

de N1NC

July 2001 Volume 10 Number 7

### This Month's Meeting

**REMEMBER** his month we have no regular meeting. In August Den KD2S will host the club cookout on the regular meeting night August 16<sup>th</sup>. Bring your grub to barbecue. The club will provide soft drinks and chips. Den is setting up an HF special event station.

We need help with the July road clean up so see Stan if ybou are available.

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

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

### Last Month's Meeting

Last month's meeting was chaired by Earl WR1Y since Erik was providing communications at the Mt Washington auto race. We started out with the regular business reports.=

We then considered he proposed Constitutional changes. After a lengthy discussion moderated by Earl a vote was taken. Absentee ballots were counted and represented 14 valid votes. There were 17 members present at the meeting. This was a total of thirty-one votes which satisfied the minimum quorum. With all thirty-one votes cast the motion to accept all five changes was passed unanimously

Other business included approval of \$100 to pay for a porta-john for Field Day, the August cookout at the

Den Connors KD2S estate, and Russ advised on upcoming meeting speakers.

Terry Stader KA8SCP (emergency communications), Terry Cone (Firemaster, Boston), Norm Jones (Engineer of miniature engines), -Russ's son (GHz data links)

Stan also solicited for changes to the Yearbook update which should be ready for the September meeting.

Then Rod WA1TAC (a Groton Electric Power Commissioner) and Earl talked about the Groton electric distribution system, what issues they face in terms of system efficiencies and how it has been improved. There were tables of rates from Massachusetts towns comparing the prices of electricity. This was tied into some RF interference problems they were having which they tracked down to a business in the center of town.

We then broke up into separate discussions and the Field Day group finished up the last minute details to make Field Day a success.



## Welcome to New Member

Welcome to new member Steve Uutamo. This was Steve's first meeting and he endured the Constitutional discussion. We hope he comes back. HiHi.

## Corrections/Additions

In the June issue I failed to credit the article on the Dayton Hamvention. Thanks to Les N1SV for being our man on the scene. See his article on the VHF QSO Party in this months issue.

Stan

## Field Day 2001



Above Wolf's recently completed Elecraft K1 transceiver which was the main Field Day radio. Notice it is smaller than the tuner below it.



Signs at the center of town and arrows to the site invited visitors to come see us in action.



Above are Ben and Wolf running the show Saturday afternoon.

Field Day was run in the apple orchard on Heald St. in Pepperell. This property is Pepperell Conservation land and is open to the public.

The Field Day paper work has been submitted. We claimed a total of 349 contacts, all CW, and a total of 3490 points. This does not include bonus points which are determined at the ARRL HQ. We operated four bands during the event using three dipole antennas.

We have started a Field Day notebook to keep a record of Field Days and what went on. This will be part of the club records and can be a resource for future participants and coordinators.

### Adopt A Highway

Sunday July 22nd will be our next road cleanup. With the June date falling on Field Day weekend and the next two weekends being around the 4th of July I decided that any further delay would push it so close to the July clean up that it didn't make sense. So I canceled the June cleanup. After a month off I'm looking for a good turn out to make this one easy.

Stan

### Board of Directors Meeting

Minutes of the NVARC Board meeting 7/12/01. Members present: Ian, Ralph, Erik, Bob, Stan

Moved Erik, seconded Ian, that Field Day bills, as presented, be paid-carried

Ralph voiced his concern that we should have approved a Field Day budget rather than approve charges after the fact. The board agreed to do that for future events.

Moved Stan, Seconded Erik, that Wolf, as Field Day chairman, be authorized to sign the Field Day log submission-carried

Moved Stan, seconded Ian, that the club pay for Soft Drinks, Ice and Chips up to \$30 to Den Connor as host of the Summer meeting/cookout-carried

Discussion on the archiving process for the constitutional change materials resulted in the following: Stan will send Ian the material (electronic) for printing and filing in the Clubs records. The Year Book will become the official members record of the current constitution, based on the original updated document in the clubs records.

