



SIGMA



de N1NC

April 2002 Volume 11 Number 4

This Month's Meeting

The Speaker for this month's meeting will be Den Connors and the subject is "Mobile & Portable Communications" -making connections to a mobile world. Den will also discuss assembly of the Anderson Powerpole connectors and will have his crimping tool available if anyone wants to assemble connectors.

We plan to run an emergency communications course so we would be interested in what format would work best for members.

Earl WR1Y will have a laminator for people who need their license or other card-sized items protected.

Bring your outgoing QSL's to the meeting and have the club send them out. See Bob W1XP.

We gather at Tiny's for breakfast Saturday mornings at 8:00 AM. We sit in the back dining area.

Bring your short Shows-and-Tell to the meetings. They are always welcome. It's always interesting to see the variety of things people are working on.

Long Time Members

This month marks the 10 year anniversary of NVARC.

Current members who joined the Club on 1-Apr-1992 are:

Ian NZ1B	Erik KA1RV
Karen KA1JVU	Bob W1XP
Earl WR1Y	Bruce K1BG
Ben KB1FJ	

They are our first official 10-year Members. Thanks, folks, for having started something that has continued

to be a fun, social, and educational forum for all of us.

ARES, RACES, SKYWARN Communications Drill

Massachusetts ARES, RACES, and SKYWARN conducted a state-wide (mostly East Mass) Simulated Emergency Test (SET) March 23rd. This was a communications exercise based on a hurricane scenario. In addition to the stations/towns that signed up to participate in advance, many additional stations participated in an ad hoc way. In addition to the required messages generated to satisfy the instructions discovered when sealed envelopes were opened, many stations got creative and generated messages based on the script to report conditions in their area.

Last Month's Meeting

Last month's program was on Extremely High Frequency (EHF) datalink systems by David Russell. David talked about the capabilities of EHF datalinks that operate in the 60 GHz band. This is a no license band and systems are power-limited to 10 milliwatts by the FCC. Due to the attenuation of the atmospheric oxygen (O₂) these systems are short haul. Due to the seven GHz band with they can use these systems to achieve Gb data rates. They provide point-to-point line-of-sight high speed links particularly where useful in urban areas where it would be difficult or very expensive to lay fiber.

In the book raffle Dave N1MNX won the ARRL World Map and ARRL Net Directory, Stan KD1LE won the Satellite Communications book and David Russell's son David was given a copy of Now Your Talking.

New England QSO Party

For you contest junkies the NE QSO Party is coming up on the weekend of May 4th and 5th. The objective is to work as many New England counties as possible. There are 67 counties in the five states. For complete rules see <http://www.neqp.org>. If you have questions or suggestions contact them at info@neqp.org.

Adopt-A-Highway

April 21st will be our first road cleanup of 2002 hope to see a few new faces.



Here Stan and Ralph are stenciling the backs of the safety vests with the word "RADIO". It seemed the best choice to let someone behind one of us know we might help if they needed a communicator. Ralph is carefully hiding behind the camera.



Here the vests are being hung up to let the stenciling dry. After the vests were dry Lynda N1PBL sewed NVARC patches on the front (see first vest in lower picture) so people will now know who we are. The

reflective stripes really show up from the camera flash.



Groton Road Race

The Groton Road Race is coming up April 28th. Contact Erik if you would like to help. These community service activities are great practice for emergency situations. NVARC has provided communications between the race officials and the Police Departments at this event for ten years. Approximately three dozen radio operators are needed.

RACES

Be prepared to Help your family, friends, community and country, with your expertise!

The town of Pepperell is in need of RACES operators. You can use your radio skills to help, even from your home.

Pepperell Emergency Management Agency would like to get you involved in Emergency Communications as a volunteer. Any time or equipment level accepted.

For further information on helping your community and country, please contact:

David Peabody
Pepperell E.M. Communications Officer
E mail n1mnx@qsl.net
Phone 978-433-2577

Or snail mail
P.O. Box 1309
Pepperell, Ma. 01463-3309

All appointments must submitted by June 1st so contact me soon if you are interested.

