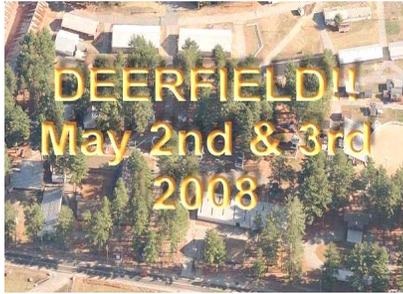




Squelch Tales



Merrymeeting Amateur Radio Association Newsletter for March 2008



NEAR-Fest funds going to good use

By John Goran, K1JJS

The following web site address will take you to the NEAR-Fest (New England Amateur Radio Festival) page, and the latest press release, outlining the partnership between the NEAR-Fest and the Christa McAuliffe Planetarium in Concord, NH.

www.near-fest.com

The NEAR-Fest staff is proud to announce that the proceeds from NEAR-Fest II are being used to fund a fully operational amateur radio station, the first of what we hope will be many such projects.

The NEAR-Fest staff looks forward to seeing you and your fellow amateur radio operators, as well as families and friends, at NEAR-Fest III beginning Friday, May 2, at Deerfield Fairgrounds in Deerfield, NH.

73, John



Special Event Station

WØS

The 96th Anniversary of the Titanic Disaster

Your club members have been invited to come operate with us in Branson, MO for the 96th Anniversary of the Titanic Disaster. Last year our press release hit 111 news wire services around the world in two days. This is an internationally recognized Special Event Station and here is a once in a lifetime opportunity to participate.

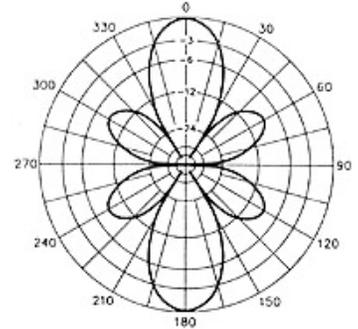
Icom is our official supplier of radio equipment. Last year we had two Icom 756 Pro III transceivers and two PW-1 amplifiers. If more HF stations are needed, Icom will supply us as many stations as needed. We have crank up towers with TA-33 beams, as well as, wire dipoles for the lower frequencies. There is room for all, hams and non-hams. We are in full view of the public between the Entrance and Exit outside the Museum. This is to honor the two brave wireless operators Jack Phillips and Harold Bride.

Please visit our website at **www.w0s.org**. For more information and scheduling of operating times. All updates for this event will be on this website, so please visit often for new information.

If any questions, please feel free to contact me at

wa0sap@att.net.

Thank you from the "Titanic Four," Dave "SAP" Beckler, WA0SAP, Al Gallo, WØERE, Rich Vogt, KB9YZE, and Rod Kittleman, KØADI



Antenna gain made easy

By Bruce Randall, W1ZE

I am sure you have heard hams say and seen antenna ads that state their antenna has 11 dB of gain or some other impressive figure. Sounds good doesn't it. But being the skeptic you are, you should ask the following question, "compared to what?"

I can prove to you that the stubby rubber ducky antenna on my tiny HT has 40 dB of gain. You may now be saying to yourself, old ZE has been nibbling on those magic mushrooms again. No I have not. Here is how you get 40-dB gain. You measure the signal strength from that rubber-ducky antenna against the HT feeding a dummy load

and you will see a very high gain figure.

As you already know, gain is a measurement greater than another reference point. Saying your antenna exhibits 11dB of gain means zip, absolutely nothing, unless you know what you measured you antenna against.

Antenna measurements are usually measured against one of two reference antennas. The first is a theoretical radiating device in free space called an isotropic radiator. You can not buy one of these at HRO. The other reference antenna is a half-wave dipole. You can buy one of these at HRO.

Physicists and antenna engineers tell us that a dipole has 2.1dB gain over an isotropic antenna. If you sell antennas to hams (and yes, CBers) for a living you want your ad to have the highest figure you can, so most likely your stated gain figure will be against an isotropic antenna source, and that figure is called **dB_i**. I like to see the gain figure compared to a "real" antenna, such as a dipole. That figure is called **dB_d**.

