





de N1NC

March 2005 Volume 14 Number 3

This Month's Meeting

This month's meeting is March 17th. It will be a presentation by Ken Williams AB1BE on Bletchley Park. This is the facility in England where much of the Allied code breaking was done during World War II and is probably best known for the work relating to the German cryptographic machine called Enigma.

Last Month's Meeting





Stan awarding Phil the highly prized NVARC Mug.

Last months' meeting program was by Phil Temples the former ARRL East Mass Section Manager. Phil talked about a camp program for handicapped individuals with an Amateur Radio theme called Courage Handi-Hams. Phil played a video which showed the two camp locations -- one in southern California and one in Minnesota -- and the activities of the participants do during their week at camp. The staff of the camp is primarily volunteers and range from care givers to hams that modify equipment and teach the various classes leading up to a VE Exam session for the various license classed. Phil himself has been a volunteer in the program for several years.



Dennis K1LGQ showed a portable QRP antenna he had assembled from a Pacific Antenna bag-o-parts antenna kit and a tripod. In order to set up the antenna he had to put it on a stairway at home since it was the only location with sufficient ceiling height to extend the antenna to its full eight feet. During the

tuning process a station came back to him which he thought was great since he was only running five watts on the antenna indoors. He was surprised to learn that the station (K0OL), which was in Kansas, was only running 350 milliwatts!

A donor provided Honey Dew doughnuts.

In attendance were John KB1HDO, Dennis K1LGQ, Hank KB1JLA, Larry KB1ESR, Bruce K1BG, Jim N8VIM, Ken K1JKR, Don N1HVA, Ralph KD1SM, Leo WA1ULK, Peter N1ZRG, Dave N1MNX, Stan KD1LE, Erik W1ZBT, Ken K1KEY, Gary K1YTS, Les N1SV, Skip K1NKR and guests K9HI, Peter KB1LZH.

From the President

As you can see from the newsletter there are plenty of projects and activities going on and coming up. Find something that interests you and lend a hand.

Stan KD1LE

Adopt A Highway

The first cleanup of 2005 is April. Normally we meet at the traffic island on the east side of the Nashua River at 9:00 AM on the Sunday after the club meeting.

Due to a conflict with the Groton Road Race our first cleanup will be shifted earlier one week to April 17th.

Emergency Management Agencies

We Need YOU! Would you like to get involved in Emergency Communications. Amateur (Ham) radio, C.B. or FRS radio, computers or networking, gas generators, water pumps, lighting and electrical.

Do you have knowledge, or urge to learn, then you are welcome to join us. If you or anyone you know would like to help refer them to me. For further information on helping your community and country Please contact: David Peabody Pepperell E.M. Communications Officer E-mail n1mnx@n1mnx.com Phone 978-433-2577 U.S. mail PO Box 1309 Pepperell, Ma. 01463-3309

Bandpass Filter Project

After last Field Day several members expressed interest in running a Digital Station for Field Day

2005. That would be in addition to the CW and SSB stations we normally run. Including the GOTA station we could have as many as four HF stations on the air at one time. This can cause interstation interference from harmonics and phase noise. To help alleviate the problem Bob W1XP and Stan KD1LE have been working on designs for bandpass filters for each of the five HF bands that we could build. Bob built the first prototype and brought it to the January meeting. This is not a final design but one to test how well the design transfers to real life. Once a design is proven we need help building the "production" models. While there are six HF bands used for Field Day it is unlikely we could produce filters for all six bands times four stations by Field Day. A first cut might be to complete the filters for 80, 40, and 20 meters which will likely be used by everyone. That is three filters times four stations which is twelve filters. The next most likely bands to tackle would be 15 meters and then 10 meters.



Above is a prototype 15 meter filter.



Above is a near production 40 meter filter.

The 20 meter filter has been designed and a first and second iteration successfully built and tested. An 80 meter filter has beien designed and a proto-

type is being built. We are looking for a few more people to get involved in the program.

