





de N1NC

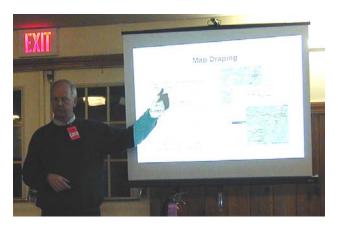
February 2005 Volume 14 Number 2

This Month's Meeting

This months meeting program will be by Phil Temples the former ARRL East Mass Section Manager. Phil will be talking about a camp program for handicapped individuals with an Amateur Radio theme called Courage Handi-Hams.

Last Month's Meeting

The January meeting program was a presentation on a program called Radio Mobile by Skip K1NKR. Radio Mobile is a radio propagation modeling software that does propagation modeling from 20 MHz to 20 GHz and displays on a map format. The program considers transmitter, receiver, antenna characteristics, topography and path loss.



Skip suggested many uses for the program such as predicting repeater coverage but his favorite use relates to his hill topping with GHz radio gear to see who he can talk to.



Russ brought some show and tell material. A homebrew two meter stacked collinear antenna he fabricated from CATV hard line.



Above are the pieces of the antenna before being assembled using the pieces he machined.



We had a great turn out for the January meeting with 29 members and guests present.

In attendance were Walter K1CMF, Phil KB1JKL, Nancy KB1KEF, John KB1HDO, Ron W1PLW, Dennis K1LGQ, Hank KB1JLA, Bob AB1CV, Bob W1XP, Earl WR1Y, Larry KB1ESR, Ken K1JKR, Don N1HVA, Ralph KD1SM, Den KD2S, Leo WA1ULK, Peter N1ZRG, Dave N1MNX, Stan KD1LE, Erik W1ZBT, Ken K1KEY, Wolf KA1VOU, Gary K1YTS, Les N1SV, Skip K1NKR, KB1LXF Marc, ZZ3FVD Marco, Pete no call yet

From the President

With spring is coming many public service events. Groton Road Race, Parker Classic, and Townsend Lions Canoe Race are just a few. If you have acquired any new radios over the winter make at least an abbreviated copy of the manual and keep it with you. Especially know how to put a frequency, offset, and tones into the VFO and memory. When we support an event we want the participants, sponsors, and police to leave with the impression we acted competently and professionally. This is undermined when we cannot properly use our equipment. This also applies to our dress, language, and willingness to help. It all goes together to form the impression the public has about Amateur Radio. Make it a good impression.

Stan KD1LE

Adopt A Highway

Next cleanup is April 2005. 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 probably have to be shifted.

Board Meeting Notes

The NVARC Board met February 10th at the KD1LE QTH. In attendance were Stan KD1LE, Ralph KD1SM, Peter N1ZRG, Les N1SV, John KB1HDO.

Items discussed

Ralph gave 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.

There was a proposal and discussion on the club sponsoring an operating possibly based on the New England QSO Party or alternatively a special event station possibly to coincide with a Groton 350th event.

Brief update on the sound card and bandpass filter projects.

Flea Markets and Such

Feb 19 Algonquin ARC Flea Market Marlboro MA Feb 20 Radio 36 Antique Radio Swap Westford

PSLIST

Date Location `Event Contact Tel/Email

Feb 19 Laconia Sandwich Notch 60 Dave KA1VJU ka1vju@dmegin.com

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

Apr 24 Groton MA Groton Road Race Ralph KD1SM 978-582-7351

NVARC Club Net

The January 17th net was run by Stan KD1LE and had a theme of "Tsunami" and questions about Tsunami's. In attendance were Dave N1MNX, Erik W1ZBT, Larry KB1ESR, Ralph KD1SM, Ken K1KEY, and Stan KD1LE. The January 31st net was

run by Larry KB1ESR and the February 7th net was run by Stan KD1LE.

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.

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.

ARRL Letter

COMMUNITY EDUCATION PROJECT HOLDS INAUGURAL SESSION

Even a blizzard didn't stop several hearty Mainers from attending the first meeting of the ARRL Community Education Program (CEP). The Saturday, January 26, session was held in the southern Maine city of Saco. Coordinated by Bill Barrett, W1WJB, the CEP is funded by the Corporation for National and Community Service (CNCS) to explore the best ways Amateur Radio can work with local emergency managers and with Citizen Corps councils. The CEP has targeted a dozen communities from Maine to Oregon to learn about the value of Amateur Radio to community safety and security between now and August.

