

# What's NEW

Tell them you saw it in Monitoring Times

## Domestic Broadcast Survey

September begins the DX season for active HF radio listeners. High static levels are subsiding, and the lure of hearing distant shortwave stations in the lower shortwave broadcast frequencies has the die-hards returning to the dials.

The Danish Shortwave Listener's Club International, a radio club of experienced international DXers, has released their 11th annual *Domestic Broadcasting Survey* to coincide with the start of the DX season. Edited by Anker Petersen, Chairman, this excellent annual publication is divided into four parts:

Part 1 begins with the Tropical Band Survey, covering all active broadcasting stations, listed by frequency from 2300-5700 kHz.

Part 2 includes Domestic stations on international shortwave bands above 5700 kHz and broadcasting to a domestic audience.

Part 3 lists all Active Clandestine shortwave stations with schedules and identifications.

Part 4 is a compilation of frequencies between 2 and 30 MHz which have not been reported by the listening shortwave audience during the past five years, but which may possibly return.

Parts 1-3 also list the station identification, slogans if known, broadcast schedules, and any parallel frequencies heard.

The *DBS* is based upon numerous sources from hobbyists, DX bulletins, and the current A09 frequency schedules when available. Throughout the year, hobbyists monitor thousands of frequencies to ensure the frequencies are listed accurately. In the listings, the right-hand column is called the "Last Log," listing the last month and year the station was heard prior to the *DBS* deadline.

All buyers of the *DBS-11* will receive a username and password, giving them access to the monthly updates on the tropical bands. These updates are published under the title *Tropical Monitor* and are posted on the club website at [www.dswci.org](http://www.dswci.org)

The new 35-page 11<sup>th</sup> edition is available by email in the Adobe PDF format (about 452 kB). The electronic edition costs: DKK 40,00 or USD 8.00 or Euro 5,00 or GBP 5,00 or SEK 60,00 or 5 IRCs. A limited number of copies are available in printed format. The printed edition costs: DK 80,00 or USD 16.00 or EUR 10,00 or GBP 10,00 or SEK 120,00 or 9 IRCs.

Funds should be addressed to: Bent Nielsen-Treasurer, Egekrogen 14, DK 3500 Vaerloese, Denmark. Payments by cash notes are accepted, but checks and postal money orders are not. DSCWI bank is Danske Bank, 2-12 Holmens Kanal, DK-1092 Copenhagen K. If you are using Pay-Pal or a Euro as national currency, please contact Andreas Schmid, Le-

renchenweg 4, D-97717 Euerdorf, Germany.

The *Domestic Broadcast Survey 11<sup>th</sup> edition* is an excellent source for shortwave broadcast hobbyists who want to follow the changing world of shortwave radio. This edition, as well as previous ones, will become a permanent part of my reference library and the current edition is always within easy reach as I tune the shortwave spectrum. I highly recommend the *DBS* to DXers seeking the "extra edge" when it comes to listening to domestic shortwave broadcasts.

— Review by Gayle Van Horn, W4GVH.

## HAMCALC v110 Now Available

HAMCALC "Painless Math for Radio Amateurs" Version 110 was released June 22, 2009. It contains over 350 programs — a far cry from version 1, released in 1993, which contained 12 programs!

HAMCALC is free from R.F. engineering software by George Murphy, VE3ERP, and it is used worldwide as a design, reference, and teaching tool by radio amateurs, professionals, and educators since its introduction in 1993.



Most of the programs can be run in either Metric or Imperial/USA units of measure. Hamcalc contains a lot of information not readily found in current popular handbooks and literature. The program is easy to install, use, and understand by non-technical hobbyists.

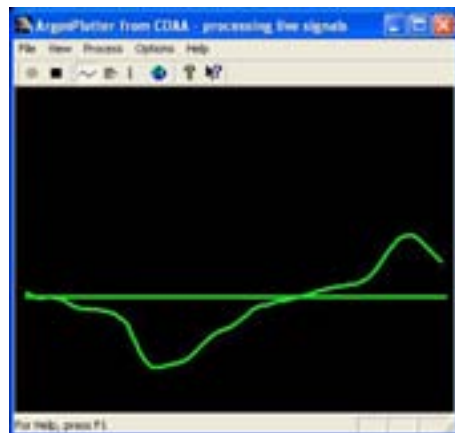
A hard drive is required for the installation of HAMCALC. Once installed, it can be run in WINDOWS or MS-DOS. HAMCALC is written in GWBASIC, but does not require MS-DOS to run. GWBASIC.exe is a stand-alone file that runs in WINDOWS and MS-DOS operating systems.

