NVARC
Nashoba Valley
Amateur Radio Club

SIGNAL

SPECIAL SERVICE CLUB
ARRL

February 2000 Volume 9 Number 2

This Month's Meeting

The food experiment will have been going on for three months as of this meeting. This month we will have pizza. Everyone should understand that this is not a subsidized operation and needs to break even every month in order to continue. Also there will be a discussion at this meeting as to whether this is actually of any benefit to people in order to decide if we should continue it.

This month the meeting speaker will be Terry Stader KA8SCP MEMA Area 1 RACES Radio Officer.

The March meeting will be a QSL card sort. Burt W1ZS the W1 QSL Bureau Manager who lives in Vermont will bring cards down for us to sort.

During he April meeting we will hold elections and the program is tentatively scheduled to be a presentation on SSTV

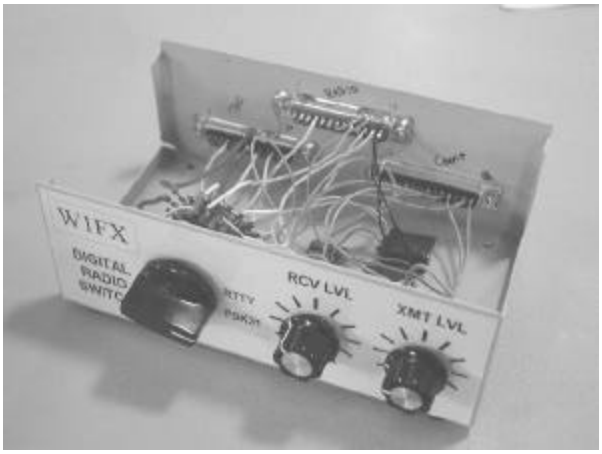
Mays program is planned to be a presentation on VHF Contesting by Les KA1DVZ.

If you have a show-and-tell type of thing or a story you can share bring them along to any meeting.

Last Month's Meeting

Dan Norton W1FX gave a presentation on PSK 31 which is a new digital mode. It has the desirable characteristics of handling weak signals and using a very narrow slice of spectrum compared to the voice modes.

He also brought along a switch and signal level adjustment box he had built to trim input and output signals between the PC/sound card and his rig.



Upcoming Public Service Events

The first event of the Spring is coming up on April 30th. The Groton Road Race is the largest local event we support. We depend on a good turnout

from as many members as possible to make this event a success. The contact for this event is Erik KA1RV 978-448-5536 or piip@merl.com.

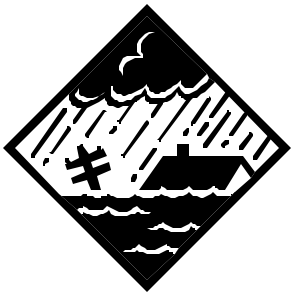
Two weeks later is the Harvard Bike Race. This year due to scheduling changes it will be Sunday May 14th. This is Mother's Day and of course is Hoss Traders weekend. If you can help out please contact Stan KD1LE at 978-433-5090 or pozerski@net1plus.com

Y2K and Beyond

The Y2K scare is over now, but the need for emergency preparedness remains. Many hospitals, EOC's, and other communication sensitive locations were staffed by hams. By all accounts the support was appreciated and I hope established some level of confidence in our ability to communicate in a manner that could help support their activities. Although hundreds of hams across Massachusetts were active in some capacity the striking thing I observed was what a small percentage actually turned out. It is very difficult to motivate people to prepare since in this area we have a minimum of disasters. There are no active earthquake fault lines under us and we don't have forest fires scorching thousands of acres. But we do have our winter storms, hurricanes, and a few tornadoes. I know people who say they would help if something happened but they don't want to be bothered with weekly or monthly net check-ins. I can understand that perspective and to some extent agree. But there are a couple of catches. The first one is the ability to operate efficiently in a net environment. This is the most common operating modes in an emergency. For people who regularly operate in a net format listening for a few minutes even during an emergency should be enough to get them oriented so they can work effectively. Practicing concise communication skills so they become second nature means fewer stumbles in real operation. I regularly hear people who have been licensed a long time who have operating habits that waste air time in net operations. Someone who never operates in this environment can cause a lot of confusion by jumping in here. Another issue I see is of all the people who say they will help out in a real situation how many will be on the air at that point. There are many issues here. Do you have emergency power? Do you charge up your NiCd batteries or have holders for regular alkaline batteries so you can operate if the lights go out? Do you have some sort of gel cell or other battery for extended battery operation? Remember, only a few years ago some parts of Pepperell lost power for seven days after a winter storm. Most of all, if the storm hits do you know where to check in to report the thirty-six inches of snow to the SKYWARN net? Do you know the local net frequency for the RACES net should reports need to be sent to MEMA? Given some time the information can probably be gotten from a local repeater from someone who knows. That is if you charged your batteries.