"Even though a blizzard was well under way in Saco--only 'essential government employees' were to report to work that day--emergency management officials from a number of area agencies trekked to the town hall auditorium," Barrett recounted. "A sizeable group of 11 radio amateurs also slogged through the snowstorm, while 20 others were standing by on the air."

Barrett said those participating from home served as the "other end" for the program's demonstrations and assisted in clarifying various points of his program.

Created by Barrett to be much more "conversation" than "presentation," the lively exchange of questions and answers gave the Maine emergency officials a much better idea of what Amateur Radio is and what sorts of applications it can be put to. It also helped acquaint the emergency officials with the community of local radio amateurs.

Indeed, Barrett kept the program's spotlight focused on the true stars of the show--the local hams, who also fielded the vast majority of questions.

In addition to repeater basics and an explanation of the very large territory covered by linked repeater systems, demonstrations included digital text communications and APRS (Automatic Position Reporting System).

Each served-agency attendee got specially a created booklet aimed at the non-ham, non-technical audience as well as a companion resource CD—

both produced by ARRL through the CNCS grant. The materials are intended to be shared with other personnel at the served agencies, spreading the word on ham radio even wider.

Before and after surveys helped to gauge attendees' reactions and, more important, how the ham radio presentations may have altered their thinking. One objective of the CEP is to facilitate the networking of hams and municipal leaders to foster greater understanding and new relationships.

The ARRL last fall received new CNCS funding of nearly \$90,000 to execute the pilot program to enlighten localities about the value of Amateur Radio to community safety and security. For his visits, Barrett enlists local Amateur Radio Emergency Service (ARES) teams, the ARRL Field Organization and ARRL-affiliated ham radio clubs to demonstrate Amateur Radio's expertise as a source of trained volunteer communicators--equipped and ready to serve.

SOME NEW WRINKLES IN 2005 FIELD DAY RULES

Those planning to participate in this year's Field Day will need to bone up in advance on a few changes in the rules for the ever-popular operating event. Field Day this year takes place June 25-26. The 2261 Field Day entries for 2004 were the most ever. While similar in format to a contest, Field Day is primarily a means to exercise and demonstrate Amateur Radio's emergency operating capabilities while having fun at the same time. ARRL Contest Branch Manager Dan Henderson, N1ND, says that among other things rule changes for 2005 expand eligibility for bonus points.

"All groups will be eligible for some kind of bonus points," Henderson said. "Make sure you carefully read Field Day Rule 7.3." That rule spells out how to qualify for such bonus points as 100 percent emergency power, media publicity, message handling, making satellite contacts, using an alternative power source and copying the W1AW bulletin, among other things. Many bonus point categories are available to all entry classes.

Henderson notes that some large clubs often compete among themselves to see who can claim the highest number of transmitters. Under the revised rules, all transmitters must be on the air with an operator to count toward a club's entry class. "You have to actually have individual people and sufficient equipment capable of operating simultaneously,"

Henderson emphasized, referencing Rule 4. "The key word there is 'simultaneously."

The Field Day exchange consists of the number of transmitters on the air followed by the participation category (A through F). Operators would send "3A," for example, for a club or non-club portable setup with three transmitters on the air at the same time. Rule 4 also specifically prohibits switching and simulcasting devices.

The 2005 Field Day rules also modify the number of transmitters eligible for bonus points that a group can claim for its operating class. "You can only claim the emergency power bonus points for up to 20 transmitters," Henderson explains. "That's a maximum of 2000 emergency power bonus points." There no limit on the number of transmitters eligible participants may have on the air, however. Field Day rules already generally prohibit the use of more than one transmitter at the same time on a single band-mode.

