



SIGNAL



de N1NC

March 2001 Volume 10 Number 3

This Month's Meeting

This month's programs is ATV by N1HTS. Jim will discuss the use of ATV in the context of public service events.

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

We are always looking for ideas for the meeting program. Don't be afraid to suggest something that seems interesting to you.

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

New Member

Welcome to new member KB1GID Ronald Wood of Ayer.

Last Month's Meeting

With 13 members present President Erik, KA1RV, opened the meeting at 7.30 PM.

The guest speaker for the evening was Les Peters whose subject "Vertical Antennas and Arrays" Why? Which generated good discussion regarding the merits/demerits of vertical antennas for 80 and 40 meters. Les supported his talk with slides of data, gathered from actual field trials of the antennas, which included an impressive "Four Square" of Force Five verticals (one of which is shown at right) modified to fit on the 1.3. acres that Les had available. Les also discussed the options for ground radials.

The monthly meeting raffle generated \$19 so only one prize was awarded. That being won by Club

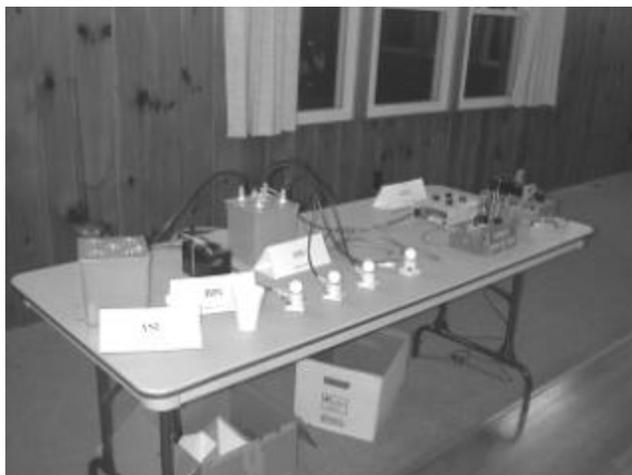
President Erik who won the ARRL books *200 Meters and Below* and *The Best of New Ham Companion*. There being no further business, the meeting closed at 8.45 PM.

Ian Norrish NZ1B
Secretary.



In the "Show & Tell" section of the meeting Bob Reif set up a 1959 era 80 meter tube transmitter connected through a remote antenna switch Stan KD1LE had

homebrewed. Dummy load light bulbs were used to show which port on the switch had been selected since they illuminated when the transmitter was keyed. Stan also provided an assortment of "ham related" material which members could pick and take any item that they wanted.



W1 QSL Bureau Info

Effective Feb 5, 2001 the new address of the W1 QSL bureau is as listed below.

W1 QSL Bureau
P O 7388
Milford, Ma 01757 - 7388

Public Service Jan 2001

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

Apr 1 Boston MA Multiple Sclerosis Walkathon Bob
WA1IDA 508.650.9440 wa1ida@arrl.net

Apr 16 Hopkinton MA Boston Marathon (course) Bob
WA1IDA 508.650.9440 to Boston wa1ida@arrl.net

Apr 16 Hopkinton MA Boston Marathon (start) Steve
K1ST 508-435-5178 k1st@arrl.net

Apr 16 Boston MA Boston Marathon (finish) Paul
W1SEX 978-632-9432 ptopolski@net1plus.com

Apr 29 Groton MA Groton Road Race Erik KA1RV
978-448-5536 erik@eggo.org

Apr 29 Boston MA March of Dimes WalkAmerica
Bruce KC1US 781-275-3740 kc1us@cyberzone.net

May 6 Boston MA Walk for Hunger Bob K1IW 413-
647-3060 wfh@demattia.net

May 13 Devens MA Parker Classic Road 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>.

Board of Directors Meeting

The March Board of Director meeting was held March 8, 2001 at Eriks. Items discussed included Field Day preparations, possible speakers and field trips for meeting programs, a suggested new by-law to disperse club funds in the event of dissolution and upcoming April officer elections.

From The ARRL Letter

AMATEUR RADIO MOUNTS QUICK QUAKE RESPONSE

Hams responded within minutes after an earthquake hit the Seattle area the morning of February 28. The epicenter was some 35 miles southwest of Seattle, but the quake was felt as far away as Salt Lake City. Washington Gov Gary Locke declared a state of emergency for western Washington.