Field Day Logging Stations

Each year we have used whatever computers were available for Field Day. This creates a problem getting the software installed and running on a variety of machines and getting them networked. It also risks member's personal machines. To solve this problem Stan KD1LE has donated three machines that are exactly the same to a project Les N1SV has been working on for several years. That is to have dedicated machines that can be set up and tested in advance.



Field Day Logging Systems

Les has now installed the software and networked the three machines. The computer to radio interface is the last piece that needs to be developed. For Field Day all that should be required is to borrow several monitors.

Groton Road Race April

Groton Road Race - April 24

The Groton Road Race is a nice country foot race attracting about 2,000 runners to the town of Groton on a Sunday in April. Since its first running in 1992, the Groton Road Race has relied heavily on Amateur Radio operators to provide communications essential to managing the race.

This event truly highlights Amateur Radio at its best. The race is organized by a local running club, the Squannacook River Runners.



The Club has an excellent relationship with the Groton Police Department -- vital to the safety of the event. In turn the small Groton Police force has to call in officers from neighboring towns, and even the Massachusetts Environmental Police, to cover all the road intersections along the course. These several Police Departments of course have no shared radio communications between themselves.

Here is where we Hams prove our worth to the public for the frequencies that the FCC preserves for our use.

In a letter thanking us, race director Sue Podolske wrote "We truly could not even consider allowing a single runner across the starting line if you were not there to insure communications were open to safequard the participants."

Sue is not understating her need for our services. The only way the Groton Police Officer who is responsible for ordering road closings and approving the starting musket to fire can communicate these orders to the entire course and to the starting line is by instructing his Ham 'shadow' to communicate his instructions. We even station a Ham in the Groton Dispatch center so that out-of-town officers have a direct path to Groton Dispatch.

It takes about 40 Hams to meet the full needs of this event. Please consider spending a few hours on Sunday, April 24 and joining us. It is very rewarding; both the runners and the spectators have approached Hams at various checkpoints and thanked us "just for being there". Volunteers are needed starting at 9am and 11am but the major event is the 10k race at 12:30pm. If you are able to spend 3 hours with us and show how Amateur Radio serves the public, please contact Ralph Swick KD1SM at kd1sm@arrl.net or 978.582.7351 evenings. More

information about the race itself may be found at http://www.grotonroadrace.com/

Board Meeting Notes

The NVARC Board met March 10th at the KD1LE QTH. In attendance were Stan KD1LE, Ralph KD1SM, Peter N1ZRG, Les N1SV, John KB1HDO, Dave N1MNX and Bob W1XP.

Items discussed

Ralph presented the Treasurers Report which is included later in the newsletter.

There was a review of upcoming meeting programs and possible subjects to fill openings in the schedule particularly software items to include in a Software Medley program.

Relating to last months presentation we discussed the possibility of listing NVARC as a support option to with the Handi-Hams organization in support of their members once they return home. Stan is contacting Phil K9HI on this item.

Brief update on the sound card and bandpass filter projects. The filter project crew was to meet in a Filterfest to build up the 20 and 40 meter units.

Flea Markets and Such

March 19 Eastern CT Hamfest, Pomfret CT April 3 Framingham ARA Hamfest, Framingham April 9 IRS Hamfest Londonderry NH April 17 MIT, Cambridge May 6-7 Hosstraders, Hopkinton NH May 9 Franklin County ARC, Whately May 15 MIT June 11-12 Newington ARL Hamfest, Newington CT

PSLIST

Date Location `Event Contact Tel/Email

June 19 MIT

Apr 16 Townsend Lions Club Canoe Race Gary Busler K1YTS wink1469@att.net

Apr 18 Hopkinton/Boston MA Boston Marathonbaa05@bmarc.info Register at http://bmarc.info

Apr 24 Groton MA Groton Road Race

Ralph KD1SM 978-582-7351

May 1 Walk For Hunger, Boston to Newton See the Crocker Public Service Group Web site.