Stan has produced a "How to do a Field Day" document providing an invaluable resource for future planning. It will include a record of the details of each Field Day. This will be sent electronically to Ian for inclusion in the clubs records.

Treasurers Report:

General Fund	\$5220.03 (\$203 received from Fox Finder activity)
Community Fund	\$1192.55

Ian Norrish NZ1B, Secretary.

### SKYWARN



These are pictures of the Princeton tornado which occurred on June 17<sup>th</sup>, 2001.



The above pictures are a reminder to the SKYWARN people and those who might be thinking about becoming

ing SKYWARN observers. If you think it doesn't happen here your wrong.

It was rated an F0 which makes it small though it can still do plenty of damage as demonstrated in these pictures.

## UHF/VHF Contest

### 2001 ARRL JUNE VHF QSO PARTY



I participated in the annual ARRL June VHF QSO Party this month from high atop Mt Greylock in North-western Massachusetts. I'm happy to report that it looks like the Mt. Greylock Expeditionary force, W2SZ/1 has taken home another 1<sup>st</sup> place finish in the Unlimited M/M category. The group avenged last June's loss to the Grid Pirates, K8GP by racking up 2.4M points to the Grid Pirates 1.83M (claimed raw scores). This is the first time any group has broken the 2M-point barrier and it eclipses the old record set by K8GP last June by more then 500K points.

As you can see from the photo above, the weather really cooperated with us. From setup on Wednesday through the contest the weather was great with temperatures in the 60s and 70s and only a light wind. Having operated from this mountain for more than 15

years I know the weather can make things quite difficult. In years past we've had to deal with heavy wind blown rain, dangerous thunderstorms, high winds, pea soup fog, and even snow flurries.

Prorogation for the June contest was typical with Sporadic-E on 6meters and little or no enhancement on the other bands. The 6m operators did report a very small opening to Europe and worked into Portugal and Spain Saturday afternoon for the first time ever. There was also a good 6m opening to the West Coast very early Sunday morning (approximately 4:30 A.M. local) for those lucky enough to be up.

The 2m and 220 MHz stations reported a small Aurora Saturday evening though it appeared that it didn't produce as many new multipliers as was hoped.

New this year for the group was a pair of 145 GHz stations as well as two laser transceivers. With this equipment the 220 GHz band remains as only VHF and above band allocated for amateur radio use where we don't have any equipment. The laser stations where able to complete a QSO over an 8mile path using modulated CW and modified laser pointers.

I have posted Photos I took of the contest. To access them go to: <http://www.tiac.net/users/lpeters/www/mgef/2001MGEFJUNE.htm>. Upcoming VHF/UHF contests include the ARRL UHF contest 7August 4 - 5 and the September VHF QSO party September 8 & 9. For additional information on W2SZ/1, K8GP, or contesting go to the links below.

<http://www.mgef.org/>

<http://www.k8gp.net/>

<http://www.arrl.org/contests/>

Les N1SV

## Public Service

Listing public events at which Amateur Radio communications is providing a public service and for which additional volunteers from the Amateur Community are needed and welcome. Please contact the person listed to identify how you may serve and what equipment you may need to bring.

Every event listed is looking for volunteers  
Date Location Event Contact Tel/Email

July

21 Marlboro MA to Amherst MSPCC Yankee Tour

22 Amherst MA to N Adams MSPCC Yankee Tour

23 N. Adams MA to Castleton MSPCC Yankee Tour

24 Castleton VT to Burlington MSPCC Yankee Tour  
25 Burlington VT to Killington MSPCC Yankee Tour  
26 Killington VT to Keene MSPCC Yankee Tour  
27 Keene NH to Marlboro MSPCC Yankee Tour  
Bruce KC1US 781-275-3740 kc1us@cyberzone.net

The most recent copy of this list is maintained as <http://purl.org/hamradio/publicservice/nediv>.

## SANS 'Recruiting' Hams

Den KD2S pointed out this story In Computer World  
SANS: Calling all ham radio operators  
By DAN VERTON (July 06, 2001)

The System Administration Networking and Security (SANS) Institute is recruiting amateur radio operators to take part in an emergency communications network that it said could be used by disaster relief personnel in the event of a catastrophic failure of telecommunications systems, including the Internet.

