



Squelch Tales



Newsletter from the Merrymeeting Amateur Radio Assoc. for April 2004

Minutes of February 26th MARA Meeting

By Abe, KC1W

Call to Order:

The October Meeting of the Merry Meeting Amateur Radio Association was called to order at 7:33pm by our President Donnie/WD1F at Mid Coast Hospital. With the ink on their checks barely dry, Donnie/WD1F recognized MARA's two newest members Eric/KB1HYV and Dave/KB1FGG.

Attendees:

MARA Members:

Abe/KC1W, Donnie/WD1F, Louise/KB1EF, Bob/N1GWE, Bruce/W1ZE, Brian/AA1WI, Allan/WA1SCS, Eric/KB1HYV, Lee/K5LWT, Mark/N1JIM, Dave/KB1FGG and Devin.

Treasurer's Report:

Bob/N1GWE reports our current balance is: \$553.47

Technical Committee:

Bruce/W1ZE: The glitch in the .21 repeater turned out to be a solder connection, it has been repaired and the machine is operating well.

Work on the 1200 MHz machine continues. The exciter is completed and the amplifier is being worked on. As part of upgrades there may be a link between either 440 MHz and 1200 MHz or 6 meters, depending on final location of the equipment. Also there will be requests for working

parties to help with new installs as the weather improves.

Donnie/WD1F: The new .21 controller is running well, all that remains is programming the autodials and voice IDs and Mark/N1JIM will be completing that.

ATV: Bill Messier/K1MNV continues work on the project and information will be passed as things progress.

Activities:

Lee/N1HOC was unable to attend the meeting however, the only event currently scheduled is the MS Walk for Brunswick is scheduled for April 18th, 2004. More information will follow as the date approaches.

Old Business:

1. Brian/AA1WI: Provided additional information regarding AMSAT, including uplink/downlinks and modes. The next satellite to be launched is the Eagle, and an estimated \$10,000.00 will be needed to complete the project. AMSAT is about half way there and individuals are encouraged to donate to the fund to make this happen.

MARA's 25th Anniversary: Coming up next year and the item will stay on the agenda for discussion as our birthday approaches.

New Business:

1. BPL: Bruce/W1ZE reported that the amateur clubs in Maine were getting

together to donate as much as possible to the ARRL for the defense against BPL. It is estimated with BPL hams would be subjected to an S7-S9 noise level all the time on the HF bands. Additionally, as part of BPL there is an effort to amend Part 15 and increase permissible power levels from 100mw to 300mw for unlicensed devices. This technology has been banned in Japan and Australia as causing too much interference and the Department of Homeland Security is reviewing the issue for interference to emergency HF frequencies.

Mark/N1JIM made a motion, seconded by Bob/N1GWE to donate \$100.00 from the MARA Treasury to the ARRL to support efforts against BPL. The motion was unanimously approved. Following the vote several of the MARA members present added to the donation. Bruce/W1ZE will be forwarding the total MARA donation to ARRL.

2. Meeting time for MARA monthly meeting: Due to scheduling at the previous meeting location, the time for the monthly MARA meeting had been moved from its original time of 7:00pm (that's 1900 for all you former military types) to 7:30pm. Members have questioned whether or not the time could be returned to the earlier

time. Don/WD1F motioned and Mark/N1JIM seconded, that the monthly meeting of MARA be changed to 7:00pm. The motion unanimously passed. Allan/WA1SCS will confirm with MidCoast Hospital that the earlier start time will not conflict with any of their activities in the conference room.

3. MARA Field Day: The last full weekend in June and MARA will participate again this year. Mark/N1JIM raised the question of moving the MARA location to a more visible site such as Topsham Fair Mall to generate more interest from the general public. A discussion followed regarding other possible sites, MARA doing a split field day with a station in a more visible location for several hours, the availability of facilities through the night at the other locations, and the possibility of a special event station at Bath Heritage Days or the Topsham Fair to bring attention to amateur radio. The possibility of additional club outings was also brought up. Discussion on this topic was lively and will continue at future meetings. All members of MARA are encouraged to bring their ideas.

4. The Maine Emergency Communicator: The new quarterly newsletter from our Maine SEC, Bryce/K1GAX, was introduced by Don/WD1F. There is a link to the Maine ARES site from the MARA web site to access the newsletters. This was a perfect lead in to the program for the evening.

Program:

DR Allan Kuong, DO, EMT-P, WA1SCS, and tonight as the Sagadahoc County Emergency Coordinator for ARES brought the attending members up to date on local ARES happenings. Allan meets regularly with our AEC's, Bruce/W1ZE and Lee/N1HOC, and the Bryce/K1GAX the Maine SEC. Their next meeting is Tuesday, March 2nd and the membership will be kept up to date on not only this meeting's outcome but also information from the LEPC meetings.

Allan/WA1SCS highly recommends all members take the ARRL Emergency Communications courses. In the works are plans to get more involved with Cumberland County ARES(CARES) and the possibility of conducting our own emergency drills. Allan/WA1SCS is also working on getting a local workshop/seminar together for local members.

Allan/WA1SCS then presented certificates to Bruce/W1ZE and Lee/N1HOC, for their hard work as AEC's. The recognition is well deserved as both put in a significant amount of time as volunteers for the organization.

Next Meeting:

The next meeting of the MerryMeeting Amateur Radio Association will be at the Mid Coast Hospital, on March 25th, 2004 at 7:00pm unless notified otherwise by email. We will meet in the conference room next to the cafeteria.

Adjournment:

At 8:25pm Bruce/W1ZE made a motion, seconded by Louise/KB1IEF to adjourn the meeting.