HAMCALC is no longer available on CD, but authorized copies can be downloaded for free (1.5Mb zip file) from the internet at [www.cq-amateur-radio.com](http://www.cq-amateur-radio.com). Click on HAMCALC at the bottom of the left side of the *CQ* magazine home page.

## Argos3Plotter

With the advent of more powerful PCs now available to radio hobbyists, digital decoding software has made a gradual shift from hardware based decoders to software decoding packages that use the computer sound card.

One of the best kept secrets on the web for digital decoding software is the suite of software packages available from the COAA (Centro de Observação Astronómica no Algarve) in Portugal. The author of these programs is Bev



M. Ewen-Smith.

Bev has released a brand new program for decoding the Argos-3 satellite downlink digital streams.

The Argos-3 system collects terrestrial data from remote locations, including automatic weather stations, drifting oceanographic buoys, and wildlife tracking. You can use a simple UHF radio receiver (scanner) tuned to the 459.9875MHz downlink frequency to pick up the strong signals from these satellites.

With the new Argos3Plotter software you can decode the downlink telemetry and find out the positions of the satellites, their operational status, and monitor the command messages sent to the remote data collection platforms.

Argos3Plotter decodes transmissions from the Argos-3 systems on board the NOAA and Metop satellites using the sound card in your PC. You need a suitable UHF band radio receiver tuned to the Argos-3 telemetry channel. The program decodes the received digital data and displays and logs the messages.

There are five modes available within the Argos3Plotter software:

### Signal mode -

In Signal Mode, Argos3Plotter displays the raw digital signals on your PC screen in a diagnostic display which helps you to set up the system and adjust the receiver.

### Message mode -

In Message Mode, Argos3Plotter displays each decoded message in plain language on your PC screen. It displays the ephemerides, the status reports, the time codes, the downlink coded messages, and the acknowledgements to the uplink messages from the data collection platforms.

### Satellite mode -

In Satellite Mode, Argos3Plotter displays the current location, azimuth, elevation, range, and Doppler shift of those satellites for which an ephemeris message has been received.

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#### Chart mode -

In Chart Mode, Argos3Plotter charts the current location those satellites for which an ephemeris message has been received.

#### Message log -

Argos3Plotter stores all messages received and decoded in a text file for later analysis and review. The log file is time stamped.

Computer requirements to run Argos3Plotter are a Pentium level PC running Win95/98/Me/2k/XP/Vista with compatible sound card, a UHF band radio receiver with NFM mode. The receiver must be tuned to the Argos telemetry channel 459.9875 MHz. The receiver audio output must be connected to the Line-In connector on your PC. Because Argos downlink messages are transmitted on UHF, the satellites must be within line of sight of the receiver in order for the signals to be received.

The Argos3Plotter program can be downloaded freely and comes in a self-installing exe file. The file size is a modest 400 kb. Version 1.8 is available now and can be used for 21 days. After that time it must be registered. Registration is quick via an on-line secure website. Argos3Plotter costs only Euro 25 (plus VAT for EU residents) for personal use. I strongly recommend that you ensure that Argos3Plotter performs to your satisfaction before registering.

Some of the other software packages available from COAA include: Ship Plotter (VHF AIS decoder); Plane Plotter (works with ACARS, ADS-B, and HFDDL decoding software, not included); Train Plotter (UIC protocol); DSCdecoder (Digital Selective Calling and DGPS beacon decoding); NDB-finder (NDB decoder); EpirbPlotter; Orbcomm satellite telemetry decoder; SondeMonitor (radiosonde balloon telemetry decoder); Combi-Plotter (combines the ShipPlotter, PlanePlotter, OrbcommPlotter and SondeMonitor decoders into one package); and several other interesting software packages.

You can get more details on all these software packages, including registration information at [www.coaa.co.uk/software\\_signals.htm](http://www.coaa.co.uk/software_signals.htm).

## Multipsk to add Mil-Std 188-110A

Fans of Multipsk will be happy to know that Patrick, F6CTE, developer of the program, is in the process of adding the Mil-Std-188-110A serial modem mode to the popular decoding software. This mode will become part of the professional package and not the freeware version.

Mil-Std 188-110a is a mode commonly used by various military services, including the US Department of Defense services, US Coast

Guard, the Chinese military, Mexican Navy, Swedish Navy, the Australian ADF-HFCS, Austria Navy, Swiss diplo nets, Georgia military, Venezuela Army/Navy, and the Spanish Navy to name a few. Since the Skysweep software is going away in the near future, this is very welcome news. Patrick's program continues to evolve and is very reasonably priced to get the professional modes.