Bill Orr, W6SAI (SK) published a table in his Amateur Radio Antenna Handbook (still in print) that has an easy reference matrix called a "Truth Table" showing the real gain of various types of popular antennas used by hams. The following is a similar table you can refer to when talking about the gain of antennas.

ANTENNA	GAIN OVER AN ISOTROPIC RADIATOR (DBi)	GAIN OVER A HALF-WAVE DIPOLE (DBd)
ISOTROPIC RADIATOR	0	-2.1
GROUND PLANE	+0.3	-1.8
HALF-WAVE DIPOLE	+2.1	0
5/8-WAVE ANTENNA	+3.3	+1.2
QUAD LOOP ELEMENT	+4.1	+2.0
2 ELEMENT YAGI	+7.1	+5.0
3 ELEMENT YAGI	+10.1	+8.0
4 ELEMENT YAGI	+12.1	+10.0
2 ELEMENT QUAD	+9.1	+7.0
3 ELEMENT QUAD	+12.1	+10.0
4 ELEMENT QUAD	+14.1	+12.0

The above truth table shows 0 dB for a dipole and you can compare gain figures to that. The dB_d and dB_i results given are approximates because gain figures can vary slightly depending on various factors such as:

- Beam element spacing.
- How high the antenna is above true ground.
- Antenna traps & loading coils.
- Loop antenna shapes.
- Angle of radiation and polarity.
- And other factors.

These days, most of the antenna manufacturers who

market antennas to hams are doing a better job at stating their antenna gain figures in DBd. However there are still a few out there that do not, so beware.

73, Bruce



MARA members get new tickets

Topsham: At the February 9th MARA sponsored examination session at the Red Cross building, MARA and Mid Coast ARES net member Andy Martin, KB1DOI of Lewiston arrived to take an examination for a General class ticket. Thirty minutes after he arrived he had passed his test with flying colors.

By the time you read this column, Andy will have had time to travel to the candy store, pick-up an HF rig and be chasing DX on high frequency bands.

At the January MARA meeting we had a guest, Mark Potter who was interested in becoming a ham. Well, after the meeting Mark must have done a crash study course, showed up at the test session and within 30 minutes had passed his Technician class exam. He was asked if he would like to take a try at the General class exam. He said "OK." After another thirty minutes he had passed that exam too.

Kudos and well done to Andy and Mark for becoming General class license holders!



MARA sponsored Ham exam sessions for 2008



May 10
August 9
November 8

All exam sessions are held at 10:00 AM at the
Mid Coast Chapter of the American Red Cross,
16 Community Way, Topsham.

73, Bryce, K1GAX

Note: For other VE sessions times and dates
throughout Maine, go to the ARRL Maine
Section web site at:

www.arrl.org/section/?sect=ME



NESMC FREQUENCY COORDINATION FOR REPEATERS

By Marty Rigoulot, K1PIG

What does a frequency coordinator do?

There is a common misperception in the
amateur community that frequency
coordinators are "in charge of" the amateur
bands. This simply is *not* true. The
frequency coordinator serves two distinct
functions:

1. When an individual or group wants to
install a new repeater, control link, auxiliary
link, or other large-user operation on a
relevant amateur band, the frequency
coordinator carefully researches the
request, based on the groups specified
power levels, location, and other factors
relative to current users on the band. Then
suggests, based on the research, a
frequency of operation which will not
interfere with other existing or proposed

installations. The recommendation of the
coordinator always comes with a caveat: a
new coordination is always in a "test" period
for six months. This allows for any
unanticipated circumstances which end up
causing interference. When this occurs, the
coordinator can withdraw or modify the
original suggested coordination.

2. The frequency coordinator also
maintains a database of existing
installations. This database is much more
than the simple "repeater directory" listings
which most amateurs are familiar with. The
coordinator's database contains thousands
of entries including control links, auxiliary
links, digital-mode operations, and other
users on the band. For those modes for
which coordination is provided, each entry
is marked as to whether it is a coordinated
operation, in the test period, or
uncoordinated. In some cases, this data is
sent to other parties to help resolve
coordination disputes.

**It is not the function of the frequency
coordinator to arbitrate frequency use
disputes.** Though the coordinator might
assist in the resolution of a problem, it is up
to the two parties having the dispute to
resolve the issue on their own, or seek an
arbitrator such as an official observer (OO)
or, as a last resort, the FCC to resolve the
problem.