Stan

SKYWARN Training



According to the SKYWARN Newsletter the National Weather Service will be holding a training session in Shirley. Whether you are interested in becoming a SKYWARN observer or are just interested in the weather these are excellent presentations with pictures, videos, and explanations of various weather phenomenon. The training will be held Wednesday April 26th from 7 to 10 PM at the Lura A White Elementary School. The school is located at 34 Lancaster Road in Shirley.

License EXAMS

If you are planning on upgrading but expect it to be after the new rules are in effect in April you should read the section in the ARRL news about the question pools. It contains a URI to see what the new question pools are.

The next VE Session in Nashua is Feb 26th.

The Public Service List Feb 3rd

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 con-

tact the person listed to identify how you may serve and what equipment you may need to bring.

Every event listed is looking for additional volunteers

**** Special Note: The Boston Athletic Association requests that volunteers register as soon as possible. Contact one of the three individuals listed below.

Date Location Event
Contact Tel/Email

Apr 9 Boston MA Multiple Sclerosis Walk
Bob WA1IDA 508-650-9440 wa1ida@arrl.net or
Ed N1VSJ 978-952-6474 mooseeb@aol.com

Apr 17 Hopkinton MA Boston Marathon start
Steve K1ST 508-435-5178 k1st@arrl.net

Apr 17 Boston+ MA Boston Marathon course
Bob WA1IDA 508-650-9440 wa1ida@arrl.net

Apr 17 Boston MA Boston Marathon finish
Paul W1SEX 978-632-9432
ptopolski@net1plus.com

Apr 30 Groton MA Groton Road Race
Erik KA1RV 978-448-5536 piip@merl.com

May 14 Harvard MA Harvard Classic (bike race)
Stan KD1LE 978-433-5090 kd1le@amsat.org

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

W1 QSL Bureau Reminder

The incoming bureau no longer accepts stamps and envelopes for your cards.

Bob W1XP is our outgoing QSL bureau manager for ARRL members. The club picks up the tab for shipping and the fees for the League Burea

First ½Y2K Fleamarkets

19 Feb Marlborough MA AlgonquinARC @MidSc $15@8 $3@10 Ann KA1PON 508 481 4988

20 Feb Westford MA @Regency RadioXXXI Antique $6@8 Tammy A.R.C. 978 371 0512

11 Mar Londonderry NH IRS @ Lions Hall $10@6 $3@8 Harold N1UZT 603 883 3308

12 Mar Westfield MA MtTomARA @127 Holyoke Rd $4@9 Cindy K1ISS 413 568 1175

18 March Reading MA QRA @Ch GoodShep Auction@10AM Redmond W1SYA 781 944 8689

19 Mar Uxbridge MA CMPSA 8:30 @SerdiptyHall Rt16@146 Mike N1PSE 508 278 3477

26 March Framingham MA FARA @HS $14/T@7:30 $3@9 Bev N1LOO 508 626 2012

16 April Flea at MIT Nick 617 253 3776

29 April Nashua NH NE Antique RC $5@8 $1@9 @ Res Ctr Church 617 923 2665

12,13 May Rochester NH Hoss Traders @FG x13 rt16 Joe K1RQG 207 469 3492

21 May Flea at MIT Nick 617 253 3776

4 June Newington CT NARL

18 June Flea at MIT Nick 617 253 3776

Hams in New England

Have you ever wondered where all the hams live in New England? Well Tom Frenaye the NE Division Director has the answers for you. He has produced maps depicting the ham density per 1000 residents for New England. The area resolution is to Zip Codes. They are drawn in a variety of scales such as Northern and Southern New England, North Central Massachusetts, and there are maps for various larger cities. If you have Internet access you can check out all the maps at the following URI.

http://barc.eli.com/nediv/ne-map-cover.html

I will print out a couple of examples of the maps for Massachusetts for anyone who is curious and can't get to the web site.

