRC Quebes, Que. 50,000 CJAD Mentreal, Que. 50,000d 10,000n	CKNX Wingham. Ont. 10,000d 1,000n
CKUA Edmonton, Alta. 10:000	CJAM Windser, Ont. 20	CJBQ Belleville, Ont. 10,000 CJJC Langley, B.C. 10,000	930-322.4
CKWW Windsor, Ont. 500 CKXR Salmon Arm. B.C. 10,000	670-447.5	CKOK Pentieton, B.C. 10,000d 500m CKLW Windsor, Ont. 50,000	CFBC Saint John. N.B. 10,000d 5,000n
CKY Winnipeg, Man. 50,000	CJNW Musgravetown, Nfid. 10,000d CKCU Ottawa. Ont.	VOWR St. John's, Nfid. 1,000	CJCA Edmonton, Alberta, 10.000d 5,000n
590—508.2		810—370.2	CJON St. John's, Nfld. 25,000
CFAR Flin Flon, Man. 10.000d	680—440.9 CBQM Fort McPherson, NWT 40	CHQR Caigary, Alta. 10,000	940-319.0 CBM Montreal, Que. 50,000
CFNL Fort Nelson, B.C. 250 CFTK Terrace, B.C. 1,000 CJCW Sussex, NB 500d	CHFA Edmonton. Alta. 10,000 CFTR Teronto, Ont. 10,000d 25,000n	820—365.6 CFRU Guelph, Ont. 20	CJGX Yerkton, Sask. 10,000 CJIB Vernen, B.C. 10,000 950-315.6
CKEY Toronto, Ont. 10,000 CKRS Jonquiere, Que. 10,000d 5,000n	CJCN Grand Falls, Nfld. 10,000 CJOB Winnipeg, Man. 10,000d 2,500n	850—352.7	CFAM Altona, Man. 10,000
VOCM St. John's Nfld. 10,000	CKGB Timmins, Ont. 10,000	CKRO Red Deer, Alta. 10,000d	CKBB Barrie, Ont. 10,000d 2,500n CKNB Campbellton, N.B. 10,000d
600-499.7 CBNA St. Anthony, Nfld. 10,000 CFCF Montreal, Que. 5.000	690—439.5 CBF Montreal, Que. 50,000 CBU Vancouver, B.C. 50,000	CKVL Verdun, Que. 50,000d 10,000n	CHER Sydney, N.S. 10,000n
CFCH Callander, Ontario 10,000d 5,000n	700-428.3	860-348.6 CBH Halifax, N.S. 10,000	960-312.3
CFCT Tuktoyaktuk, N.W.T. 1.000 CFQC Saskatoon, Sask. 5.000 CJOR Vancouver, B.C. 10.000	CIMN Charlottetown, P.E.I. 20	CBH Halifax, N.S. 10,000 CBKZ Cleanwater, B.C. 40 CBWA Asheroft, B.C. 40 CFNS Saskatoon, Sask. 10.000	CFAC Calgary, Alta. 50,000 CHNS Halifax, N.S. 10,000 CKWS Kingston. Oht. 10,000d
CKCL Truro, N.S. 1.000	710-422.3 CFRG Gravelbeurg, Sask. 5,000d	CFPR Prince Rupert, B.C. 10,000 CHAK Inuvik, N.W.T. 1,000	970—309.1
610—491.7	CHYR Leamington, Ont. 10,000d	CJBC Toronto, Ont. 50,000	CBZ Fredericton, N.B. 10.000

CANADIAN AM STATIONS BY FREQUENCY

CANADIAN	AM	5
Call Location	W.P	
	10,000	
CJYR Edson, Alta. CKCH Hull, Que.	5,000	
980—305.9		
CBV Quebec, Que. CFPL London, Ontario	8,000	
	0.0000	
CHEX Peterborough, Ont	5.000n	
CKGM Montreal, Que. CKNW New Westminster,	B.C.	
CHEX Peterborough, Ont CKGM Montreal, Que. CKNW New Westminster, CKRM Regins, Sask.	50,000 10,000d	
	5,000n	
990—302.8		
CBW Winnipeg, Man. CBWK Terrace, B.C. CBY Corner Brook, Nfid.	50,000	
	10,000	
1000—299.8		
CKBW Bridgewater, N.S	. 10,000	
1010—296.9	E0 000	
CBR Calgary, Alta. CFRB Toronto, Ont.	50,000 50,000	
1050-285.5		
CFGP Grande Prairie, Al	ta.	
CHIIM Toronto Ont	10,000	
CHUM Toronto, Ont. CJIC Sault Ste. Marie, O.		
CIND III II D III I	10,000d 2,500n	
CINB North Battleford, S	10.000	
CKSB St. Bonniace, Man	. 10.000	
1060—282.8	E0 000	
CFCN Calgary, Alta. CJRP Quebec, Que.	50,000 50,000d	
	10,000n	
1070—280.2		
CBA Moncton, N.B. CFAX Victoria, B.C. CHOK Sarnia, Ont.	50,000	
CHOK Sarnia, Ont.	10,000	
1080-277.6		
CKSA Lioydminster, Alta	. 10,000	
1090—275.1		
CHEC Lethbridge, Alta. CHRS Longueuil, Que.	5,000 10,000d	
1110—272.6	,	
	10,000	
CJBC-10 Matachewan, O	nt. 40	
CJBC-12 Wawa, Ont. CFTJ Galt, Ont. CHQT Edmonton, Alta.	250d 10,000	
1130-265.3	10,000	
CKWX Vancouver, B.C.	50,000	
1140—263.0		
CITE Trois-Rivieres. Qui	e. 10,000	
CBI Sydney, N.S. CKXL Calgary, Alta.	10,000	
1150—260.7		
CHSJ Saint John, N.B.	10,000d	
CJRC Ottowa, Ont.	5,000n 50,000d	
	5,000n	
CKIQ Kelowna, B.C.	10,000d 1,000n	
CKX Brandon, Man. CKOC Hamilton, Ont.	10,000	
1160-258.5		
CBQR Rankin Inlet, N.V	V.T. 40	
1170—256.3		
CFML Cornwall, Ont. CFNS Saskatoon, Sask.	10,000	
CKGY Red Deer, Alta.	10.000d	
	5,000n	
1190-252.0 CFSL Weyburn, Sask.	10,000d	
	5,000n	
CHTN Charlottetown, P.E. CJMR Mississauga, Ont.	10,000d	
1210-247.8		
CFFB Frobisher Bay, N.	W.T. 250	
1220-245.8	FILL	
CFBV Smithers, B.C.	1,000d 250r	3
CFGN Port-aux-Basques	Nfld. 250	
CFGR Gravelbourg, Sas	k. 250n	
CFGR Gravelbourg, Sas CFLK Kapuskasing, Ont CFPA Thunder Bay, Ont	1,000d	
CHFC Churchill, Man.	250	
CHSC St. Catharines, O	nt. 1,000d 500n	
CHYD Dolbeau, P.Q.	10,000d 250n	
CJNL Merrit. B.C.	1,000d 250n	
CJOC Lethbridge, Alta.	10,000d	
	75.0	

ATIONS BY	FREQ
Call Location	W.P.
CJOK Fort McMurray, Alta	. 1,000d
CJRB Boissevain, Man.	500n 10,000d
CJSS Cornwall, Ontario CJRL Kenora, Ont.	5,000n 1,000
CJRL Kenora, Ont. CJSA Ste-Agathe-des-Mont P.Q.	1,000
	250n 1,000d
CKDA Victoria, B.C. CKCW Moncton, N.B. CKLD Thetford Mines, P.	50,000 10,000
CKMP Midland, Ont.	Zaun
CKSM Shawinigan, Que.	1,000d 250n 10,000d
CKQR Castlegar, B.C.	2,500n 1,000d 250n
CKTK Kitimat, C.C.	250n 1,000d
VOAR St. John's, Mfid.	250n 100
1230-243.8	
	40
CBAR Canso, N.S. CBPB Jasper National Par	ita. 0.1
CBPD Glacier National Pa	.C. 0.1
CBQO Franklin, N.W.T. CFLN Goose Bay, Labrador Nflo	
	250n
1240—241.8 CBLP Espanola, Ont.	40
CFEK Fernie, B.C.	1,000d 250n
CFLM La Tuque, Que.	1.000d
CFLS Levis, Que. CFVR Abbotsford, B.C.	250n 250 1,000d
CJAF Cabano, Que.	1,000d 250n
CIAN Best Allegal B.C.	1,000d 500n
CJAV Port Alberni, B.C. CJCS Stratford, Ont.	1.00ud 250n 500d
CJMD Chibougamau, Que	500d 250n . 1,000d
CJRW Summerside, P.E.I	250n 250
CJWA Wawa, Ont.	250n
CKBS St-Hyacinth, P.Q. CKIM Baie-Verte, Nfld.	250 - 40
CKBX 100 Mile House.	500n
B.C. CKLS La Sarre, Que,	1.000d
CKMK Mackenzie, B.C.	1,000d 250n
CKOO Osoyoos, B.C.	1,000d 250n
1250—239.9	
CBGA Matane, Que.	10,000d
CBOF Ottawa, Ont. CHWO Oakville, Ont.	5,090n 10,000 10,000d 5,000n
CHSM Steinbach, Man.	5,000n 10.000
CHSM Steinbach, Man. CKJD Sarnia, Ont. CKOM Saskatoon, Sask.	1,000
1260—238.0	
CFRN Edmonton, Alta	50,000
1270—263.1	
CBGD Murdochville, Que GFGT Alma, P.Q.	. 40
CHAT Medicine Hat, Albe	5,000n
	10,000
CHWK Chilliwack, B.C. CJCB Sydney, N.S.	10,000
1280-234.2	
1280—234.2 CHAM Hamilton, Ont. CHQB Powell River, B.C. CJMS Montreal, Que. CJSL Estevan, Sask. CKCV Quebec, Que.	1,000
CJSL Estevan, Sask.	1,000
ONOV Quonet, Que.	5,000n
1290-232.4	
1290—232.4 CHRM Matane, Que. CJBK London, Ont.	10,000
1300-230.6	
CBAF Moncton, N.B. CJME Regina, Sask.	5,000 1,000
1310-228.9 CFGM Richmond Hill. On	t. 50.000
CHGB La Pocatiere, Que.	10.000d
CIOK St. Paul. Alta. CKOY Ottawa. Ont.	5,000n 10,000 50,000
1320—227.1	
CHQM Vancouver, B.C.	50,000