As of week's end, Amateur Radio had scaled back its response as power and telephone service returned to the stricken region. Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) teams in the quake zone were mobilized within minutes of the event. The Salvation Army Team Emergency Radio Network (SATERN) and the Military Affiliate Radio System (MARS) also activated.

Residents in the affected region now are picking up the pieces. Damage estimates could top \$2 billion. Upwards of 350 injuries—a few of them serious enough to require hospitalization—were reported, but no deaths were directly attributed to the earthquake.

ARRL Western Washington Section Manager Harry Lewis, W7JWJ, reported that very soon after the quake struck, State RACES Officer Jim Sutton, WA7PHD, was on the air, handling net control duties for the Washington State Emergency Net on 75 meters from the State Emergency Operations Center at Camp Murray. Western Washington Section Nets also activated on HF SSB, and in the Seattle area, ARES volunteers had mounted an emergency repeater net with King County EC Rich Hodges, KB7TBF, and Lt. Russ Reed, N7NOV, of the US Coast Guard sharing NCS chores. Several other county ARES nets took to the air.

Amateur Radio operators also set up a temporary 2 meter net to assist the Red Cross with damage assessment. An unconfirmed report says one ham used an ATV link from a helicopter to the State EOC—where Gov Locke was on hand—to survey the damage below.

While Eastern Washington was not as badly affected, Spokane County ARES/RACES activated to assist. Because the Spokane County Department of Emergency Management had trouble maintaining contact with the State EOC at Camp Murray, an auxiliary cross-state link was established via the Washington Emergency Net. “This HF link was maintained by Spokane County’s off-site Official Emergency Stations, communicating with operators at the County EOC by 2 meters,” said Spokane County EC Nathan Jeffries, KI7QT, who said the action drew later praise from a County emergency official.

Eastern Washington SM Kyle Pugh, KA7CSP, said “a loose information net” also fired up on 40 meters to handle general inquiries and health-and-welfare traffic.

The Alaska Pacific Emergency Preparedness Net also took the airwaves on 20 meters (14.292 MHz). “The net was opened within minutes of the quake, and hundreds of messages were passed,” said Bob Baker, NL7UH, in Anchorage, Alaska. Baker praised net participants for their “very highly professional manner. The net was formed after the 1964 Alaska earthquake, and it includes several net control stations in Alaska and in the “Lower 48.”

The SATERN Net activated for about six hours on 20 meters (14.265 MHz), processing health-and-welfare information requests and handing out situation reports from Washington and Oregon amateur stations. “Scores of stations over the nation assisted in relay,” said National SATERN Director Pat McPherson, WW9E. SATERN’s Web site, www.go.to/satern, remains available for inquiries.

Lewis said he was “deeply impressed” by the speedy amateur response.

A GLIMMER OF GOOD NEWS FOR AO-40

AMSAT reports that the sun began triggering AO-40’s sun sensor as the satellite emerged from Earth’s shadow on orbit 147. The news has boosted ground controllers’ optimism that they might be able to regain control over the satellite’s spin rate and attitude sooner than had been predicted.

AMSAT-DL’s Peter Guelzow, DB2OS, said this week that as soon as the sensor unit delivers good sun sensor data, controllers will be able to reduce AO-40’s spin and make it easier to adjust attitude. “This also will lead to an improvement in reception of the S-Band telemetry,” he said.

For the past few weeks, the AO-40 has remained in what AMSAT called “a semi-hibernation state,” because the satellite’s high angle has prevented the sensor from seeing the sun’s light. Controllers had planned to work around the sun sensor issue by using a software routine.

Once ground controllers can get accurate AO-40 attitude data, they should be able to correctly aim AO-40’s high-gain antennas for optimal reception on Earth. Ground controllers have been relying on telemetry from AO-40’s S-band (2.4 GHz) downlink—the only transmitter now operating—but they are holding out hope that at least some of the satellite’s other transmitters still function. Since the satellite went silent for about two weeks in December, ground controllers have had no luck hearing the 2-meter, 70-cm or 1.2 GHz transmitters using AO-40’s omnidirectional antennas.

The next major step will be to bring AO-40 into an orientation where ground controllers can fire the onboard arc-jet thruster—using only gaseous ammonia and no electrical power. The test firing will allow checking out the guidance electronics and the arc-jet valves. Guelzow said the thrust of the test will be enough to lift the satellite’s perigee by about 100 km.