Stan

From the ARRL Letter

ARRL BOARD ENDORSES CERTIFICATION PROGRAM

The ARRL Board of Directors has approved the development and implementation of an initiative to promote self-education by radio amateurs. The new ARRL Certification Program will aim to inspire amateurs to continue acquiring technical knowledge and operating expertise beyond that required to become licensed and give them a chance to test their own limits. Following up on the "2010 Vision" discussions at last July's Board meeting, ARRL Executive Vice President David Sumner, K1ZZ, presented the broad strokes of the Certification Program during the Board's January 21-22 meeting in Memphis.

At this point, the Certification Program only exists as a concept, with the details to be worked out, but plans call for having the program in place by later this year. The first step in putting the program in place will be to solicit the ideas of ARRL members, via a Web-based message board, on appropriate topics to be included in the initial rollout. "The idea is to make this program what members want it to be, and not something imposed from 'on high,'" Sumner said.

"Many ARRL members believe there is a widening gap between what the FCC requires amateur licensees to know and what it takes to be truly knowledgeable about Amateur Radio," he continued. "Whether or not you agree, it's certainly true that those of us who took our FCC exams years ago have never had to demonstrate an understanding of current technology. We could use a new challenge."

The new Certification Program will offer participants an opportunity to earn credentials at various levels of depth and difficulty in different courses of study—perhaps in such areas as ionospheric propagation, receiver design, and Morse code proficiency. Sumner said the ARRL should and will continue to encourage the development of Morse code proficiency beyond the basic HF licensing requirements. He observed that the standards for ARRL certification could be more stringent and more uniform than those used for FCC exams.

Sumner said he sees the certification program not only as a welcome opportunity for individual self-development but a response to the perceived "dumbing down" of Amateur Radio qualifications—especially in the aftermath of the FCC's recently announced license restructuring plan. While the plan was not developed directly in response to restructuring, its timing could not be better, Sumner said, conceding that the restructuring debate "has moved it up the agenda."

As envisioned, the program would be largely self-supporting, but startup costs would be funded from the Exceptional Merit Stipend established by the late Ethel Smith, K4LMB. The Certification Program will be dedicated to her memory. Smith—who helped found the Young Ladies Radio League and served as its first president—died in 1997, leaving the bulk of her estate to the ARRL.

Sumner says a Web-based message board will be set up in a few weeks to gather input from members in terms of specific programs and areas of study or skills development they would like to see become part of the voluntary certification program. The League plans to seek outside expert input to assist in setting the knowledge or performance threshold at the optimal level.

The program likely will include some professional development aspects and could include the granting of Continuing Education Units—CEUs. The League also is seeking cooperative arrangements with related professional organizations. It already has a memorandum of understanding with the National Association of Radio-Television Engineers and has approached the Society of Broadcast Engineers for a similar agreement.

The voluntary certification program dovetails neatly with goals expressed by the League's new President Jim Haynie, W5JBP. Following his election January 21 in Memphis, Haynie said he favors even greater promotion of Amateur Radio, especially among youth and in schools, as well as programs

to rekindle interest and activity among current licensees.

WHAT'S THE FREQUENCY, DENNIS?

Ham moviegoers report seeing previews for the new movie Frequency, starring Dennis Quaid and directed by Gregory Hoblit, that's set for an April release. The ARRL was consulted in the interests of accuracy and came up with an unused W2 call sign for the movie's protagonist to use. The movie also recently got a plug on Entertainment Tonight.

Frequency is billed as a sci-fi thriller, but boatanchor fans may believe the movie was made just for them. The gist of it is that a long-dead father and his adult son meet up on the airwaves via ham radio (during the mother of all sunspot cycles), and the son tries to prevent his father's death by altering the past. Both also attempt to prevent a murder. It reportedly winds off into the ozone after that, but we don't want to spoil it for anyone.

