

# What's NEW

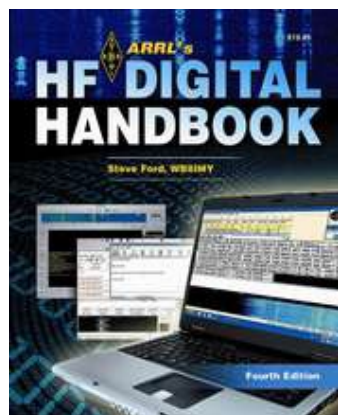
Tell them you saw it in Monitoring Times

## ARRL's HF Digital Handbook

By Steve Ford, WB8IMY

Amateur radio has entered the 21<sup>st</sup> Century. Thanks to advanced technology, ham communications have evolved from crude spark gap communications to digital signal processing and software-defined radios. One of the major technology advancements in recent years has been in digital communications. As microprocessor technology became more sophisticated, so did the new digital modes.

This explosive growth in ham radio digital modes has been well chronicled in articles by Steve Ford in the pages of *QST* magazine. Now Ford has recently compiled a new publication covering this rapidly expanding field of communications.



The ARRL's *HF Digital Handbook* is your guide to understanding the most active HF digital communication modes in use today. There is something here for every radio operator – beginners and more advanced operators alike. And, as this technology rapidly advances, your increased understanding of digital communication techniques will make certain that you stay in the race as new modes and methods unfold.

This fourth edition book includes expanded station setup information; discussion of PSKMail and other varieties of PSK; new content on Olivia, DominoEX, HF digital voice and image modes; and Automatic Link Establishment.

If you want to get in on the digital revolution, then this new

ARRL book is just the ticket to get you started. All it takes is your sound-card-equipped computer and your HF transceiver. ARRL's *HF Digital Handbook* will guide you through the rest!

Topics covered include: Assembling Your HF Digital Station, RTTY, PSK31, PACTOR, Winlink 2000, Clover, Hellschreiber modes, MFSK, G-TOR, MT-63, Throb, Olivia and DominoEX modes, HF Digital Contesting, HF Digital Voice and Image, and ALE in the ham bands.

This 4<sup>th</sup> edition is published by The American Radio Relay League, Inc. Order ISBN 0-87259-103-4 or ARRL book number 1034 for \$19.95.

You can order this new ARRL publication or any other League publication online at [www.arrl.org](http://www.arrl.org), or via their toll free order line at 1-800-277-5289. The snail mail address is ARRL, 225 Main Street, Newington, CT 06111-1494. Be sure to include shipping and handling.

## Sunair / FlexRadio Agreement

Sunair Electronics, LLC., Ocala, Florida, recently announced that they had finalized an agreement with FlexRadio Systems of Austin, Texas, to purchase certain customized state-of-the-art software defined high frequency radios and accessory items for sale to Sunair's government and military customers globally.

"I am very pleased to announce the formalization of our relationship. Sunair and FlexRadio have been working on the relationship for quite sometime. Sunair has chosen a technology solution designed right here in USA, continuing with our 'Made in the USA' philosophy. FlexRadio has been refining their design for more than 4 years. FlexRadio has combined extremely innovative software and graphical interfaces with RF hardware to produce a product which is truly state of the art when it comes to high frequency (HF) radio. This product will help our customers with their critical

national security communications requirements. Sunair foresees this as the beginning of a multi-phased long-term relationship. We enjoy an excellent working relationship with FlexRadio," commented Mark Allen, Sunair's President.

A software defined radio (SDR) is a major departure from traditional designs where all radio frequency functions and processing are accomplished with hardware. In an SDR, many of the processes are accomplished with high speed digital processors, allowing for much simpler hardware designs and allowing maximum flexibility in filtering and user specified functionality. HF radios operate in the frequency range of 2 - 30 MHz and are designed for long range global communications circuits.