MAINE HAM EVENTS FOR 2004

**April 17 Greater
Portland Electronics
Fleamarket**

Stewart Morrill
American Legion Post
#35 413 Broadway,
South Portland ME
(exams) Bryce
Rumery, K1GAX
(k1gax@juno.com)
207-799-1116)

**June 5 Bangor
Hamfest,** Hermon
High School (exams)

**July 10 Union
Hamfest,** at the
Thompson Center
corner of routes 131
and 17 in Union.
(exams)

**Aug 14 St. Albans
Hamfest,** Snow
Devil's Field (exam on
site)

**Sep 11 Windsor
Hamfest,** Windsor
Fairground(exams)

**Are you
working on
that license
upgrade yet?**



Sagadahoc ARES holds steering committee meeting at Midcoast

The morning of March 2nd had five members of the MARA meeting at Midcoast Hospital for the quarterly local ARES steering committee. In attendance were Sagadahoc Co. EC Dr. Al Kuong/WA1SCS, Sag. Co. AESs Bruce Randall/W1ZE and Lee Tribou/N1HOC, MARA President Don Dauphin /WD1F, MARA Treasurer Bob Watson/N1GWE and Maine EC Bryce Rumery/K1GAX.

The meeting addressed a verity of issues with some brainstorming and consensus building. Some of the topics were:

1. Develop a Sag. County ARES web site. Since the MARA is where most of the ASRES volunteers come from, it was decided that the MARA's web site www.ks1r.net could be expanded to be a dual site. Don said that when you access the site you would see a start-up page that would direct you to either the MARA

page or the Sagadahoc County ARES/RACES page.

2. Training should be offered to MARA members and area hams. The first would be the 4-hour Maine Emergency Communications overview course with Bryce/K1GAX as instructor. Then ARRL Level-1 course would then be offered and Lee/N1HOC would be the instructor. Other classes like a refresher class at MARA meetings on how to set up an emergency communications "Go Kit" could keep interest in the program.

Other topics like ARES Packet network, Simulated Emergency Tests (SET), cross county cooperation, etc. were addressed.



CODAR

By Paul Towne/N1ZYB

Recently, Linda (N1ZYC) and I (N1ZYB) went to a lecture at the University of Connecticut where a professor of Marine Sciences gave a talk on the application of HF radio frequencies to measure ocean currents. Like most

amateur radio people, we think of HF as a communications medium and we were surprised to learn about the unique nature of HF Radar for ocean current mapping.

Coastal Ocean Dynamics Applications Radar (CODAR) uses RF transmissions in the 3 to 30 MHz range to measure the Doppler shift of RF waves that are traveling radially towards or away from the transmitter. When HF radar waves impact on ocean waves that are 9 to 150 feet long the signal scatters in many directions. It was discovered that the radar signal will return directly to the transmitter site only when the radar signal scatters off a sea wave that is exactly half the transmitted signal wavelength and traveling in a radial path. The scattered radar waves add coherently resulting in a strong return of energy at a very precise wavelength. This is known as the Bragg scattering principle. To put it another way, think of the Resonant Bragg Scattering as an amplifier that sends back a strong signal at an HF wavelength related to the sea wave wavelength.

CODAR can analyze the return signal and measure the Doppler shift which results from the fact that the sea waves (the target)

are moving. The faster the surface wave moves the more frequency shift will be noticed. Since we know the wavelength of the sea wave we can predict what its speed should be using deep-water wave theory. If the measured sea wave speed is different from the theoretical wave the only explanation is speed added or subtracted by underlying ocean current. Put it another way, unexpected Doppler frequency shift is the result of ocean current. By looking at the same patch of water using radars at two or more sites, the surface current radial velocity components can be summed to determine the total surface current velocity vector. CODAR can monitor ports and small bays as well as open ocean up to 120 miles from shore. The sea current being measured is in the upper three feet of the water column which is the current that determines the drift of spills or people. The Coast Guard is looking closely at this modern HF Radar technology. There are CODAR stations on all three coasts of the US. For more technical details on this subject you can go to any of the web search engines and search on CODAR. If you live near the coast and tune around 25 MHz, 12 MHz or 5 MHz,

you may even hear some HF Radar. (*Note that CODAR uses swept frequency FM. That's why I say may.*)
73, Paul

NEQP,

An invite to participate

By K1KI & W1RH

Hello!

We'd like to invite all MARA club members to join us in the New England QSO Party this year. The 3rd running of the NEQP will be taking place on May 1st and 2nd this year. Last year we had more than 250 entries from all across New England, most states and a number of foreign countries. This is a nice low pressure operating event where New England stations are the center of attention!

Please pass this message along to club members in your newsletter or at your next meeting!

The full rules and other information is located here (and in an attached file) <http://www.neqp.org/> Certificates are awarded to anyone making more than 25 QSOs, and there are (so far) 26 very nice plaques to be awarded. The plaques include one for the top New England

club score, as well as the top school club score. A listing of all plaques and special awards is located here

<http://www.neqp.org/plaques.html> Let us know if your club would like to sponsor a plaque.

We also hope to field a lot of mobiles so we can cover all 67 New England counties during the contest. Last year we had ten mobiles out across New England. Whether you plan to be on from home or while mobile, please let us know so we can update to Reserve Your County section and work to make sure all counties are covered

<http://www.neqp.org/ryc.html>.

Very 73!!

Tom Frenaye/K1KI &
Bob Hess/W1RH

**New England
QSO Party
May 1st and 2nd.
2004.**

**For more
information
connect to:
<http://www.neqp.org>**