May 14 Devens MA Parker Classic Road Race Stan KD1LE 978-433-5090

Advertisements

Tell them you saw it in the Signal. Advertisers should contact the NVARC Treasurer for information.



\$February Treasurers Report\$

Income for January was \$45 in membership dues, \$4 from ARRL membership renewal rebates, \$24 for newsletter advertising, \$30.49 from bank interest, and \$15 from PowerPole connector sales. Expenses were \$44 for the annual Post Office box fee, \$14.80 for newsletter postage leaving a net income of \$59.69 for the month.



Current balances:

General fund \$4431.47 Community fund \$1782.95

As of 10 February we have 55 current members and five renewals outstanding.

Welcome to new member Larry Caruso K1LGC of Haverhill.

NVARC Club Net

Recent nets were run by Dave N1MNX, Larry KB1ESR, and Stan KD1LE. Besides announcements and general information nets included quizzes and discussions on subjects as varied as Tsunamis, the history of WWV, and doing simplex radio checks between the stations to check communications between stations without the aid of the repeater.

The net is a good place to bring information for the club and questions or discussions. The net meets at 8:00 PM Monday evenings on the 442.900 N1MNX repeater.

ARRL Letter

NEW QST COLUMN AIMS TO TAKE MYSTERY OUT OF MODERN HAM GEAR

A new QST column, "Getting to Know Your Radio" debuts in the April edition of QST. Author and ARRL Product Review Editor Joel Hallas, W1ZR, says the column "basically talks about what all those knobs do" on modern equipment.

"The idea is to acquaint users with the typical features of modern radios." Hallas says there was a time when radio receivers were pretty easy to understand--in some cases not all that much different from the broadcast set in the kitchen or living roomso most new amateurs could quickly learn their way around the front panel. It's a new world now.

"It's fair to say that modern transceivers have come a long way since the boat anchors of the 1950s and earlier," he says. "Many transceiver makers seem to sell their wares by claiming the most and newest features." As a result, modern ham transceivers can be pretty intimidating, making operation daunting for newcomers and veterans alike.

The first installment of "Getting to Know Your Radio" will cover the now-popular--and common--passband tuning feature. Hallas says a column on audio compression systems is in the works.

FCC MORSE, RESTRUCTURING PROPOSALS COULD HIT THE STREET BY MID-YEAR

The FCC continues to work toward developing a Notice of Proposed Rule Making (NPRM) that will spell out what the Commission has in mind with respect to possible changes in the current Morse code requirement and Amateur Radio licensing.

A total of 18 petitions have been filed, including one from the ARRL, seeking Part 97 rule changes addressing the future of the 5 WPM Morse requirement (Element 1) and revisions to the overall Amateur Radio licensing structure. The FCC is planning to tackle all 18 rulemaking petitions within the framework of a single proceeding.

As far as the code issue is concerned, petitions--and comments in response to them--run the gamut from retaining or even beefing up the Morse requirement to eliminating it altogether. (The ARRL's proposal would retain the 5 WPM Morse examination for Amateur Extra class applicants only.) The League and others have also put forth proposals for a new entry-level Amateur Radio license class.

At this point, personnel in the FCC Wireless Telecommunications Bureau are continuing to review the thousands of comments filed on the 18 petitions. While the FCC appears unlikely to release an NPRM any sooner than mid-2005, the issue still may be a major discussion topic during the FCC Forum at Dayton Hamvention, May 20-22.

Once public, the NPRM will initiate yet another round of public comments--this time on what the FCC has proposed. An FCC Report and Order to implement any new rules regarding Morse code and license restructuring is unlikely before the second half of 2006, although it's possible the Commission could wrap up the proceeding before then.