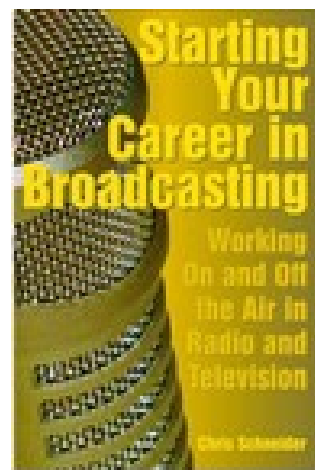
Gerald Youngblood, President of FlexRadio reflected that, "Our strategic partnership with Sunair offers the opportunity to combine Sunair's excellent worldwide marketing, sales, and support network for HF communications with FlexRadio Systems expertise in Software Defined Radio (SDR) technology. SDRs represent the most significant change in communications technology in well over half a century, allowing flexibility and performance not practical with traditional analog approaches. We look forward to a long and productive relationship with Sunair."

You can learn more about radio monitor products from FlexRadio, including the details on their new Flex-5000 HF/6 meter transceiver on their website at [www.flex-radio.com/](http://www.flex-radio.com/).

## Starting Your Career in Broadcasting

By Chris Schneider

For anyone who wants to work in TV or radio, *Starting Your Career in Broadcasting: Working On and Off the Air in Radio and Television* is the bible to starting and building a successful career. In this informative and inspiring guide, today's top broadcasting personalities share how they broke into the business, the often-hilarious mistakes they made along the



way, and how they grew personally and professionally.

Veteran broadcaster Chris Schneider interviews Bob Costas, Chris Berman, Larry King, Jim Lampley, Bob Kingsley, Rene Syler, Troy Aikman, E.D. Hill, station managers, top university and broadcasting school instructors, and others who offer expert advice on making the right choices throughout a career.

Chapters explore:

- Specific on-air and behind-the-scenes jobs
- Academic programs in broadcasting
- How to capitalize on a "big break"
- What news and program directors seek in job candidates
- How an aspiring broadcaster can buy time on the air
- Weathering the ups and downs of a competitive industry
- How professionals of all kinds can host their own talk shows

A special section explains how broadcast ratings are computed and provides tips for dealing with allergies and the common cold in an industry in which the voice is everything. This is the essential book for anyone who has dreams of working in "the biz."

*Starting Your Career in Broadcasting* is published by Allworth Press (6 x 9-inches, 240 pages; ISBN is 978-1-58115-489-4) and retails for \$19.95. This book is available at the publisher's website: [www.allworth.com/Starting-Your-Career-in-Broadcasting\\_p/1-58115-489-5.htm](http://www.allworth.com/Starting-Your-Career-in-Broadcasting_p/1-58115-489-5.htm).

# What's NEW

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## Yaesu FT-950 HF/50 MHz Transceiver

The Yaesu FT-950, the newest radio in the direct lineage of the FTDX-9000 and FT-2000 series radios, has been developed to fit the needs of both casual and serious DX enthusiasts, as well as new HF licensees eagerly seeking to discover the magic of the HF and 50MHz bands. Prospective owners will find that this radio comes in an appropriately-sized desktop package that provides them with loads of easily located controls and features to ensure they enjoy all of the excitement available on the 160 through 6 meter Amateur Radio bands.

The FT-950 is a 160 to 6 meters transceiver, with an output power adjustable in increments from 5 watts to the full 100 watt output SSB/CW/FM and AM - 5 to 25 watts output. It includes a general coverage receiver that covers the 30 kHz to 56 MHz frequency range (continuous).

The sophisticated receiver section utilizes DSP filtering, incorporating features such as variable bandwidth, IF Shift, and pass-band contour tuning. Digital noise reduction and digital auto-notch filtering are also provided, along with a manually-tuned IF notch filter.

On the transmit side, the Yaesu-exclusive three-band parametric microphone equalizer allows precise and flexible adjustment of the wave-form created by your voice and microphone. The amplitude, center frequency, and bandwidth of equalization may be adjusted independently for the low-frequency, mid-range, and high-audio-frequency spectra, and the transmitted bandwidth may

also be adjusted, as well.

Advanced features include direct keyboard frequency entry and band change, speech processor, IF monitor for voice modes, CW pitch control, CW spot switch, full CW QSK, adjustable IF noise blanker, and all-mode squelch. Two TX/RX antenna ports are provided on the rear panel. Two key jacks are provided (one each on the front and rear panels), and they may be configured independently for paddle input or connection to a straight key or computer-driven keying interface. The CW message memory is provided.

