

What's NEW

Tell them you saw it in *Monitoring Times*

Crystal Radio Projects

As technology speeds ahead at a head-spinning pace, many radio experimenters delight in returning to the days of old, marveling once again at the reception of signals during a simpler time.

Crystal radio sets require no external source of power; they derive their earphone volume purely from the signal voltage itself. Medium wave AM broadcasters are the most common targets for reception, but shortwave broadcasters, CB stations and even aircraft communications can be heard as well.

Publishers of the Xtal Set Society Newsletter periodically assemble articles and projects into book form; their latest assemblage of volumes 12 and 13 is such a publication.

135 well-illustrated pages contain instructional details on building your own headset and cat's whisker crystal, simple one-tube projects, amplifiers, coil winding, paper-box radios, shortwave crystal sets, crystal detectors, antenna recommendations and much more.

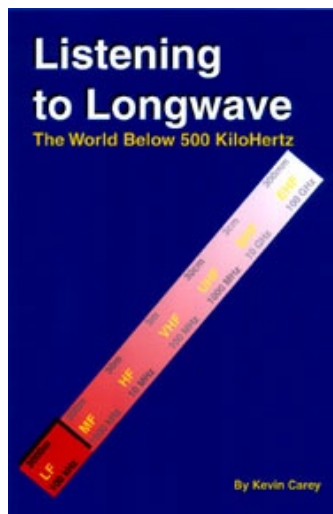
And if you would like a head start, the Society also offers do-it-yourself kits.

Crystal Radio Projects Volumes 12 and 13 is available for \$15.95 plus \$4.95 shipping from the Xtal Set Society, PO Box 3636, Lawrence, KS 66046. Phone them at (405) 517-7347 or visit their website at www.midnightscience.com.

— Reviewed by Bob Grove

Listening to Longwave

Most *Monitoring Times* readers are familiar with the shortwave spectrum, but many of you are not familiar with the spectrum below the AM broadcast band – the longwave radio spectrum. *MT Below 500* columnist, Kevin Cary, WB2QMY, has written a nontechnical introduction to the fascinating “basement band” of the radio spectrum. *Listening to Longwave - The World Below 500 kiloHertz* is an up-to-date look into the interesting world of radio below 500 kHz.



Key chapters include:

- Who is on the air, and when and where to listen to longwave communications.
- Transmitters (lower), receivers, converters and antennas for longwave.
- Longwave listening tips for beacon hunters, logging your catches, and equipment.
- Unusual users of the longwave spectrum – navigation systems and military users.
- Monitoring the sounds of nature – Whistlers, Tweeks, Dawn's Chorus and other atmospheric sounds.
- Background information on navigation beacons, time stations, longwave broadcasters and NAVTEX weather broadcasts.
- Transmit and Receiving equipment for the Lower license free experimenter's band.
- Reference section that includes books and periodicals; clubs, groups and organizations; manufacturers and distributors of longwave related products; and useful internet websites.

This is a great book for the beginner who wants an overview of monitoring the longwave spectrum, and for oldtimers looking for a new band to challenge.

Listening to Longwave - The World Below 500 kiloHertz is published by Universal Radio Research. It is perfect bound, with a color cover and has 98 pages.

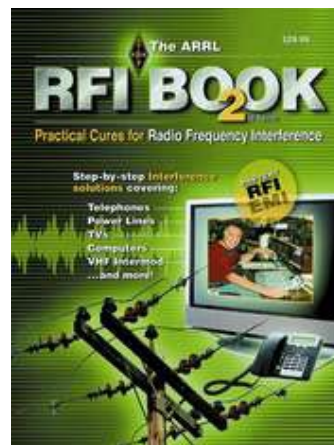
You can order your copy of this excellent beginner's guide from Universal Radio, Inc., 6830 Americana Parkway, Reynoldsburg, OH 43068-4113 (800-431-3939) or on their website at www.universal-radio.com. Order book number 0024, \$6.95 plus shipping.

— Reviewed by Larry Van Horn

ARRL RFI Book

Our high-tech era brings convenience at the expense of radio interference. Power lines, telephones, computers, lighting fixtures, electronic accessories, home appliances, TV sets, radio equipment and other electrically-operated devices are a limitless source of unwanted signals.