ENCY	
Call Location	W.P.
	10,000d
	5,000n 5,000
CKEC New Glasgow, N.S. CKKW Kitchener, Ont.	1,000
1330—225.4	
CKKR Rosetown, Sask.	10,000
1340-223.7	
CBGN Ste Anne-des-Mont	1,000d
	250n 250
CFED Chapais, Que. CFGB Happy Valley, Nfld. CFKC Creston, B.C.	1,000
CFLH Hearst, Ont.	1,000d 250n
GFLW Wabush, Labrador, CFOM Ville Vanler, Que.	Nfld. 250
CFOM VIIIe Vanier, Que. CFYK Yellowknife, N.W.T	. 1,000
CHAD Amos, Que.	1,000d
CHAR Alert, N.W.T. CIVH Vanderhoof, B.C.	250n 40
	1,000d 250n 1.000d 250n
CJAN Asbestos, Que.	250n
CJLS Yarmouth, N.S.	1.000n
CKAR-I Parry Sound, Ont.	250n 250
CKAR-I Parry Sound, Ont. CKBG Bagotville, P.Q. CKBR Brooks, Alta.	1,000d
CKCR Revelstoke B.C.	250n 1,000d
CKGF Grand Forks, B.C.	250n 1,000d 250n
CKMA Mont-Apica, P.Q. CRMC Maniwaki, Que.	40
	1,000r 250 1,000d
	250n
CKVT Temiscaminque, Que	. 250
1350-2221	
1350—222.1 CHOV Pembroke, Ont. CJCR Gander, Nfd. CJDC Uawson Creek, B.C. CJLM Joliette, Que.	1,000
CJDC Uawson Creek, B.C.	1,000 1,000 1,000
Oll M. Isliable Our	
	1.000n
CILM Joliette, Que. CKAD Middleton, N.S. CKLB Oshawa, Ont.	1,000 n 1,000 10,000d
	1.000n
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4	1,000 n 1,000 10,000d 5,000n 1,000
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que.	1,000 n 1,000 10,000d 5,000 n 1,000
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CLVL Ste-Maria de Beauce.	1,000 n 1,000 10,000d 5,000n 1,000
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B.	1,000 n 1,000 10,000d 5,000 n 1,000
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce, P.Q.	1,000 n 1,000 d 5,000 n 1,000 d 5,000 n 1,000 d 5,000 n 10,000 d
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce, P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta.	1,000n 1,000d 5,000n 1,000 10,000d 5,000n 10,000d 5,000n 10,000d 5,000n 10,000d
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que.	1,000 n 1,000 d 5,000 n 1,000 d 5,000 n 10,000 d 5,000 n 10,000 d 5,000 n
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CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce, P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C.	1,000 n 1,000
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CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce, P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont.	1,000 n 1,000 n 1,000 d 5,000n 1,000 d 5,000n 10,000 d 5,000n 10,000 d 5,000n 1,000 d 5,000n 1,000 d 5,000n
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CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victoriaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Nelson, B.C. 1400—214.2 CBOD Maynooth, Ont. CFLD Burns Lake, B.C. CHNL-I Clearwater, B.C. CJFP Rivière du Loup, Que. CINL Princeton, B.C.	1,000 n 1,000 10,000d 5,000n 1,000 10,000d 5,000n 10,000 10,000d 10,00d 10,0d 10,
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CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKC Nelson, B.C. 1400—214.2 CBOD Maynooth, Ont. CFLD Burns Lake, B.C. CJFP Rivière du Loup, Que. CINL Princeton, B.C. CKCB Collingwood, Ont. CKFL Lac Megantic, Que. CKGR Golden, B.C. CKOB Renfrew, Ont. CKRN Rouyn, Que.	1,000 n 1,000 10,000d 5,000n 1,000 10,000d 5,000n 10,000 10,000d 10,00d
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victorlaville, Que. CKCC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Nelson, B.C. 1400—214.2 CBOD Maynooth, Ont. CFLD Burns Lake, B.C. CHNL-I Clearwater, B.C. CJFP Rivière du Loup, Que CINL Princeton, B.C. CKCB Collingwood, Ont. CKFL Lac Megantle, Que CKGR Golden, B.C. CKOB Renfrew, Ont. CKGR Golden, B.C. CKOB Renfrew, Ont. CKRV Drummondville, P.	1,000 n 1,000 10,000d 5,000n 1,000 10,000d 5,000n 10,000 10,000d 10,00d 10,0d 10,0d
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKC Nelson, B.C. 1400—214.2 CBOD Maynooth, Ont. CFLD Burns Lake, B.C. CJFP Rivière du Loup, Que. CINL Princeton, B.C. CKCB Collingwood, Ont. CKFL Lac Megantic, Que. CKGR Golden, B.C. CKOB Renfrew, Ont. CKRN Rouyn, Que.	1,000 n 1,000 10,000d 5,000n 1,000 10,000d 5,000n 10,000 10,000d 250n 10,000d
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock. Alta. CHPQ Parksville. B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Melson, B.C. 1400—214.2 CBOD Maynooth. Ont. CFLD Burns Lake. B.C. CHNL-I Clearwater, B.C. CJFP Rivière du Loup, Que CKC Collingwood, Ont. CKFL Lac Megantic, Que CKGR Golden. B.C. CKOB Renfrew, Ont. CKRN Rouyn, Que. CKRV Drumondville, P. CKSJ St. Jovite, Que. CKSV Swilt Current, Sasl	1,000 n 1,000 10,000d 5,000n 1,000 10,000d 5,000n 10,000 10,000d 10,00d 10,0d 10,0d
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock. Alta. CHPQ Parksville. B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Melson. B.C. 1400—214.2 CBOD Maynooth. Ont. CFLD Burns Lake. B.C. CJFP Rivière du Loup, Que. CKC Collingwood, Ont. CKFL Lac Megantic, Que. CKGR Golden. B.C. CKOB Renfrew, Ont. CKRN Rouyn. Que. CKRV Drummondville. P. CKSJ St. Jovite, Que. CKSW Swilt Current, Sasi	1,000 n 1,000 l 1,000
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CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock. Alta. CHPQ Parksville. B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Melson. B.C. 1400—214.2 CBOD Maynooth. Ont. CFLD Burns Lake. B.C. CJFP Rivière du Loup, Que. CKC Collingwood, Ont. CKFL Lac Megantic, Que. CKGR Golden. B.C. CKOB Renfrew, Ont. CKRN Rouyn. Que. CKRV Drummondville. P. CKSJ St. Jovite, Que. CKSW Swilt Current, Sasi 1410—212.6 CFMB Montreal, Que. CFUN Vancouver, B.C.	1,000 n 1,000
CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock, Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Nelson, B.C. 1400—214.2 CBOD Maynooth, Ont. CFLD Burns Lake, B.C. CHNL-I Clearwater, B.C. CJFP Rivière du Loup, Que. CKCB Colllingwood, Ont. CKGE Colllingwood, Ont. CKGR Golden, B.C. CKGR Golden, B.C. CKGR Golden, B.C. CKGR Golden, B.C. CKGR Westlow, Ont. CKRV Drummondville, P. CKSJ St. Jovite, Que. CKSJ St. Jovite, Que. CKSU Swilt Current, Sasl	1,000 n 1,000 l 1,000
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CKAD Middleton, N.S. CKLB Oshawa, Ont. CHAL St-Pamphile, Que. 1360—220.4 CJVL Ste-Marie de Beauce. P.Q. CKBC Bathurst, N.B. 1370—218.8 CFLV Valleyfield, Que. CFOK Westlock. Alta. CHPQ Parksville, B.C. 1380—217.3 CFDA Victorlaville, Que. CKLC Kingston, Ont. CKPC Brantford, Ont. 1390—215.7 CHOO Ajax, Ont. CKKC Nelson. B.C. 1400—214.2 CBOD Maynooth, Ont. CFLD Burns Lake. B.C. CHNL-I Clearwater, B.C. CJFP Rivière du Loup, Que CKGC Collingwood, Ont. CKFL Lac Megantic, Que CKGR Golden. B.C. CKOB Renfrew, Ont. CKRV Drummondville, P. CKSJ St. Jovite, Que. CKSV Swilt Current, Sasi 1410—212.6 CFUN Vancouver, B.C. CKSL London, Ont.	1,000 n 1,000

Call Location	W.P.
CKDY Digby, N.S. CKPT Peterborough, Ont. CKTL Plessisville, Que.	1.000
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1440—208.2 CFCP Courtenay, B.C. CFGO Ottowa, Ont. CJOI Cetaskiwin, Alta.	1.000
CFGO Ottowa, Ont.	1,000 10,000 1,000
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CHRT St. Eleuthere, Que, CFAB Windsor, N.S.	250
CFJR Brockville, Ont.	1000r
CHCL Cold Lake, Alta.	40 250n
CHUC Cobourg, Ont. CHAP Long Lac. Ont CHMO Mossone, Ont.	1,000
CHMO Moosone, Ont. CJBM Causapseal, Qué.	50
OTOM Ontompsent, Que.	1,000d 250n
CKSP Summerland, B.C.	250n 100
CKYR Jasper, Alta.	100
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1460-205.4 CJOY Guelph, Ont.	10,000d
CKRR Ville St. Georges	5,000n
CKRB Ville St. Georges,	10,000d 5,000n
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1470—204.0	10.0004
CFOX Pointe Claire, Que.	a.00011
CFRW Winnipeg, Man. CHOW Welland, Ont.	1,000d
CJVB Vancouver, B.C.	500n 10,000
1480-202.6 CHRD Drummondville, Qu	
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1490—201.2 CBNN Hopedale, Labr, CBPA Jasper National Park, CBPC Glacler National Park, CBPE Cape Breton, Highl National Park CFHG Holberg, B.C. CFMR Fort Simpson, N. CFNC Cross Lake, Man. CFRC Kingston, Ont. CFWB Campbell River, B.C. CHYM Kitchener. Ont. CJPR Blairmore, Alta. CJMC Ste-Anno Des Mont CJSN Shaunavon, Sask. CKBM Montmagny, Que. CKEN Kentville, N.S. CKGO Hope, B.C. CKLR L'Annoncation, P. 1500—199.9 CKAY Duncan, B.C. 1510—199.1 CJRS Sherbrooke, Que. CKOT Tillsonburg, Ont. 1540—195.0 CHIN Toronto, Ont. 1570—191.1 CFOR Ortilla, Ont. CHLO St, Thomas, Ont. CHUB Nanaimo, B.C. CKLM Montreal, Que. CKTAT Aber, B.C. CKTAT Aber, B.C.	Nfid. 40 Alta. 0.1 B.C. 0.1 ands 0.1 B.C. 0.1 ands 0.1 20 25 100 1.000d 2500 1.000d 5,000n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d
1490—201.2 CBNN Hopedale, Labr, CBPA Jasper National Park, CBPC Glacler National Park, CBPE Cape Breton, Highl National Park CFHG Holberg, B.C. CFMR Fort Simpson, N. CFNC Cross Lake, Man. CFRC Kingston, Ont. CFRC Kingston, Ont. CJRR Balirmore, Alta. CJMC Ste-Anno Des Mont CJSN Shaunavon, Sask. CKBM Montmagny, Que. CKEN Kentville, N.S. CKGO Hope, B.C. CKLR L'Annoncation, P. 1500—199.9 CKAY Duncan, B.C. 1510—199.1 CJRS Sherbrooke, Que. CKOT Tillsonburg, Ont. 1540—195.0 CHIN Toronto, Ont. 1570—191.1 CFOR Ortilla, Ont. CHLO St, Thomas, Ont. CHUB Nanaimo, B.C. CKLR Unders, B.C. CKLR Unders, CR.C. CKLR Unders, CR.C.	Nfid. 40 Alta. 0.1 B.C. 0.1 ands N.S. 0.1 20 25 100 1.000d 2500 1.000d 5,000n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 1.000d 1.000d 1.000d 1.000d 1.000d 1.000d
1490—201.2 CBNN Hopedale, Labr, CBPA Jasper National Park, CBPC Glacler National Park, CBPE Cape Breton, Highl National Park CFH GHOLDER, CFMR Fort Simpson, N. CFNC Cross Lake, Man. CFRC Kingston, Ont. CFRC Kingston, Ont. CFRC Kingston, Ont. CJPR Blairmore, Alta. CJMC Ste-Anno Des Moni CJSN Shaunavon, Sask. CKBM Montmagny, Que. CKEN Kentville, N.S. CKGO Hope, B.C. CKLR L'Annoncation, P. CKAY Duncan, B.C. 1510—199.1 CJRS Sherbrooke, Que. CKOY Tillsonburg, Ont. 1540—195.0 CHIN Toronto, Ont. 1550—193.5 CBE Windsor, Ont. 1570—191.1 CFOR Ortilla, Ont. CHLO St. Thomas, Ot. CKLM Montreal, Que. CKLA Taber, B.C.	Nfid. 40 Alta. 0.1 B.C. 0.1 ands N.S. 0.1 20 250 1.000d 250n 1.000d 5,000n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d 250n 1.000d

CANADIAN AM STATIONS BY LOCATION

Location	Call kHz	Location	Call kHz	Location Call kHz	Location	Call kHz
Abbotsford, B.C. Ajax, Ont, Alert N W T.	CFVR 1240 CHOO 1390 CHAR 1340	Alma, Que. Altona, Man. Amherst, N.S.	CFGT 1270 CFAM 950 CKDH 900	Amos, Que. CHAD 1340 Antigonsh, N. 5. GJFX 580 Armstrong, Out. GFAO 1450	Ashestos, Que. Asheroft, B.C. Bagotville, P.Q.	CJAN 1340 CBWA 860 CKBG 1340

CANADIAN AM STATIONS BY LOCATION

Location Call kHz	Location Call kHz	Location Call kHz	Location, Call kHz
Baie Verte, Nfid. CKIM 1240	Glacier National Park, B.C.	Moosenee, Ont. CHMO Murdochville, Que. CBGD CJRO CJRO CJRO CJRO CK CSGO CK CSGO CK CK CK CK CK CK CK C	Sept-lies, Que. CKCY Sept-lies, Que. CKCN Shaunavon, Sask. CJSN 1490 CHSM Sherbrooke, Que. CKSM CHSM Simcoe. Ont. CKSM CKSM Smiths Falls, Ont. CJSN CKSM CK
N.W.T. CFFB 1210 Galt, Ont. CFTJ 110 Gander, Nfld. CBG 1450 CICR 1350 CKGA 730 Geraldton, Ont CBOJ 900	CFMB 1410 CJAD 800 CJMS 1280 CKAC 730 CKGM 980 CKLM 1570 Moose Jaw, Sask. CHAB 800	Salmun Ann. B.C. CANA GOV Sarnia, Ont. CHOK 107.0 CKAD 1250 CFQC 600 CFQC 600 CKOM 1250 Sault Ste. Marie, Ont. CJIC 1050	Woodstock, N.B. CJCJ 920 Woodstock, Ont. CKOX 1340 Yarmouth, N.S. CJLS 1340 Yellowknife, N.W.T. CFYK 1340 Yorkton, Sask. C1GX 940 100 Mile House, B.C. CKBX 1240
CANADI	AN AM STATION	NS BY CALL LET	TERS
Coll Location kHz	Call Location kHz	Call Location kHz	Call Location kHz
Canadian Broadcasting Corporation Stations CBA Moneton, N.B. CBAF Windsor, Ont. CBAF Windsor, Ont. CBAF Windsor, Ont. CBAF Windsor, Ont. CBAF Montreal, Que. CBAF Gander, Nfid. CBAF Moneton, Nfid. CBAF Moneton, Nfid. CBAF Moneton, Nfid. CBAF Moneton, Nfid. CBAF Fermont, Que. CBAF Fermont, Que. CBAF Fermont, Que. CBAF Malifax, N.S. CBAF CBAF NS. CBAF CBAF NS. CBAF CBAF NS. CBAF CBAF NS. CBAF Regina, Sask. CBAF CBAF NS. CBAF NS	CBM Montreat, Que. CBN St. John's. Nfd. 640 CBNA St. Anthony. Nfd. 740 CBNM Marystown, Nfd. 740 CBNM Marystown, Nfd. 740 CBNM Hopedale, Labr., Nfd. 1490 CBO Ottawa, Ont. 1400 CBO Ottawa, Ont. 1250 CBO Ottawa, Ont. 900 CBOF Ottawa, Ont. 900 CBOF Alsaper National Park, Alta. 1230 CBPC Glacier National Park, B.C. 1490 CBPD Glacier National Park, B.C. 1230 CBPC Cape Breton Highlands National Park, N.S. 1490 CBPF Cape Breton Highlands National Park, N.S. 1490 CBP Cape Breton Highlands National Park, N.S. 1450 CBQ Thunder Bay, Ont. 800	CBQE Fort Good Hope, N.W.T. CBQM Fort McPherson CBQO Franklin, N.W.T. 1230 CBQR Rankin Intet, N.W.T. 1160 CBR Calgary, Alta. CBT Grand Falls, Nfid. CBU Vancouver, B.C. CBV Ste-Foy, Que. CBW Winnipeg, Man. CBWA Asheroft, B.C. CBWA Asheroft, B.C. CBWA CBWA CBWA CBWA Mondow, Alta. CBY Corner Brook, Nfid. CBY Corner Brook, Nfid. CBY Corner Brook, Nfid. CBY Corner Brook, Nfid. CBY Fredericton, N.B. CFAM Windsor, N.S. CFAM Windsor, N.S. CFAM Altona, Man. CFAM Altona, Man. CFAM Altona, Man. CFAM Newcastle, N.B. 290 CFAC Armstrong, Ont. CFAR Flin Flon, Man. 590	CFAX Victoria, B.C. 1070 CFBC Saint John, N.B. 930 CFBR Sudbury, Ont. 900 CFBR Symithers, B.C. 1239 CFCB Corner Brook, Nfld. 570 CFCB Corner Brook, Nfld. 600 CFCL Timmins, Ont. 620 CFCL Timmins, Ont. 620 CFCC Chainam, Ont., with another Studio at Wallaceburg, Ont. 630 CFCP Courtenay, B.C. 1440 CFCC Camprose, Alta. 790 CFCV Camrose, Alta. 790 CFCV Camrose, Alta. 790 CFCV Charlottetown, P.E.I. 630 CFDA Victoriaville, Que. 1380 CFDA Dartmouth, N.S. 790 CFED Chapais, Que. 1340 CFEK Fernie B.C. 1240 CFFB Frobisher Bay, N.W.T. 1210