Guelzow said plans call for optimizing the current orbit with a live arc-jet firing. He said that several independent analyses—including one done by the French space agency, CNES—confirm that the current orbit will be stable for many years—longer than the spacecraft’s anticipated lifetime.

For more information, visit the AMSAT-NA Web site, <http://www.amsat.org>.

SPACE STATION SHIFT CHANGE SET WITH NEXT SHUTTLE LAUNCH

It’s almost time for a shift change aboard the International Space Station, and two hams are among the new crew members. Relieving the current ISS crew will be the Expedition 2 team of Commander Yuri Usachev, UA9AD/R3MIR, of Russia and US astronauts Susan Helms, KC7NHZ, and Jim Voss. The Expedition 2

crew is scheduled to head into space March 8 aboard the space shuttle Discovery. The Expedition 1 crew has spent more than four months in orbit.

The Space Station Alpha crew is staying in space a couple of weeks longer than planned because of a tight shuttle launch schedule and necessary refitting on the Discovery. Expedition 1 Commander William "Shep" Shepherd, KD5GSL, and Russian cosmonauts Yuri Gidzenko and Sergei Krikalev, U5MIR, arrived at the station November 2. During their stay, Shepherd has spoken via ham radio with students at several schools as part of the Amateur Radio on the International Space Station—or ARISS—program. In addition to ferrying the Expedition 2 crew, Discovery will have in tow an Italian-made cargo carrier that's filled with laboratory experiments and equipment. At the end of its almost 12-day flight, Discovery will transport Shepherd, Gidzenko and Krikalev back to Earth. Discovery is planned to land March 20 at NASA's Kennedy Space Center in Florida.

Commanding Discovery will be Jim Wetherbee. Jim Kelly, KC5ZSW, will be the shuttle's pilot, and Andy Thomas, KD5CHF—a Mir veteran—and Paul Richards, KC5ZSZ, will serve as mission specialists. No Amateur Radio activity from the shuttle is scheduled.

LEAGUE SEEKS GREATER FLEXIBILITY AT 219-220 MHz

The ARRL is urging the FCC to retain the 219-220 MHz shared Amateur Radio allocation and says it wants the Commission to make it a bit easier for hams to use the segment. In comments filed February 6 in an FCC rulemaking proceeding, the ARRL said it believes the 219-220 MHz band "must be maintained and enhanced."

The League commented in PR Docket 92-257, released last November. The Third Further Notice in that proceeding proposed to designate licensing regions for the Automated Maritime Telecommunications System (AMTS) facilities at 216-220 MHz and to authorize a single licensee for each unassigned AMTS frequency block on a geographic basis. The current AMTS system uses a site-based licensing structure.

Current rules require that amateurs planning to operate within 80 km (50 miles) of an AMTS facility get written permission from the AMTS licensee, but getting that consent has been difficult to impossible for hams in coastal areas. "The Commission's intended flexibility in amateur station operation at 219-220 MHz has not, in general, been realized," the League commented.

The ARRL suggested letting amateurs seeking to use 219-220 MHz submit computer-generated field strength contours that demonstrate a lack of interference poten-

tial at the relevant AMTS boundaries in lieu of having to get written permission.

"It is ARRL's intention that the Amateur Service be provided a practical opportunity to make substantial, flexible use on a secondary basis of the 219-220 MHz allocation, taking into account expanded development of AMTS stations," the League said. The FCC should "provide some flexibility in the engineering of amateur systems in that band, to the extent consistent with avoidance of interference to AMTS stations."

The 219-220 MHz amateur segment was created in 1995 as a result of an ARRL petition for rulemaking. The FCC has designated the band on a secondary basis for amateur fixed point-to-point digital message forwarding systems.

While the ARRL said it's unaware of any amateur interference to AMTS stations, attempts by hams to use the band to construct digital backbone systems "have been largely thwarted to date" because of the inability to get consent from AMTS licensees within 50 miles of the proposed operation, as rules now require.

A copy of the ARRL's comments is available at www.arrl.org/announce/regulatory/pr92-257/.

HIKING HAMS CLAIM PEDESTRIAN MOBILE DISTANCE RECORD

Bonnie Crystal, KQ6XA, of San Mateo, California, and Max Pompe, ZL1BK, of Auckland, New Zealand, are claiming the record for the longest direct-path, pedestrian-to-pedestrian Amateur Radio contact. The two worked each other February 18 on 10 meters using compact SSB transceivers and homemade antennas.