In addition, Field Day 2005 will introduce a new "Youth Element" bonus category (Rule 7.3.15). Clubs or groups operating in Class A, C, D, E or F now can claim 20 bonus points--up to a maximum of 100--for each person aged 18 or younger, who completes a valid Field Day contact. Single-operator Class B stations can earn a 20-point bonus if the operator is age 18 or younger. Two-person Class B setups can claim a 20-point bonus for each operator age 18 or younger, for a maximum of 40 points. The maximum number of participants for Class B entries remains at two.

Another rule change clarifies that Get On The Air (GOTA) stations--instituted a few years ago to encourage new or comparatively inexperienced operators to gain operating practice--use the same exchange as the "parent" station. The maximum transmitter output power for GOTA stations is 150 W, and GOTA stations may only operate on the Field Day HF bands.

Free transmitters do not count toward a group's total, and GOTA stations and free VHF stations for Class A entries do not qualify for bonus point credits.

Henderson encourages Field Day participants to submit their Field Day summaries electronically using the Web applet form http://www.b4h.net/cabforms. "You may input your summary information at that site for a 50-point bonus," Henderson points out.

The Maritime Radio Historical Society's K6KPH, comprised of former operators of the KPH commercial shore station, now an historic site, again will augment W1AW Field Day CW and RTTY bulletin transmissions for West Coast participants.

The complete 2005 Field Day packet now is available on the ARRL Web site http://www.arrl.org/contests/forms/05-fd-packet.pdf.

NEW MEXICO YOUNGSTERS FINALLY GET CHANCE TO TALK TO ISS

A dozen pupils who attend Piñon Elementary School in Los Alamos, New Mexico, are all smiles this week after getting the chance to speak via Amateur Radio with International Space Station Commander Leroy Chiao, KE5BRW. The January 27 contact was arranged by the Amateur Radio on the International Space Station (ARISS) program. Los Alamos Amateur Radio Club Communications Officer Bill Boedecker, NM5BB, handled Earth station duties for the direct VHF contact with NA1SS. Piñon's application had been in the queue for an ARISS school contact for more than four years.

"Luckily we had a good nine-minute window, and all the students were able to ask at least one question," he commented. Before the contact actually got under way, Boedecker spent some time with the school's sixth graders describing how the ham radio gear on the ground works to communicate with the ISS. The kids also did some practice runs. In all, the 12 youngsters asked 14 questions, and Chiao responded to some of them at length.

On hand for the event were some 60 fellow students, who observed along with a few parents and teachers. Principal James Telles called the ARISS contact "an incredible experience" for his students, one they'd remember it for the rest of their lives.

Among other topics, the youngsters' questioned Chiao about how the ISS is powered. He explained that solar power was the only type of power aboard the ISS. Another wanted to know about how Chiao and his crewmate, Russian cosmonaut Salizhan Sharipov, keep physically fit. The ISS Commander explained that the crew needs to exercise for at least two hours daily, using a variety of exercise equipment especially designed for the zero-gravity environment.

Youngsters also wanted to know what kinds of experiments the crew was conducting, and if the ISS residents were able to view space phenomena such as meteors heading into Earth's atmosphere. Chiao

said the crew actually looks down, not up, to see meteors from the ISS.

Boedecker, an ARRL Life Member and a retiree of the Los Alamos National Laboratory, had help from Los Alamos ARC members Dave Haworth, N9KYP, and Anne Browning, KD5NLN. Boedeker said all the gear worked flawlessly, despite bad weather at the time.

A local newspaper sent a reporter and photographer to cover the event, and University of California TV recorded the contact for future use in a program to air in several weeks as part of the Behind the White Coat series, produced at Los Alamos National Labs and distributed by UCTV.

ARISS http://www.rac.ca/ariss/ is an international outreach, with US participation by ARRL, AMSAT and NASA.--some information provided by Gene Chapline, K5YFL

ARRL TO INTRODUCE ON-LINE ANALOG ELECTRONICS COURSE

The ARRL Certification and Continuing Education Program (C-CE) will introduce a new on-line course, Analog Electronics, EC-012, this month. Registration for the first session will remain open through Sunday, February 13, and the class will begin Friday, February 25.