CANADIAN AM STATIONS BY CALL LETTERS

Location Call MHz	Location Call	MHz	Location Call A	MHz	Location	Call	MHz
			N W In		St. Andrews.		
Baker Lake, N.W.T.	Hamilton, Unt. CKDS-FM		New Westminster, B.C. CFMI-FM I	101.1	Nfld.	CFCV-FM	97.7
CKQN-FM 99.3	Hull, Que CKCH-FM	94.9		93.7	St. Anthony, Nfl		
Belleville, Ont. CJBQ-FM 97.1	lles de la Madeleine, Que. CBIM-FM	02.5		94.9	St. Catharines, C		1
Blg Trout Lake.	Que. CBIM·FM	55.0	Ottawa, Ont. CBO-FM i			CHSC-FM	105.7
Ont. CFTL-FM 100.3	B.C. CFWL-FM-I	107 1		102.5		CKTB-FM	97.7
Bonnington, B.C. CBUD.FM 92.3	Kamloops, B.C. CFFM-FM	98.3		93.9	Sudbury, Ont.	CKSU-FM	92.7
	Kelowna, B.C. CJOV-FM	104.7	CKBY-FM I	105.3	Sydney, N.S.	CJCB-FM	94.9
Brandon, Ont. CHIC-FM 102-1 Brandon, Man. CKX-FM 96.1	Kentville, N.S. CKWM-FM		Peace River.		Thompson, Man.	CBTF-FM	99.9
Brantford, Ont. CKPC-FM 92.1	Kingston, Ont. CFRC-FM			93.9	Thunder Bay,	0400 544	04.3
Calgary, Alta. CHFM-FM 95.9	CKLC-FM			97.1	Ont.	CKPR-FM	94.3
Chariottetewn, P.E.I.	CKWS-FM		Peterborough, Ont.		Tilisonburg, Ont	CKGB-FM	94.5
CBC-FM 103.1	Kitchener, Ont. CFCA-FM		CHEX-FM I		Toronto. Ont.	CBL-FM	94.1
Chicoutimi, Que. CBJ-FM 100.9	CHYM-FM			95.3	Toronto, Onc.	CHFI-FM	98.1
CBJE-FM 107.9	CKWR-FM		CHRC-FM	98.1			100.7
Chilliwack, B.C. CBUF-FM 102.1	Kitimat, B.C. CBUK-FM	101-1		89.1			104.5
Churchill Falis.	La Pocatiere, Que.	****	Red Deer, Alberta	98.9		CJRT-FM	91.1.
Lab. Nfld. CFLC-FM 97.9	Laval. Que. CFGL-FM			92.1		CKFM-FM	99.9
Clearwater, B.C.		100.7	negina, case, or marin	Ja.,	Trail. B.C.		106.7
CFFM-FM-2 92.7	Lethbridge, Alberta CHEC-FM	100.0	Richibucto, N.B.		Truro, N.S.		100.9
Clinton, B.C. CFFM-FM-4 106.5	London, Ont. CFPL-FM		CBHM-FM	98.5	Vancouver, B.C.		105.7
Cornwall, Ontario CJSS-FM 104.5	Maniwaki, Que. CBFL-FM			101.5		CBUF-FM	97.7
Dawson Creek, B.C. CBKQ-FM 93.7	Merritt, B.C. CFFM-FM-3			98.9			103.5
Deer Lake, Nfld. CFDL-FM 97.9	Mount Timothy, B.C.			103.9	Mandan O .	CKLG-FM CKVL-FM	99.3 96.9
Drummondville, Que.	CFFM-FM-5	99.7	CJUS-FM	89.7	Verdun, Que.	CFMS-FM	98.5
CFDM-FM IG4.3	Montreal, Que. CBF-FM		Sault Ste. Marie. Ont.	5	Victoria, B.C. Windsor, Ont.	CJOM-FM	88.7
Edmonton, Alta. CFRN-FM 100.3	CBM-FM		CIIC-FM I	100.5	Williasor, Out.	CKLW-FM	93.9
CJCA-FM 99.5	CFQR-FM		CKCY-FM I		Winnipeg, Man,		98.3
CKUA-FM 98.1	CHOM-FM		Savona, B.C. CFFM-FM-I		. wemiball man.	CERW-EM	94.3
Guelph, Ont. CJOY-FM 106.1	CINQ-FM		Sherbrooke, Que, CHLT-FM I			CJOB-FM	97.5
Hallfor M.S. CHEX-EM 96.	CJFM-FM	95.9	Smithe Falls Ont CIET-EM			CKY.EM	99 1

CANADIAN FM STATIONS BY CALL LETTERS

Call Location MHz	Call Location MHz	Call Location MHz	Call Location MHz
Canadian Broadeasting Corporation Stations CBC-FM Charlottetown, P.E.I. 103.1 CBF-FM Montreal, Que. 100.7 CBFL-FM Maniwaki Que. 98.9 CBHM-FM Iles de General Stations CBIM-FM Iles de General Stations CBIM-FM Iles de General Stations CBJ-FM Chicoutimi, P.Q. 100.9 CBJE-FM Chicoutimi, Que. 107.5 CBL-FM Chicoutimi, Que. 107.5 CBL-FM Chicoutimi, Que. 107.5 CBL-FM Teronto, Ont. 93.7 CBL-FM Teronto, Ont. 93.7 CBL-FM Teronto, Ont. 103.3 CBO-FM Ottawa, Ont. 103.3 CBO-FM Ottawa, Ont. 102.5 CBUF-FM Thompson, Man. 99.9 CBU-FM Vancouver, B.C. 105.7 CBUF-FM Thompson, Man. 99.9 CBU-FM Vancouver, B.C. 105.7 CBUF-FM Vancouver, B.C. 105.7 CBUF-FM Thompson, Man. 98.9 CBU-FM Vancouver, B.C. 101.1 CBV-FM Vancouver, B.C. 101.1 CBV-FM Quebec, P.Q. 95.3 CBW-FM Winnipeg, Man. 98.3 CBW-FM Winnipeg, Man. 98.3 CBW-FM Winnipeg, Man. 98.3 CBC-FM Saint John, N.B. 98.9 CFGA-FM Kitchener, Ont. 105.3	Call Location MHz CFFM-FM Kamloons, B.C. 98.3 CFFM-FM-I Savona. B.C. Rebroadcasting the programs of Station CFFM-FM. Kamloops, B.C. Rebroadcasting the programs of Station CFFM-FM, Kamloops, B.C. CFFM-FM-3 Merritt, B.C Rebroadcasting the programs of Station CFFM-FM, Kamloops, B.C. CFFM-FM-4 Clinton, B.C Rebroadcasting the programs of Station CFFM-FM, Kamloops, B.C. CFFM-FM-5 Mount Timothy. B.C. CFFM-FM-5 Mount Timothy. B.C. CFFM-FM-5 Mount Timothy. B.C. CFCL-FM Churchill Falls, Lab., Nfld. Rebroadcasting the programs of Station CFFM-FM-FM-FM-FM-FM-FM-FM-FM-FM-FM-FM-FM-	CFRC-FM Kingston, Ont. 91.9 CFRN-FM Edmonton. Alta. 100.3 CFRW-FM Winnipeg 2, Man. 94.3 CFTL-FM Big Trout Lake. Ont. 100.3 CFWL-FM-I Invermere, B.C., Programs originating from CHFM-FM studios at 107.1 CHEC-FM Lethbridge, Alta. 100.9 CHEX-FM Peterborough, Ont. 101.5 CHFI-FM Toronto, Ont. 98.1 CHFM-FM Calnarv. Alta. 95.9 CHIX-FM Halfax, N.S. 96.1 CHIX-FM Halfax, N.S. 96.1 CHIX-FM Halfax, N.S. 96.1 CHIX-FM Serbrooke, Que. 102.7 CHOM-FM Vancouver, B.C. 103.5 CHC-FM Ste-Foy, Quebec, Que. 97.7 CHOM-FM Vancouver, B.C. 103.5 CHC-FM St. Catharines, Ont. 104.5 CHYM-FM Toronto, Ont. 104.5 CHYM-FM Mitchener, Ont. 104.5 CHYM-FM Mitchener, Ont. 104.5 CHYM-FM Morreal, P.Q. 99.3 CJAT-FM Teall, B.C. 106.7 CJBQ-FM Belleville, Ont. 97.1	CJOW-FM Windsor, Ont. 88.7 CJOV-FM Kelowna. B.C. 104.7 CJOY-FM Guelph, Ont. 106.1 CJRT-FM Toronto, Ont. 91.1 CJSS-FM Cornwall, Ont. 104.5 CJUS-FM Saskatoon, Sask. 89.7 CKAT-FM North Bay, Ont. 105.3 CKCH-FM Hull. Quebec CKCY-FM Sult Ste. Marie, Ont. 105.3 CKCH-FM Hull. Quebec CKCY-FM Sault Ste. Marie, Ont. 104.3 CKCH-FM Toronto, Ont. 95.3 CKCH-FM Timmins, Ont 95.3 CKLG-FM Kingston, Ont. 96.3 CKLG-FM Windsor, Ont. 96.3 CKLG-FM Windsor, Ont. 96.3 CKLG-FM Windsor, Ont. 96.3 CKLG-FM Windsor, Ont. 96.3 CKCKT-FM FM Montreal, Que, 99.3 CKLW-FM Windsor, Ont. 94.3 CKGK-FM Pentieton, B.C. CKOT-FM Tillsonburg, Ont. 101.3 CKPC-FM Brantford, Ont. 94.3 CKQN-FM Daker Lake, N.W.T. 99.3 CKGR-FM Oshawa, Ont. 94.9 CKRD-FM Reed Deer, Alta. 98.9 CKRD-FM Reed Deer, Alta. 98.9 CKRD-FM Steubry, Ont. 92.7 CKTB-FM St. CATABrines. 89.1
Rebroadcasting the programs of Station CFGN, Port- Aux-Basques, Nfid. CFDL-FM Deer Lake, Nfid. Programs orliginating from CFCB studios at Corner Brook, Nfid. CFDM-FM Drummondville, Que. 104.3	CFMO-FM Ottawa, Ont. 93.9 CFMO-FM Regina, Sask. 92.1 CFMS-FM Victoria. B.C. 98.5 CFNN-FM St. Anthony, Mild Rebroadcasting the programs of Station CFCB. Corner Brooks, Mild. 97.9 CFPL-FM London, Ont. 95.9 CFQR-FM Montreal 15. Que. 92.5	CJBU-FM Belleville, Ont. 97.1 CJBR-FM Rimouski, Que. 101.5 CJCA-FM Edmonton, Alta. 99.5 CJCB-FM Sydney, N.S. 94.9 CJET-FM Smiths Falls, Ont. 101.1 CJFM-FM Montreal, Que. 95.9 CJIC-FM Sault Ste. Marie, Ont. 100.5 CJOB-FM Winnipeg, Man. 97.5	Ont. 97.7 CKUA-FM Edmonton, Alta. 96.9 CKVL-FM Verdun, Que. 96.9 CKWM-FM Kentville, N.S. 97.7 CKWR-FM Kitchener, Ont. 103.5 CKWS-FM Kingston, Ont. 96.3 CKY-FM Brandon, Man. 96.1 CKY-FM Winnipeg, Man. 92.1

Brook. Nfid. 97.9 CFDM-FM Drummondville, Que. 104.3	Brooks, Nfld. 97.9 CFPL-FM London, Ont. 95.9 CFQR-FM Montreal 15. Que. 92.5	CJIC-FM Sault Ste. Marle, Ont. 100.5 CJOB-FM Winnipeg, man. 97.5	CKWS-FM Kingston, Ont. 96.3 CKX-FM Brandon, Man. 96.1 CKY-FM Winnipeg, Man. 92.1
CAN	ADIAN TV STAT	IONS BY LOCAT	ION
Location Call Ch.	Location Call Ch.	Location Call Ch.	Location Call Ch.
Location	Chapleau, Ont. CFCL-TV-6 7 Charlottetown. P.E.I. CBCT 13 CKCW-TV-1 8 CKCW-TV-1 6 Chase (Adams Hill). B.C. CKW-TV-1 6 CHSH-TV-1 7 Cherryville. B.C. CHSH-TV-1 10 CHSH-TV-1 10 CHST-1 2 CHSM-TV-1 11 CHST-1 2 CHSM-TV-1 11 CHST-1 2 C	Location Call Ch. Fleid, B.C. LFFY-IV-1 4 CFFY-TV-2 2 Fisher Branch, Man. CBWBT 10 Filin Flon, Man. CBWBT 10 Figo Island, wild. CBNAT-6 2 Fort Frances, Ont. CBWCT 5 Fort Fraser, B.C. CKPG-TV-3 6 Fort McMurray, Alta. CBXT-6 8 Fort McMerray, Alta. CBXT-1 11 Fort Simpson, N.W.T. CBEAT 9 Fort Simpson, N.W.T. CBEAT 8 Fort St. James, B.C. CFJC-TV-1 10 CKPG-TV-5 5 Fort St. John, CFPV-TV-1 2 Fort Vermillen, CFDF-TV-1 5 FO. CF. CFC-TV-1 11 Fountain, B.C. CFDF-TV-1 5 Fountain, B.C. CFDF-TV-1 5 Fountain, B.C. CFDF-TV-1 5 Fountain, B.C. CBUAT-3 9 Gaspe, Que. CHAU-TV-6 10 Gaspe, Que. CFGW-TV-1 8 Geraldon, D.C. CBUAT-3 9 Gaspe, Que. CFGW-TV-1 8 Geraldon, B.C. CBUAT-3 9 Grand Falls, Nfld. CBNAT 13 Grand Falls, Nfld. CJDX-TV-1 2 Grand Forks, B.C. CBUAT-1 5 Grand Rapids, Man. CBWLT 8 Grand Forks, B.C. CBUAT-1 5 Grand Falls, Nfld. CJCN-TV-1 6 Grand Forks, B.C. CBUAT-1 5 Grand Falls, Nfld. CJCN-TV-1 6 Grand Forks, B.C. CBUAT-1 5 Grand Falls, Nfld. CJCN-TV-1 6 Grand Forks, B.C. CBUAT-1 5 Grand Forks, B.C. CBUAT-1 6 Grand Forks, B.C. CBUAT-1 6 Grand Forks, B.C. CBUAT-1 7 Grand Forks, B.C. CBUAT-1 8 Hallburton, Ont. CKVR-TV-3 Hallian, N.S. CBHT 3 CJC-TV-1 11 Havre St. Pierre, Que. GEST-1 12 Hearst, Ont. CBLAT-6 13 Hope, B.C. CFTK-TV-11 4 Hope Payne, Ont. CBLAT-6 13 Hope, B.C. CFTK-TV-1 2 Hull, P.Q. CFYO-TV-1 3 Hull For Bayne Mountain 10 LEBMT 12	Location
Cassiar, B.C. CBUET 7 Castlegar, B.C. CBUAT-2 3 Cathedral Point, B.C. CFSB-TV-3 13	CFEN-TV-2 11 CHBC-TV-5 72 Espanola, Ont. CBFST-4 11	Inuvik, N.W.T. CHAK-TV 6 Invermere, B.C. CFWL-TV-1 6 Inverness, N.S. CJCB-TV-1 6	Manitouwadge, Ont. CBLAT-1 8 Manning, Alta. CBXAT-3 12 Maple Creek, Sask. CHAT-TV-2 10 Marathon, Ont. CBLAT-4 11
Causapsaal, Que. CBGAT-5 6 Cawston, B.C. CHKC-TV-3 3 Cellsta, B.C. CHBC-TV-6 3 Chandler, Que. CHAC-TV-4 7 Chapais, Que. CBFAT-1 12 Chapeau, P.Q. CBFAT-1 11	Farlkland, B.C. CHGR-TV2 12 Farlkland, B.C. CFWS-TV-1 19 Farmouse, Nrid. CBNT-5 11 Fermont, P.Q. CBNT-5 7 Fernie, B.C. CBJBT-9 8	Irishtown, Nfid. CBYT-2 7 CJWN-TV-6 3 Jasper, Alta. CBXT-4 5 Jonquière, Que. CKRS-TV 12 Jubliee Mountain, B.C. GFWL-TV-2 8	Margaree, N.S. Marquis, Sask, CKMJ-TV 7 Marystown, Nfid. CIDX II Matagami, Que. CKRN-TV-4 7 CBGA7 9