Some of the other key features of the FT-950 include:

- High Speed Automatic Antenna Tuner with 100 memories
- Front Panel Proprietary High-visibility Fluorescent Display (VFD)
- Front Panel Block Diagram Display for Function Status
- Optional External Data Management Unit - DMU-2000
- Optional Fully-automatic External RF  $\mu$ -Tuning - RF Mu-Tuning Kit
- Triple-conversion super-heterodyne receiver
- Yaesu 32-bit floating point IF DSP
- Robust Receiver Front End
- Digital PLL for strong-signal-handling capabilities in multi-signal environments.
- Three (3) Factory Installed 1st IF Roofing Filters
- Analog-sounding High-quality Digital SSB Modulation
- Dedicated RTTY/PKT connection jack on the rear panel.

The FT-950 requires 13.8 VDC at 22 amps. This radio comes with the MH-31B8 hand microphone, DC cable, spare fuses and plugs. It measures 14.4 x 4.5 x 12.4 inches and weighs in at 28.7 lbs. The Yaesu FT-950 retails for \$1840.00 and is available at amateur radio dealers nationwide.

## Bearcat BC-95XLT Scanner

The Bearcat BC-95XLT is an affordable 200 channel scanner with many features. It has Uniden's new Close Call™ RF Capture Technology that instantly tunes to signals from nearby transmitters. (You can even screen-out pager frequencies). Frequency coverage is 25-54, 108-174, 406-512, 806-956 MHz (excluding cellular).

There are ten programmable search ranges to help you find un-



listed frequencies in use in your area. Plus there are six preprogrammed service searches: Public Safety, Railroad (by channel), Air, Marine (by channel), CB (by channel), GMR S / FRS (by channel), Weather, News Media, Ham Radio and Special. The priority scan frequently scans the channels you have designated as priority channels. The delay feature helps prevent missed replies during 2-way conversations. The BC-95XLT features easy to use controls and a quality keypad.

The backlit LCD display makes for easy night time operation with Uniden's patented backlight-on-squelch feature that illuminates only when there is channel activity. Operation is from two AA cells providing flexibility in choice of batteries: Alkaline for long life, rechargeable for economy (batteries can be charged while in the scanner). Inside the battery compartment there is a switch for using either two AA NiMH cells or two AA Alkaline cells (the AA cells are not supplied).

The BC-95XLT measures 2-3/4 x 4-1/2 x 1-1/4-inches. The BC95XLT is similar to the BC92XLT, but is blue in color and has a USB computer programming port on the right side of the

radio. (PC cable not included).

The BC95XLT comes with: AD1017 AC adapter (6 VDC +), belt clip, flexible BNC antenna, and English/Spanish Owner's Manual.

### Frequency Range

- 25-30 MHz Amateur Band (10 Meters)
- 30-50 MHz VHF Low Band
- 50- 54 MHz Ham Band (6 Meters)
- 108-137 MHz Aircraft Band
- 137-144 MHz Federal Government
- 144-148 MHz Amateur Band (2 Meters)
- 148-174 MHz VHF High Band
- 406-420 MHz Federal Government
- 420-450 MHz Amateur Band (70 Cm)
- 450-470 MHz UHF Band
- 470-512 MHz UHF "T" Band
- 806-956 800 MHz Band (less cellular)

This scanner is not a trunk tracker or APS025 digital decoding scanner. It retails for \$149.99 and is available from several *Monitoring Times* advertisers.



W5YI Group

## ARRL National Exam Weekends

The ARRL has announced the 2008 dates for their National Exam Weekends. The ARRL sponsored national exam day weekends are held annually on the last full weekend of April and September. The Spring weekend is April 26-27 and the Fall dates are September 27-28, 2008. If you are looking for the latest ham radio exam study materials from the W5YI group and Gordon West, WB6NOA check out their website at [www.w5yi.com](http://www.w5yi.com) or call toll free at 800-669-9594.

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 **Larry Van Horn, [larryvanhorn@monitoringtimes.com](mailto:larryvanhorn@monitoringtimes.com)**