In 16 learning units students will learn about the use of instrumentation, Kirchoff's Laws--two laws necessary for solving circuit problems, diodes, rectifier circuits, bipolar and field effect transistors, various amplifier configurations, filters, timers, op amps and voltage regulators. Most lessons include a design problem and optional construction project. The course run 12 weeks and earns 2 Continuing Education Units (CEUs).

This course is designed for those who feel at home with basic electrical and electronic components. Prospective students should be able to read simple schematics; know Ohm's Law and the relationship between power, voltage, current, and resistance; own and be able to use basic test equipment and be competent in simple algebra.

Those who feel they need a refresher course might consider browsing the first few sections of Chapter 6, AC Theory and Reactive Components, in The ARRL Handbook for Radio Communications or pick up a copy of Understanding Basic Electronics, by Larry Wolfgang, WR1B.

EC-012 tuition is \$65 for ARRL members and \$95 for nonmembers. Additional details are in the course introduction http://www.arrl.org/cce/intro-012.html. Information on all ARRL C-CE courses is on the ARRL Web site http://www.arrl.org/cce.

ISS COMMANDER RETURNS TO HIS ELEMENTARY SCHOOL VIA AMATEUR RADIO

International Space Station Expedition 10 Commander Leroy Chiao, KE5BRW, visited via Amateur Radio January 13 with fourth and fifth graders at John Baldwin Elementary School in Danville, California. That's the same school Chiao attended more than 30 years ago when he was growing up.

"We just looked him up in the yearbook and found his picture, and there he was, smiling away," said John Baldwin fourth-grade teacher Starr Dawson, who coordinated the contact at the school. Dawson said 17 pupils who proposed questions to ask the ISS commander were chosen to participate in the event, which was arranged by the Amateur Radio on the International Space Station (ARISS) program. Chiao answered 11 of them. Responding to one youngster's inquiry, he said the Apollo missions inspired him to become an astronaut.

"I first really knew I wanted to become an astronaut when I was eight years old attending John Baldwin School there and watching the first Apollo moon landings," he recalled, "and from that point on, I knew that that was what I wanted to do." Of all his space missions, his current tour aboard the ISS has been his "most unforgettable."

Replying to another question, Chiao allowed for the possibility of life forms other than human elsewhere in the universe.

"I believe, personally, that there is other life in the universe, and I think that it's just that we haven't found it yet--or they haven't found us," Chiao told the youngsters. "You know, we haven't had any confirmed life on other planets, but some of the results coming back from the Mars probes is showing some promise that there was water, and of course if it looks like there was water on the surface of Mars in the past that opens up the possibility that there may have been life there."

Chiao also said that he and crewmate Salizhan Sharipov were working on an ultrasound "Telemed" experiment. It's aimed at coming up with a system that would permit physicians on Earth to diagnose health problems space travelers may experience during long-duration space flights, such as those

required to journey to Mars and beyond, he explained.

Handling Earth station duties for the event was ARISS veteran Tony Hutchison, VK5ZAI, in Australia, who contacted NA1SS directly. An MCI-donated teleconference link handled two-way audio between Australia and the school. Audio of the contact also was distributed via EchoLink and IRLP. The QSO with John Baldwin Elementary School marked the 160th ARISS school group contact.

ARISS is an educational outreach program with US participation by ARRL, AMSAT and NASA.

ARES SUPPORTS NATIONAL WEATHER SERVICE, RED CROSS IN FLOODING'S WAKE

The same weather system that caused flooding and mudslides in California wreaked havoc elsewhere in the western US the week of January 10. Heavy rainfall in the southeastern Nevada region bordering Utah and Arizona combined with runoff from melting snow, causing rivers and streams to overrun their banks. The resulting flooding damaged or destroyed dozens of homes in the area northeast of Las Vegas. Early on in the emergency, the National Weather Service (NWS) contacted Clark County, Nevada, Emergency Coordinator Charlie Kunz, AA5QJ, to request help from his team.

"They had lost a level detector on the Muddy River near Glendale and asked if someone could get them reports," said Vern Garman, K0EGA, the Clark County ARES Assistant EC for Operations and Training. Starting January 10, radio amateurs from the Logandale/Overton area provided information to the NWS for the next three days.