SOYUZ A SMOOTHER RIDE THAN SHUTTLE, ASTRONAUT TELLS STUDENTS

Youngsters attending St John's School in Houston, Texas, used ham radio to pose 15 questions about life in space to International Space Station (ISS) Expedition 10 Commander Leroy Chiao, KE5BRW. For Chiao, the contact February 23 between NA1SS and W5RRR--the club station at the Johnson Space Center (JSC)--was a way to "phone home," in a manner of speaking. The QSO was arranged through the Amateur Radio on the International Space Station (ARISS) program. One student was curious about the differences between traveling into space aboard the Russian Soyuz vehicle and the US space shuttle.

"The Russian rocket, because it doesn't use solidrocket boosters, is actually much smoother. It's liquid engines the whole time and just feels a little bit different," Chiao explained. "Also, because it's a missile--not a winged vehicle like the shuttle--the actual trajectory is a little bit different that than of the shuttle, so we actually pull a few more Gs. We get up to about four and a half Gs as opposed to three Gs on the American space shuttle." So-called "G" forces refer to the force of gravity during acceleration.

Both spacecraft convey crews into space--the Soyuz can hold three passengers, while the shuttle can accommodate a crew more than twice that size, and both take the same amount of time to get into space-about eight and a half minutes, Chiao pointed out. The Soyuz vehicles have been the sole means of transporting crews to and from the ISS since NASA grounded its shuttle fleet following the 2003 shuttle Columbia tragedy. As a result, ISS crew complements dropped from three to two members. NASA hopes to return the shuttle to flight this summer.

Chiao said haircuts and shaving in zero gravity present minor challenges to the ISS crews. "For haircuts we do have an attachment we hook up to the vacuum cleaner to keep the hairs from flying all over the place when we cut each other's hair, and so we've both become amateur barbers," he told the students. Chiao said that for shaving, the crew has a choice of electric razors or blades.

The Expedition 10 Commander also said humans are naturally curious and explorers. "We want to know what's on the other side of that mountain," he said.

St John's teacher Rene Wright thanked Chiao for selecting the school for an ARISS school group contact. "For us it has been the experience of a lifetime," she said. Chiao allowed that the contact was a real pleasure for him and that it was "great to be talking to home again."

Ten St John's students ranging from elementary through high school age participated in the QSO. Looking on were some 400 students, teachers and parents. The Johnson Space Center's Nick Lance, KC5KBO, served as control operator for the contact.

ARISS http://www.rac.ca/ariss/ is an educational outreach with US participation by ARRL, AMSAT and NASA.

ARRL SPOTLIGHTS HAM RADIO AT EMERGENCY MANAGEMENT CONFERENCE

The ARRL promoted Amateur Radio at the National Emergency Management Association (NEMA) Mid-Year Conference February 12-15 in Washington, DC. With help from Maryland-District of Columbia Section Emergency Coordinator Mike Carr, WA1QAA, and Assistant Section Manager and

Emergency Coordinator Jim Cross, WI3N, ARRL Emergency Communications Course Manager Dan Miller, K3UFG, staffed an Amateur Radio exhibit booth at the gathering.

"This event provided excellent exposure for Amateur Radio to the larger emergency management community," Miller said. "Interaction with those representing many diverse levels of emergency management is a win-win proposition." Miller said the ARRL's presence further established the League as a national point of contact to answer questions about Amateur Radio's emergency communication capabilities. At the same time, he said, it gave League representatives a chance to hear the concerns of emergency managers for followup with local ARES teams.

The conference also offered an opportunity for NEMA members—ARRL included--to discuss the many challenges facing the emergency management world, to share solutions, grow professionally, network with peers and strengthen relationships with partner organizations. NEMA also shared with federal officials its views on emergency preparedness for all hazards. Individuals and organizations involved in shaping the future of homeland security and emergency management offered presentations and forums.

Miller said many of the nearly 350 attendees representing federal and state emergency management and other agencies around the US stopped by the ARRL booth to complete a short questionnaire and to discuss Amateur Radio--with a focus on emergency communications.