### ADVERTISEMENT

In its weekly newsletter this week, Bethesda, Md.-based SANS asked all interested ham and packet radio operators "to take a leadership role to help establish and maintain" such an emergency backup communications network. SANS is a research organization for systems administrators and security managers.

There are approximately 600,000 amateur radio operators in the U.S. and 2.5 million around the world. Ham radio operators, as amateur radio operators are popularly known, must obtain a license from the U.S. Federal Communications Commission and are encouraged to provide emergency communications during natural disasters and national emergencies.

Jim Haynie, president of the American Radio Relay League (ARRL), a Newington, Conn.-based organization that supports the interests of ham radio operators in dealings with the government, said the SANS proposal is a good one and in many ways similar to what amateur radio operators have been doing since the first licenses were issued in 1912.

"There is a network that can be marshaled if needed," said Haynie, referring to the potential of a terrorist attack or natural disaster to cripple large portions of the Internet and the telecommunications grid. "If the Internet went down today, it wouldn't change my life one bit," he added. "It's nothing for me to go in my ham shack and flip one switch and talk to New York or Bul-

garia or Ukraine."

The ARRL estimates that there are about 275,000 "hardcore operators" who could swing into action if needed, Haynie said. "But to back up the entire infrastructure is a pretty tall order," he cautioned, noting that the use of ham radio operators in this fashion wouldn't mean the instant restoration of Web browsing capabilities or Internet e-mail capabilities.

Instead, Haynie said, the ham radio network would be strictly used for passing emergency voice and data communications between government officials at the local, state and federal levels and the public.

The ARRL is a signatory to several memorandums of understanding with various federal and private relief agencies, including the Federal Emergency Management Agency and the Red Cross. In fact, many of the ARRL's 175,000 members have actively supported federal emergency response operations during many of the most recent disasters and crises.

During the flooding that ravaged parts of Texas last month, for example, the FCC set aside a band of frequencies for use by ham radio operators to support federal relief efforts, Haynie said. Likewise, the radio operators were called into action after the 1995 blast that destroyed the Alfred P. Murrah Federal Building in Oklahoma City led to an overload of the cell phone network.

Alan Fedeli, director of emergency response services at Atlanta-based security software vendor Internet Security Systems Inc. (ISS), applauded the approach suggested by SANS and said any attempt to establish alternate communications channels should be supported.

David Curry, manager of business strategies at ISS, pointed to outbreaks of Internet and e-mail worms as prime examples of the need for such an alternate network. Many companies simply pull their systems off the Internet when that happens in order to prevent the worms from reaching them, according to Curry.

"People's reaction was to unplug the network," he said, referring to several such incidents. "The problem is that the people disconnected themselves from the source of information about the problem."

## Repeater Improvements

Much work has been going on to improve the equipment and performance of the N1MNX repeaters. Particular emphasis has been placed on stability and running without commercial power.



With the new 12 volt bus bar system and rack in place equipment is being moved from various locations around the shack to the more stable location in the rack. The 220 system is mounted in the center with the 220 cans behind the lower portion of the rack. The 440 machine and the packet digipeater will be moved from the rack on the counter at the left to the main rack on the right when the power distribution panel is ready.



Below is a picture of the optional external charging port we 'ordered' for the bus system. It will allow external hookup of an external system such as the 'Lil Pup' or an automobile to charge the batteries in an emergency. The external portion of the bus is disconnected inside the shack unless it is being used to protect against accidental shorts.



During a recently completed battery power test we operated the 6M repeater, the 440 repeater and the packet digipeater for 60 hours on batteries. Our goal



is to be able to run a voice repeater for three days without commercial power. Since we were very close with three machines operating we should be able to keep any two up for longer than the 72 hours we desire.

