

What's NEW

Tell them you saw it in *Monitoring Times*

ARRL VHF Digital Handbook

Steve Ford, WB8IMY

In the feature section of *Monitoring Times* this month, I profiled ham radio digital modes. But digital modes are not limited to the HF radio spectrum. A lot of us who have been around the bands for many years remember the packet radio craze in the late '80s and early '90s in the VHF/UHF spectrum. Then the Internet became a daily part of life and the amateur radio packet networks sharply declined in activity.

The chatter on the repeaters at that time was that digital radio activity on the VHF/UHF bands was dead.

Nothing could be further from the truth. As the digital mode sound card craze cranked up, it spilled over into the VHF/UHF spectrum as well.

Pioneers such as Joe Taylor, K1JT, have led the way in developing innovative software that let hams conduct digital meteor scatter contacts, and even moonbounce communications with a modest radio station setup. These are just a couple of areas of digital communications that can serve as a jump start to digital communications in the VHF/UHF spectrum.

Now, just in time for our annual amateur radio edition of *MT*, the ARRL has announced the release of their new book – *VHF Digital Handbook* by Steven Ford, WB8IMY.

Without complicated “owners manual” jargon – ARRL's *VHF Digital Handbook* presents the material through a unique how-to approach and friendly, conversational style. Readers will understand how to set up and operate their equipment and software, and make the best use of their VHF digital station. The contents of this new book includes:

Packet Radio Fundamentals – All the basics including Terminal

Node Controllers (TNC), operating commands, and networks (such as DX Packet Cluster).

Automatic Position Reporting System (APRS) – Packet radio has been “repurposed” to create the worldwide APRS network. This wide-flung packet radio network exists to support many ham radio public safety activities. You can track moving objects on maps (other stations, public service vehicles, marathon runners, etc.). Connect your own GPS receiver and transmit your location even as you're moving. Even realtime weather conditions and email message traffic is passed over ham packet networks.

D-STAR – Enjoy high-speed digital voice and data on the growing network of D-STAR repeaters. Developed by the Japanese Amateur Radio League (JARL) and marketed by Icom here in the US.

Digital Meteor Scatter and Moonbounce – Explore weak signal operating using the software masterpiece WSJT by Joe Taylor, K1JT.

APCO-25 – While there isn't an APCO-25 ham transceiver yet (as of press time), that hasn't stopped ham from exploring this digital mode commonly found in the public safety spectrum. Hams have started adapting commercial APCO-25 equipment for amateur radio use.

High Speed Multimedia – Discover how you can set up your own wireless Amateur Radio data network by modifying over-the-counter gear such as routers and access points. It's ham WiFi consumers can only dream about!

Technical Descriptions – In-depth information about AX.25, D-STAR and APCO-25 protocols.

There is a lot of information in this 8-1/2 x 11-1/2-inch soft cover book including digital applications in public service and emergency communications: Packet radio, APRS, Winlink 2000 and more.

This first edition, © 2008 is published by American Radio Relay League, Inc. ISBN: 0-87259-122-0, ARRL publication number 1220 is \$19.95 plus shipping and handling. And as I pointed out in my Ham digital radio feature, I highly recommend you order the ARRL *HF Digital Handbook* (reviewed in the February *MT* *What's New* column). That book is in its fourth edition,

© 2007 and also published by American Radio Relay League, Inc. ISBN: 0-87259-103-4, ARRL publication number 1034 is \$19.95 plus shipping and handling. Order details below.

New ARRL Instructor's Manual

The American Radio Relay League has released a new manual for instructors teaching Technician and General class courses. This new 4th edition now includes course material to teach a General class course.

The ARRL Instructor's Manual is designed for use with the ARRL license manuals below:

The ARRL Ham Radio License Manual - First Edition (ARRL publication number 9639)

The ARRL General Class License Manual - Sixth Edition (ARRL publication number 9965)

This new publication includes: Lesson plans for Technician and General Class courses, practice test, and a CD-ROM with classroom graphics and other visual resources.

There is an interesting chapter written by Peter Kemp, KZ1Z – *The Teacher's Guide to Amateur Radio Instruction*, that includes such topics such as class organization, teacher qualities, classroom management, a guide to learning styles, and much more.

The *ARRL Instructors Manual* is a 8-1/2 x 11 1/2-inch soft cover book with CD-ROM. Fourth edition, © 2008 is published by American Radio Relay League, Inc. ISBN: 0-87259-126-3, ARRL publication number 1263 is \$19.95 plus shipping and handling.

ARRL's Hands-on Radio Experiments

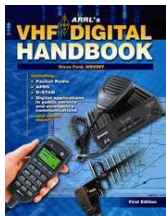
H. Ward Silver, NØAX
Hamradio is where “hands-on” lives on and this new book from the ARRL epitomizes that mantra. This book has 61 short electronics

experiments, designed to increase the reader's understanding of basic radio fundamentals, components, circuits and design. Areas covered include: Radio and electronic fundamentals; semiconductor basics; building block circuits; power supplies; filters; oscillators and buffers; transmission lines and impedance matching, workshop and design techniques; and it includes a complete parts list.

These experiments, devised by H. Ward Silver, NØAX, first appeared in *QST* magazine's *Hands-On Radio* column from 2003-2008. The collection covers a wealth of topics designed to educate today's radio experimenters, and inspire others who want to learn what makes their radios work. Even seasoned experts will encounter new approaches to practical methods, new explanations for familiar topics and new ideas that will enhance your understanding of the radio art. Step-by-step, Silver expertly leads you through each experiment and you'll make discoveries along the way.

First edition, © 2008 is published by American Radio Relay League, Inc. ISBN: 0-87259-125-5, ARRL publication number 1255 is \$19.95 plus shipping and handling.

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