MARA Squelch Tales
Newsletter from the Merrymeeting Amateur Radio Association for July 2003

1,290 MHz Coverage tests render positive results

June 2nd Oak Hill: Bill Messier, K1MNW at his QTH on Oak Hill using 10 Watts on 1294.5 FM and a Station Master type collinear antenna at 50 feet was able to have a continuous QSO with Don, WD1F/mobile using a 1-watt HT into an 8 dB mag-mount antenna all the way from Witch Spring Hill in Bath to Biddeford!

On June 3rd, Bruce, W1ZE using his new 10-watt TM-541A and a home brew 1/4 wave antenna was able to communicate with Bill, on the hill, all the way from the Sagadahoc Bridge in Bath to Big Al's in Wiscasset.

W1ZE's roll-your-own 1.2 GHz GP antenna

Two days later Bruce headed to Lewiston and used the 8 dB mag-mount. Results were not as impressive as the previous two runs because the terrain between Topsham and Lewiston does not lend itself to continuous high ground line of sight communications. However, there were spots in Lisbon Falls, and the hilltop in Lewiston that made the trip to Oak Hill.

As previously reported, Bill K1MNW is building Maine's first 1.2 Gig repeater. Plans are to install the 1280 MHz antenna(s) on the 85-foot tower atop Oak Hill. As soon as the 1-5/8 inch hard-line is run, the repeater will be moved to Bill's 250 foot tower (about 450 feet above average terrain)! That should provide wide area coverage. **Microwaves are alive and well on mid coast Maine!**

Bangor Hamfest good for MARA treasury

On June 7th Bill (K1MNW) and Bruce (W1ZE) in his truck and Loren (W1LHD) in his truck headed up I-95 to Herman High School and the Bangor Hamfest and Flea market. Bruce's pick-up was filled with ham radio treasures that were donated to the Association for use or to raise funds.

As the trio pulled up into a parking space to set up a tail gating a small crowd gathered around the truck to check out the goodies. Before the card-tables were set-up three offers were on the table. One was the Ten Tec Century-21, donated by Loren that languished on the clubs auction site for some time and posted in the newsletter, never made the card table. "SOLD" was the word of the day. Within three hours $147 was collected for the club coffers. We only had to bring home a few pieces. However, Bill found a few treasures he just had to have. We loaded

some free-bee computer boards an 11 GHz satellite transmitter and a Hy-Gain long boom 2-meter yagi back on the truck.

The weather was great, the Hamfest attendance was better than last year and all the remarks about the event were positive. About noon the trio headed out. Loren off to reserve a camping space for the next weekend with Bruce and Bill heading over to Miller's Buffet in Bangor to attend the Pine Tree Chapter QCWA meeting-lunch and load up on the all you can eat goodies.

There are several more Hamfests this summer and fall in Maine and your MARA hopes you find the time to attend one or more and support the States ham radio clubs.

KS1R team does VHF QSO Party

Oak Hill, Brunswick: The weekend of June 14th and 15th had MARA VHF/UHF enthusiasts Bill Woodhead, N1KAT, Bill Messier, K1MNW and Bruce Randall, W1ZE set up a contest station at the QTH of Bill Messier on Oak Hill. Yagis for 50, 144, 222 and 432 MHz were installed on push-up masts along house deck with coax and rotor cables snaking into Bill's kitchen table. From that location the yagies had a clear shot down Casco Bay and down the New England coast.

By the time all the equipment and antennas were hooked up the 1800z start time was passed and about 1820 Bruce turned on his IC-736 at 50.125 MHz and the band was full of signals. He wasted no time putting a few of the loud ones in the logbook. By that time Bill Woodhead had his Yaesu multi-mode fired up on 144.2 MHz and hearing stations down the coast and jumped into the fray.

Band conditions for the QSO Party were not all that great but with 6 meters experiencing some E-skip on Saturday afternoon the KS1R team managed to get a over 50 QSOs with stations in grid-squares below the Mason-Dixon line to get those needed multipliers. Bill Woodhead managed to get a fair number of QSOs on 2-meters through 432 MHz with Bill Messier snagged several QSOs on 1296 MHz.

The contest team was in hopes that there would be more interest in the event but there was only one visitor through the 2-day event. There is another contest in the fall and maybe interest will increase.

