



Squelch Tales



Newsletter from the Merrymeeting Amateur Radio Assoc. for October 2002

2 show & 2 pass

The MARA sponsored VE session on September 21st at the Bath Public Library had a very light turnout. Only two folks arrived to take the Technician exam. The good news was that both candidates passed with high scores. The five VEs (3 from the MARA) divided the tests between themselves and within a half-hour every one was finished and heading out of the library.

Fox Hunting Program at Sept. meeting a big hit

The first MARA meeting held at the Oak Hill ARLC took place on evening of September 26. Even though there was a light turnout the program presented by Paul & Linda Towne on Fox Hunting (DFing or T-Hunting) was a whopping success with lots of visual aids, a box full of DFing toys and a 20-minute video. Paul, with able

coaching by Linda did a great job with an easy to understand and very interesting program. The video made by Paul and members of their hometown ham club in Connecticut was professionally done, a real keeper.

The second 2-Meter repeater receiver and controller cabinet was showed off with Bill Messier, K1MNW gave a short tutorial on FM receiver sensitivity measurements such as SINAD and receiver quieting of FM receivers using his station monitor.

The meeting was closed at 8:30 so everyone could get to his or her cars before the rain got heavy.

Sorry we did not see more of you at the meeting but we hope that participation will increase over the next several months.

Ham Events left in 2002

VE test sessions

OCTOBER:

15 Tue 6:30pm -

Presque Isle, NMTC

Christie Bldg. Rm 113,
WA1YNZ Wilburn Scott
455-8333

19 Sat 10:00am -

Winslow Elementry School AE1Q Don Smith
495-3891

19 Sat 9:00am -

Rockland, Knox County Courthouse, W1RU Dick Baldwin 529-5781

NOVEMBER:

15 Fri 6:30pm - **Saco Middle School, AA1CZ**
Albert Noble 642-8830

16 Sat 9:00am -

Bangor Community Ctr.-Davis Rd., K1AG
Bill Sullivan 947-4051

16 Sat 9:00am - **South Portland, Am.Leg. Post** 413 Broadway, WZ1N
John Bergeron 799.3687

20 Wed 6:00pm - **Togus VA Center Bldg. 210, AE1Q Don Smith** 495-3891

DECEMBER:

7 Sat 10:30am - **Bath Public Library,** Washington St. N1WC
Wes Clement 729-8563
(exam)

Other Ham Events

October 4-5 =

Hosstraders, Hopkinton, NH, Hopkinton Fairground (exams)

KS1R/R location and antenna change atop hill

Several weeks ago Bill Messier, K1MNW, Oak Hill site manager, offered the MARA a 140 to 150 MHz 4-pole antenna originally used in DOD service. Since the 4-pole had lower gain (6 dB) and a radiation pattern with more down-tilt coverage than the MARA Station Master the tech committee thought that giving it a try from the ARLC tower may improve coverage in the Bath-Brunswick area.

Thanks to Don Dophine, WD1F (ex N1PAA) offered his climbing skills, the 4-pole antenna and associated transmission line were removed from one tower and a week later reinstalled atop on the ARLC tower. When the antenna was installed it was noted that there was an intermittent in the antenna's transmission line. Donnie lowered the antenna and Bill made repairs. On the evening of September 24, Donnie and Bill got the 4-pole reinstalled.

On Saturday September 28th Bruce WIZE and

Bill K1MNW moved the repeater from the commercial tower over to the ARLC building and made up new pigtail jumpers to hook everything back up. Before firing up the repeater Bill got out his station monitor and did a spectrum analysis of the Kendecom repeater receiver. It was noted that two problems existed. The first noted was the receiver's front end RF pre-amp was going into oscillation in the 2-meter band within a few kHz of the input frequency. As the front-end resonator(s) were tuned the oscillation could be moved up and down the band. It is most likely this was not helping the receivers front end performance.

The second problem was with the local paging transmitter. With its signals notched down into the noise level of our receiver there it was still being de desensed. The spectrum analyzer pointed to the 152.6 MHz paging transmitter. When the transmitter was transmitting it places broad-spectrum noise throughout the 147 MHz portion of the 2-meter band. This noise was strong enough to interfere

with weak and moderate signals on 147.81 MHz.

Bill, contacted the paging company the following Monday a comm-tech from the pager company come to the hill and made repairs to their transmitter. The paging transmitter got a nice TxRx pass cavity and that eliminated the hiss and desense problem, freeing up the receiver to hear signals on 147.81.

ACS-Kendecom was contacted about the problem with front-end oscillation. They knew exactly what the problem was and how to fix it. A wire-wound RF choke coil feeding the RF amp stage was the offender and if we spread it out a bit that would correct the problem and it did.

After the oscillation was corrected Bill ran receiver sensitivity tests with the 10db pre-amp in line and here are the results:

12dB SINAD = 0.1 uV

20dB quieting = 0.2 uV

Needless to say the receiver is now about as good as it gets.

2-way Coverage tests were made with hams in various locations and results showed a dramatic improvement over the last several months.

The process of getting both repeaters up and running, with good performance in a very heavy RF environment is a slow process. Like most good things, it takes time to get it right and install good engineering practice into the system. As each one of these projects get completed, members of your MARA can get other systems running such as ARPS node packet nodes, ATV and other projects of interest to hams in the area.

The Tech committee wants to thank all of you for your patience in this sometimes tedious relocation process.

Club kitty getting light

Keeper of the shekels, Loren, W1LHD indicates that the Associations coffers are getting low with total funds in the bank at about \$400. We have spent funds for the repeater move and continue to pay \$27+ a month for telephone service. We need to explore ways of building the treasury back up.

If you know you have not paid your dues in over a year, most likely

you are overdue. If you have a good idea on a fund-raiser (i.e., yard sale, raffle, etc.), pass it along.

If we drop much lower in available funds we may have to cut expenses by dropping autopatch service on the repeater. We hope we do not have to do that because it is a handy communications service for members and helps support our ARES activities.

News From Newington

RADIO RULES: UPDATE ON NTIA VS. PROPOSED 5 MHz HAM BAND

Some good news concerning the National Telecommunications and Information.

Administration opposition to a new Amateur service allocation at 5 MHz. This from ARRL President Jim Haynie, W5JBP, and General Counsel Chris Imlay, W3KD who say that they are now optimistic about reaching a resolution to issues that could otherwise block plans for the band.

The two met with representatives of the government agency to

discuss the NTIA concerns. Haynie says that they came away with a feeling that the NTIA was willing to work with the ARRL to resolve concerns. Until surprise opposition surfaced the FCC appeared to have put ARRL's request for a new, domestic-only, secondary amateur allocation at 60 meters on the political fast track. (ARRL Bulletin)



Are you ready to help?

***Next Meeting
of the MARA
will be 7:00
PM.
Thursday
October 24th at
the Oak Hill,
Brunswick
Amateur Radio
Learning
Center***



*177 Sabino Road, West Bath, ME
04530-9503*