## From The ARRL Letter

### MUSEUM SHIP SPECIAL EVENT SET FOR JULY 21-22

Amateur Radio stations aboard or associated with some 60 historic vessels will be on the air July 21-22 for the annual museum ship special event. The yearly outing is sponsored by the USS Salem Radio Club, K1USN, in Quincy, Massachusetts. Warships, submarines and various motorized vessels from WW II and earlier from the US and elsewhere will be on the air. All have a history and a story to tell. A certificate is available. Visit the USS Salem Web page <<http://www.qsl.net/k1usn/event.html>> for a list of participating ships, operating frequencies and certificate information.

### JULY IS IOTA MONTH

DXers who participate in the IOTA (Islands On The Air) program, sponsored by the Radio Society of Great Britain (RSGB), know that July is IOTA Month. This is quite possibly the best month to work a new one, because so many people in the Northern Hemisphere go on IOTA DXpeditions at this time of year, especially during the RSGB IOTA Contest the last full weekend of the month. If you are just starting out in this DX award program you can easily work your first 100 IOTA counters and some of the more serious operators can work well over 200. This year's contest will be held on the weekend of July 28-29. For more information on IOTA, visit the RSGB's Islands on the Air Web site, <<http://www.rsgbiota.org/>>.

### SUSAN HELMS, KC7NHZ, THRILLS FIELD DAY OPS FROM ISS

Astronaut Susan Helms, KC7NHZ, took time out aboard the International Space Station to join in the ARRL Field Day fray last weekend. The operation was believed to mark the first time anyone participated in Field Day from space.

Helms worked several dozen stations—most of them Field Day operations—as the ISS passed over the US. ARRL Contest Branch Manager Dan Henderson, N1ND, says the NA1SS contacts will count for Field

Day credit, but they will not count for satellite bonus points.

Helms sounded like a veteran contester during Field Day, although not without some confusion as to what exchange she should transmit. Initially acting on incorrect information, Helms was giving out “one alpha maritime mobile-Russia” for a Field Day report. Later, she resorted to “1 alpha battery on the space station.”

The NA1SS Field Day operation infused a lot of enthusiasm into the occasion. “This Field Day is the one I’ll remember the most, even after doing FD for 40 years,” said ARRL Wisconsin Public Information Coordinator Jim Romelfanger, K9ZZ. Romelfanger worked NA1SS as part of the WB9FDZ Yellow Thunder Amateur Radio Club Field Day crew. “Susan was having a ball up there!” he said.

Dave Swartz, KC7RRH, said his club’s Field Day operation was another lucky enough to snag a contact with NA1SS. It happened almost by accident. Swartz, who operated with the Federal Way Amateur Radio Club’s WA7FW setup in Washington, said the group was set up for a packet contact via the ISS when he heard Helms’ voice coming over the speaker. Although he was on 20 meters at the time, he grabbed the mike at the packet setup next to him and made the QSO. Swartz said he was “very psyched” about working Helms but disappointed not to get the bonus points. Henderson said that ISS contacts will not count for bonus points because the ISS is not an “Amateur Radio satellite,” as rule 7.3.7 specifies <<http://www.arrl.org/contests/announcements/rules-fd.html>>. Henderson said that, because of their nature, bonus points “need to be readily available to everybody,” and the ISS offers only a limited window of opportunity.

As for the correct Field Day operating class for NA1SS, Henderson said there is more than one possible choice, but the question is largely academic. “Whatever exchange she sent out, count it as a valid contact for Field Day and enjoy the experience,” he said. Field Day entries require a list of call signs worked by band and mode.

Henderson said Helms’ ISS Field Day entry will end up “in a class by itself.” US stations working NA1SS aboard the International Space Station QSL to Margie Bourgoin, KB1DCO, ARRL, 225 Main St, Newington, CT 06111. Canadian stations QSL to Radio Amateurs of Canada, 720 Belfast Rd—Suite 217, Ottawa, ON K1G 0Z5. A self-addressed, stamped envelope is required to get a QSL in return.

## **DISASTER COMMUNICATIONS CONFERENCE PRAISES HAM RADIO**

Amateur Radio's role in emergency communication received high praise in an opinion adopted by the recent Second Tampere Conference on Disaster Communication. Several speakers at the conference, held in late May in Tampere, Finland, also lauded the work of amateurs in the wake of disasters.