According to someone who caught one of the trailers, the son (Quaid) uses an old Heathkit sans cabinet. "I guess the idea is to nail down the point that this is an old radio because you can see all the tubes glowing right out in the open," said Avery Comarow, W3AVE, who caught the preview. Information on Frequency is available at http://www.frequencymovie.com. Visit the International Movie Database at http://us.imdb.com/Title?0186151 for additional details and a look at the trailer.—thanks to Mark G Ewell, KC5IZN and Avery Comarow, W3AVE (via John Dilks, K2TQN)

Revised question pools now available

Revised Amateur Radio examination question pools for the new Elements 2, 3 and 4 that become effective April 15, 2000, now are available on ARRLWeb at http://www.arrl.org/arrlvec/pools.html. The ARRL-VEC's Wayne Irwin, W1KI, says the revised pools remain a work-in-progress, and graphics still are being integrated. Irwin says the current Novice, Technician, Advanced and Amateur Extra graphic sheets remain available and valid. Examinations for Elements 2 and 3 will contain 35 questions; examinations for Element 4 contain 50 questions.

Russia launches supply ship to Mir

Russia has launched a Progress cargo rocket to Mir that's carrying fuel and supplies needed to recommission the Russian space outpost. Russia is planning to send another crew to Mir in March. The Progress rocket docked automatically on February 2. It carried fuel, water and other supplies, plus equipment needed to build up pressure inside Mir, which has a minor leak. Russia had been prepared to scuttle Mir, which saw its last crew in August, to concentrate on its role in developing the International Space Station. A foreign investor reportedly has agreed to pay $20 million for at least one more Mir mission, however. The next crew is due to spend between 45 days and four months aboard Mir. It's not known if Amateur Radio gear aboard the aging space station will be reactivated.

On-line Amateur Radio practice tests

The West Valley Amateur Radio Association has added on-line practice examinations for all written elements to its Web site. "Our program will automatically generate a test and grade it after you are done!" says Webmaster Mike Polkinghorn, K6PUD. Visit http://www.wvara.org and follow the link in the bulletin on the front page.—Mike Polkinghorn. K6PUD/WVARA

American Lung Association seeks hams for 2000 "Big Ride"

The American Lung Association is recruiting ham radio "communicators" to assist in its Big Ride Across America 2000. The 2000 ride—only the second to use ham radio operators—is the third annual event to raise money and awareness for the American Lung Association's fight against lung disease. It's a 3500-mile bicycle trek from Seattle, Washington, to Washington, DC, from June 19, 2000 to August 5, 2000. More than 850 cyclists have raised in excess of $7.2 million during the previous rides. Details are available at http://www.bigride.com. To volunteer or to obtain more information about volunteer responsibilities, contact Volunteer Support Manager Mark Ewert, KB1ECH, bigride@lungusa.org or call toll free at 877-BIGRIDE (877-244-7433).

AMATEUR RADIO SATELLITE PACKAGES ROCKET INTO SPACE

An Air Force Minotaur rocket lifted off right on schedule January 26 from the new California Commercial Spaceport at Vandenberg Air Force Base. Three Amateur Radio satellite packages were aboard. Two of the satellites already have been de-

ployed and are said to be working. A third amateur picosat package will be deployed over the weekend.

The primary payload is the US Air Force Academy's Falconsat. JAWSAT—Joint Air Force-Weber State University Satellite—served as a bus for several deployable payloads and the Plasma Experiment Satellite Test experiment—PEST. The telemetry stream from JAWSAT, including data from PEST, will be transmitted on Amateur Radio frequencies. Amateur Radio operators have been invited to contribute to the program by recording the downlinked data. Data from PEST will require using either a G3RUH modem or a GMSK modem. Data rates should be as high as 38.4 kb/s. Data will be transmitted on 437.175 MHz or 2403.2 MHz. NASA says it will publish instructions for sending in data so the PEST team can use it.

Deployable payloads aboard JAWSAT are Stanford University's Orbiting Picosat Automatic Launcher—or OPAL; Arizona State University's ASUSat, and the Air Force Research Lab's Optical Calibration Sphere.

"It was a spectacular sight, since the sky was clear and the visibility almost unlimited," said Eric Lemmon, WB6FLY. "I was able to view the first two burns without binoculars, and it was an impressive sight!

Hank Heidt, N4AFL, of the StenSat team said today that both JAWSAT and ASUSat appear to be working perfectly at this time, with telemetry indicating that all systems are reporting nominal performance. StenSat, which is a satellite within another satellite—OPAL—is set to be put into space this weekend, Heidt said.