ARRL OFFERING FREE BASIC ELECTRONICS PRESENTATION

The ARRL Education and Technology Program is offering schools and clubs a CD-ROM presentation on basic electronics. The instructional presentation is available free of charge upon request.

"The Basic Electronics Course is intended for teachers and instructors who want a ready resource they can adapt to their instruction of electronics fundamentals," says ARRL Education and Technology Coordinator Mark Spencer, WA8SME. "The materials include a PowerPoint presentation and instructor's script."

Spencer says the course is designed around affordable components, a prototyping board and a voltohmmeter (VOM). The recommended text is Under-

standing Basic Electronics http://www.arrl.org/catalog/?category=&words=3983>.

"The course covers the very basics up to Ohm's Law and then touches on other components like capacitors, coils, diodes and transistors--components common to virtually all electronic circuits," Spencer explains. He says teachers or instructors can use the presentation "as is" with the script or "cut and paste and roll their own" course.

"The course should take on the order of 10 hours to present," he notes. The PowerPoint presentation is on the order of 19 MB, so it is being made available on CD-ROM by request. Spencer has included a parts list and source. Those with high-speed Internet connections may wish to download the PowerPoint presentation http://www.arrl.org/FandES/tbp/Basic-Electronics-for-the-New-Ham.ppt and the Instructor's Script MS-Word document http://www.arrl.org/FandES/tbp/Basic-Electronics-Script.doc.

For ARRL Education and Technology Programparticipating schools, Spencer says he's kitted up the necessary parts, VOM, prototyping boards and text. That package is available by request to program schools as part of their progress grants.

For more information or to request a copy of the presentation, contact Mark Spencer, WA8SME, mspencer@arrl.org; 860-594-0396.

AMATEUR RADIO SPECTRUM PROTECTION ACT OF 2005 INTRODUCED

At the urging of the ARRL, Rep Michael Bilirakis (R-FL) has introduced The Amateur Radio Spectrum Act of 2005 into the US House of Representatives. The bill, designated HR 691, has been referred to the House Energy and Commerce Committee where Bilirakis serves as vice chairman. Like previous versions of the proposal, the current measure would require the FCC to provide "equivalent replacement spectrum" to Amateur Radio if the FCC reallocates primary amateur frequencies, reduces any secondary amateur allocations, or makes additional allocations within such bands that would substantially reduce their utility to amateurs. ARRL President Jim Haynie, W5JBP, expressed his appreciation to Bilirakis this week.

"As president of the American Radio League and on behalf of the more than 670,000 federally licensed Amateur Radio operators throughout the country, I would like to thank you for once again sponsoring the 'Amateur Radio Spectrum Protection Act," Haynie told the Florida Republican. "As you know, this legislation is vital for ensuring that the Amateur Radio Service, the only 100-percent fail safe emergency communication capability, remains a viable public safety option."

HR 691 references Amateur Radio's role in providing "voluntary, noncommercial radio service, particularly emergency communications," and it points out that hams have "consistently and reliably" provided communication support in the event of emergencies and disasters including tornadoes and hurricanes, chemical spills, forest fires and rail accidents. As the measure notes, FCC actions already have led to the loss of at least 107 MHz of spectrum to radio amateurs.

Rep Roscoe Bartlett (R-MD) has signed on as the bill's first co-sponsor. Bartlett chairs the Projection Forces Subcommittee of the Armed Services Committee. One of three scientists in the 109th Congress, Bartlett also is a senior member of the House Science Committee.

Efforts now will focus on attracting additional cosponsors for the legislation. The League is encouraging members to urge their congressional representatives to sign aboard HR 691. A sample letter is available on the ARRL Web site http://www.arrl.org/govrelations/hr-691-sample-letter.html. More than 100 lawmakers agreed to cosponsor similar legislation in the 108th Congress, where it was designated HR 713. Work is proceeding to have identical legislation introduced in the US Senate.

