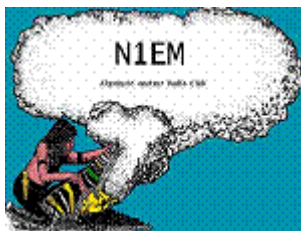


Algonquin Amateur Radio Club

Founded 1976



QRZ – The Newsletter for AARC members

www.n1em.org
May 2007

Meetings!

General club meeting : The next AARC meeting is scheduled for Thursday, May 10th at 7:30 pm in the Marlborough EOC (Central Fire Station 215 Maple Street aka. Rt 85 – Please use the entrance on the north side of the fire station). The May meeting includes a raffle for a Cen-Tec digital voltmeter to be given to a lucky attendee.

Meeting topics:

May Elections and planning for the 2007 Field Day. Location: Marlborough EOC.

Jun Kit night - By Request Communications will again open its doors for members to bring a project to build or choose from a stock of small kits available. Guests from the CMARA or FARA clubs will be invited to attend.

MEMA: The next MEMA meeting is scheduled for May 15th at the Marlborough E.O.C. More MEMA information is available at: <http://www.qsl.net/n1em/EOC/EOChome.html>

Election for club officers

Nominated candidates for club officer positions in the 2007-2008 season are:

President: Ed Fitzgerald

Treasurer: Frank McInnis

Vice President: Ron Wood

Secretary: Tim Ikeda

Ballots for members in good standing will be included with mailed newsletters. If you have questions please contact the club secretary. Election ballots must be returned at or before the general club meeting held this May. The newly elected officers will begin their terms on July 1st, 2007.

First NEAR-Fest Runs May 4th & 5th

The first New England Amateur Radio Festival (NEAR-Fest) will open its gates at 9:00 am on Friday, May 4th. The location is the Deerfield Fairgrounds on Highway 43 in Deerfield, New Hampshire, about an hour and 20 minutes from Marlborough. Admission is \$10 until 3:00 pm on Friday and \$5 afterwards.

Vehicle parking on the grounds is \$10. More information is available at: <http://www.near-fest.com>

Other flea markets in May

May 20 - Cambridge MA. The Flea and MIT. In the Albany St. Garage at the corner of Albany & Main Streets. Buyer's gate opens at 9 am.

May 26 - Vernon CT. The Hartford Hamfest, sponsored by the Natchaug Amateur Radio Club. Location: Tolland Agricultural Center on 24 Hyde Avenue. For more info contact Wayne Rychling (n1gus@arrl.net).

AARC community service

Hazmat Day - Marlborough

Marlborough's hazardous waste collection day is scheduled for Saturday, May 19th at the Easterly Water Treatment Plant, from 8 am to noon. Club members who wish to help provide communication support should contact any club officer.

School Watch

Ed Fitzgerald is organizing the School Watch for the Marlborough schools in late May and early June. At the April meeting, Ed distributed a sign-up schedule and questionnaire for volunteers. This form was also sent to the AARCList email reflector. Please remember to reserve time to volunteer for the watch.

Radio coverage map for Marlborough Hospital

We have offered to help map the radio coverage zones centered on Marlborough Hospital to help prepare local emergency response plans. Volunteers are needed to drive through several towns to help locate dead zones for radio communication. Don Cusson has topographic maps to guide efforts and the work will be carried out in May or June. If you would like to help, please notify Don or contact any club officer. More details will be available at the May meeting and published on the ARRLList.

SKYWARN training scheduled for May

Training for SKYWARN will be available on Saturday, May 12th from noon to 3 pm. This training program is sponsored by MEMA and will be held at the Marlborough EOC.

Other news...

The club sponsored Kevin Colomey, KB1NQE with a \$50 donation to the American Heart Association through their "Relay for Life" program. The AARC also replaced the "lost" MEMA FRS radios with 6 new Motorola T550R, 1 watt units. These have rechargeable batteries and can also use AA cells.

New England QSO Party

This year's New England QSO party runs May 4th & 5th, over two periods: from 4 pm on Saturday, May 4th to 1 am Sunday, May 5th and from 9 am that Sunday to 8 pm that evening (all times listed are EDT). The goal is to contact as many New England stations as possible on 80-40-20-15-10m. New England stations should send a signal report, their county and state. Stations outside the area should exchange a signal report and state/ province. Contacts count once per mode and band. Suggested frequencies are CW: 3540 7035 14040 21040 28040, and SSB: 3850 7280 14280 21380 28380. For more information about the contest please see: <http://www.neqp.org>

Antenna Modeling Notes

In April's AARC meeting, Greg Algieri, WA1JXR gave an informative presentation on antenna modeling. Greg referenced a couple of free antenna and transmission line modeling tools, including EZNEC by W7EL (Roy Lewallen) and Transmission Line program for Windows: TLW by N6BV (R. Dean Straw). There are several versions of EZNEC available, including a free, demo version that is limited to modeling 20 segments (sufficient for two-element quads, simple yagis and many wire antennas). Roy also donated a version equivalent to EZNEC v3.0 that is included with the ARRL Antenna Book (20th and 21st editions). This version can create models with up to 500 segments. The TLW program is also available in CDs shipped with select ARRL publications such as recent ARRL Manuals and Antenna Books.