An Opinion of the Conference expressed appreciation for "the role played by volunteers, in particular those of the Amateur Radio Service," and encouraged administrations to facilitate their work in emergency telecommunications.

In the role of International Amateur Radio Union expert consultant, ARRL Technical Relations Manager Paul Rinaldo, W4RI, spoke at the conference on Amateur Radio and disaster communications. Approximately 125 attended the conference, including what Rinaldo called, "a notable percentage of radio amateurs" representing agencies or companies from several nations.

The conference Opinion also invited administrations to consider "the recognized need of disaster relief organizations to use their existing radiocommunication equipment under disaster relief situations" as well as "the need to conclude frequency arrangements" for such equipment in emergencies.

The conference—sponsored by the United Nations Office for the Coordination of Humanitarian Affairs and the International Institute of Communications—was organized to raise visibility of the 1998 Tampere Convention

<<http://www.arrl.org/news/stories/1998/12/02/1/>> and to urge its ratification. The US is not yet among the nine countries that have ratified the Convention. Tampere II also provided a forum for administrations and nongovernmental organizations to exchange information about disaster communications.

## **HAMS ASSIST US NAVY FLIGHT**

Participants on the 20-meter Maritime Mobile Net June 13 were a bit surprised when a ham aboard a US Navy plane checked in for assistance. John Pierce, KC4YWP, informed the Net that the Navy aircraft—using the military call sign "Copperhead 5"—had lost communication with its base. "He asked us to place telephone call to his base to inform them he was returning due to loss of communications," said Bob Puharic of Pennsylvania—one of the net controllers. Pu-

haric said that retired US Air Force Col Bob Botik, K5SIV, placed the call and informed Copperhead 5 that it had been delivered. "The US Navy thanked the net and secured," Puharic said.  
Considered

## **GULF REGION HAMS WADE IN TO HELP IN ALLISON'S WAKE**

Amateur Radio continues to support relief agencies in the wake of heavy flooding in Texas, Louisiana and parts of Mississippi. South Texas ARRL Section Manager Ray Taylor, N5NAV, said June 15 that several dozen more volunteers were needed to help provide communication support for Salvation Army, Baptist Mens' Kitchen and Red Cross relief operations. An FCC-declared general communications emergency in Texas and Louisiana for 3873 and 7285 kHz was rescinded at 2300 UTC on June 15.

The region suffered some of the worst flooding in decades after Tropical Storm Allison moved ashore last weekend and stalled. The storm claimed more than a dozen lives.

Although the initial flooding was receding, additional rainfall this past week—and more predicted—created an uncertain situation in the region. Taylor said hams had been using HF links between their field volunteers and their regional headquarters operations in the Dallas area to support Salvation Army and Baptist Mens' Kitchen feeding efforts in the stricken area. Cellular telephone service was made available, however. Other links were made using Amateur Radio VHF. Hams also have been using VHF and UHF repeater nets to provide emergency communication and to coordinate relief activities on the local level, including at Red Cross shelters. Taylor said he expected hams would be needed for the next couple of weeks.

Amateur Radio volunteers with VHF capability—either an HT with extra batteries or a mobile and portable antenna—were needed to help relief agencies with conventional and cellular systems still knocked out due to flooding. Prospective volunteers should contact Taylor via e-mail at [n5nav@texas.net](mailto:n5nav@texas.net); South Texas Section Emergency Coordinator Bob Ehrhardt Sr, W5ZX, [w5zx@yahoo.com](mailto:w5zx@yahoo.com), or Jeff Salmons, N5ECP, [n5ecp@flex.net](mailto:n5ecp@flex.net).

Radio Amateur Civil Emergency Service member Bruce Paige, KK5DO, in Houston said telephone service was lost in most of downtown area in the immediate aftermath of the flooding. Several hospitals and the medical center also lost power and water, he said. In



some cases, basement flooding prevented emergency generators from taking over. Paige said hams provided a link between the Medical Center and local hospitals and were stationed at a triage center set up at the Houston Astrodome. He reports that hams assisted at local Houston fire stations last Saturday when the dispatch system went down. Hams helped to direct emergency calls for service to the station best-equipped to handle the call. Amateur Radio also handled health-and-welfare messages from the affected area to the outside.