ARRL staffer Steve Ford, WB8IMY, says he was able to watch the Webcast of the launch at home. Unlike the seemingly languid shuttle launches, Ford says, the rocket "went screaming skyward immediately and was lost to sight within less than a minute."

ASUSat and JAWSAT have Amateur Radio capability, but the tiny, eight-ounce StenSat is strictly a ham satellite—designed by hams, for hams. It was developed by a group of amateur enthusiasts in the Washington, DC, area as part of Stanford University's OPAL project.

StenSat will operate as a single-channel Mode J FM voice repeater. The uplink frequency will be 145.84 MHz; the downlink will be 436.625 MHz. StenSat will periodically transmit 1200 baud AX.25 for telemetry. Additionally, amateur radio operators will be able to "ping" the satellite by transmitting a six-digit DTMF command to the receiver uplink. More information on StenSat is available at http://users.erols.com/hheidt/.

ASUSat will contain amateur packet hardware and a 2-meter/70-cm FM voice repeater. ASUSat1 is an ASU NASA Space Grant project and Arizona State University's first student-designed satellite. Information on ASUSat is available at http://nasa.asu.edu/asusat/.

ARES ACTIVATES AS WINTER TAKES A BITE OUT OF DIXIE

Normally a relative stranger to Georgia, Ol' Man Winter turned up unexpectedly January 23 in the form of an ice storm that affected the northern third of the state. Georgia SEC Tom Rogers, KR4OL, says forecasters did not anticipate the freeze line coming as far south. The weather emergency caught some ARES members off-guard as well and showed him that amateurs in the region need to be better-prepared for the unexpected.

The Georgia ice storm left some 340,000 homes and businesses without power, and tens of thousands still were without power at week's end. But The Peach State was not the only one affected by unusually harsh winter weather. Thousands of others in the Southeast were left without power and snowbound to boot. The winter storm cause widespread school and business closings and dumped upwards of two feet of snow on North Carolina, paralyzing traffic and stranding travelers. Parts of South Carolina, the Virginias, and Tennessee saw snow as well.

Rogers says that as power lines, telephone lines, and trees came crashing down in Georgia, out went the call for help. ARES teams in several Georgia counties were pressed into service, and Georgia's Emergency Management Agency sought ARES assistance as well. The Georgia ARES Net met on HF and continued to monitor the situation, Rogers said.

The exercise revealed what Rogers called "some very important lessons." For starters, the ice storm

not only presented a very serious problem for public utilities but for amateur stations as well. Many stations lost their HF antennas due to icing, handicapping ARES' ability to coordinate between the ARES HF net and local areas, Rogers said. He recommended ARES members keep a spare, emergency HF antenna on hand for situations like this. Rogers says HF was not the only mode hampered by the icing. Several repeaters also were crippled by the ice, he said, and VHF coverage in many areas of the ice storm was lost.

Rogers pointed out that in winter conditions, things taken for granted can and do fail. "Create a plan for backup and exercise it," he suggested. "Winter icing creates conditions for amateur radio we can overcome if we plan ahead."

The surprise nature of the ice storm gave rise to another "lesson learned," Rogers said. "Don't assume you are going to have time to prepare your station before an event happens," he said. "Prepare now! Do not take the threat of winter weather to your station lightly."

Rogers said the assistance of each and every station is valuable to the ARES program and is sorely missed when stations are unable to be on hand. With the possibility of more freezing weather in Georgia this weekend—just in time for the Super Bowl in Atlanta—Rogers recommended that ARES members take time to review their station capabilities and ARES response plans.—Tom Rogers, KR4OL

MINI-BIOS ON QRZ.COM

QRZ.com says it now has more than 14,000 mini-biographies of Amateur Radio operators on-line along with its call sign database, with dozens of new listings arriving daily. QRZ.com says it is now possible to instantly search through the entire collection of biographies to find other hams with similar interests, backgrounds or other hobbies. Any combination of keywords may be searched. Check it out at http://www.qrz.com/biosearch.html QRZ.com/Fred Lloyd, AA7BQ