CANADIAN TV STATIONS BY LOCATION

Location	Call	Ch.
Mayo, Y.T. McBride, B.C. McCusker Lake,	CBKHT CBUHT Man. CBWU	2 7
Mayo, Y.T. McBride, B.C. McCusker Lake, I Meadow Lake, S	Man. CBWU	
	CKSA-IV-	1 12
Melfort, Sask.	CKBQ-T	V 6
Melita, Man.	CKX-TV-	2 9
Merritt, B.C. Miea Creek (Site	I). B.C.	-3 8
	CFZQ-TV	1 9
Mica Creek (Site		2 4
Mica Creek Villa	CHMC-TV- Ige, B.C. CFZQ-TV- CKHQ-TV- CKMY-TV- CBNAT- CHEX-TV- CBAF- CHMT-T' CKCW-T' 0, Que.	2 5
Micoua, Que. Midway, B.C.	CKHQ-TV-	3 12
Midway, B.C. Millertown, Nfld. Minden, Ont.	CBNAT-	5 7
Minden, Ont.	CHEX-TV-	2 10
Moneton, N.B.	CHMT-T	T !! V 7 V 2
Mont Blane Perc	CHMT-T CKCW-T' e, Que. CFGW-TV- Je. CBGAT- CJML-TV- IE. CBGAT- Que. CBFT- CBFT-	V 2
Mant Climant C	CFGW-TV-	2 8
Mont Climont, Que Monte Lake, B.C. Mont-Laurier, Que Mont-Louis, Que Mont Tremblant, Montreal, Que	CIML-TV.	1 11
Mont-Laurier, Qu	e. CBFT-	2 3
Mont Tremblant.	Que. CBGAT-	1 11
Montreal, Que.	CBF	7 2 7 6 7 12
	CFCF-T	/ 12
	CFTM-TV	10
Moose Jaw, Sask.	CIVM-T	V 17
Moose Jaw, Sask. Moosenee, Ont.	CBCO-TV-	1 9
Morrissey Ridge,	CDWII.	1 9
R C	CBUBT-	8 21
B.C. Mount Baker, B.C Mount St. Margar	et.	
Nfld. Mount Timothy, E	CBNAT-	9 9
mount imothy, i	CFJC-TV-	5 5
Mount St. Margar Nfid. Mount Timothy, E Moyle, B.C. Mt. Dolly, Near S	CKVS-TV-	5
Mt. Parizeau, B.C	CKHF-TV-2	11
Mt Book Noon O	CFTK-TV-	5
Charlotte, B.C.		4
Mount Timothy, B Mulgrave, N.S.	C. CITM-TY	12
margravo, 14.5.	CBHFT-	7
Murdochville, Que	CBIT-1 CBIT-1 CBHFT- CBGAT-2 CKMU-TV-	6
Musgrave Harbou		
Nakusp, B.C.	CINP-TV-	7 2
	CBNAT- CINP-TV-I CINP-TV-3 CINP-TV-3	4
N (N	CIMP-IV-3	,
Nass Camp (Near Lava Leke) B.C.	CFTK-TV-6	5
Natal, B.C.	CBUBT-10	II
Nelson, B.C. Nelson House, Man	CBUCT	9
Natal, B.C. Nelson, B.C. Nelson House, Man Newcastle, N.B. Newcastle Ridge,	CBUBT-10 CBUCT CBWPT CKAM-TV-1	
Nowcastio illago,	CFKB-TV-1	7
New Denver. B.C. New Glasgow, N.S	CFKB-TV-1 CFKB-TV-1 CHSL-TV-1 CBHT-5 CJCB-TV-4 CFNV-TV-2	8 7
teon disagons N.C	CJCB-TV-4	2
Nimpkish, B.C.	CFNV-TV-2	6
(Northeast New H	azelton), B.C	
New Glasgow, N.S. Nimpkish, B.C. Nine Mile Mounta (Northeast New H Nipawin, Sask.	CKBI-TV-4	7
Norman Wells. B.C	. CBEDT	9
North Battleford, S	CFQC-TV-2	6
	CKBI-TV-2	7

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Location	Call	Ch.
North Bay, Ont.	CHNB-1	TV 4
Norway House, M Ocean Falls, B.C	an. CBWI CFTK-TV CHKC-TV CHKC-TV CHKC-TV	TV 10 DT 9 -9 2
Otalia, B.C.	CHKC-TV	-2 11
Oliver, B.C. Ottawa, Ont.		
	CION	JI 4
Outardes 4, Que. Oyen, Alta.	CKGN-TV CKHQ-TV CFON-TV CFON-TV CBTB-TV	-6 6 -2 12 -1 2
	CFON-TV	-1 2
Parent, P.Q. Paris, Ont. Parry Sound, Ont	CRIB-IA	-1 12 FV 6
	CKVR-TV	-111
Parsons Lake, N.W.T. Pasadena, Nfld.	CKPL-TV	-1 9
Passmore, B.C. Peace River, Alt	CHMS-TV	-5 8 -2 2 -1 7
Peachland, B.C.	CFRN-TV	-2 3
Peachland, B.C. Pemberton, B.C. Pembroke, Ont. Penticton, B.C.	CHPV-TV CHOV-1	1 B
Penticton, B.C.	CHKL-TV-	1 13
Perce, Que. Perrys, B.C. Peterborough, Or Pikwitonei, Man. Pincher Creek, Alta.	CKPL-TV CJWN-TV CHMS-TV CFRN-TV CHPT-TV CHOV-1 CHBC-TV CHKL-TV- CHAU-TV CHMS-TV CHES-TV CHES-TV	-5 2 -3 5
Pikwitonei, Man.	CFPM-TV	-1 12
Alta.	CHPC-TV	-1 9
Pine Point, N.W.	T. CBEE	BT 4
Pivot, Alta. Piacentia, Nfld.	CHAT-TV CBNT	-1 4
Pleasant Bay, N. Port Alberni, B.	S. CBIT	-3 8 -3 4
Pincher Creek, Alta. Pine Point, N.W. Pine Valley, B.C. Pivot, A.Ita. Piacentia, Nfid. Pleasant Bay, N. Port Alberni, B. Port Alfred, Que Port Allee, B.C. Port Aux Basques	CKRS-TV	1 2
		-4 8
Port Daniel, Que Port Hardy, B.C. Port Renfrew, B.	CHAU-TV CFKB-TV	-3 10
Port Renfrew, B.		
Port Rexton, Nfl. Potlash Creek, B.	d. CBNT	-1 13
Prince Albert, Sa	sk. CKBI-T	-3 12 V 5
Port Rexton, Nfli Potlash Creek, B. Prince Albert, Sa Prince George, B Prince Rupert, B.	CIFG-T	V 12
Princeton, B.C.	CHGP.TV	1 5
Princeton, B.C. Pritchard, B.C.	CFJC-TV- CHKM-TV	19 2
Pritehand, B.C. Promontory Moun Purden Lake, B.C Quebec, Que. Quesnel, B.C. Radisson, P.Q.	CFJC-TV-	12 10
Quebec, Que.	CBUHT	-1 10
	CIVQ-1	V 4
Quesnel, B.C.	CFJC-TV-	V 5
Radisson, P.Q.	CKCQ-TV CBFF	-1 13 RT 8
Radium Hot Sprii	CBUBT	
Rainbow Lake, Al	CBXAT	-8 11
Ramea, Nfld.	CBXAT CFRT-TV CJOX-TV V.T. CBEC	-1 13 -6 10
Rankin Inlet. N.V Rapides-des-Joach P.Q.	n ms.	
Red Deer, Alta.	CBOFT CKRD-T CFRN-TV CBWE CJWN-TV	-2 8 V 6 -6 8
Red Lake, Ont. Red Rocks, Nfld.	CBWE	T 10

ION		
Location	Call	Ch
Regina, Sask.	CBKR1 KCK-TV	,
Richmond Lake, Sask.		
Rimouski, Que. Riverhurst, Sask. Cl Riviere-au-Renard, Qu CH Riviere du Loup, Que.	FQC-TV- CJBR-TV FB-TV-3 e.	8:
Riviere du Loup, Que.	KRT-TV	1 13
Riviere-au-Renard, Qu Riviere du Loup, Que. CK Roberval, Que. CK Rocky Mountain House Rocky Mountain House Ross River, Y.T. CF Rouyn, Que. C	RT-TV-3 RS-TV-3 Alta.	12
Ross River, Y.T. CF Rouyn, Que. Saint John, N.B.	RR-TV-I KRN-TV HSJ-TV	4
Salmo, B.C. CHI	BUAT-5	9
Sarnia, Ont. CKG Saskatoon, Sask.	N-TV-29 CBKST	29
Rouyn, Que, Salmo, N.B. C Salmo, B.C. C Salmon Arm, B.C. CH Sarola, Ont. CF Saskatoon, Sask. Sault Ste. Marle, Ont. C Savona, B.C. CF Sayward, B.C. CF	SC-TV-I	13
Sayward, B.C. Schefferville, P.Q.	SC-TV-2 CBUT-10 CBST-1 CBST-1 CBST-1 CBHT-4 CBHT-4 CBHT-2 HLT-TV KSH-TV-1 SWDT-1	4
Sept-Hes, P.Q.	CBST-I	13
Sept-Iles, P.Q. Shaunavon, Sask. CB(Sheet Harbour. N.S. Shelburne, N.S. Sherbrooke, Que. C	CBHT-4	11
Sherbrooke, Que. C	HLT-TV KSH-TV	7
Sherridon, Man. CJS Sloux Lookout, Ont. CE	M-TV-I	12
Skaha Lake, Near Penti B.C. CHI Smithers, B.C. CFT Snow Lake, Man. Sointula, B.C. CFN South Bentick Arm, Narrows, B.C. CFS Spences Bridge	eton, BC-TV-7 K-TV-2 CBWKT	7 5 8
South Bentick Arm, Narrows, B.C. CFS Spences Bridge,	B-TV-4	13
Narrows, B.C. CFS Spences Bridge, B.C. CIN Spiritwood, Sask. CKB Squamish, B.C.	A-TV-I	3
Squamish, B.C.	CBUT-5	117
St. Alban's, Nfld.	CBNT-4	9
St. Andrews, Nfld. St. Anthony, Nfld. C. St. Georges de Beauce,	A-TV-1 I-TV-6 CBUT-5 N-TV-3 CBNT-4 N-TV-1 CBYT-5 BNAT-4 Que.	6
St. John's, Nfld.	CBVT-I	8
010	ION-TV I-TV-4 N-TV-5	10
St. Lawrence, Nfd.	X-TV-3	10
Ste. Marguerite Marie,	Que.	2
St. Lawrence, NTG. CJO Ste. Marguerite Marie, CHA St. Mary's, Nfld. St. Quentin, N.B. CHA Ste. Rose du Degelá, CKR St. Urbain, Que. CKR South Indian Lake,	BNT-6 U-TV-2 Que.	10
St. Urbain, Que. CKR South Indian Lake,	T-TV-5	10
Spence Bridge, B.C.		10
Snillamachaan D.C	A-TV-2	7
Stephenville, Nfld.	BYT-I	89
Stranraer, Sask CE	UBT-6 CBYT-1 N-TV-1 KST-1 C-TV-1 CBFST	9 3
Sturgeon Fails, Ont. Sudbury, Ont. CE	CBFST	3 7 13 9
CK CK	NC-TV SO-TV	5
Swift Current, Sask. CJ	NC-TV SO-TV -TV-I FB-TV	5