If you know anyone that does not have a ham license that would like to be a worker in the "Communications Unit" such as persons familiar with gas engines, generators, gas-driven water pumps, lighting, automobile drivers, CB radio, FRS radio, computers or networking they may also apply.

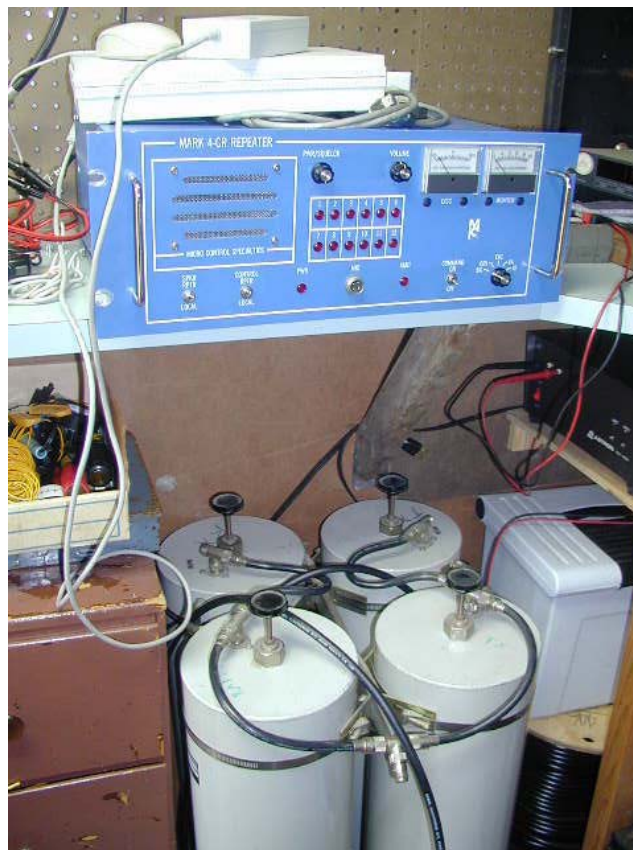
If you're not from Pepperell and would like to help your own community, you are welcome to call me and I will help you to contact the appropriate person for your town.

Dave Peabody N1MNX

Repeater Improvements

Now all of the equipment for packet, 220, and 440 has been moved into the rack. We Bob has also added preselectors to the 440 and six meter machines. They are mounted behind the fancy wood-grained panel near the center of the rack in the picture at top right.

The next photo at botton right shows the bits and pieces of a two meter machine that is under construction.



Submarines on the Air Special Event April 27th-28th

For Details see SVARA - Submarines Veterans Amateur Radio Asso.
<http://groups.yahoo.com/group/SVARA/>

Over 30 Submarines Worldwide taking part. For the list of Museum Submarines with call signs See <http://www.marinefunker.de/eng/shiplist.html>

Frequencies are:

CW 3.5043 & 3743, 7.043 & 7.143,
14.043, 21.043, 21.143, 28.043, 28.143 & 50.043

SSB: 3.843, 3.943, 7.243, 14.243, 21.343, 28.443,
50.143 All 20Khz except 10 & 6 meters 40Khz

April Board of Directors Meeting

3 chocolate donuts were consumed, along with 2 chocolate frosted, 1 sprinkles, 1 Boston Kreme, and 1 jelly.



Minutes of the NVARC Board Meeting held on 4.11.02. at the President's residence

Board Members present:

Bob W1XP, Earl WR1Y, Ralph KD1SM, Den KD2S, Ian NZ1B, Erik KA1RV

Visting member: Wolfgang KA1VOU

Ralph presented a "Job Description" for the new Librarian position and circulated it to the members present for review. It was moved Ralph, seconded Ian, that the librarian's duties be as outlined in the Job Description--carried

Peter Nordberg N1ZRG has applied to Erik for the position of Club Librarian. Erik will verify that Peter understands the Librarian is expected to attend most club meetings. Moved Ralph, Seconded Russ, that should Erik choose to appoint Peter, the Board ratifies that appointment--carried

Ralph presented the Treasurers report which is printed separately in the newsletter.