MOTOROLA RESEARCHING METHANOL BATTERIES

According to a Reuters report, Motorola researchers and scientists at the Los Alamos National Laboratory are working on a new mini-battery for wireless devices. The fuel cell, which uses methanol as the power source, reportedly will last 10 times longer than batteries used today. But, consumers will have to wait for at least three years to see them in stores. The battery will be packaged in a see-through tube, so users can check their battery supply at any given time. The cost of the methanol batteries should be in line with current power supplies, Motorola says.—Reuters

RUSSIAN SETBACKS ALTER PLANS FOR AMATEUR RADIO'S ISS DEBUT

Despite launch delays, Amateur Radio will be available to the first crew members to live on the International Space Station, thanks to some quick shuffling of plans by those involved with the Amateur Radio on the International Space Station project. Initial ham gear now will be installed temporarily aboard the Functional Cargo Block module, already in space, instead of aboard the Service Module. The station would use existing non-ham antennas that can function on 2 meters.

Flaws recently revealed in the Russian Proton booster rocket further put off the launch of the Zvezda (or "Star") Service Module that was to house initial ISS crews and initial amateur gear.

An all-ham initial ISS crew and the amateur gear could go into space as early as this summer, instead of this spring as planned. Original ARISS plans had called for installation of basic VHF-UHF amateur gear and antennas aboard the Service Module.

Russian space agency chief Yuri Koptev said this week that Russia plans to put the Service Module into space at the end of July. But Koptev also indicated that his country will need additional financial help to cover the costs of its space endeavors. Those projects include rejuvenating the aging Mir space station.

"Our ham equipment eventually will be installed in the Service Module," explained ARRL Field and Educational Services Manager Rosalie White, WA1STO—a member of the SAREX Working Group. White says the shift in ARISS plans meant the US and Russian ISS partners have had to tackle some new issues, including connectors, feed lines, and attachment within the Functional Cargo Block. Russian qualification testing for gear

that will fly in the Russian module was said to be nearly complete this week.

White will report in detail on the ARISS project's status to the ARRL Board of Directors, meeting this weekend in Memphis.

The first ISS crew includes US astronaut Bill Shepherd, KD5GSL, and Russian Cosmonauts Sergei Krikalev, U5MIR, and the recently licensed Yuri Gaidzenko, whose call sign was not available. Shepherd's designated backup is astronaut Ken Bowersox, who just passed his Amateur Radio exam this month.

The SWG has tapped John Nickel, WD5EEV, to be Project Manager of ARISS. He'll work with SAREX Principal Investigator Matt Bordelon, KC5BTL. Nickel was SAREX Principal Investigator before he retired from NASA.

In her report to the ARRL Board, White said the multinational ARISS project has generated a new dimension of challenges and difficulties. "If someone had asked how much work it would take to have Amateur Radio onboard the International tacts with current DXCC List entities made after November 15, 1945.
Space Station, the SAREX Working Group would have never even come close to guessing the correct number of hours," she said. In the spirit of "one of the fine ham traditions we hold dear," White concluded, the ARISS team would continue to find the time and know-how to work through the challenges and problems ahead.

ARRL ANNOUNCES NEW DXCC AWARDS

As it looks forward to the new millennium, the ARRL DXCC program has added a few new twists of its own, with something for the seasoned DXer as well as the DX neophyte. Inaugurated at the start of the new year were The DXCC Challenge, the DeSoto Cup, the 20-Meter Single-Band DXCC Award, and the DXCC 2000 Millennium Award. Here's a rundown.

The DXCC Challenge is open only to holders of 5-Band DXCC. Individual standings in the DXCC Challenge are based on accumulated contact credits made on all eligible bands within the DXCC program using only current DXCC entities. This includes credits already received by DXCC for con

Challenge standings will be updated each year. The deadline to submit is September 30, 2000. Standings will be reported as numbers. Plaques are available for those who accumulate 1500 DXCC Challenge credits. Endorsement bars are available in increments of 500. This year, eligible bands are 160, 80, 40, 20, 10, and 6 meters. The band list will be increased each year until all bands (except 30 meters) are included.

Starting this year, the DeSoto Cup will be awarded to the DXer who is at the top of the DXCC Challenge list on September 30 of each year. The cup is named for Clinton B. DeSoto, W1CBD, who wrote the 1935 QST article that inspired the original DXCC program. A DXer may only be awarded one cup.