The most comprehensive volume devoted to curing radio frequency interference (RFI) problems is unquestionably this second edition of the formidable *RFI Book* from the American Radio Relay League (ARRL).



More than 300 pages of professionally-illustrated articles contain advice and construction details for minimizing interference for virtually any RFI challenge that arises. And, if you're interested in radio direction finding (RFI) to track down that offending signal, there's a chapter on building a variety of RDF antennas as well.

This latest volume contains a reprint of the *FCC Interference Handbook*, a contact list for manufacturers of home electronics equipment, and a resource guide for commercial RFI filters.

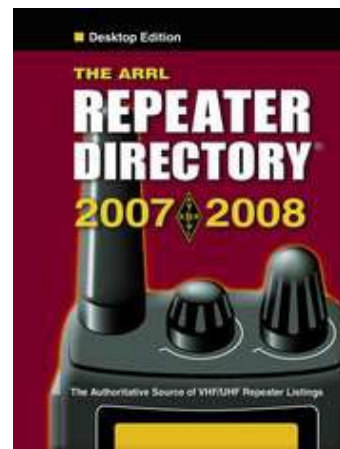
The exhaustive *RFI Book* is available for \$29.95 plus shipping from the ARRL.*

— Reviewed by Bob Grove

Repeater Directory

Some publications from the American Radio Relay League are such stand-bys that we don't fully appreciate the breadth of information they contain until we

review a new edition. Such is the 36th edition of the *ARRL Repeater Directory* for 2007-2008. No, don't yawn! What's ho-hum about the book with the greatest potential of actually getting new hams on the air?



The bulk of the *Repeater Directory* – which comes in a condensed, pocket size or the new, large-print desktop version – is made up of periodically updated listings of active repeaters, along with all the pertinent information to access each repeater. The repeater listings are divided into frequency range (or repeater type, such as APCO 25 or Echolink), then by state regions, for quick look-up.

But that's not all. In plain, practical language, chapters give an invaluable overview of good operating practices, repeater and emergency message handling, band plans, repeater lingo and hints, and the names and addresses of regional frequency coordinators.

As ARRL Chief Executive Officer David Sumner K1ZZ says, “Our service benefits from you actively using your license, and the systems listed herein provide a way for you to do so.”

The large-print directory, available for the first time by popular request, is \$15.95 from the ARRL.*

The traditional pocket-sized version is also available at \$10.95. Or call and ask about the *TravelPlus for Repeaters* CD, which combines the repeater listings in a map-based software which can be used with GPS.

— Reviewed by Rachel Baughn

ARRL Periodicals on CD-ROM

The American Radio Relay League has released their 2006 anthology of their popular journals on a compact, fully searchable CD-ROM. Every word and photo published throughout the year is included for *QST* – the official membership journal of the ARRL; *NCJ* – *National Contest Journal*; and *QEX Forum for Communications Experimenters*.

Using the Adobe Acrobat engine you can search the full text of every article by entering titles, call signs, names – almost any word. You can see every word, photo (including color images), drawing and table in technical and general interest features, columns and product reviews, plus all advertisements. And you can even print what you see, or copy it to other applications. Web links appearing in the article can be used to launch your Web browser to view additional information.



In addition to the features above, ARRL Periodicals on CD-ROM includes source code for software projects and PC board etching patterns. And the 2006 version also includes Section News and ARRL Contest Results – with individual scores and Contest Soapbox.

Minimum System Requirements (Windows): Intel Pentium processor or higher. (Macintosh): PowerPC processor. 128 MB of RAM, 90 MB of available hard-disk space for either system.

The *ARRL Periodicals on CD-ROM* is published by The American Radio Relay League, Inc. and costs \$19.95 plus shipping and handling.*

– Reviewed by Larry Van Horn

Music Radio: A Review

The enjoyment of old time radio (OTR) is not the same as the enjoyment of the DX hobby, but some of us enjoy both interests. The enjoyment of OTR can take the form of remembering the actual good old days of the golden age of radio (about 1930 into the fifties) if one was born soon enough, listening to reruns of some programs on some broadcasting stations, listening to OTR audio streams on the Internet, or listening to and collecting your own OTR product.

Like any hobby, OTR has developed a library of current and prior books about radio programming. Here is one that I have enjoyed,

published in 2005.