Den reported on the past Exam sessions and indicated the next steps for the follow up sessions.

Since the next monthly meeting will be the Club Elections, President Erik asked Russ to run the meeting as Erik will be unable to attend.

There are two Board positions vacant, plus nominations will be called for the President, Secretary and Treasurer and VP positions at the meeting.

Moved Russ, seconded Bob, that the club buy 20 additional bags of PowerPole connectors for sale to members -carried

The Speaker for the upcoming meeting will be Den Connors and the subject will be "Mobile & Portable Communications" -making connections to a mobile world

Stan advised by note that he needs volunteers for the Parker Road Race to be held in Devens on Sunday May 19th. He also advised of the next Road Cleanup to be held on Sunday 21st April.

The upcoming Groton Road Race was discussed and President Erik advised that since the volunteers were all experienced, the pre race meeting would not be required, but that volunteers should check in to the High School on Saturday April 27th to pick up materials for the race. Call in frequency to be used to contact Erik at the High School is 147.57 Mhz.

Wolfgang presented his plan for the upcoming Field Day (copy sent separately to Stan for the Newsletter) The plan detailed the use of QRP both CW SSB and PSK31 for the day. An RV will be provided for the day as a base for operations, toilet etc. It was suggested that Wolf check with Dave to ensure the RV would have no access problems on the site.

Moved Ian, seconded Den, that we adopt Wolf's plan for Field Day -carried

Incidental expenses:

Moved Ralph, seconded Erik, that we purchase paint to spray the emergency vests for the amount of \$3.29 -approved

Moved Ralph, seconded Den that we spend \$11 on the purchase of Roll Pins for the PowerPole connectors -approved

There being no further business, the meeting closed at 8:55PM.

Ian Norrish NZ1B Secretary NVARC

Librarian Position Description

Librarian

The President may appoint a Librarian from the full Membership.

This appointment becomes effective immediately upon ratification by the Board of Directors.

The duties of the Librarian are:

1. Create an inventory of all Club-owned lending materials ("Library"). Lending materials are materials such as books, videotapes, and other training materials that are intended for circulation within the Membership.

2. Maintain an up-to-date account of the location of all Club-owned lending materials, providing periodic articles to the Signal editor about the Library, and file an annual report with the Board of Directors of the inventory and the number of times each item in the Library has been in circulation.

3. Assure that Club-owned lending materials are available for circulation to Members with reasonable advance notice. Typically this will require the Librarian or his/her representative to be a regular attendee at the monthly meetings so that Members may request in advance that specific items be brought to the Meeting.

3. Propose new Library acquisitions to the Board of Directors. The Board retains responsibility for making all acquisitions of Library materials and for accepting any donations to the Library.

Field Day Planning Highlights

We will do SSB as well as CW
 We will do multiple stations on batteries HF, UHF/VHF
 We will do QRP 5W max again. At least one deep discharge or car battery per station. (a 40W solar panel has also been volunteered)
 (rigs that can be turned down to 5W are ok, need not be kits)
 We will simplify logging by restricting each station to particular non overlapping bands (SSB and CW at same station on particular band but not at same time)
 We will do digital modes especially psk31 because it is good for low power (laptops and TNC's have also been volunteered)
 We will do NTS messages traffic to support RACES/ARES emergency preparedness goals
 We have a stretch goal to do satellite contacts w/ 5W and high gain antennas
 We will use the Shasta camper offered to save on setup and porta potty
 We strongly encourage use of our new power pole connectors and Den will bring the crimp tool to club meeting so that we can have a cable assembly party. Bring your connectors and wire to the meeting.



A test session for the ARRL Emergency Communications courses EC-01, EC-02, and EC-03 was run on March 16th at the Pepperell Community Center. Eight people took advantage of the session to certify at one or more levels of the Emergency Communications Course. They successfully passed 18 exam elements. The tests were coordinated by Steve Telsey N1BDA and Darrel Mallory K1EJ and sponsored by NVARC.