The text of HR 691 is available on the Government Printing Office Web site http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&do cid=f:h691ih.txt.pdf.

For general guidance on the best methods of contacting your members of Congress, see "Communicating with Congress," by Derek Riker, KB3JLF, on the ARRL Web site http://www.arrl.org/news/bandthreat/0304046.pdf>.

STANDING ROOM ONLY AT 2005 AMATEUR RADIO HURRICANE CONFERENCE

ARRL Emergency Communications Course Manager Dan Miller, K3UFG, represented the League at the 10th annual Amateur Radio Hurricane Conference February 5 at the National Hurricane Center (NHC) in Miami http://www.wx4nhc.org. He reports upward of 75 visitors--nearly all of them radio amateurs--turned out for the event. Scheduled in

conjunction with the Miami Tropical Hamboree, which Miller also attended, the conference provided an opportunity to review the busy 2004 hurricane season and to discuss Amateur Radio's role to support emergency communication.

"This was a phenomenal meeting," commented Miller, who delivered a presentation at the conference on ham radio's hurricane and tsunami-related activities. "Because 2004 was one for the record books, comments, reports and pictures from the people who live in the islands and in the affected areas of Florida, were that much more meaningful."

Miller said the consensus at the gathering was that despite the best efforts to prepare, no one imagined the onslaught witnessed last year. Among featured speakers was Hurricane Watch Net (HWN) http://www.hwn.org Manager Mike Pilgrim, K5MP. The HWN and the center's WX4NHC work hand-inhand to funnel real-time weather data to NHC forecasters via Amateur Radio. The HWN Web site recorded more than 55 million hits during September alone!

The conference agenda also included reports from many areas affected by the 2004 hurricanes, including the Cayman Islands; Grenada; Marsh Harbour, Abacos, and, of course, Florida. NHC Hurricane Specialist Stacy Stewart told the gathering how each storm presented varied characteristics and explained how computer modeling is not always right on the money in projecting a hurricane's path.

Newly appointed Southern Florida Section Emergency Coordinator Jeff Beals, WA4AW, spoke about the Holiday Hams video, which chronicled the overwhelmingly successful ARRL Holiday Toy Drive to benefit youngsters affected by the Florida hurricanes.

NHC Amateur Radio Coordinator John McHugh, K4AG, and Assistant Coordinator Julio Ripoll, WD4R, served as conference hosts.

HAM RADIO SAVES A HAM IN ALASKA

Two Alaskan hikers on a day outing in rugged mountains near Anchorage saw their afternoon turn into something entirely unexpected February 12. One of them--Jesse Jones, KL1RK--slipped and fell more than 200 feet down a steep ravine, losing his snowshoes in the process. Jones found himself trapped between a low overhang on one side and a swiftmoving stream on the other. Even worse was the fact that his descent could continue into the water at any moment, and almost certain death from hypo-

thermia. With more than 10 feet on the ground, the loss of his snowshoes meant he could not walk out. On the plus side, Jones had taken along his 2-meter handheld transceiver. After several unsuccessful tries, he finally was able to access the wide-area WL7CVG repeater atop Mt Susitna, almost 40 miles distant.

"As a control operator for the repeater, I heard his weak 'Mayday! Mayday! Mayday!' call just a few minutes after 4 PM local time," reports Jim Wiley, KL7CC. "I immediately called 911 and was placed in contact with the local fire department rescue coordinator. I was able to pass on Jesse's messages to the local rescue coordinator, including coordinates from a GPS unit he was carrying." Wiley says the rescue coordinator's office called out the local mountain rescue group and the Alaska State Troopers, who immediately left for the scene.

The rescue team met with Jones's climbing partner, who had been able to hike out to a place where he could assist the rescuers. Jones was able to keep in touch via 2 meters to report his condition, but his signal into the repeater was marginal. Although uninjured, the sub-zero cold was numbing his extremities to the point that he was having trouble operating his transceiver.