Location	Call	Ch.
Sydney, N.S.	CJCB-TV	4 5
Tabor Mountain, fasu, B.C. Temiseaming, Qu Terrace, B.C. Terrenceville, Md.	CRHET-3	13
Tabor Mountain,	B.C. CBUHT	78
Tasu, B.C.	CFAL-TV-I	11
lemiseaming, Qu	CECH-TV-I	3
Terrace, B.C.	CFTK-TV	3
Terrenceville, Nfle	d.	-
		12
Tete Jaune, B.C. The Pas, Man. Thompson, Man. Thunder Bay. On	CRIENT-4	10
The Pas, Man.	CBWIT	7 7
Thompson, Man.	CBWTT	7
Thunder Bay, On	CBUHT-4 CBWIT CBWIT t. CHFD-TV CKPR-TV	2
Ticket Bostone	ORT II-TV	•
Ticket Portage, Man.	CITM.TV.I	4
Timmins, Ont.	CJTM-TV-I CBFOT	0
	CFCL-TV CKSO-TV-2	6
Topley Mountain,		3
R.C.	CHTL-TV-I CBLT CBLFT 2 CFT0-TV 7 CITY-TV 7 CICA-TV I CBUAT I CJON-TV-3 CJTA-TV-2	9
Toronto, Ont.	CBLT	9
	CETO TY	5
	CITY-TY 7	9
	CICA-TV I	9
Trail, B.C.	CBUAT I	1
Trepassey, Nfld.	CION-TV-3 I	0
Trois Pistoles, Que	B.	*
Trois Pistoles, Que Trois-Rivieres, Qu Tuktoyaktuk, N.W	CKRT-TV-6	5
Tuktovaktuk N W	P. CKTM-TV I	3
· untojuntun, it. ii	CKPL-TV-2	5
Ueluelet, B.C.	CKPL-TV-2 CBUT-7	7
	CKUP-TV-I	6
Uranium City, Sar Uxbridge, Ont. Valemount, B.C. Val Marie, Sask.	N.B.	
Hranium City Sa	CREAT	8
Uxbridge, Ont.	CKGN-TV-22 2	22
Valemount, B.C.	CBUHT-5	6
Val Marie Sask	CIER-TV-2	8
Val Marie, Sask. Vancouver, B.C.	CBUT	2
	CHAN-TV	8 7
Vernon, B.C.	CHRC-IA-5	2
Victoria, B.C.	CHEK-TV	6
Ville Marie, Que.	CKRN-TV-3	
Val Marie, Sask. Vancouver, B.C. Vernon, B.C. Victoria, B.C. Ville Marie, Que. Wabowden, Man. Waterton Park, Ali	CBWMT	U
Watertoll I alk, Al	CJWP-TV-I	2
man Laborator	CJWP-TV-2	6
Watson Lake, Y.1	CRIAT-3	8
Westwold, B.C.	CFWS-TV-2	2
Whitecourt, Alta.	CBXT-2	9
Whitehorse V T	CEWH-TY	2
White River. Ont	CBLAT-2	6 2 2
Victoria, B.C. Ville Marle, Que. Wabowden, Man. Waterton Park, At Watson Lake, Y.1 Wawa, Ont Westwold, B.C. Whitecourt, Alta. Whitehorse, Y.T. White River, Ont Wiarton, Ont. Williams Lake, B.	CKCO-TV-2	2
Whitenorse, Y.I. White River, Ont. Wiarton, Ont. Williams Lake, B. Willow Bunch, Sas Windsor, Ont. Wingham, Ont. Wingham, Ont. Winnipeg, Man.	CEIC-TV-5	8
	CITM-TV-1	3
Willow Bunch, Sas	sk. CBKMT-I 1	0
Windsor Ont	CKGN-TV-1	6
William, Oill.	CKLW-TV	9
Wingham, Ont.	CKNX-TV	8
Winnipeg, Man.	CBWFT	3
	CKY-TV	6
Wynyard, Sask.	CHSS-TV	6
Vole B.C	CHYT.TV-1	2
Yale, B.C. Yarmouth, N.S.	CBWFT CBWT CKY-TV CHSS-TV CICC-TV-1 CHYT-TV-1 CBHFBT	3
	CBHT-3 I	ſ
	CJCH-TV-7	3
Yellowknife, N.W.	T. CFYKT	В
Yorkton, Sask.	CKOS-TV :	3
	CICC-TV I	U

WORLDWIDE SHORTWAVE STATIONS

kHz	Call	Name	Location	GMT	kHz	Call	Name	Location	GMI
		120 Meter Band	-2300-2495 kHz		3265 3275		R. Demerara Trans World R.	Georgetown, Guyana Manzini, Swaziland	0900 0430
2340 2340 2340 2375 2375 2390 2410 2428 2450 2468 2475 2490 2510	TGBA TGDF	Fukien Front Bc R. West New Britain R. Moya R. Chimbu LV Atitlan R. Eastern Highlands R. New Ireland R. Western Highlands R. Northern District Fukien Front Bc Korean B.C.	Fuzhou, China Kimbe, Papua NG Huehuetenango, Guatemala Kundiawa, Papua NG Santiago, Guatemala Goroka, Papua NG Kavieng, Papua N.G. Mt. Hagen, Papua N.G. Papondetta, Papua N.G. Hangzhou, China Fuzhou, China Taegu, S. Korea	1400 1130 1200 1100 1130 1130 1130 1130 11	3275 3280 3285 3300 3306 3315 3316 3325 3338 3346 3350 3360 3365 3375	YVMC HCVN7 TGNA HCHA2 HCHA2	R. Mara LV Napo R. Belize R. Cultural Rhodesian B.C. France Region 3 Sierra Leone B.S. Ondas Quevedenas R. East Sepik R. Mozambique Zambia B.C. Chana B.C. L.V. Nahuala R. Puerto la Cruz Em. Oficial Malawi B.C.	Maracaibo, Venezuela Tena, Ecuador Belize, Br. Honduras Guatemala City, Guatemalo Gwelo, Rhodesia Fort de France, Martinique Freetown, Sierra Leone Quevedo, Ecuador Wewak, Popua N.G. Mapulo, Mozambique Lusaka, Zambia Accra, Ghana Nahuala, Guatemala Puerto Lo Cruz, Venezuela Luanda, Angola Blantyre, Malawi	0300 0230 0300 0400 0230 0630 0600 1200 0430 0400 0600 0230 0100 2330
		90 Meter Band—	3200-3400 kHz		3385	YVQI	R. Borcelona France Region 3	Barcelona, Venezuela Cayenne, Fr. Gujana	0400 0230 0900
3204 3205 3205 3210 3215	ZYE318	Nigerian B.C. R. Republik Indonesia R. Ribeiro Preto R. Mozamblaue Ondas Panamericanas	Ibodan, Nigeria Gorontalo, Indonesia Ribeira Preto, Brazil Maputo, Mozambique El Viala, Venezuela	0530 1245 0130 0400 1100	3390 3395 3396 3396	AAO1	R. Zaracay R. Universidad Rhodesian B.C. Nigerian B.C.	Sto. Dgo. Colorados, Ecuador Merida, Venezuela Gwelo, Rhodesia Kaduna, Nigeria	0230 0300 0400 0500
3215 3220	= '	R. Republik Indonesia R. Morobe	Menado, Indonesia Lae, Papua A.G.	1230 1130			75 Meter Band—	3800-4000 kHz	
3223 3225 3225 3245 3250 3260	YVKI HCOS4	R. Republic Indonesia Swazi Commercial R. R. Republik Indonesia R. Libertodor South African.B.C. LV Carrizal	Mataram, Indonesia Mbabane, Swaziland Tanjungpinang, Indonesia Caracas, Venezuela Johannesburg, S. Africa Calceta, Eucador	1200 0430 1245 0230 0300 0230	3425 3482 3810 3905 3905	HC21OA	R. Nepal R. Padilla Senal Horaria All India R. R. Manus	Kathmandu, Nepal Padilla, Bolivla Guayaquil, Ecuador Delhi, India Lorengau, Papua N.G.	1200 0200 0800 1330 1200