News from Newington

60-METER RULES ADD NEW RECORD-KEEPING REQUIREMENT

When the five new 60-meter channels become available to US Amateur Radio operators at midnight (12 AM) local time on July 3, the rules will impose a new record-keeping requirement for hams. The requirement applies only to those using *something other than a simple half-wave dipole* for an antenna on the 5-MHz allocation.

According to §97.303(s), a half-wave dipole on the 5 MHz allocation will be presumed to have a gain of 0 dBd. "Licensees using other antennas must maintain in their station records either manufacturer data on the antenna gain or calculations of the antenna gain," the newest addition to the FCC's Amateur Service rules says.

Because the new rules also require hams to run no more than 50 W effective radiated power (ERP) on the new channels, the choice of antenna becomes

an important compliance factor. The FCC rules stipulate, "For the purpose of computing ERP, the transmitter PEP will be multiplied with [sic] the antenna gain relative to a dipole or the equivalent calculation in decibels."

If you use a half-wave dipole--about 87 feet 3 inches for the "middle" channel according to the formula--setting your transmitter's power output power at up to 50 W peak envelope power (PEP) should ensure compliance.

Under no circumstances may amateurs on 5 MHz radiate more than 50 W ERP in any direction, so those choosing to employ gain antennas will have to "do the math" and calculate their ERP. They also will have to keep a record of such antenna gain calculations on file. This might include documentation such as output from a computer-modeling program for a home-brew antenna design. For example, an amateur using an array for 5 MHz exhibiting a calculated or modeled gain of 3 dB would have to cut power to 25 W PEP to comply with the new rules.

Operating on 60 meters is the subject of the July 2003 QST "It Seems to Us….." editorial http://www.arrl.org/news/features/2003/07/01/1/ by ARRL CEO David Sumner, K1ZZ. "If we demonstrate that we can use [the 60-meter channels] responsibly, cooperatively and in the public interest, there is no reason we cannot seek expanded access at an appropriate time," Sumner wrote. "If your personal operating practices are inconsistent with that, please do yourself and everyone else a favor and confine your operating to the traditional bands."

The FCC Report and Order in ET Docket 02-98 is available on the FCC's Website <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-105A1.doc>.

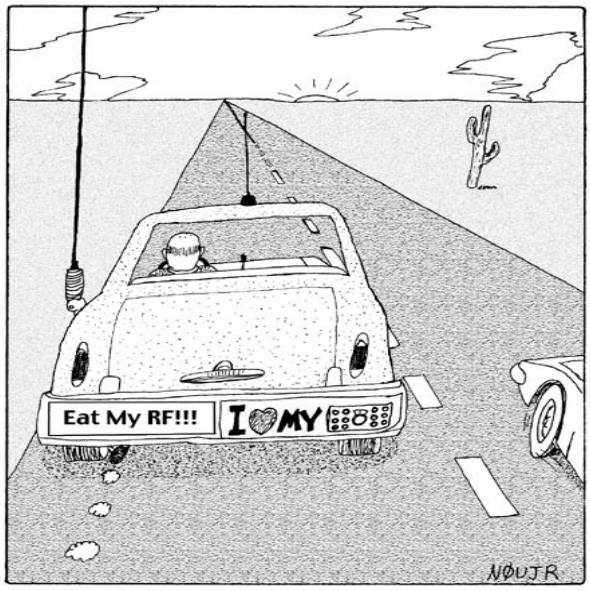
The ARRL has posted a list of frequently asked questions concerning 5-MHz operation on the ARRL Web site <http://www.arrl.org/FandES/field/regulations/faq.html#sixty>

Update from the Packet Guru

From: "KB6YNO"

Well, it's been a couple of months now and the KS1R packet system has been up and operational. You will find connectivity to Mt. Washington, NH, down to Cape Cod and nightly windows to the Canadian Maritimes. The station is located in Phippsburg at the home of WD1F. You will find a Winlink 2000 e-mail node (KS1R), an experimental NetROM node (KS1R-1) and a digipeater (KS1R). Check in sometime and give your APRS system something else to do.

73 de ***Eric***, KB6YNO/1



QCWA members with an attitude...