On the New Zealand end, ZL1BK used a 1.8-meter (5 feet 11 inches) homebrew telescopic whip mounted on his Yaesu FT-817 running 5 W. Crystal had a 6-meter (19 feet 8 inches) fishing pole strapped to an aluminum pack frame and ran 20 W using a Vertex/Standard VX-1200 HF Manpack transceiver, a radio that's not marketed in the US. "Both of us used 3-meter insulated-wire dragging counterpoises," said Crystal.

The 6500-mile contact began on 15 meters but ended on 10, because conditions were better there for that path. "Other stations in the HFpack group here in the US had been trying to make a go of it, but we just lucked out," Crystal said. For his part, ZL1BK said, "I still can hardly believe we did it, but the Pacific gods smiles on us as we rode the airwaves today."

The HFpack Web site has more information at <http://groups.yahoo.com/group/hfpack/>. More information on Bonnie Crystal, KQ6XA, is available on her Web site, <http://www.qsl.net/kq6xa/>.

ARRL SEEKS ARTICLES FOR ANTENNA COMPENDIUM

ARRL is looking for original, unpublished articles for the next volume of the extremely popular book series The ARRL Antenna Compendium. Articles should be about antennas, propagation, transmission lines, antenna tuners, towers—anything dealing with antennas! Submit articles to Dean Straw, N6BV, c/o ARRL HQ, 225 Main St, Newington, CT 06111.

ARRL DXCC DESK APPROVES ST0P OPERATION FOR CREDIT

Last summer's ST0P DXpedition by Jeff Hambleton, G4KIB/5B4YY/KF9BI, in Khartoum, Sudan, has been approved for DXCC credit. The DXCC Desk has reviewed and accepted ST0P documentation, and stations now can now receive DXCC credit for ST0P. Rejected ST0P submittals can be updated without having to re-submit a QSL by contacting the DXCC Desk, dxcc@arrl.org. QSL information for ST0P is on the Web at <http://www.qsl.net/st0p>.

QRP EME QSO REPORTED

A posting on the EME reflector reports that Ernie Manly, W7LHL, and Larry Liljequist, W7SZ, both in Washington, successfully completed an Earth-Moon-Earth (moonbounce) contact February 25 while running 5 W on 1296 MHz. "This was using the PUA43 mode with their DSP-10 transceivers and transverters," said Bob Larkin, W7PUA. This marked their first attempt at using the 5W level for a QSO. The DSP-10 was a QST construction project by Larkin that appeared in three parts in the September, October and November 1999 issues of QST. The antennas for the QRP contact consisted of 10 and 12-foot TVRO-type dishes. Details are available at Larkin's Web site, <http://www.proaxis.com/~boblark/dsp10.htm>.

LF-TO-LF TRANSATLANTIC AMATEUR CONTACT IS HISTORY

Amateur Radio history was made this month when amateurs in Canada and the UK completed what appears to be the first two-way transatlantic Amateur Radio exchange on 136 kHz. Larry Kayser, VA3LK, and Lawrence "Laurie" Mayhead, G3AQC, managed the LF feat using extremely slow CW that featured 90-second-long dits and 180-second-long dahs. The two-way contact took two weeks to complete.

"We are the first to do a two-way QSO on LF across the North Atlantic as far as I am concerned," Kayser said. "We are the ones who put the stakes in the ground; others will build on what we have done."

The VA3LK-G3AQC contact began February 5 and was completed February 19 with the reception and confirmation of VA3LK's report by G3AQC. Kayser said the participants agreed in advance to a "firewall" between them for the duration of the contact and that all QSO information was exchanged over the LF radio link.

Mayhead said it was clear from the outset that, because of the relatively short band openings, he and Kayser would have to spread the contact out over several days. "It was not easy," he said. "I stayed up late most nights--3 AM on one occasion—changed blown fuses in my transmitter six times, and reconfigured my receiver to include a narrow filter because of interference that was desensitizing it." Kayser says he once had to climb the tower supporting his wire antenna in total darkness.

The UK has authorized amateur operation on 136 kHz, with special authorization and strict limits on radiated power. While Canada has not yet authorized general Amateur Radio operation on 136 kHz, Kayser and a few other Canadian amateurs have received special authorization to experiment there.