The 20-Meter Single-Band DXCC Award is the first of several new single-band awards to be phased in over the next year or so. Contacts with current DXCC entities are eligible for credit, beginning with any QSOs made on or after November 15, 1945, on any mode. DXCC reports returned after August 1, 1999, show 20-meter contact credits. Those with a 5-Band DXCC issued before April 1, 1992, may submit up to 100 current 20-meter cards with no per-card charges applied.

Here's a DXCC award for everyone. To qualify, work 100 or more current DXCC entities during the calendar year (UTC), any combination of bands or modes is allowed. Here's the best part: You don't have to submit any QSL cards! Applicants must certify to the authenticity of log extracts submitted, however. The DXCC 2000 Millennium Award period began 0000 UTC on January 1, 2000, and continues through 2359 UTC on December 31, 2000.

The DXCC 2000 Millennium Award is separate and apart from the traditional DXCC awards program. Qualifying for this award does not give credit for traditional DXCC awards, but DXCC rules still apply. The DXCC 2000 Millennium Award certificate is available to ARRL members and nonmembers.

Official application forms may be downloaded at http://www.arrl.org/awards/dxcc. Forms also are available for an SASE (or an SASE plus one IRC for hams outside the US). Send requests to DXCC 2000 Millennium Application, ARRL, 225 Main St, Newington, CT 06111.

Completed applications must be received at ARRL HQ within one year of the close of the DXCC 2000 Millennium Award period. Applications should be accompanied by $10 (US funds) to cover the costs of printing, postage, and handling.

For additional information on these new programs, see "New DXCC Awards for the New Millennium" in December 1999 QST, page 47, or visit http://www.arrl.org/awards/dxcc/00rules.html.

If you have questions about any of these new awards, contact DXCC Manager Bill Moore, NC1L, bmoore@arrl.org.

OBTAINING DOCUMENTARY PROOF OF PRE-1987 TECHNICIAN TICKET

The FCC says to send any requests for verification of a pre-March 21, 1987, Technician license in writing to FCC, 1270 Fairfield Rd, ATTN: Amateur Section, Gettysburg, PA 17325. The request must include name, address, telephone number, date of birth, call sign issued at that time, and when the Technician license was granted (if exact date is not known, give the approximate timeframe). The FCC asks those inquiring to include any information that may be helpful in researching these requests, but it does not need to know details of the examination session, such as where the test was administered or who gave it. "These requests must be researched on microfiche, so they will be very time-consuming," an FCC spokesperson said, adding that no one should expect an overnight response. You also may contact the FCC contractor ITS Inc (visit http://www.itsdocs.com/). For a fee, ITS will research prior FCC licensing records and should be able to provide necessary documentary proof.—FCC

QRZ.COM OFFERS LOOK-UP SERVICE FOR PRE-1987 TECHS

In response to numerous recent requests by amateurs seeking to obtain information regarding licenses that existed before 1987, QRZ has placed a copy of the March 1993 edition of the QRZ Ham Radio CDROM Ver 1 on line for public access. This collection, the oldest available from QRZ, contains listings of more than 195,000 licenses issued between 1983 and 1987. Call sign and name searches are available. Visit http://www.qrz.com/search1993.html .—QRZ.com/Fred Lloyd, AA7BQ

COAST GUARD THANKS HAMS

The United States Coast Guard has expressed its thanks to the Amateur Radio community for its willingness to assist the National Response Center by being prepared to relay NRC reports during the Y2K rollover. "Your preparedness and willingness to assist are heartily commended. We thank you!" said Lt Charles Pugh, USCG Office of Communication Systems in a bulletin January 11.

Upcoming Events

17 Apr Boston Marathon
12,13 May Hosstraders (Rochester, NH)
24,25 Jun Field Day

$January Treasurer Report$

Income credited in February was $45 in membership dues and $8.14 in bank interest. Expenses were $14 for the Post Office box and $13.20 for newsletter postage.

Current fund balances:

General Fund	$597.20
Community Fund	$1467.55

Don't forget to send your ARRL renewals (or new memberships) through me to help the Club receive credit.

-Ralph, KD1SM

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purl.org/hamradio/club/nvarc/

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V Pres.: Open
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PIO: Jon Kinney N1JGA
Board Members
Wolfgang Seidlich KA1VOU 1997
Earl Russell 1998
Bob Reif 1999

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

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