In addition to EZNEC, there is another program often cited by modelers: NEC-Win Plus by Nittany Scientific, Inc. This program is also a user-friendly front-end to the common, core NEC-2 calculation engine. Note that each antenna modeling program has separate strengths worth considering. For example, NEC-Win Plus includes "modeling by equation" which creates multiple output files for changing input parameters such as antenna length or element spacing. Both programs can provide frequency sweeping, however, and both create very informative 2D and 3D propagation plots. The ease with which one can model traps and tapered elements varies but in most cases the results produced are equivalent.

There are many good sources for learning about antenna modeling. Online manuals and tutorials are provided on the EZNEC and NEC-Win Plus websites: <http://www.eznec.com/> and <http://www.nittany-scientific.com/>. L.B. Cebik, W4RNL, has many pages devoted to antenna modeling on his web pages, <http://www.cebik.com/amod/modeling.html>. The ARRL has an online Antenna Modeling Course available as part of their Certification and Continuing Education Program (see here: <http://www.arrl.org/cce/courses.html#ec004>). CCEP classes begin almost every month and for those who wish to learn offline, a 450-page, printed version of the course manual can be purchased from the ARRL. Course participants can also access a .pdf version of the manual.

One question asked during Greg's presentation was whether other people had collected libraries of antenna designs that could be used as starting points for beginning modelers. Those libraries may be hard to find and if anyone else knows of a site,

please forward the information to the club secretary. In addition to his extensive web pages, Cebik authored several volumes of Antenna Modeling Notes. These books are sold by antennEX (<http://www.antennex.com>) and include a collection of over 330 model files. Another information source is the AntennaWare email reflector sponsored by Contesting.com. This online discussion list is devoted to all aspects of antenna modeling (<http://www.contesting.com/FAQ/antennaware>).

New toys...

With the Dayton hamfest approaching, several radio manufacturers are releasing new HTs, mobile rigs and HF transceivers for amateur operators. Icom has the IC-2820H, a dual-band, D-Star ready mobile and the IC-V85 2m HT. With the optional UT-123 D-Star module, Icom's mobile can connect to a GPS and transmit location information (Note: not APRS-formatted data) along with digital voice and serial data. The IC-V85 HT is water resistant (IXP4 standard) and although the radio is only about 11 cm tall, it can transmit up to 7 watts.

Kenwood advertised their new TM-V71A dual-band mobile in the May 2007 issue of QST. This rig has a detachable head and can operate as a cross-band repeater. The radio also has ten Echolink memories and other Echolink features. Another model, identified as the TM-D710A was recently spotted in the FCC certification website. Details of that rig are extremely sketchy but there is speculation that it might be an updated version of the TM-D700A, an APRS-ready rig with a TNC built in.

Yaesu released two new mobile rigs and a new HF+6m transceiver. The FT-450 is a compact HF+6m transceiver with an IF DSP and an optional internal antenna tuner. Compared to the FT-897D, this new radio has a more 'standard' design and appears to fill a gap in Yaesu's line between the FT-897D and the FT-2000. The two mobile, dual-band radios are the FTM-10R and FTM-10RS. These have extremely interesting features including waterproof detachable front panels (to IP57 standards, and waterproof body with the FTM-10RS), microphone & PTT switches built into the panel, auxiliary audio-in (for MP3 players?), AM/FM radio and Bluetooth capability. The radios are also tiny, reminiscent of the discontinued FT-90R model. With a max power output of 10W on 2m and 7W on 70cm, the FTM-10RS appears to be designed with motorcycles in mind. The FTM-10R has higher power, with 50W output on 2m (40W on 70cm). With VOX operation and a Bluetooth headset, the FTM-10 radios allow hands-free, uncabled communication.

Algonquin Radio Club - P.O. Box 258, Marlborough MA 01752

The Algonquin Amateur Radio Club (AARC) holds meetings on the second Thursday of each month (No meetings in July and August). Meetings are open to all in the community with an interest in Amateur Radio. For directions, contact a club officer or visit our web site at www.n1em.org. Meeting times are listed in this newsletter. The AARC also operates the N1EM repeater on 446.675 MHz, -offset, PL 88.5 Hz. This machine is open to all licensed amateur operators. An informal open net on this repeater is conducted Sundays at 8:00 PM.

We publish QRZ monthly from September through June. The deadline for submissions is the 25th of the preceding month. Text files are preferred and can be mailed to newsletter@n1em.org. For further information about QRZ and the AARC please send inquiries to the address listed above.

Current club officers

President	Ed Fitzgerald
Vice President	Peter Simoneau
Treasurer	Frank McInnis
Secretary	Tim Ikeda