Reception of weak LF signals typically is done using spectrographic software like ARGO or Spectran. Signals are transmitted using dual-frequency CW—or DFCW—or very slow-speed CW, also known as "QRSS." Using their particular brand of QRSS, Kayser calculated that it took nearly 70 minutes for him to send his call sign. "Certainly the information rate will improve," he said. "We did the best we could with what we had to work with over the last two weeks."

G3AQC and VA3LK were using a combination of commercial and surplus equipment at their respective stations. G3AQC estimated his effective radiated power at 350 mW, while VA3LK said he might have been at the 5 W ERP level.

In October 1998, the ARRL petitioned the FCC to create two amateur LF allocations at 135.7-137.8 kHz and 160-190 kHz. The FCC has not yet acted on the request.

CANADIAN YOUNGSTERS SPEAK WITH COMMANDER SHEPHERD ON ARISS QSO

A dozen youngsters at Merivale Public School in Ottawa, Ontario, this week became the first Canadian students to speak with Space Station Alpha Commander William "Shep" Shepherd, KD5GSL, operating from space as NA1SS. The successful Amateur Radio on the International Space Station—or ARISS—school

contact February 22 likely will be the last for the Expedition 1 crew.

Amateur Radio coordinator Steve McFarlane, VE3TBD, worked in concert with his wife, Lori—a teacher at the school—to make the contact a reality. Lori McFarlane has been working with youngsters at the school for several weeks in anticipation of the ARISS QSO.

After a few unsuccessful calls, VE3TBD raised NA1SS on the ARISS backup frequency. Youngsters asked Shepherd about trash disposal and recycling aboard the ISS, procedures for dealing with a sick crew member, and what the crew does for exercise. One fourth grader wondered why building a space station was necessary, given problems with pollution and poverty on Earth. Shepherd had a ready reply. “We live on a planet that’s really kind of an island, and it’s not going to last forever,” he said. Shepherd said he thinks humans probably will one day need to “go places other than Earth” and that the ISS made possible the research needed to do that.

Shepherd said the crew members all missed their families and friends but he said he gets to talk to his wife via Amateur Radio “every couple of days.” He also said he has photos and videos of his family aboard. Responding to another student’s question, Shepherd said the crew had exercise equipment aboard, and that exercising was considered essential.

Near the conclusion of the contact, the students on hand hollered “73, Commander Shepherd!” in unison. Looking on in addition to other students and teachers were TV and newspaper reporters. It had been hoped that Canadian Prime Minister Jean Chretien would be able to be on hand, but he was occupied with a visit by British Prime Minister Tony Blair.

The Merivale ARISS contact probably will be the last school QSO for the current crew of Shepherd, Yuri Gidzenko, and Sergei Krikalev, U5MIR. ARISS spokesman Will Marchant, KC6ROL, said he expects it will be sometime in late March—after the Expedition 2 crew arrives—before ARISS school contacts can resume. For more information on the ARISS program, visit the ARISS Web site, <http://ariss.gsfc.nasa.gov>.

RTTY SIGNAL IN AM WINDOW BEING INVESTIGATED

In its periodic report to the FCC Notifications Branch, The ARRL Monitoring System has asked the FCC to help identify the source of a RTTY transmission near 3.885 MHz, the 75-meter AM calling frequency. “We received numerous reports of this signal from AM enthusiasts on February 22,” said Monitoring System Administrator Brennan Price, N4QX. “We have asked the FCC HF Direction Finding Facility in Maryland to determine the origin of the signal.” Price said this was

the first step in resolving the situation, but he notes that the signal may not be illegal. “US hams are fortunate to have access to 3800 to 4000 kHz,” he said. “In many countries, this segment is used by a variety of fixed, mobile, and broadcasting services.” He said that if the RTTY transmission is not coming from the US, it may be legal in its country of origin. “In that case, any resolution will have to be achieved through negotiation rather than through enforcement,” he said.

ARRL EMERGENCY COMMUNICATIONS ON-LINE COURSE AGAIN FILLS UP FAST

The ARRL course, Introduction to Emergency Communications, was fully subscribed within 72 hours of the opening announcement earlier this week. A ham in Italy has been added to the growing list of foreign students “attending” this on-line course. Plans call for offering a new course every four weeks, and a “live” classroom version of the course is now in beta testing. For more information on this on-line course, visit the ARRL Certification and Continuing Education page, <http://www.arrl.org/cce>.