Amateurs also provided vital links between the Austin Emergency Operations Center and Houston and Fort Bend EOCs after Houston and Fort Bend lost telephone service. Paige said ham radio was a communications mainstay at one point as other systems fell victim to the flooding or power outages.

In Louisiana, East Baton Rouge Parish EC Karl R. Sandstrom, K5MAN, reports that ARES and RACES were activated June 7 to assist the Red Cross in the Baton Rouge area following upwards of two feet of rain during the weekend. The Red Cross opened shelters in Baton Rouge and Denham Springs and hams provided communication. Hams were able to stand down from duty when the Red Cross was able to re-establish its normal communication infrastructure.

“Communications Coordinator Joe Ross and the Red Cross extended their very sincere appreciation for the time and effort put forth by local ham operators helping to fill communications gaps,” Sandstrom said.

Taylor said many hams in the Gulf region have volunteered to help out in the aftermath of the flooding, but he did not yet have an accurate head count.

## \$July Treasurer Report\$

The book drawing winners for June were our newest Club Member Steve WA4LDL who got the Antenna Compendium and Dave N1MNX who got the Basic Electronics book.

Income for June was \$23 from the book drawing, \$15 from membership renewal, \$203.61 net from FoxFinder kit and board sales, and \$6.96 in bank interest.

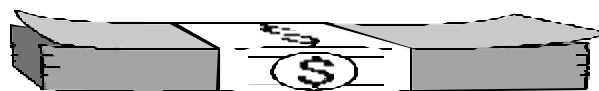
Expenses were \$100 for the Field Day porta-potty, and \$3.95 for mailing a yearbook leaving a net income of \$144.62.

Fund balances as of June 14 are:

General Fund: \$5220.03  
Community Fund: \$1192.55

If your ARRL renewal is coming up soon or you haven't yet joined ARRL and wish to do so, I can mail your paperwork for you. Make your check payable to NVARC and I'll do the rest. The ARRL rebates a portion of your membership to the Club when I do the mailing.

73, Ralph KD1SM



## 2001 Fleamarkets

28 Jul 2001 + Bagley ARC, Lincoln, ME

19 Aug 2001 x MIT Radio Society/Harvard Wireless Club/MIT UHF Repeater Assn.

<http://web.mit.edu/w1mx/www/swapfest.html>

1-2 Sep 2001 \* Eastern VHF/UHF Conference  
Eastern VHF/UHF Society & North East Weak Signal Group, Enfield, CT

9 Sep 2001 + Mohawk ARC, Orange, MA

16 Sep 2001 + Western Connecticut Hamfest  
Candlewood ARA, Newtown, CT

16 Sep 2001 x MIT Radio Society/Harvard Wireless Club/MIT UHF Repeater Assn.



**Nashoba Valley  
Amateur Radio Club**

PO Box # 900  
Pepperell Mass 01463-0900

mailto:[nvarc\\_n1nc@arrrl.net](mailto:nvarc_n1nc@arrrl.net)  
<http://purl.org/hamradio/club/nvarc/>

Pres.: Erik Piip KA1RV  
V Pres.: Earl Russell WR1Y  
Secretary: Ian Norrish NZ1B  
Treasurer: Ralph Swick KD1SM  
Editor: Stan Pozerski KD1LE  
Photographer Ralph Swick KD1SM  
PIO: open  
Board Members  
Bob Reif 1999-2002  
Den Connors 2000-2003  
Craig Kalley 2001-2004

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

This newsletter is published monthly. Submissions,  
corrections and inquiries should be directed to the  
newsletter editor. Articles and graphics in most IBM-  
PC formats are OK. You can send items to  
[pozerski@net1plus.com](mailto:pozerski@net1plus.com)  
Copyright 2001 NVARC