FoxFinder Industries

Working to maintain an inventory of kits and boards FoxFinder Industries 'employees' inspect PC boards for proper etching and drilling.



Notice the homey surroundings of the workspaces at FoxFinder Industries.

Emergency Communications Course

The club has six sets of ARRL Emergency Communications course books to be loaned out to members. They will be available for loan from the club librarian.

Public Service List April 10

Public Service Volunteer Opportunities in the New England Division

Date	Event	Location
Event Contact		Tel/Email
Apr 21	Multiple Sclerosis Walk	Boston MA
Bob WA1IDA	508-650-9440	wa1ida@arrl.net
Apr 27	Lion's Club Canoe Race	Townsend MA
Bill NZ1D	978-597-2348	nz1d@juno.com
Apr 28	Groton Road Race	Groton MA
Erik KA1RV	978-448-5536	erik@eggo.org
Apr 28	March of Dimes WalkAmerica	Boston MA
Bruce KC1US	781-275-3740	kc1us@net1plus.com
May 5	Walk for Hunger	Boston MA
Bob K1IW	413-647-3060	w4h@amateur-radio.net
May 19	Parker Classic Road Race	Devens MA
Stan KD1LE	978-433-5090	kd1le@amsat.org
Jun 1	Apple Country Challenge	Hollis NH
Neil K1VY	603-465-2788	Neil@innermedia.com

Jun Narragansett RI ADA Ocean State 150
Bruce KC1US 781-275-3740 kc1us@net1plus.com

Jun 2 N Kingstown RI ADA Ocean State 150
Bruce KC1US 781-275-3740 kc1us@net1plus.com

Jun 22- MS Bike Tour Boston to Provincetown MA
John N1PYN 508-588-3250 23 to n1pyn@arrl.net

MSPCC Yankee Tour

Jul 27 Marlboro to Amherst MA
Jul 28 Amherst to N.Adams MA
Jul 29 N. Adams MA to Poultney VT
Jul 30 Poultney to Burlington VT
Jul 31 Burlington to Killington VT
Aug 1 Killington to Keene NH
Aug 2 Keene NH to Marlboro MA
Bruce KC1US 781-275-3740 kc1us@net1plus.com

This list is published periodically as demand warrants by Stan KD1LE and Ralph KD1SM. Our usual distribution is via packet to NEBBS, via Internet mail to the arrl-nediv-list and ema-arrl distribution lists, and on the World Wide Web (see URL below). If other mailing list owners wish us to distribute via their lists we will be happy to oblige. Permission is herewith granted to republish this list in its entirety provided credit is given to the authors and the URL below is included. Send comments, corrections, and updates to:

(via packet) KD1SM@K1UGM.#EMA.MA.USA,
(via Internet) KD1SM@ARRL.NET.

We make an attempt to confirm entries with the coordinator unless the information is from another published source. We very much appreciate the assistance we have been receiving from our 'scouts'; everyone is welcome to send us postings.

World Wide Web users: the most recent copy of this list is maintained as <http://purl.org/hamradio/publicservice/nediv>.

From The ARRL Letter

NEW MEXICO ARES/RACES TEAMS SUPPORT FIRE RESPONSE

Amateurs in New Mexico supported the activities of responding agencies in late March when four wildfires broke out at approximately the same time within a few miles of each other. One of the fires destroyed more than two dozen houses.

Working as a combined Lincoln County Amateur Radio Emergency Service (ARES) and Radio Amateur

Civil Emergency Service (RACES) team, amateurs provided local communication support as well as an HF link between the fire incident command post and the state emergency operations center in the capital city of Santa Fe.

"This was the first time the team members wore both hats during an actual event," said Lincoln County Emergency Coordinator and RACES Officer Rick Sohl, K5RIC.

Amateurs also helped the Rio Hondo Chapter of the American Red Cross, which provided staff, equipment and food to feed fire-suppression teams as well as those staffing the incident command headquarters, other support staffers and those forced to take refuge in Red Cross shelters or seek first aid. More than 1000 people had to be evacuated.