Unable to execute the rescue themselves, the team called an Air National Guard unit, which flew a helicopter to the scene. While the presence of high-voltage power lines just above Jones' position complicated matters, the chopper was able to lower some para-rescue jumpers to a nearby location, from which they could rappel to his position and, after a few hours, extricate him.

Briefly hospitalized for a checkup, Jones was released just before midnight, cold and a bit hungry, but otherwise okay. Wiley says several local hams also assisted the effort, either directly or by their connection with local emergency service groups.

Additional details of the rescue and photos are available on the ARRL Web site http://www.arrl.org/news/features/2005/02/24/1/.

TWO AMATEURS RECEIVE PRESIDENT'S VOLUNTEER SERVICE AWARD

Two radio amateurs have received the President's Volunteer Service Award. President George W. Bush personally presented the award to Thomas J. "T. J." Powell, N8UIR, of Northfield, Ohio. Powell, is an active volunteer with the Northeast Ohio Medical Reserve Corps, a partner program of Citizen Corps,

which provides medical support services for public events and emergency situations.

As chief of NEOMRC and a certified emergency medical technician, Powell volunteers 800 to 1000 hours per year, helping with logistics, planning, Amateur Radio operations and first-aid for charitable fundraising events throughout Northeast Ohio. In addition, he assists local fire departments and emergency medical service agencies during incidents that impact public health. Bush made the presentation during a January 27 visit to Cleveland.

The White House also honored ARRL member John H. Bauer, W4AWM, of Burke, Virginia, with a President's Volunteer Service Award. Bauer received the award January 29 in recognition of more than 500 hours of volunteer work in the Volunteer In Police Service (VIPS) program. Bauer is assigned to the Crime Prevention Office of the West Springfield District Station, Fairfax County Police.

"My assignment consists of many public relations and administrative duties as well as participating in various training drills for SWAT teams and other police activities," he explained. Presenting Bauer's award during a ceremony for himself and other recipients was the Fairfax County Chief of Police. Bauer also received a certificate of appreciation from the Fairfax County Police Department.

Bauer says he always wears his call sign belt buckle when on duty, and that's resulted in his meeting two police officers who also are hams. The buckle also invites questions from people who want to know what it represents. "This is a great door opener to talk about my favorite hobby," Bauer said.

Contest Calendar and DXpeditions

The information for a DXpedition can be quite detailed and may include bands, dates, number of stations, and times of day they plan to work certain continents so I can not list it all here. But if a country or prefix is of interest you can get more information at www.425dxn.org.

Contests March

19-21 BARTG HF RTTY 26-27 CQ WW WPX Contest, SSB

Contests April

2-3 EA RTTY Contest 16 Holyland DX Contest 16 TARA Digital Prefix Contest 23-24 SP DX RTTY Contest

DXpeditions

Until Call Location May 2005 FR/G Glorioso **9V1CW** till 2008 Singapore Bahamas till April 2005 C6AWF 8Q7WP Maldives 09/05 5H3HK till March 2006 Tanzania ZD8I Ascension Is till March 2006



Amateur Radio Club

PO Box # 900 Pepperell Mass 01463-0900

http://www.n1nc.org/

President: Stan Pozerski KD1LE Vice President: Peter Nordberg N1ZRG Secretary: John Griswold KB1HDO Treasurer: Ralph Swick KD1SM Board Members:

Les Peters 2002-2005 Dave Peabody 2003-2006 Bob Reif 2004-2007

Editor: Stan Pozerski KD1LE
Emergency Coordinator: Den Connors KD2S

Photographer: Ralph Swick KD1SM
PIO: Dave Peabody N1MNX
Librarian: Peter Nordberg N1ZRG
Property Master: John Griswold KB1HDO
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

442.900 + 100Hz Repeater 147.345 + 100 Hz Repeater 53.890 – 100Hz Repeater

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