How do frequency coordinators get selected?

When an opening is available, NESMC will
publish an announcement on its website
and in other public forums for a minimum of
thirty days. Any individual eligible as a
NESMC member will be considered.
Selection is based solely on an individual's
experience and abilities as determined by
the interview process. Interested individuals
should follow the instructions on that page.
NESMC will interview qualified applicants
and select one. All others will be given an
explanation as to how the decision was
made.

How do the NESMC directors get elected?

Candidates for NESMC directors and vice-directors are nominated then elected by the general membership at regular NESMC meetings. The general membership consists of 1 representative from each coordinated repeater group in NESMC's territory.

How many directors/vice directors are there?

NH, ME, and RI each have a director and vice-director. MA is broken into two sections: East and West. Each section has a director and vice-director. This makes a total of 5 directors and 5 vice-directors.

Why aren't Connecticut and Vermont represented?

Connecticut and Vermont are serviced by different coordinators. NESMC maintains relationships with these groups and uses their data in providing coordination functions which affect these areas. Likewise, these groups use NESMC data in coordinating their repeater slots.

If you have any questions on coordination or interference please feel free to contact myself Martin Rigoulot (K1PIG) - Maine Director or Randy Lewis (K1XI) - Maine Vice Director. If you know of repeater pairs that are not being used please notify us, as we do not want individuals or clubs just holding frequencies that they "may" use in the future. The repeaters must be up and running to have a frequency pair coordinated.

Check out the NESMC web page at <http://www.nesmc.org> and anyone is welcome to our meetings which are held mostly in the Mass area but at least once a year we try to have one in Maine.

73 and enjoy the repeaters, *Marty, K1PIG*



MEMA seeking candidates for volunteer RACES Director position

AUGUSTA: After 20 years of service with MEMA as the Maine Radio Amateur Civil Emergency Service (RACES) Director, Rod Scribner (KA1RFD) has announced he wishes to retire. Therefore, MEMA is in search for a new volunteer candidate who will serve as the next Maine RACES Director. Although this is a volunteer position, the successful applicant will be an active team member who will provide emergency operations communication support.

The RACES Director acts as the liaison between the State Emergency Operations Center and other entities to ensure an emergency communications link. He or she advises the MEMA Communications Manager on Amateur communications policies and procedures. The person selected will be asked to carry a pager and will have to be able to report to the State EOC in Augusta during emergencies.

The selected candidate must pass a criminal background check in order to be accepted. Requirements for this volunteer position include:

At minimum, General Class amateur radio license, 2-3 years experience with ARES or RACES, knowledge of multiple bands of operation, packet, and APRS radio; Familiarity with the RACES requirements in 47CFR97 (Part 97; 97.407); Familiarity with the current requirements for ARES requirements as set forth by the American Radio Relay League (ARRL) and the ARRL Section Coordinator for the Maine Section; Training in Incident Command and the National Incident Management System (this training will be



provided to the successful candidate if he or she has not already taken it).

Mail or FAX will accept applications on or before Wednesday, March 12, 2008. Applications will be reviewed and the top applicants will go before an interview board consisting of MEMA Communications Manager, outgoing RACES Director, ARRL Section Emergency Coordinator, and the Vice President of the County Directors Council. Applications may be mailed or faxed to:

Roy Jones (KB1PWJ)
Communications Manager
Maine Emergency Management Agency
72 State House Station
Augusta, ME 04333-0072
FAX: 207-287-3178



Lefty does it again!

Turner, ME: In last month's issue of Squelch Tales it was reported that Paul "Lefty" Clement, K1TOL took 50 MHz top honors in the CQ World Wide VHF contest. Well hot dang, if Lefty, not to be outdone by himself, scored top honors in the 50 MHz QSO Leader, Single Operator, High Power category in last September's ARRL VHF QSO Party. He had a final score of 303, forty-three points ahead of the 2nd place winner W5PR.



The 303 score may not seem very high to you, but N1KAT and W1ZE gave it a try and both reported little to no activity on the 6 and 2 meter bands. Bruce reported a grand

total of two QSOs on 6 meters and Bill did not do much better.

Again we send an **at-a-boy** to Lefty for keeping Maine VHF contesters on top.