Sohl said the so-called Alto Fire got its start March 23 in Lincoln County and destroyed 29 homes and a barn. "Someone putting fireplace ashes outside without making sure the ashes were out caused this fire," he said. The blaze burned nearly 1000 acres. A second fire started in Otero County on the Mescalero Apache Reservation. Called the Hondo Fire, it subsequently crossed into Lincoln County and burned some 17,000 acres.

Sohl said local repeater nets coordinated support personal, equipment disbursement and food distribution. In addition to the HF link with the state EOC, the ARES/RACES team networked the Red Cross shelter, first aid station, fire command post, three county-wide gateway net control stations and five mobile radio units via Amateur Radio. "The two fires required the Red Cross to set up two shelters and first aid stations to deal with two areas," Sohl said. "Two smaller fires were being suppressed at the same time."

The ARES/RACES team was able to integrate smoothly into the Red Cross response activities, Sohl observed. "Feeding this many people can be a logistical problem," he said. "This chapter has provided such support each year during fire season, so they know how to do the job correctly and have found that a radio network can improve efficiency at a time when it can make a major difference."

Sohl said this week that while the Alto and Hondo fires now are out, high winds plus a warmer-than-normal winter and a lack of snowfall have combined to create an extremely high fire danger situation.

In all, more than three dozen amateurs--including ARRL New Mexico Section Manager Joe Knight, W5PDY--were involved in providing communication

support during the fire emergency. More information is available on the Lincoln County ARES/RACES Web site <<http://www.zianet.com/sohl>>.

ALL-HAM ISS CREW'S DUTY TOUR EXTENDED

The Expedition 4 International Space Station crew of Commander Yuri Onufrienko, RK3DUO, and flight engineers Dan Bursch, KD5PNU, and Carl Walz, KC5TIE, will be spending an extra month in orbit. Problems with the Canadarm 2 robotic arm on the ISS will result in extending their mission to 189 days--a new record for the US crew members. March 29 marks 114 days in space for the current crew, which came aboard in December.

Late last week NASA decided to bump the launch of the Expedition 5 crew aboard the shuttle Endeavour (STS-111) from May 6 to May 31 in order to permit more training time for the shuttle crew to deal with the mechanical arm repair. Shuttle astronauts will replace a wrist joint in the space station's mechanical arm. The Endeavour won't be returning to Earth until June 12, which means the astronauts on the Expedition 4 crew will beat NASA's current space endurance record by one day.

US astronaut Shannon Lucid, who spent 188 days aboard the Russian Mir spacecraft in 1996, is the current American record holder, and she will still hold the women's space endurance record.

Onufrienko, however, will not come close to topping the Russian 438-day endurance record set aboard Mir in 1994 and 1995 by cosmonaut Valery Polyakov.

For more information about the ISS, visit NASA's Human Space Flight Web site, <<http://spaceflight.nasa.gov/index.html>>.--NASA, news accounts

AMATEURS SUMMON HELP AFTER SAILBOAT RUNS AGROUND

Vigilant members of the Maritime Mobile Service Net on 20 meters relayed calls for help from a sailing vessel that ran aground March 26 off the northern coast of Cuba. Aboard the sailing vessel Tao were Dave Beane, G0TAG, and his wife, Sara, whose frantic calls on the Net frequency got a quick response. The couple subsequently was rescued by Cuban authorities and their sailboat refloated.

"She was in a big panic, and then they just stopped transmitting," reported Ed Petzolt, K1LNC, in South Florida, who said he happened onto the situation when he turned on his transceiver.

US Virgin Islands ARRL Section Manager John Ellis, NP2B, said that less than an hour earlier, Beane had checked into the MMSN to say the couple had enjoyed a visit to Cuba and was planning to sail around to the south side. "There was no indication of any problem," he added. Since Ellis had the best copy, he managed the incident.