The book's complete title is: *Music Radio - The Great Performers and Programs of the 1920s Through Early 1960s*. I met the author, Jim Cox, at an OTR convention in El Segundo, CA, three years ago. Jim is not only a very pleasant man, but he is a prolific author of OTR books. They include books about radio soap operas, crime fighters, audience participation shows, and the fading of the golden age of radio into the early stages of what we know now as broadcast programming.

Music Radio is basically a history of music as heard on American radio. The names of many familiar artists and groups are found in the book, as well as sponsors, dates and times of broadcasts, and the networks carrying the programs. Not only will you find history, some anecdotes, and insider viewpoints in the book, but Jim introduces each subject with his informed and expert analysis.

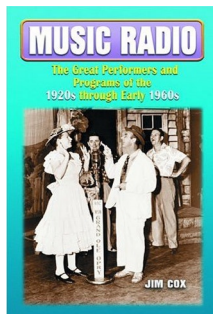
I will list the chapters here so that the variety of musical themes he covers will be better understood: The Bell Telephone Hour; The Big Bands; The Bing Crosby Show; The Chamber Music Society of Lower Basin Street; Cities Service Concerts; The Classics; The Contests; The Disc Jockeys; The Fred Waring Show; Grand Ole Opry; The Horse Operas; The House Bands; The Hummert Musicales; The Kate Smith Show; The Railroad Hour; The Sacred Singers; The Vocalists; The Voice of Firestone; and Your Hit Parade.

Music Radio: The Great Performers and Programs of the 1920s through Early 1960s by Jim Cox is published by McFarland & Company (Box 611, Jefferson, NC 28640; 800-253-2187; www.mcfarlandpub.com). The 380pp. hardcover book costs \$55. However, I will cheerfully loan this book to any AWA member if it not already on loan. Let me know if you are interested in borrowing it, and let our editor know if you want more book reviews. My small radio library includes mostly OTR subjects, although I also have some antique radio histories and price guides.

– Andy Ooms, Pine, AZ; oomspine@msncom

* ARRL books are available from ham radio dealers and on the ARRL website (www.arrl.org). You can also order League publications on their toll-free telephone line 1-888-277-5289 (Outside the US +1-860-594-0355), or via snail mail to ARRL Publication Sales Department, 225 Main Street, Newington, CT 06111-1494 USA.

Books and Equipment for announcement or review should be sent to What's New, c/o Monitoring Times, 7540 Highway 64 West, Brasstown, NC, 28902. Press releases may be faxed to 828-837-2216 or emailed to Rachel Baughn, editor@monitoringtimes.com.



On the Bench continued from page 71

❖ Conclusion

DRM provides exciting listening and DX-ing opportunities. While using a PC may not be convenient, at least we can hear and sample DRM broadcasts now. I encourage shortwave radio hobbyists to try DRM, especially since the shareware DReaM is free, it is possible to receive a 12 kHz audio signal without modifying a receiver, and simply because it is fun.

DRM reception is not always 100 percent. At times the audio will drop out at exactly the wrong time. Or, at times, the audio sounds, to me, tinny, somewhat like cell phone audio. However, these are not deterrents. These simply present challenges.

Why would someone endure, at times, drop outs, tinny audio, the need to download software, the need to use a PC? Because the same person will get out of bed at 2a.m. to chase that elusive DX.

 Kraig Krist, Manassas, VA
 KG4LAC – Amateur radio
 KDX4KWK – All-Band Radio Monitor

- ¹ <http://www.drm.org/consortium/history.php>
- ² <http://www.drm.org>
- ³ http://www.drmrx.org/receiver_mods.html
- ⁴ 455 kHz IF to 12 kHz adapter available from <http://www.sat-schneider.de/DRM/DRM.htm> See Universal DRM - miniature mixer unit
- ⁵ Sourceforge website, location of much shareware including DReaM, <http://drm.sourceforge.net>
- ⁶ Sourceforge DRM compile instructions <http://drm.sourceforge.net/installation.html>
- ⁷ DReaM.exe download site <http://drm.sourceforge.net/forums>
- ⁸ From the Microsoft Developer Network Library KB815065 "A DLL is a library that contains code and data that can be used by more than one program at the same time."
- ⁹ <http://prdownloads.sourceforge.net/net-clipboard/qt-mt230nc.dll?download>
- ¹⁰ <http://www.drm.org/livebroadcast/livebroadcast.php>

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