CHINA TEAM TO COMPETE IN FIRST USA ARDF CHAMPIONSHIPS

The Chinese Radio Sports Association has announced that it plans to send a team to the first USA ARDF Championships to be held in Albuquerque, New Mexico, July 31 through August 4. The USA ARDF Championships invite all ARDF enthusiasts, at any skill level, from any country. ARRL ARDF Coordinator Joe Moell, K0OV, says registration is now open, and a 10% discount is offered to those who register before March 1. For more information on the event, sponsored by the Albuquerque Amateur Radio Club, visit <http://groups.yahoo.com/group/abqardf/files/web/index.html>. For more information on Amateur Radio Direction Finding, visit Moell’s ARDF Web site, <http://www.homingin.com>. —Joe Moell K0OV USA ARDF Coordinator

D68C DXPEDITION AT 126,000 QS AND COUNTING

The D68C DXpedition to Comoros reports logging more than 4650 QSOs in the recent ARRL International DX Contest (CW), probably topping the current the Africa multi-two record by a significant margin. D68C has been active on 30, 17 and 12 meters as well as on 14 and 28 MHz RTTY and PSK31. The D68C will not do any satellite operation, as originally planned. The team reports occasional high noise levels on the lower bands. “We are working all we can hear. Sometimes it is really hard to hear anything at all

with all the static," said John Linford, G3WGV. As of February 20, the team had 126,000 QSOs in the log, and Linford said he anticipates when all is said and done, the D68C operation will hold several new records, including total number of QSOs.—John Linford, G3WGV

NEW CHAIR APPOINTED FOR NTS EASTERN AREA STAFF

Marcia Forde, KW1U, has been appointed as chair of the Eastern Area Staff of the ARRL National Traffic System. From Edgartown, Massachusetts, Forde was nominated by fellow Eastern Area staff members for the two-year term. She continues as Transcontinental Corps director for Cycle 2, a position that she has held since 1984. A member of the ARRL for 19 years she also holds Official Relay Station and Official Emergency Station appointments in the League's field organization.

WORLD AMATEUR RADIO DAY SET FOR APRIL 18

The Administrative Council of the International Amateur Radio Union has selected the theme "Providing Disaster Communications: Amateur Radio in the 21st Century" for World Amateur Radio Day, April 18, 2001. IARU has been the watchdog and spokesman for the world Amateur Radio community since its founding in Paris, France, in 1925. Hiram Percy Maxim, 1AW, was its first president. In a related item, the International Telecommunication Union has approved publication of the Disaster Communications Handbook for Developing Countries. The role of the Amateur Radio service in disaster communications is one of the main points of the Handbook. IARU is the principal contributor to the Handbook. This event will coincide with the 76th anniversary of the founding of the IARU.—Fred Johnson ZL2AMJ/IARU Region 3

INDIAN HAMS PUT AVAILABLE HAM TECHNOLOGY TO THE TASK

Hams assisting with earthquake relief operations in the Indian State of Gujarat are even taking advantage of the UO-14 amateur FM satellite as they continue providing communication from the stricken region. Hams within the quake zone and those keeping touch from the outside also have found themselves caught up in the human tragedy. The death toll from the quake now is estimated at up to 50,000 and could rise higher. More than 600,000 were left homeless.

Bangalore-based Guru Rao, VU2GUR, and Sandeep Shah, VU3SX, a Gujarati Bangalorean engaged in

relief work in Gujarat have been using UO-14 to touch bases. "Guru and Sandeep were quick to seize the opportunity and roped in the amateur satellite UO-14 to maximize all possible communication routes," said Raj Kumar, VU2ZAP, another Bangalore ham who's been following the Amateur Radio effort.

While some telephone service in the earthquake zone has been restored, Amateur Radio was the primary link to the outside world in the immediate aftermath of the January 26 earthquake.

Another Bangalore amateur, Chandru Ramachandra, VU2RCR—a former UNESCO official—drove his SUV to Bhuj, 1700 km distant. Carrying a medical team and some 400 kg of gear and supplies, he set up a station to establish a link between Bhuj and Bangalore. As of a few days ago, 18 amateurs from the State of Karnataka were handling communication regarding placement of doctors and medical supplies as well as health-and-welfare inquiries into areas where the telephone system is still out. "This has become a practical exam showing our capability and preparedness in disaster management," said Bangalore Amateur Radio Club President Lion Ajoy, VU2JHM.