kHz	Call	Name	Location	GMT	kHz	Call	Name	Location	GMT
3910	_	Far East Network	Tokyo, Japan	1130	6025	-	R. Nigeria	Enugu, Nigeria	2230
3925 3945	JOZ	NSB R. Vila	Tokyo, Japan Vila, New Hebrides	1100 0930	6025 6025	ZPA1	R. Nacional R. Portugal	Asuncion, Paraguay Lisbon, Portugal	1030 0300
3960		R. Republik Indonesia	Padang, Indonesia	1300	6030	_	Suddeutscher R.	Muhlacker, German F.R.	0600
3975 3980	=	R. Republik Indonesia South African B.C.	Surabaya, Indonesia Johannesburg, S. Africa	1300	6035 6035	CP92	V. America relay R. Panamericana	Monrovla, Liberia La Paz, Bolivia	0700 1100
3985	HCER5	Escuelas R. Papulares	Riobamba, Ecuador	1130	6040	1000.	Deutsche Welle relay	Antigua, West Indies Montevideo, Uruguay	0130 1030
3995 3995		Deutsche Welle	Nikolayevski, USSR Cologne, German F.R	1600 0130	6045 6045	OAX61 OCY4H	R. Uruguay R. Santa Rosa	Lima, Peru	1130
4068	-		Huhehaote, China	1230	6065	CFRX	RTV Espana	Madrid, Spain Toronto, Canada	0100 1800
4679 4697	HCWE1	R. Nac. Espejo R. Riberalta	Quito, Ecuador Riberalta, Bolivia	0300	6070 6075	HRMH5	LV Junco	Sta. Barbara, Honduras	1230
4719		R. Republik Indonesia	Ujung Pandang, Indonesia	1230	6085	=	All India R. RTV Kaduna	Madras, India Kaduna, Nigeria	1300 0500
-		60 Meter Band-4	750 5040 kH-		6090	_	R. Luxembourg	Luxembourg	0000
_		oo melel bana—4	730-3080 KHZ		6095	= -	Pollsh R. R. Nigeria	Warsaw, Poland Maiduguri, Nigeria	0300 0600
4750		R. Lubumbashi	Lubumbashi, Zaire	2030	6100	-	V. Arab Homeland	Tripoli, Libya	2330 1230
4765 4765	HCAJ2	CRE RTV Congolaise	Guayaquil, Ecuador Brazzaville, Congo	0300 0430	6105	XEQM	Su Pontera R. El Mundo	Merida, Mexica Buenos Aires, Argentina	0700
4770	ELWA	Sudan Interior Mission	Monrovia, Liberia	2200 0300	6135	_ `	R. Univ. Cancepcion R. Tahiti	Concepcion, Chile Papeete, Tohiti	1030 0330
4770 4775	YVNW	R. Bolivar Em. Kennedy	Ciu. Bolivar, Venezuela Bogota, Colombia	0300	6135	-	Swiss B.C.	Berne, Switzerland	0200
4775 4777	-	All India R. RTV Gabonaise	Gauhati, India Libreville, Gabon	1200 0500	6155	-	R. Singapore British B.C. relay	Singapore Cyprus	1200 0200
4780	YVLA	LV Carabobo	Valencia, Venezuela	0100	6180	TGWA	LV Guatemala	Guatemala City, Guatemala	0200
4780 4780	-	France Region 3	Jibouti, Afars and Issa Paramaribo, Surinam	1430 0300	6190	=	RTV Marocaine R. Nigeria	Sebaa-Aioun, Morocco Sokoto, Nigeria	0600 0530
4781	HRRZ	R. Juticalpa	Juticalpa, Honduras	1230					
4785 4785	ZYMB	R. Ribamar R. Tanzania	Sao Luis, Brazil Dar es Salaam, Tanzania	0830			41 Meter Band-	7100-7300 kHz	
4790 4790	OAX8F	R. Atlantida R. Republik Indonesia	Iquitos, Peru Fak Fak, Indonesia	0330		-			0000
4800	YVMO	R. Lara	Barquisimeto, Venezuela	0130	7065 7105	Ξ	R. Tirana British B.C. relay	Tirana, Albania Ascension Is.	0000
4810 4815	HCVG8	LV Galapagos RTV Voltaique	Is. S. Cristobal, Galapagos Is. Ouagadougou, Upper Volta	1230	7120	-	R. Cairo	Cairo, Egypt	0230
4820	HCPS6	R. Paz y Bien	Ambato, Ecuador	1000	7125 7130		R. Peking British B.C.	Peking, China London, England	0100 0400
4820 4820	HRVC	Em. Nacional LV Evangelica	Lvanda, Angola Tegucigalpa, Honduras	2200 0300	7145	-	R. Nigeria	llorin, Nigeria Seaul, South Korea	0530 1500
4820 4825	HJVG HIFA	R. Guotapuri LV Fuerzas Armadas	Valledupar, Colombia Sto. Domingo, Dominican Rep.	0330	7157	IE III	R. Koreo V. America relay	Philippines	1100
4825	-	- Ly Fuerzas Armadas	Ashkabad, USSR	2130	7170 7170		R. Moscow R. Noumea	Moscow, USSR Noumea, New Caledonia	1000
4832 4835	TIHB	R. Relog R. Malaysia Sarawak	San Jose, Costa Rica Kuching, Sarawak	1400	7175	_	RAI	Caltanisetta, Sicily	0500
4850	. E.,	R. Clarin	Sto. Domingo, Dominican Rep.	0200	7190 7240	_	Democratic Yemen B.S. R. Australia	Aden, Dem. Rep. Yemen Melbourne, Australia	0330 1500
4855 4855	PRC5	R. Nacional R. Clube Para	Bogota, Colombia Belem, Brazil	0300	7245	_	Em. Nacional	Luanda, Angola	0400
4860	YVQE	R. Maracaibo	Maracaibo, Venezuela	1000	7250 7260	_	R. Moscow R. Berlin Int.	Moscow, USSR Berlin, German D.R.	0630
4870 4875	12	LV Revolution R. Republik Indonesia	Cotonou, Benin Sorong, Indonesia	2130 1230	7270		R. RSA Polish R.	Johannesburg, S. Africa Warsaw, Poland	0300 0200
4875		South African B.C.	Johannesburg, S. Africa LaPaz, Bolivia	0400	7270 7275	=	V. Nigeria	Lagos, Nigeria	0700
4875 4880	YVMS	La Cruz del Sur R. Universo	Barquisimeto, Venezuela	0200	7275 7280		RTV Tunisienne All India R.	Tunis, Tunisia Delhi, India	1400
4885 4890	HJIG	Ondas del Meta R. Senegal	Villavicencio, Colombia Dakar, Senegal	0230 0600	7280	_	R. France Int.	Paris, France	0500
4890	-	National B.C.	Port Moresby, Papua N.G.	1130	7285 7285	3 1	All India R. Deutsche Welle	Delhi, India Cologne, German F.R.	0500 0600
4900 4904	YVNK	R. Juventud R. Nat. Tchadienne	Barquisimeto, Venezuela N'djamena, Chad	0300 0530	7285	-	R. Nederland relay	Talata, Malagasy Rep.	2100 0100
4905	-	R. Relogio Federal	Rio de Janeiro, Brazil	0130	7300 7335	CHU	R. Tirana Dominion Observatory	Tirana, Albania Ottawa, Canada	0200
4911 4915	ZYE2	R. Zambia R. Macapa	Lusaka, Zambia Macapa, Brazil	0400	7345	_	R. Progue	Prague, Czechoslovakia Jerusalem, Israel	0100 0500
4915	-	Ghana B.C.	Accra, Ghana Nanning, China	2230 1300	7412		Israel B. Authority	serosurem, israel	0300
4915	_	Australian B.C.	Brisbane, Australia	1200	-		07.44 · D · I	0500 0775 111	
4926 4932	3	R. Ecuatorial Nigerian B.C.	Bata, Eq. Guinea Benin City, Nigeria	0515 2230			31 Meter Band—	9300-97/3 KHZ	
4940	HCXZ1	R. Nac. Ecuador	Quito, Ecuador	0230	9022	-	V. Iran	Teheran, Iran	2000 1300
4940	= -	RTV Ivorienne V. Vietnam	Abidjan, Ivory Coast Hanoi, Vietnam	2300 1230	9390 9435	_	R. Peking Israel B. Authority	Peking, China Jerusalem, Israel	2230
4945 4960	HJDH HCSE7	R. Colosal R. Federacion	Neiva, Colombia Sucua, Ecuador	0400 1130	9475 9480	= .	R. Cairo R. Peking	Cairo, Egypt Peking, China	0200
4965	HJAE	R. Santa Fe	Bogota, Colombia	0330	9505	-	R. Prague	Prague, Czechoslovakia	0630
4972 4975	OCX4H	R. Yaavnde R. Pacifico	Yaounde, Cameroun Lima, Peru	0500 0330	9505 9515	= 1	R. Japan V. Turkey	Tokyo, Japan Ankara, Turkey	1030 2230
4990	YVMQ	R. Barquisimeto	Barquisimeto, Venezuela	0300	9515	_	R. Australia	Melbourne, Australia	0800
4990 4996	QAZ4C	Nigerian B.C. R. Andina	Shogunle, Nigeria Huancayo, Peru	0430	9540 9520	OAX4J	R. Australia R. La Cronica	Melbourne, Australia Lima, Peru	0500
5000	WWV	National Bureau of Stan	dards Ft. Collins, U.S.A.	0300	9525	+	All India R. V. Greece	Delhi, India Athens, Greece	2130 1900
5000 5005		National Bureau of Stan R. Malaysia Sarawak	Sibu, Sarawak	1400	9530 9530		RTV Espana	Madrid, Spain	2200
5010 5015	_	R. Garova	Garova, Cameroun Vladivostok, U.S.S.R.	2130 1200	9535 9540	E	Swiss B.C. R. Australia	Berne, Switzerland Melbourne, Australia	2100 0730
5020		Solomon 1s. B.S.	Honiara, Solomon Is.	1130	9555	KGEI	V. Amistad V. Andes	San Francisco, U.S.A. Quito, Ecuador	0730 0200
5025 5030		R. Splendit R. Malaysia Sarawak	Cuenca, Ecuador Kuching, Sarawak	1330	9560 9565	HCJB	R. Moscow	Moscow, USSR	2230
			Bangui, Central Af. Rep.	2230	9566	_	LV Chile R. Bucharest	Santiago; Chile Bucharest, Rumania	0100
5038	-	R. Bangui		2200					
5038 5047 5052	Ξ	R. Bangui R. Togo R. Singapore	Lome, Togo Singapare	1400	9570 9575	_	RAI	Rome, Italy	0100
5047	Ξ	R. Togo	Lome, Togo		9575 9580	=		Manila, Philippines	1400 0300
5047	Ξ	R. Togo R. Singapore	Lome, Togo Singapore		9575 9580 9585 9585	Ξ	RAI V. Philippines R. Budapest R. Japan	Manila, Philippines Budapest, Hungary Tokyo, Japan	1400 0300 1200
5047 5052	Ē	R. Togo R. Singapore 49 Meter Band—	Lome, Togo Singapore	1400	9575 9580 9585 9585 9585 9585	1 I I	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies	1400 0300 1200 1900 0130
5047 5052 5885		R. Togo R. Singapore	Lome, Togo Singapore	1430 0300	9575 9580 9585 9585 9585 9590 9595	Ξ	RAI V. Philippines R. Budapest R. Japan R. Mogadishu	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia	1400 0300 1200 1900 0130 0100 1000
5047 5052 5885 5930 5935		R. Togo R. Singapore 49 Meter Band— R. Republik Indonesia R. Prague R. Riga	Lome, Togo Singapare 5950-6200 kHz Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR	1400 1430 0300 2130	9575 9580 9585 9585 9585 9590 9595 9595 9600		RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brázil Tokya, Japan Kiev, USSR	1400 0300 1200 1900 0130 0100 1000 0030
5047 5052 5885 5930		R. Togo R. Singapore 49 Meter Band— R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int.	Lome, Togo Singapore 5950-6200 kHz Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada	1430 0300 2130 0400 2330	9575 9580 9585 9585 9585 9590 9595		RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brázil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R.	1400 0300 1200 1900 0130 0100 1000 0030 1130 2230
5885 5930 5935 5955 5960 5965		R. Togo R. Singapore 49 Meter Band— R. Republik Indonesia R. Prague F. Riga R. Casino R. Canada Int. Trans World R.	Lome, Togo Singapare 5950-6200 kHz Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costo Rica Montreal, Canada Monte Carlo, Monaco	1430 0300 2130 0400 2330 0500	9575 9580 9585 9585 9585 9590 9595 9600 9610 9620 9620	ZYN29	RAI V. Philippines R. Budapest R. Japon R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlln Int. R. Belgrade	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brdzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia	1400 0300 1200 1900 0130 0100 1000 0030 1130 2230 2200
5885 5930 5935 5935 5955 5965 5965 5965	TIQ	R. Togo R. Singapore 49 Meter Band— R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C.	Lome, Togo Singapare 5950-6200 kHz Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland	1430 0300 2130 0400 2330 0500 0500 0200	9575 9580 9585 9585 9585 9590 9595 9595 9600 9610 9620 9625 9625	ZYN29 	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlin Int. R. Belgrade Canadian B.C. R. Korea	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brdzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seoul, S. Korea	1400 0300 1200 1900 0130 0100 1000 0030 1130 2230 2200 1000
5885 5930 5935 5955 5965 5965 5965 5965 5965	TIQ OBX4Q	R. Togo R. Singapore 49 Meter Band— R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol	Lome, Togo Singapare 5950-6200 kHz Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigeria Berne, Switzerland Lima, Peru	1430 0300 2130 0400 2330 0500 0500	9575 9580 9585 9585 9585 9590 9595 9610 9610 9620 9620 9625 9645	ZYN29 	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlln Int. R. Belgrade Canadian B.C. R. Korea R. Korea	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahla, Brdzll Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seaul, S. Korea Oslo, Norway	1400 0300 1200 1900 0130 0100 1000 0030 1130 2230 2200 1000
5885 5930 5935 5955 5965 5965 5965 5965 5970 5975 5978	TIQ OBX4Q	R. Togo R. Singapore R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol British B.C. R. R. RSA	Lome, Togo Singapare Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England Johannesburg, S. Africa	1430 0300 2130 0400 2330 0500 0500 0200 0430 0200 2300	9575 9580 9585 9585 9585 9590 9595 9690 9610 9620 9625 9645 9645 9645	ZYN29 	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlln Int. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R. R. Rumbos	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brdzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seoul, S. Korea Oslo, Norway Yatican Caracas, Venezuela	1400 0300 1200 1900 0130 0100 1000 1000 1000 2230 1000 100
5047 5052 5885 5930 5935 5965 5965 5965 5965 5965 5970 5975 5980	TIQ OBX4Q	R. Togo R. Singapore 49 Meter Band— R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Soil British B.C.	Lome, Togo Singapore Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costo Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England	1430 0300 2130 0400 2330 0500 0500 0200 2300 1500 0200	9575 9580 9585 9585 9585 9595 9595 9600 9610 9620 9620 9645 9645 9646 9645	ZYN29 VLW9	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlin Int. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R.	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brāzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seoul, S. Korea Oslo, Norway Vatican	1400 0300 1200 1900 1900 0130 0100 0030 1130 2230 2200 1000 0030 1600 0030 2230 0430 1200
5047 5052 5885 5930 5935 5955 5965 5965 5965 5970 5970 5980 5980 5985	TIQ OBX4Q XERMX	R. Togo R. Singapore R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol British B.C. R. RSA R. Mexico R. Splendid Burma B.S.	Lome, Togo Singapare Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England Johannesburg, S. Africa Mexico City, Mexico Buenos Aires, Argentina Rangoon, Burma	1430 0300 2130 0400 0500 0500 0200 0430 0200 1500 0200 1500	9575 9580 9585 9585 9585 9595 9595 9610 9620 9620 9645 9645 9645 9685	ZYN29 VLW9 OAZ4L VLH9	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlln Int. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R. R. Rumbos R. Pacifica Australian B.C. R. Mayana Cuba	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brdzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seoul, S. Korea Oslo, Norway Vatican Caracas, Venezuela Lima, Peru Melbourne, Australia Havana, Cuba	1400 0300 1200 1900 1900 0130 0100 1000 1000 1000 2230 1000 1600 0030 2230 2230 2230 2230 2230 2230 2
5885 5930 5965 5965 5965 5965 5965 5965 5965 5970 5978 5980 5985 5985 5985	TIQ OBX4Q XERMX	R. Togo R. Singapore R. Singapore R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol British B.C. R. RSA R. Mexico R. Splendid Burma B.S. R. Republik Indanesia R. Bucharest	Lome, Togo Singapare Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England Johannesburg, S. Africa Mexico City, Mexico Buenos Aires, Argentina Rangoon, Burma Menodo, Indonesia Bucharest, Rumania	1430 0300 2130 0400 2330 0500 0200 0200 2300 1500 0200 1430 1430 0130	9575 9580 9585 9585 9585 9595 9595 9600 9610 9620 9620 9645 9645 9645 9655 9685 9685	ZYN29 VLW9 OAZ4L VLH9	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R. R. Rumbos R. Pacifico Australian B.C. R. Karaian B.C. R. Kumbos R. Pacifico Australian B.C. R. Havana Cuba RIV Algerienne RAE	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brázil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seoul, S. Korea Oslo, Norway Vatican Caracas, Venezuela Lima, Peru Melbourne, Australia Havana, Cuba Algiers, Algeria Buenos Aires, Argentina	1400 0300 1200 1900 1000 0130 0100 0030 1130 2230 2200 1000 0030 1200 0430 1200 0200 1900 1900
5885 5930 5935 5965 5965 5965 5965 5975 5980 5985 5985 5985 5985 5985 5985 598	TIQ OBX4Q XERMX	R. Togo R. Singapore R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol British B.C. R. RSA R. Mexico R. Splendid Burma B.S. R. Republik Indanesia R. Bucharest Deutsche Welle	Lome, Togo Singapore Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Coste Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England Johannesburg, S. Africa Mexico City, Mexico Buenos Aires, Argentina Rangoon, Burma Menodo, Indonesia Bucharest, Rumania Cologne, German F.R.	1430 0300 2130 0400 2330 0500 0200 0200 2300 0200 2300 0200 1400 0130 0130 0530	9575 9580 9585 9585 9585 9590 9595 9600 9620 9620 9642 9645 9645 9645 9645 9685 9685 9685 9685	ZYN29 VLW9 OAZ4L VLH9	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. BerlIn Int. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R. R. Rumbos R. Pacifica Australian B.C. R. Havana Cuba RTV Algerienne RAE R. Sweden	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brdzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seoul, S. Korea Oslo, Norway Vatican Caracas, Venezuela Lima, Peru Melbourne, Australia Havana, Cuba Algiers, Algeria Buenos Aires, Argentina Stockholm, Sweden	1400 0300 1200 1900 0130 0100 0030 1130 2230 2200 1000 0030 030 0430 1200 1200 0200
5047 5052 5885 5930 5955 5965 5965 5965 5965 5965 5970 5975 5980 5985 5985 5985 5985 6006	TIQ OBX4Q EXERMX	R. Togo R. Singapore R. Singapore R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol British B.C. R. RSA R. Mexico R. Splendid Burma B.S. R. Republik Indanesia R. Bucharest Deutsche Welle R. Mail R. Reloj	Lome, Togo Singapare Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England Johannesburg, S. Africa Mexico City, Mexico Buenos Aires, Argentina Rangoon, Burma Menodo, Indonesia Bucharest, Rumania Cologne, German F.R. Bamako, Mali San Jose, Costa Rica	1430 0300 2130 0400 2330 0500 0500 0200 0430 0200 1500 0200 1430 1400 0130 0530 0400	9575 9580 9580 9585 9585 9590 9595 9600 9620 9620 9625 9645 9645 9645 9685 9685 9690 9695 9700	ZYN29 VLW9 OAZ4L VLH9	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlln Int. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R. R. Rumbos R. Pacifico Australian B.C. R. Movana Cuba RTV Algerienne RAE R. Sweden R. Sofia R. Nederland	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brdzil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seaul, S. Korea Oslo, Norway Yatican Caracas, Venezuela Lima, Peru Melbourne, Australia Havana, Cuba Algiers, Algeria Buenos Aires, Argentina Stockholm, Sweden Sofia, Bulgaria Hilversum, Netherlands	1400 0300 1200 1900 1000 1000 1000 1000 1000 1130 2230 1000 1200 0300 1200 12
5885 5930 5935 5965 5965 5965 5965 5970 5980 5980 5985 5985 5985 5985 5985 598	TIQ OBX4Q XERMX	R. Togo R. Singapore R. Singapore R. Republik Indonesia R. Prague R. Riga R. Casino R. Canada Int. Trans World R. R. Nigeria Swiss B.C. R. El Sol British B.C. R. RSA R. Mexico R. Splendid Burma B.S. R. Republik Indanesia R. Bucharest Deutsche Welle R. Mail	Lome, Togo Singapare Pakanbaru, Indanesia Prague, Czechoslovakia Riga, USSR Limon, Costa Rica Montreal, Canada Monte Carlo, Monaco Jos, Nigerio Berne, Switzerland Lima, Peru Londan, England Johannesburg, S. Africa Mexico City, Mexico Buenos Aires, Argentina Rangoon, Burma Menado, Indonesia Bucharest, Rumania Cologne, German F.R. Bamako, Mali	1400 0300 2130 0500 0200 0200 0200 0200 1500 0200 1430 1400 0130 0500	9575 9580 9585 9585 9585 9595 9595 9600 9610 9620 9620 9645 9645 9645 9685 9685 9690 9690 9690 9690 9690 9690 9690 969	ZYN29 VLW9 OAZ4L VLH9	RAI V. Philippines R. Budapest R. Japan R. Mogadishu Deutsche Welle relay R. Cultura Bahia NSB R. Kiev Australian B.C. R. Berlin Int. R. Belgrade Canadian B.C. R. Korea R. Norway Vatican R. R. Rumbos R. Pacifica Australian B.C. R. Rovana Cuba RIV Algerienne RAE R. Sweden R. Sweden	Manila, Philippines Budapest, Hungary Tokyo, Japan Mogadishu, Somalia Montserrat, West Indies Bahia, Brázil Tokya, Japan Kiev, USSR Perth, Australia Berlin, German D.R. Belgrade, Yugoslavia Montreal, Canada Seaul, S. Korea Oslo, Norway Vatican Caracas, Venezuela Lima, Peru Melbaurne, Australia Havana, Cuba Algiers, Algeria Buenas Aires, Argentina Stockholm, Sweden Sofla, Bulgaria	1400 0300 1200 1900 1900 0130 0100 0030 1130 2230 2200 1000 0300 2230 0430 1200 0200 0200 0200 0230 0230 0000