You can learn more about the Multipsk family of software at

[http://f6cte.free.fr/index\\_anglais.htm](http://f6cte.free.fr/index_anglais.htm)

## VoIP: Internet Linking for Radio Amateurs, 2nd Edition

Through a technique called Internet linking, ham radio operators are harnessing the immediacy and portability of radio communication to the global reach of the Internet. Today's radio amateurs are using the Internet as the relay between their radio base stations, handhelds and mobile transceivers for long-distance communication, spanning thousands of miles.

The ARRL has released a second edition of *VoIP: Internet Linking for Radio Amateurs*, the complete guide to several of the most widely used Voice over Internet Protocol (VoIP) systems used by today's radio amateurs, with particular attention to EchoLink and the Internet Radio Linking Project (IRLP).

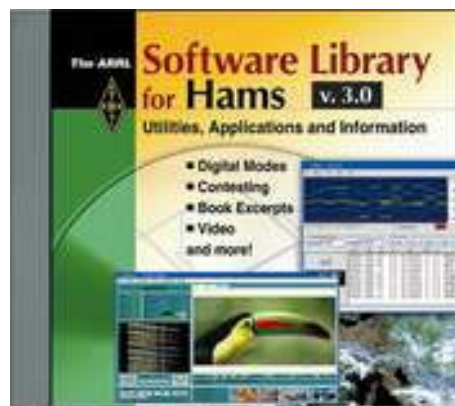
The book is designed for beginners, as well as those hams who are long-time VoIP users. If you're new to VoIP, you'll discover information on how to get started setting up and using these systems. The more advanced ham will find plenty of technical "meat" to dig deeper into VoIP applications and discover how they actually work.

Contents in this new edition include chapters on:

- Connecting the World
- Using a VoIP Link
- Conference Servers, Reflectors and Nets
- Other Linking Systems
- Setting Up Your Own Node
- Digital Audio and the internet
- Under the Hood: EchoLink
- Under the Hood: IRLP
- Legal Issues in Linking
- Web Resources & Glossary

Two new chapters have been added to this edition. Chapter 9, titled "Asterisk and app\_rpt," covers the new Asterisk PBS software and its use, set-up, and hardware to run it. Chapter 10 on "Remote Control Techniques" covers the two basic operations that are allowed in FCC Part 97 rules governing amateur radio.

Written by EchoLink creator Jonathan Taylor, K1RFD, *VoIP: Internet Linking for Radio Amateurs*, ARRL product 1431, is available for \$21.95 plus shipping from the ARRL Web site and amateur radio stores.



## The ARRL Software Library for Hams v3.0

If you are into computers and using them in the ham shack, you will certainly appreciate a new CD-ROM from the ARRL. The ARRL Software Library for Hams 3.0 provides the user quick access to utilities, applications and information.

Some of the contents on this new CD-ROM include:

- Book excerpts and videos
- Contesting software, including N1MM Logger
- DX Bulletin Reader
- Weather satellite software
- HF digital software for PSK31, MFSK16, MT63, RTTY and more
- WSJT software for meteor scatter and moon-bounce and more

The content on this CD-ROM is divided into folders which contain software for a variety of ham radio applications. You'll also find programs for APRS, packet radio, and satellite tracking. Plus, handy software tools for calculating transmission line loss, creating custom DSP audio filters, and more. Bonus files include ARRL screensavers, audio samples, video files, and PowerPoint presentations.

Minimum system requirements to run the CD include a 400 MHz Pentium PC with 256 MBytes of RAM and Microsoft® Windows® XP or Windows Vista. (Note: The included CWDecoder application will not function under 64-bit versions of Windows XP, or on Windows Vista.). A sound card is required to listen to sound samples or use the sound-card-based digital communication software. Includes the free Microsoft® PowerPoint® viewer. It should be noted that the ARRL does not support the software in this collection. For support questions you will have to contact the program authors directly.

This new version on CD-ROM, ARRL product 1424, sells for \$19.95 plus shipping.

You can order all ARRL publications from the ARRL, 225 Main Street, Newington, CT 06111-1494. Order Hotline 1-888-277-5289 (toll-free US only), Monday through Friday, 8a.m. to 8p.m. Eastern Time. You can also order online at [www.arrl.org](http://www.arrl.org).

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