Most of the earthquake-related traffic continues to be handled via HF on 40 and 20-meter SSB, although some VHF FM links have been established for local work in Gujarat.

Horey Majumdar, VU2HFR, says hams in Calcutta, where he lives, have been able to locate and pass along information about the well being of several individuals. "However, the best option would have been to have our own team from Calcutta at Bhuj," he said. Majumdar says handling some of the H&W inquiries has been tough. In one case, the information he got via ham radio from the quake zone was not good news. "It was extremely difficult for me to convey to their family that this person, his wife and 7month-old daughter didn't make it," he said. "There must have been thousands of families like this."

Late word from Prem Manani, VU2XMX, in Gandhinagar, the capital of Gujarat, is that reliance on amateur communication has ended with the restoration of normal communication channels, although he said some stations were still in action at the request of the Indian government. "The untiring job done by all hams was appreciated by one and all in the government," he said.

A SAD END TO ROUND-THE-WORLD SOLO SAIL ATTEMPT

An attempt by 76-year-old David Clark, KB6TAM, to become the oldest person to sail solo around the world came to a sad end this week when Clark's vessel, the Mollie Milar, sank two days after leaving Cape Town, South Africa. Clark was rescued, but his "constant companion" Mickey, a west highland terrier, was lost at sea during the rescue attempt. Clark was on the final leg of his journey.

"David has been rescued by a container ship and is okay, although I have not been able to talk with him yet," said his wife Lynda, in an e-mail posting. "The ship is heading for East London, South Africa, and I am waiting for a phone call from him, hopefully tomorrow."

David Clark's 44-foot sailboat went down the evening of February 7. Lynda Clark said that she got the news via ham radio. "According to the ham operator who contacted me, the boat sprang a leak and the pump could not cope," she said. "It was very heavy weather, so when he realized that the situation was hopeless he called for help and a passing container ship sent a lifeboat to pick him up, and he had Mickey with him."

Lynda Clark said that the lifeboat capsized on the way back to the ship, and everyone ended up in the water. "It would have been pitch dark, and in all the trauma Mickey got lost. I'm sure David is heartbroken, as am I," she said. "All of you who have met Mickey along the way know what a special little guy he was."

" 'So close, and yet so far away,' I guess the quote goes," she concluded. Lynda Clark said she would post additional information as soon as she hears from her husband.

During his journey, which began in late 1999, Clark had been keeping in touch with his wife and family via ham radio, and he was a regular check-in on the Maritime Net on 20 meters. His vessel, which was named for his mother, also had satellite communication gear aboard.

Clark had been hoping to return to Ft Lauderdale, Florida, in mid-May, in time for his 77th birthday.

SO-35 SATELLITE FAILURE BELIEVED PERMANENT

SUNSAT SO-35 has ceased operation, and ground controllers at South Africa's Stellenbosch University, where the satellite was built, say SO-35 appears to be off-the-air for good. The satellite had served as a popular and easily accessible FM-mode repeater.

"Unfortunately, little hope remains after two weeks of recovery attempts," said Stellenbosch University's Johann Lochner, ZR1CBC, in a posting to the AMSAT bulletin board. "Thanks to all who shared in our fun. Your feedback and encouragement made most of it happen."

A statement (<http://sunsat.ee.sun.ac.za/news/20010201.html>) from Stellenbosch University's Electronic Systems Laboratory said the last communication with SUNSAT was on January 19 at 1522 UTC. "We are certain, after having performed several tests since the last contact, that an irreversible, probably physical, failure has occurred on the satellite," the statement said. "It is therefore unlikely that we will have any further contact with SUNSAT, apart from the occasional visual sighting by telescope!"

Built by Stellenbosch grad students, SO-35 was launched February 23, 1999, from Vandenberg Air Force Base in California aboard a Delta II rocket.

Ground controllers say it's unlikely that battery failure was the cause of the shutdown. It's believed the failure resulted from multiple internal problems or possible collision with an external object resulting in major physical damage. The SUNSAT Web site is at <http://sunsat.ee.sun.ac.za>.