"It turned out that Dave and Sara had run upon a reef, had called for help from the Cuban authorities, but had received no response," he said. "Sara was rather frantic when she came on 14.300. We immediately gave her a clear frequency." Ellis said a net slightly higher in frequency yielded to give the Net a wide berth.

Mike Pilgrim, K5MP, in Texas notified the US Coast Guard. At about the same time, Petzolt contacted the Swiss Embassy--the US has no diplomatic relations with Cuba, and Switzerland often serves as an intermediary. The Swiss Embassy put him in touch with the Cuban mission in Washington, which, in turn, contacted authorities in Havana by radio. The US Coast Guard was only able to contact the Cuban authorities via telex.

"We tried to determine if they were in danger of sinking, but that is when we lost communication," Ellis said. "We never heard from them for the remainder of the evening."

Ellis said G0TAG checked into the Net later in the week to say that Cuban authorities were able to float the vessel off the reef and get the couple under way again. "Dave, G0TAG, had nothing but good words to say about the Cubans," Ellis said. "The authorities were very nice and helpful, they even sent two divers down to inspect the bottom of the boat--all at no charge!"

The MMSN had "excellent cooperation and assistance" during the incident from net control Frank Kelly, N3FK, Petzolt, Pilgrim and Dave Dalziel, N4ICE, Ellis said. "There were a number of others on frequency available to help, but all maintained top-notch order and control," Ellis added.--thanks to Brandon Horn, KC2HFG, for alerting ARRL to this incident

AMATEURS RESPOND TO APPALACHIAN FLOODING

Appalachian amateurs this week responded to assist after heavy rains caused flooding in several states in the region. Flooding closed numerous roads, damaged or destroyed many structures, forced residents

from their homes and was blamed for at least seven deaths.

In Kentucky, ARRL Section Emergency Coordinator Ron Dodson, KA4MAP, says the Red Cross asked amateurs to assist with damage assessment in Knox County. According to press reports, hundreds of homes and businesses were flooded out as heavy rain spread throughout the eastern part of the state after earlier affecting the Harlan area. The Salvation Army also has responded to assist.

The National Weather Service issued flood warnings for Carroll and Owen counties where the Kentucky River had overflowed following up to four inches of rain March 19. Flooding also forced Morehead State University to close March 20 after more than four inches of rain fell there. Emergency declarations were issued in at least eight counties and five cities in Kentucky. No Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) activations were reported.

In extreme Southwest Virginia, heavy rain over the March 16-17 weekend swelled streams and rivers beyond flood stage, reportedly covering highways and sweeping away some bridges and forcing more than 1000 residents to flee their homes. ARES and RACES teams were called up March 17 to staff the Scott County Emergency Operations Center.

"Many major highways were under water for a period of time, and quite a few secondary roads are still impassable," Scott County EC Jimmy Flanary, K4GV, reported. Although shelters were set up, most people refused evacuation, he said, opting instead to stay with friends or relatives. ARRL District 14 Emergency Coordinator Phil Mohon, KU4RK, said hams in Tazewell County volunteered to help out in any way they could, but there was no formal ARES activation. Amateurs also were reported to have activated informally in Lee, Wise, Washington and Russell counties.20

Additional flooding occurred in West Virginia. West Virginia ARRL Section Emergency Coordinator Mac McMillan, W8XF, reported that several counties and the state EOC were put on standby, but no ARES/RACES activations were necessary. Up to three inches of rain fell March 20 in West Virginia, forcing 100 residents in at least three counties to leave their homes. Flooding also occurred this week in eastern Tennessee.

PRESIDENT HAYNIE CALLS DC VISIT "BEST YET" FOR HAM RADIO

ARRL President Jim Haynie, W5JBP, says Amateur Radio got a positive reception during his fourth official visit to Washington, DC. Haynie headed a contingent of ARRL officials and staff members February 26 to March 1 that included stops at the FCC and on Capitol Hill.