Merrymeeting Amateur Radio Association makes milestone

Newington CT: In the February issue of the ARRL Club Newsletter, e-mailed out to ARRL affiliated clubs, it was announced that in February, the MARA (KS1R) had been an ARRL affiliated club for 25 years.

The association was formed in 1981 and by 1983 most of its members were also members of the ARRL. At that time club president Mike Evringham, KA1OR applied for and received affiliation from the League.



Rod Dinkins, AC6V (SK)

The ARRL has reported that Rod Dinkins, AC6V, of Oceanside, California, passed away Saturday, February 16. An ARRL member, he was 77. Many hams considered Dinkins, the author and developer of the Web site www.ac6v.com, <<http://www.ac6v.com>> to be the final word on anything to do with ham radio. His Web site has more than 130 pages covering thousands of Amateur Radio-related topics, everything from amps (A) to impedance (Z); some hams have said that if a topic is not found on or linked to Dinkins' Web site, it's safe to say that topic does not exist in the Amateur Radio world. Dinkins was also the author of a number of ham radio books, including "FM101x: Using FM Repeaters" and "DX101x: HF + 6 Meters DXing." Dinkins started in radio in the late 1940s with his Knight Kit Ocean Hopper receiver, listening in to the ham bands. In 1977, he received his Amateur Radio license with call sign WA6WTO. He served as an Aviation Electronics Technician from 1951-1955. Re-entering civilian life, Dinkins spent four years as an electronics instructor, followed by two years as a vocational electronics teacher at a junior college. For more than 30 years, Dinkins worked in the aerospace industry as an electronics technical writer. He was a member of the San Diego DX Club (SDDXC) and the Palomar Amateur Radio Club (PARC), and was the former newsletter editor of the Northern California DX Club (NCDXC).

Son Jeff has hosted his father's Web site for the past five years and has plans to keep it up and running; Jeff plans on getting his Amateur Radio license and applying for his father's call sign.

AC6V R.I.P.



Broadcast Band DXing for under \$40

By Pete Russell, K4POR

Howdy from the Sunshine State, hope your winter is going well, spring is just around the corner.

A local store chain has an item that you might be interested in. Reny's sells a portable radio labeled the "GE Superadio III" now its "RCA." Because Thomson distributes it, just the label has changed.



The Superadio III is an AM/FM receiver with expanded AM from 540 to 1700 kHz, treble and bass controls, a 6.5 inch speaker with tweeter, narrow/wide bandwidth on AM. Look at this website for full description and specifications, www.ccrane.com.

Reny's sells these radios for just under \$40, which is a bargain. Granted they are refurbished i.e. although new, went back to Thomson with an issue, however if there is a problem, Reny's will replace it.

Why is this radio one that you should add to your collection? Top of the list, sensitivity (how well it picks up signals) and selectivity (how well it separates stations) as there are tuned RF amplifiers in both AM and FM sections and there are 3 or 4 ceramic IF filters to narrow the

bandwidth, keeping adjacent stations from splattering over. The set has a built-in AM ferrite rod antenna and a pullout whip antenna for FM.

By holding the radio by the handle and turning it in a 360-degree rotation, AM stations can be nulled out, allowing other stations to be heard. The reason that works is the ferrite core is a long rod and when broadside (length of radio) to a station, the most signal will be picked up, and when the end of the rod is pointed at the station, the least signal will be received. The radio runs off AC power with its built-in power supply or off 6 "D" cells making it great for power outages or remote use. The sound is nice especially in the AM wide mode, however the station has to be local to get the fidelity (a long wire antenna helps). WJTO (W. Bath) will sound like FM in the mono mode. There are terminals on the back to connect an external AM or FM antenna bringing in more distant stations. The only drawback I found is that the frequency readout is the old fashion "dial" not a digital LCD i.e. the bar that slides across the numbered scale is not always accurate, 730 kHz may look like 700 kHz.

A fellow at a flea market told me that the unit is called "The prison radio", inmates want these because they work so well behind metal bars, in fact on MSNBC, there was a "lifer" in the big house and on his desk was a Superadio III (not misspelled). Any questions, shoot me an e-mail at K4POR@arrl.net.
73, Pete

Editors Note: *Pete Russell (ex, K1MJP) is a founding member of the MARA and a snowbird. We expect to see him back in Maine after the snow melts.*