WORLDWIDE SHORTWAVE STATIONS

kHz	Call	Name	Location	GMT
9770 9780 9790 9805 9810 9815 9815 9912 10040	инин	Austrian R. R. Peking relay R. Pakiston R. Cairo R. Peace and Progress Israel B. Authority British B.C. All India R. V. Vietnam	Vienna, Austria Tirana, Albania Karachi, Pakistan Cairo, Egypt Moscow, USSR Jerusalem, Israel London, England Delhi, India Hanoi, Vietnam	0130 0330 2115 2200 0130 2200 2230 2200 0900

25 Meter Band-11700-11975 kHz

	25 Meter Band—11700-11975 kHz					
11600		R. Peking	Peking, China	1300		
11625	-	Israel B. Authority	Jerusalem, Israel	2000		
11640		R. Pakistan	Karachi, Pakistan	2100		
11690	-	R. Moscow	Moscow, USSR	0800		
11700	-	R. Clarin	Sta. Domingo, Dominican Rep.	2230		
11700	_	Trans World R.	Monte Carlo, Monaca	1930		
11700		Vatican R.	Vatican	0100		
11705	_	R. Australia	Melbourne, Australia	1130		
11705		R. France Int.	Paris, France	0600		
11705	_	R. New Zealand	Wellington, New Zealand	0400		
11710	_	RAE	Buenos Aires, Argentina	2300		
11710	_	R. Noumea	Naumea, New Caledonia	0800		
11715	_	Swiss B.C.	Berne, Switzerland	0230		
11730	_	V. Greece	Athens, Greece	0030		
11730	_	R. Nederland	Hilversum, Netherlands	2130		
11730	_	R. Tashkent	Tashkent, USSR	1200		
11730	WINB	- /	Red Lion, USA	0200		
11755	_	R. Finland	Helsinki, Finland	1700		
11755	_	Far East B. Associates	Victoria, Seychelles	0330		
11765	-	R. Sofia	Sofia, Bulgaria	2130		
11775		All India R.	Delhi, India	1030		
11790	_	V. Indonesia	Jakarta, Indonesia	1030		
11795	-	Deutsche Welle relay	Antigua, West Indies	2200		
11800	1.50	Sri Lanka B.C.	Colombo, Sri Lanka	1430		
11810	0.5	RAI	Rome, Italy	0100		
11810		R. Amman	Amman, Jordan	0330		
11815		Polish R.	Warsaw, Poland	0300		
11825	44511	R. Tahiti	Papeete, Tahiti	0400		
11835	4VEH	R. 4VEH	Cap Haitien, Haiti	1300		
11835	ELWA	Sudan Interior Mission	Monrovia, Liberia	2000		
11845		R. Canada Int.	Montreal, Canada	0200		
11855	= =	Far East B. Associates	Victoria, Seychelles	0400		
11855		R. Norway	Oslo, Norway	1600		
11870	-	B.S. Kingdom of Saudi Arab	Dia Riyadh, Saudi Arabia	1900		
11875	_	R. Norway	Oslo, Norway	0400		
11890	_	R. Japan R. Berlin Int.	Tokyo, Japan	1230		
11905		Deutsche Welle	Berlin, German D.R.	0030		
11905		R. Sweden	Cologne, German F.R.	2300		
11910		R. Budapest	Stockholm, Sweden	0200		
11915		V. America relay	Budapest, Hungary Wooferton, England	1830		
11935	_	R. Portugal	Lisbon, Portugal	0500		
11937		Democratic Cambodian R.	Phnom-Penh, Cambodia	1230		
11940		R. Bucharest	Bucharest, Rumania	2000		
11945	ELWA	Sudan Interior Mission	Manrovia, Liberia	2000		
11950	_	R. Nederland	Hilversum, Netherlands	2130		
11950	_	_	Alma Ata, USSR	0030		
11960	_	R. Nat. Mali	Bamako, Mali	1700		
12000	VNG	Australian Post Office	Melbourne, Australia	1500		
12010	-	V. American relay	Monrovia, Liberia	1830		

19 Meter Band-15100-15450 kHz

1300 1200 1300
1300
0100
2100
0200
1200
0400
0600
0400
1330
1600
2000
0400
1200
1230
0200
2300

kHz	Coll	Name	Location	GMT
15185	-	V. America relay	Colombo, Sri Lanka	0100
15190	_	RTV Congolaise	Brazzaville, Congo Rep.	2100
15200	_	R. France Int.	Paris, France	1700
15205	_	R. Australia	Melbourne, Australia	0400
15210	_	Belgian R. TV	Brussels, Belgium	1200
15215		British B.C.	London, England	1400
15230	_	Israel B. Authority	Jerusalem, Israel	0345
15240	_	RAI	Rome, Italy	0100
15245	_	R. Nac. Brasilia	Brasilia, Brazil	2100
15255	_	Trans World R.	Bonaire, Netherlands Antilles	1300
15270	-	Austrian R.	Vienna, Austria	2300
15290		V. America relay	Tinang, Philippines	2300
15300	_	R. Havana Cuba	Havana, Cuba	2100
15325	_	R. Pakistan	Karachi, Pakistan	0200
15325	_	R. Uganda	Kampala, Uganda	1800
15330	-	American Forces R. TV	Bethany, USA	2300
15335	_	R. Cairo	Cairo, Egypt	2100
15350	-	R. TV Luxembourg	Luxembourg	2330
15365	_	R. Bucharest	Buchgrest, Rumania	1730
15385	XERMX	R. Mexico	Mexico City, Mexico	0030
15385		R. Peace and Progress	Moscow, USSR	0400
15405	_	R. Vilnius	Vilnius, USSR	2300
15410	_	R. Australia	Melboure, Australia	0200
15410	_	Deutsche Welle relay	Kigali, Rwanda	0130
15415	_	British B.C. Relay	Limassol, Cyprus	0400
15420	_	R. Moscow	Moscow, USSR	0000
15425		Australian B.C.	Perth, Australia	0500
15425		Sri Lanka B.C.	Columbo, Sri Lanka	0100
15545	_	R. Nac. Espana	Madrid, Spain	1830

16 Meter Band-17700-17900 kHz

17665		R. Pakistan	Variabi Babistas	0200
	_		Karachi, Pakistan	
17680	_	R. Peking	Peking, China	0130
17700	-	R. Nederland	Hilversum, Netherlands	1830
17705	_	British B.C.	London, England	1330
17730	_	V. Iran	Teheran, Iran	0530
17755	HCJB	V. Andes	Quito, Ecuador	1700
17765	_	Deutsche Welle relay	Kigali, Rwanda	1230
17765	-	American Forces R. TV	Dixon, USA	0100
17780	_	R. RSA	Johannesburg, S. Africa	0600
17800	entire.	V. Free China	Taipei, Taiwan	2330
17820	_	R. Canada Int.	Montreal, Canada	2230
17830	_	V. Greece	Athens, Greece	1230
17830	-	R. Pakistan	Karachi, Pakistan	0300
17870	-	V. America relay	Monrovia, Liberia	1800

13 Meter Band-21450-21750 kHz

21460	-	Belgian R. TV	Brussels, Belgium	1530
21465		R. Cairo	Cairo, Egypt	1430
21500	-	Israel B. Authority	Jerusalem, Israel	1400
21540		R. Berlin Int.	Berlin, German D.R.	1400
21580		R. France Int.	Paris, France	1730
21640		R. Nederland relay	Bongire, Netherlands Antilles	1800
21670	_	V. America	Greenville, USA	1730

Credits: Steve Wiseblood, CA; Greg Ravenhorst, MN; Jay Florian, IL; Terry Krueger, FL; Jack Jones, MS; George Poppin, CA; Peter Schippelliti, MA; Mike Brooker, Ontario; Neil Schulman, NY; Alan Mayer, IL; Marlin Field, MI; Tom Overcamp, SC; Jim Roberts, Manitoba; Robert Fraser, MA; Robert Yajko, PA; Mark Godfrey, CO; Creede Lambard, MT; Daniel Luce, TX; Aaron Hywarren, Manitoba; Michael Bolitho, Ontario; Brian Alexander, PA; Garry Sapoznikow, Manitoba; Peter Grenier, CA; Richard Lewis, OK; Mike Richardson, NY; Toshimichi Ohtake, PA; James Wilson Jr., NE; Michael Goldstein, NY; Al Miller Jr., OH; Chris Sheehan, Ontario; Dennis Streveler, HI; Robert Zilmer, WI; Frank Hermann, Ontario; Frank Woltman, WI; Kenneth Earhart, PA; Peter Jakl, IL; Bill Bogel, CA; David Walcutt, IL; W. Noel Brown, MI; Don MacKay, DE; Richard Swanson, IA; Neil Wolfish, Ontario; North American SW Association, P.O. Box 13, Liberty, IN 47353.

Ask Hank, He Knows

(Continued from page 10)

or cable, make some by stripping the shield of RG-58 coax free from its outer covering and center core. Press it flat and you'll have copper braid cable.

Making Holes

How can I cut holes through aluminum and light steel cabinets used in project building?

-K. F., Custer, SD

You should look through catalogs of tools or tool listings in electronics parts catalogs to get ideas. For example, to get an odd shaped oval hole, drill a hole and use a rat tail file to elongate it. Small square holes can be punched out, if you have the punch set. If not, drill a hole and square it with a small triangular file. Larger holes can be made with a nibbler tool that cuts out small 1/8-in. bites at a time. Holes for meters and sockets are best made with round punch sets, however, the nibbler can do the job with some filing to smooth the edges. If you

are interested in project work, plan to acquire tools of the type mentioned slow-ly to ease the cost.

It's In the Bounce

I want to build a parabolic microphone and can't get the reflector. What do I do? —M. L., Trofford, PA

Look for a war surplus radar reflector. Your chances are slim. I've used the reflector for a photoflood lamp with mild success, and one reader told me he used

(Continued on page 118)



301. Get the '78 Elco Catalog and see their do-ityourself kits and factory assembled electronic equipment. Specialties are test equipment, burglar/fire alarms, hobbylst and auto electronics.

302. International crystal has illustrated folders containing product information on radio communica-tions kits for experimenters (PC boards; crystals; transistor RF mixers & amplifiers; etc.).

303. Regency has a new low cost/high performance UHF/FM repeater. Also in the low price is their 10-channel monitoradio scanner that offers 5-band performance.

304. Dynascan's new B & K catalog features test eequipment for industrial labs, schools, and TV

305. Before you build from scratch, check the Fair Radio Sales latest catalog for surplus gear.

306. Get Antenna Specialists' catalog of latest mobile antennas, test equipment, wattmeters, acces-

307. Want a deluxe CB base station? Then get the specs on Tram's super CB rigs.

308. Compact is the word for Xcelite's 9 different sets of mldget screwdrivers and nutdrivers with 'piggyback'' handle to increase length and torque. A handy show case serves as a bench stand also.

310. Turner has two booklets on their Signal Kicker antennas. They give specifications and prices on their variety of CB base and mobile line. Construction details help in your choice.

311. Midland Communications' line of base, mobile and hand-held CB equipment, marine transceivers, scanning monitors, plus a sampling of accessories are covered in a colorful 18-page brochure.

312. The EDI (Electronic Distributors, Inc.) catalog is updated 5 times a year. It has an index of manufacturers literally from A to X (ADC to Xcelite). Whether you want to spend 29 cents for a pilot-light socket or \$699.95 for a stereo AM/FM receiver, you'll find it here.

313. Get all the facts on Progressive Edu-Kits Home Radio Course. Build 20 radios and electronic circuits; parts, tools, and instructions included

316. Get the Hustler brochure/illustrating their complete line of CB and monitor radio antennas.

317. Teaberry's new brochure presents their complete lines of CB and marine transceivers and scanners for monitoring police, fire and other public service frequencies.

318. GC Electronics offers an "Electronic Chemical Handbook" for engineers and technicians. It is a "problem solver" with detailed descriptions, uses and applications of 160 chemicals compiled for electronic production and packaging. They are used for all types of electronic equipment.

319. Browning's mobiles and its famous Golden Eagle base station, are illustrated in detail in the new 1978 catalog. It has full-color photos and specification data on Golden Eagle, LTD and SST models, and on "Brownie," a dramatic new minimobile.

320. Edmund Scientific's new catalog contains over 4500 products that embrace many sciences and fields.

321. Cornell Electronics' "Imperial Thrift Tag Sale" Catalog features TV and radio tubes. You can also find almost anything in electronics.

322. Radio Shack's 1978 catalog colorfully illustrates their complete range of kit and wired products for electronics enthusiasts-CB, ham, hi-fi, experimenter kits, batteries, tools, tubes, wire, cable, etc.

323. Get Lafayette Radio's "new look" 1978 catalog with 260 pages of complete electronics equipment. It has larger pictures and easy-to-read type. Over 18,000 items cover hi-fi, CB, ham rigs, accessorles, test equipment and tools.

327. Avanti's new brochure compares the quality difference between an Avanti Racer 27 base loaded mobile antenna and a typical imported base loaded antenna

328. A new free catalog is available from McGee Radio. It contains electronic product bargains.

329. Semiconductor Supermart is a new 1978 catalog listing project builders' parts, popular CB gear, and test equipment. It features semiconductorsall from Circuit Specialists.