"In my mind, it was the best trip we ever had," Haynie said. "This was more of a working trip than any of the previous." Haynie's entourage included ARRL General Counsel Chris Imlay, W3KD; Hudson Division Director Frank Fallon, N2FF; Legislative and Public Affairs Manager Steve Mansfield, N1MZA; and Technical Relations Specialist Jon Siverling, WB3ERA.

Haynie and Imlay met with FCC Office of Engineering and Technology Chief Edward Thomas and OET staffers. The stop included a second ex parte presentation to OET staff members by ARRL to address concerns raised by a SAVI Technology proposal to deploy Part 15 RF identification tags in the vicinity of 433 MHz at much greater field strengths and duty cycles than those now permitted for such devices. Also discussed were the ARRL's pending petitions for low-frequency allocations at 136 kHz and 160-190 kHz, and for new, 5 MHz domestic allocation.

The centerpiece of the series of Washington visits was ARRL's participation in a National Public Safety Telecommunications Council (NPSTC) brainstorming session, chaired informally by Gene McGahey, AL7GQ, of the National Law Enforcement and Corrections Technology Center. The February 27 meeting considered improved means to incorporate Amateur Radio into public safety and homeland security planning.

Topics included further upgrading the level of professionalism among Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) volunteers. Discussion focused on the possibility of forming a highly trained first-response cadre of Amateur Radio volunteers who would undergo ongoing training and accreditation. "We will be going to ARES and RACES to recruit the best and the brightest," Haynie said. The session also touched on the need for a universally recognized identification card for amateur volunteers.

Representatives of the Federal Emergency Management Agency (FEMA), the American Red Cross, The Salvation Army, the FCC and the Association of Public-Safety Communications Officials (APCO) were among those on hand for the session. A follow-up meeting will be held this spring at ARRL Headquarters.

The ARRL party also touched bases with several members of Congress to explore the possibilities of legislation concerning private deed covenants, conditions and restrictions--CC&Rs--as they affect the ability of radio amateurs to erect outdoor antennas. Haynie and ARRL officials also discussed Amateur Radio's role in the aftermath of September 11. On the list were meetings with Rep Steve Israel on New York, whose father, Howard, is K2JCC; Mike Iger, legislative assistant to Rep Maurice Hinchey of New York; Sharon Tucker, legislative assistant to Rep Jerry Kleczka of Wisconsin; Rep Greg Walden, WB7OCE, of Oregon; and Rep Pete Sessions of Texas and Jeff Koch, NU5Z, his legislative assistant.

"I was encouraged," Haynie said after the round of meetings. Since September 11, he said, he's perceived a greater level of awareness in Washington on a to what role Amateur Radio might play in homeland security and increased public safety. "The reception we got was extremely cooperative and very friendly," he said.

During the Washington visit, the ARRL renewed its Memorandum of Understanding with FEMA, which sponsors RACES. The MOU calls on FEMA to encourage state and local emergency management officials to establish cooperative relationships with ARRL field volunteers, the inclusion of Amateur Radio in developing state and local emergency operating plans, and the use of those plans to support exercises.

March Treasurer Report\$

March income was \$125 in membership dues, \$1 net from the FoxFinder project after purchasing a QST ad, \$10.16 in bank interest, \$27 from the book raffle, \$75 from PowerPole connector sales, and \$6 from patch sales.

Expenses were \$8.28 from the Continuing Education exam session and \$13.60 for newsletter postage.

Net income for the month was \$222.28.


Current balances:
 General fund: \$4799.27
 Community fund: \$1717.55

Last month's report missed an entry in my spreadsheet and was therefore incorrect. The FoxFinder

project had a net expense of \$151.81 leaving a net expense of \$412.85 for the month with a General Fund balance of \$4576.99.



73, -Ralph KD1SM


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 Board Members:
 Bob Reif 1999-2002
 Den Connors 2000-2003
 Craig Kalley 2001-2004
 N1NC Trustee: Bruce Blain K1BG
 Meetings are held on the 3rd Thursday of the month -
 7:30 p.m. - Pepperell Community Ctr. Talk-in 146.490
 simplex
 442.90 + 100Hz Repeater
 53.890 - 100Hz Repeater
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