ARRL OFFERS NEW FIVE-YEAR MEMBERSHIP PLAN

With a membership dues increase going into effect July 1, 2001, the ARRL is offering a special five-year membership plan until then, so members can lock in at the current, lower dues rates. Effective immediately, current or prospective ARRL members in the US and US possessions can obtain a five-year renewal or membership for \$146 (\$122 for those 65 or older)--a saving of \$24 (\$18 for those 65 or older) from the cost of year-to-year renewal at current rates!

Due to postal considerations, this offer cannot be extended to those living in other countries. The special five-year membership offer expires June 30, 2001, the last day the present dues schedule is in effect. After that, annual dues will increase to \$39 for individuals (\$34 for those 65 and older).

Another option is to apply for an ARRL Life Membership for \$850. Special discounts apply to senior and visually impaired applicants. A complete rate schedule and application form is available on ARRLWeb, <http://www.arrl.org/join.html>.

**ARRL OUTGOING QSL SERVICE ANNOUNCES
REVISED RATES**

The ARRL Outgoing QSL Service has announced a new and simplified rate structure, effective March 1, 2001. The new basic rate will be \$4 per one-half pound (8 ounces, or approximately 75 cards) or any portion of a half-pound, a change from the current rate of \$6 per pound or any portion. DXers still may ship 10 cards for \$1, but the 20 and 30-card rates are being discontinued. The new rate structure will help to cover basic handling costs for smaller packages while actually offering a price break to moderate-volume users submitting up to one-half pound of cards. Under the current rate schedule, a half-pound of cards would cost \$6, but it will be \$4 under the new schedule. The new rates are in response to the recent postal rate increase and price restructuring. The Outgoing QSL Service is available to ARRL members. The last rate increase was in January 1999. For information on using the ARRL Outgoing QSL Service, visit ARRLWeb, <http://www.arrl.org/qsl/qslout.html>.

\$February Treasurer Report\$

Income for February was \$19 from the book drawing and \$50 from membership renewal. Expenses were \$20.40 for postage and \$14.97 to the outgoing QSL bureau, leaving a net income of \$33.63.

Fund balances as of February 8 are:
General Fund: \$925.56
Community Fund: \$1192.55



If your ARRL renewal is coming up soon, I can mail it for you. If you bring it to me at a club meeting you save 34 cents and add a little bit more to the General Fund balance from the ARRL rebate to the Club. If you're not yet an ARRL member and wish to join, the Club can get a larger one-time rebate. Make your check payable to NVARC and I'll do the rest.

73,-Ralph KD1SM

2000-2001 Fleamarkets

17 Mar Eastern Connecticut ARA
Pomfret CT. kelli@arrl.net

17 Mar Reading MA QRA Auction @9 GoodShepCh
WoburnSt Red W1SYA 781 944 8689

25 March Framingham MA FARA @HS Bev N1LOO
508 626 2012

31 Mar Waterford CT RASON Auction Bruce KA1ZMZ
860 886 1837

7 April Londonderry NH IRS @Lions \$10@6 \$3@8
Paul K1LL 603 883 3308

15 April Flea at MIT Nick 617 253 3776

28 April Nashua NH NE Antique RC @ Res Ctr Church
Joe 617 923 2665

4,5 May Hopkinton NH HossTraders @FG x7 I89 Joe
K1RQG 207 469 3492

6 May Yonkers NY Metro70 @LincolnHS Carl N2VQP
914 969 7888

19 May Forestdale RI RIFMRS @VFW rt146 8A
flea+auct Rick K1KYI 401 725 7507

20 May Flea at MIT Nick 617 253 3776

26 May Vernon CT NARC@TollandAgC I84x67 Wayne
860 487 1921

1-3 June Rochester NY Atlantic Conv Harold K2HC
716 424 7184

10 June Bethpage NY LIMARC Eddie KC2ACY 516
520 9311

17 June Flea at MIT Nick 617 253 3776



**Nashoba Valley
Amateur Radio Club**

PO Box # 900
Pepperell Mass 01463-0900

mailto:nvarc_nInc@arrl.net
<http://purl.org/hamradio/club/nvarc/>

Pres.: Erik Piip KA1RV
V Pres.: OPEN
Secretary: Ian Norrish NZ1B
Treasurer: Ralph Swick KD1SM
Editor: Stan Pozerski KD1LE
Photographer Ralph Swick KD1SM
PIO: open
Board Members
Earl Russell 1998
Bob Reif 1999

Den Connors 2000

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
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PC formats are OK. You can send items to

pozerski@net1plus.com

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