330. There are nearly 400 electronics kits in Heath's new catalog. Virtually every do-it-yourself interest is Included-TV, radios, stereo and 4-channel, hi-fi,

331. E. F. Johnson offers their CB 2-way radio catalog to help you when you make the American vaca-tion scene. A selection guide to the features of the various messenger models will aid you as you go through the book.

332. If you want courses in assembling your own TV kits, National Schools has 10 from which to choose. There is a plan for GIs.

333. Get the new free catalog from Howard W. Sams. It describes 100's of books for hobbyists and technicians-books on projects, basic electronics and related subjects.

334. Sprague Products has L.E.D. readouts for those who want to build electronic clocks, calculators, etc. Parts lists and helpful schematics are included.

335. The latest edition of the TAB BOOKS catalog describes over 450 books on CB, electronics, broadcasting, do-it-yourself, hobby, radio, TV, hi-fi, and CB and TV servicing.

337. Pace communications equipment covers 2-way radios for business, industrial and CB operations. Marine radiotelephones and scanning receivers are also in this 18-p. book.

338. "Break Break," a booklet which came into existence at the request of hundreds of CBers, contains real life stories of incidents taking place on America's highways and byways. Compiled by the Shakespeare Company, it is available on a first come, first serve basis.

342. Royce Electronics has a new 1978 full line product catalog. The 40-page, full-color catalog contains their entire new line of 40-channel AM and SSB CB transceivers, hand-helds, marine communications equipment, and antennas and accessories.

344. For a packetful of material, send for SBE's material on UHF and VHF scanners, CB mobile transceivers, walkie-talkies, slow-scan TV systems, marine-radios, two-way radios, and accessories.

345. For CBers from Hy-Gain Electronics Corp. there is a 50-page, 4-color catalog (base, mobile and marine transceivers, antennas, and accessories). Colorful literature illustrating two models of monitor-scanners is also available.

350. Send for the free NRI/McGraw HIII 100-page color catalog detailing over 15 electronics courses. Courses cover TV-audio servicing, industrial and digital computer electronics, CB communications servicing, among others G.I. Bill approved, courses are sold by mail.

352. Send for the free descriptive bulletin from Finney Co. It tells all about their new auto FM radio signal booster (eliminates signal fading).

353. MFJ offers a free catalog of amateur radio equipment-CW and SSB audio filters, electronic components, etc. Other lit. is free.

354. A government FCC License can help you qualify for a career in electronics. Send for Information from Cleveland Institute of Electronics.

355. New for CBers from Anixter-Mark is a colorful 4-page brochure detailing their line of base station and mobile antennas, including 6 models of the famous Mark Heliwhip.

356. Continental Specialties has a new catalog featuring breadboard and test equipment for the professional and hobbyist. Descriptions, pictures and specifications ald your making a choice.

358. PixTronics announces its new Model 200 Super Sensitive Electronic Darkroom Exposure Meter, used to determine the correct exposures of all black-and-white and color negatives. Useable with any enlarger.

359. Electronics Book Club has literature on how to get up to 3 electronics books (retailing at \$58.70) for only 99 cents each . . . plus a sample Club News

360. Cornell-Dubiller has a 4-color, 4-page, bro-chure on its Ham II, CD-44, and Big Talk rotor communication systems. Exploded half tones detail interior rotor construction, and tables list specs.

361. "Solving CB Noise Problems" is published by Gold Line and tells you how to reduce the noise and get a clearer signal. In discussion and diagram you can find out about the kinds of noise, their sources, and the remedies.

362. B&F Enterprises' Truckload Sale catalog offers 10% off all merchandise: (military or indus-trial surplus) speaker kits, TV games, computer terminals, tools, TV components. lenses, and more.

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331	332	333	334	335	337	338	342	344	345	350	352	
353	354	355	356	358	359	360	361	362				

300 Enter my subscription to Elementary Electronics for 9 issues at \$5.97. Check enclosed. Add \$1.00 for Canada and all other countries. H8A029

NAME (print clearly)

ADDRESS

Ask Hank, He Knows

(Continued from page 116)

an aluminum dish snow sled with success. If my readers can suggest something better, please write to 'ol Hank.

Gotta Work Fast

I've added a bank of crystals to my Cobra 134, and it's not operating as designed when I switch it on. Can you give me any tips to improve frequency performance?

-E. V., Poway, CA

All you need is one tip; don't turn on the power because you'll end up in a heap of trouble. The FCC rules specifically state that you cannot alter the transmitting circuits of a CB rig.

Jail Bait

Hank my husband wants to quit his job to go into the radio-TV rapair business. He doesn't know that much theory and he takes a long time to fix a set. What should I do?

-A. F., Reading, MA

My name is Hank, not Abby! Anyway, ask your family and friends to drop off defective radios and TV sets at the house. Measure the time it takes to repair the set and assign a price to each job. Then compute how many dollars per hour he is earning. To stay in business, your husband must earn \$20 per hour minimum. If he

can't do this, he's in trouble. That \$20 per hour has to cover his wages, telephone bills, shop overhead, car expenses, test equipment, etc. Maybe \$20 per hour is too little?

Tantalum Is Terrific

I know the tantalum capacitor is better on performance than the aluminum electrolytic capacitor, but why?

-A. S., Fargo, ND

The tantalum has a much lower AC impedance than the aluminum type at higher frequencies. Also, tantalum types are cheaper to make as small units.

Beat Antenna Spiral

(Continued from page 53)

was "ironclad," so much so that it made baseball's reserve clause seem wishy-washy. That was it, no outdoor antenna for Carl.

I did make him somewhat happy by showing him an old trick. I connected the antenna lead-in wire to the metal finger stop on his phone's dialing mechanism. Reception was good considering the construction of the building, which killed -reception even for parts of the AM broadcast band. This was a temporary measure since Carl was lord, actually an agent representing the owner, refuses to let any tenant hang

anything out of the windows, let alone permit Carl to install an antenna on his patio.

I heard his sad story and told him to have his lease available when I visited him the following weekend. When I came to visit, I could see that the lease soon to get pushbutton phones.

Carl was all set to return to the flea market and unload his Drake receiver. He even told me he had planned to panel his room to give the listening shack a comfortable air, but now he wouldn't. "Now just a minute, before you quit," I said to Carl, "let's give it a try." We swiped his wife's kitchen roll of wrapping aluminum and hung it on the wall with masking tape. Two walls were outside walls, so this is where we placed the foil. Fig. 3 shows what we did. It looked kind of silly until we attached a clip lead from the foil to the antenna post of the receiver. Wow! Carl practically cried as he tuned the bands. His wife practically cried too when she saw the wall but calmed down once she realized that wall panels were going up. This antenna cost only 59¢ for the aluminum foil and \$45 for the wall panel job.

The last I heard from Carl was he was planning to move to the suburbs where he had purchased an old homestead on six acres. I wonder what he had in mind.

New Products

(Continued from page 9)

Record Cleaner

A new low-cost, record cleaner is available from Robins. The cleaner is used to remove dust, grime or other foreign material from delicate record grooves. If this is not done on a regular basis, sound quality suffers, high-frequency loss occurs, and annoying ticks and pops ob-

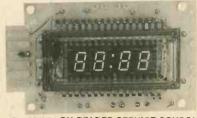


CIRCLE 62 ON READER SERVICE COUPON

scure musical passages on valuable phono records. The economy record cleaner, catalog No. 41195, carries a suggested retail price of \$1.98. The disc cleaner consists of a closed-end tube covered with special, soft velvet material. It is simply held between the thumb and forefinger at right-angles to the record grooves. Records can be cleaned either before being placed on the turntable or they can be cleaned while they are rotating. Write to Robins Industries Corp., 75 Austin Blvd., Commack, NY 11725 for information.

12 VDC Digital Clock Module

Now you can add an electronic digital clock to your car, truck, boat or other 12 VDC vehicle with the new MA1003 Digital Clock Module available from Radio Shack stores. The digital clock module features a four-digit, 0.3-inch green vacuum fluorescent display with a blinking colon activity indicator. Accuracy is about ± 0.5 seconds per day.



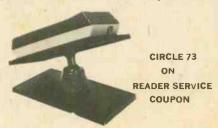
CIRCLE 33 ON READER SERVICE COUPON

Automatic display control circuitry turns off the display with ignition off, reduces brightness to 33% with park or headlights on and follows the dash lamp dimmer control setting. A lens may be used to filter the display color to blue, bluegreen, green or yellow. The digital clock

module is ready to use with the addition of three switches to control the "hours set," "minutes set" and "display on" functions. The "display on" switch is used to display the time when the ignition is off. The MA1003 Digital Clock Module for 12 VDC vehicle or portable applications is priced at \$24.95 and can be found at Radio Shack stores and dealers in all 50 states and Canada.

Desk Stand for Pocket Calculators

Calcrade is a desk stand for pocket calculators that tilts and pivots to that "just right" angle for glare-free viewing and easy keyboard operation. Accepts both vertical and horizontal pocket cal-



culators. Hook and loop fasteners secure calculator to stand while non-skid feet provide stable footing. Unit completely disassembles and features special design which allows for passage of optional anti-theft accessory. Standard model of textured black onyx finish. Retail price \$5.00. Available from One-Up, Inc., 1303 Avocado, #235, Newport Beach, CA 92660.

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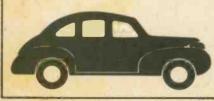
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All the features of a deluxe traditional scanner! Automatic or manual scan. Switchable scan delay to prevent missed callbacks. High-speed skipper circuit scans 15 channels per second. Built-in speaker, jacks for recorder, headphone, external speaker. With power cables for home or mobile† use. Bands (MHz): VHF-Lo, 30-50; Ham, I44-I48; VHF-Hi, I48-I70; Ham/Gov't., 430-450; UHF-Lo, 430-470; UHF-Hi ("T"), 470-512. The Realistic 2001. It's a revolution in action radio. And it's happening at Radio Shack. For under \$400.*

†Mobile use in some states and localities may be unlawful or require a permit — check with local authorities.

Like no scanner you've ever seen ...

Bright red digital readout shows exactly which frequencies are being scanned, monitored, or programmed into memory.

Powerful search capability lets you find new, often unpublicized channels. Enter lower and upper limits (even in different bands) and select either fast or slow search. The rest is automatic!

Simple, direct keyboard entry of any frequency — no codes or switches to slow you down.

Special ENTER button reduces accidental entries.

Monitor any frequency without entering it into the scanner—it's like having a 17th channel!

l6-channel scanning section with LED channel indicators and individual channel lockout buttons.

Zeromatic tuning (patent pending) for reduced interference and less spurious response over all 6 bands.



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FREQ OUT

CSC's done it again.

Broken the price and performance barriers with new MAX-100. The multimoce, professional portable frequency counter that gives you more range, visibility, accuracy and versatility than any comparable unit at anywhere near its low, low price.

MAXimum performance. MAX-100 is a cinch to use. It gives you continuous readings from 20Hz to a guaranteed 100MHz, with 8digit accuracy. Fast readings with 1/6-sec. upcate and 1-sec. sampling rate. Precise readings, derived from a crystal-control ed time base with 3ppm accuracy. High-sensitivity readings from signals as low as 30 mV, with diode overload protection up to 200V peaks.

Input signals over 100MHz automatically flash the most significant digit. And to incicate low-battery condition and extend remaining battery life, the entire display flashes at 1 Hz

MAXimum versatility. Wherever and whenever you need accurate frequency readings, MAX can do the job. Use it with clip-lead cable supplied. Mini-whi p antenna. Or low-loss in-line tap with UHF connectors. For AM or FM; CB; ham, business radio and R/C transmitter or receiver alignment. Monitoring audio and RF generators. Checking computer clocks and other digital circuits. Repair of depth sounders and fish spotters. roubleshooting ultrasonic remote controls. For these, and hundreds of other applications, you'll find it indispensable.

MAXimum visibility. MAX-100 features a big, bright 0.6' multiplexed 8-digit LED display, with leading-zero blanking. So you don't have to squint, or work up close. And, MAX's flip-up stand is built-in.

MAXimum flexibility. MAX-100 operates from tour power sources, for use in lab or field. Internal alkaline or NiCad batteries, 110 or 220V with charger/eliminator. 12V with automobile cigaretle-lighter adapter/ charger. And external 7.2-10 V supply.

MAXimum value. With all its impressive specs, you'd expect MAX to cost a lot more than a low \$134.95, complete with clip-lead cable and applications/instruction manual. But that's another nice thing about MAX: though it's accurate enough for lab

though it's accurate enough for labuse, it's well within the reach of hobbyists' and CB-ers' budgets.

Try MAX for yourself at your CSC dealer—or contact us for full specs and your local dealer's name. Once you see how handy MAX s, you'll want to "freq out" too. With CSC.

Specifications.

Range: 20 Hz to 100 MHz, guaranteed. Gatetime: 1 sec. Resolution: 1 Hz. Accuracy: ± 1 count + time base error. Input
Impedance: 1 M \(\times\) / 56 pF Coupling: AC. Sine
Wave Sensitivity: 30 mVRMS @ 50 MHz. Internal Time Base Frequency: 3 579545 MHz
crystal osc. Setability: ± 3 ppm @ 25°C.
Tamp. Stability: 8 effort han 0.2 nom/°C. Temp-Stability: Better than 0.2 ppm/°C, 0-50°C. Max. Aging: 10 ppm/year. Display: Eight. 6" LED digits; anti-glare window. Lead-zero blanking: decimal point appears between 6th and 7th digit when input exceeds 1 MHz.

Overflow: with signals over 99,999,999 Hz,
most significant (left hand) digit flashes, allowing readings in excess of 100 MHz Display update: 1/6-second plus 1 sec, gate time. Low Battery Indicator: When power supply falls below 6.6 VDC, all digits flash @ 1 Hz rate. Plashing display extends battery life. Power: 6
AA Alkaline or NiCad cells (internal); External:
110 or 220/VAC Eliminator/charger; Auto cigarette lighter adapter; 7.2-10 VDC ext. supply;
Bat. Charging: 12-14hr. S ze (HWD): 1.75"x
5.63" x 7.75" (4.45 x 14.30 x 19.69 cm.)
Weight: Less than 1.51b. (0.68 kg) w/batteries. Accessories Included: Clip-leac input cable;

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