In addition, Garman reports, the Clark County Office of Emergency Management activated the emergency operations center (EOC) on January 11, and ARES deployed a volunteer to the EOC for about one day. After flooding displaced some area residents, the American Red Cross opened a shelter in Overton, and Logandale/Overton-area ARES volunteers provided communication support. At least five ARES members also aided the Red Cross in preliminary damage assessment activities.

On January 15, the Red Cross requested ARES support in Mesquite, and six amateurs from Las Vegas and one from Overton responded. "This group assisted in setting up the Red Cross communications van and provided communications for outreach teams searching for the people who needed Red Cross assistance," Garman explained. The outreach

activity was centered in the northeastern corner of Arizona, near Littlefield and Beaver Dam, he said. A road washout cut off access to Beaver Dam, and some two dozen homes were damaged or destroyed.

Southern Nevada District Emergency Coordinator Glenn Hale, KB7REO, said communications support to the Red Cross consisted of installing an antenna on the mobile communications vehicle and programming the Icom IC-706MKIIG transceiver aboard for area repeaters. Hale noted that the Red Cross emergency response vehicles (ERVs) primarily use the 30-50 MHz Public Safety band to communicate to their command post. Garman said one of the responders, Jack Cook, N8RRL, had Red Cross communication support training and had operated one in Florida after last year's hurricanes.

Two vehicles owned by Red Cross personnel served as secondary ERVs, Hale said, and he and Dan Starr, AA7I, supported that effort in Littlefield by shadowing the group with HF/VHF communication. Most activity was within the Virgin River Gorge, and nearly all communication to the command post was via the Utah Hill 146.820 repeater.

"Bridges to the community were completely washed out making access to the community difficult," Hale reported. "The St George, Utah, American Red Cross kitchen was supplying food to the ERVs. At one location in Beaver Dam, 55 meals were served."

Hale said some homes in the region around Littlefield and just across the border in Mesquite were damaged or destroyed by floodwaters and mud. Conventional telephone and some cellular service in the area was out completely, and the Red Cross used a satellite uplink to communicate with its national headquarters from the communications van.

Garman says the support for the Red Cross wrapped up when the organization completed its outreach program on January 16. In all, more than a dozen ARES volunteers responded to the weather emergency.

ARES/RACES AID IN CALIFORNIA FLOOD RESPONSE

Flooding and a devastating mudslide in Southern California kept Ventura County ARES/RACES members on the move this week. Among other activities, ARES/RACES has supported communication at shelters housing La Conchita residents displaced by a massive and deadly mudslide January 10 that killed at least 10 people. A town of some 250 inhabi-

tants, La Conchita is approximately 65 miles north of Los Angeles.

"Several communities were cut off from access to the outside world during the flooding, including the Ojai area and the cities of Santa Paula, Fillmore, and Piru," reports David Gilmore, AA6VH, ARES District Emergency Coordinator and Ventura County RACES Radio Officer. He said five shelters were opened during the course of the flooding, providing refuge to more than 700 evacuees. Gilmore said the hospital in Ojai also experienced flooding, but the community's flood-initiated isolation would have made it extremely difficult to transfer patients to other facilities.

"An ARES/RACES member stood by at the radio communications room at the hospital during this crisis, while the flooding was dealt with," he said. "Fortunately, the effects of the flooding were able to be contained, and the hospital was able to continue operating."

In the midst of dealing with the La Conchita mudslide and the subsequent rescue/recovery effort, Ventura County also faced a forecast of additional heavy rainfall plus a prediction that the Santa Felicia dam at Lake Piru might overflow January 11.

"The integrity of the dam itself was never in doubt," Gilmore explained. "However the amount of water flowing into the reservoir was of sufficient volume that if an overflow occurred, the community of Pirulocated at the very eastern part of Ventura County and below the dam-was expected to experience considerable damage."

In light of the threat, authorities ordered residents to evacuate to higher ground, and requested Ventura County ARES/RACES to set up radio communications inside the community. Access to Piru was already difficult, Gilmore explained, and once flooding commenced the town was expected to become completely inaccessible.

"We realized that any personnel who went to Piru could become stranded for several days, along with the Piru residents," he said. Nonetheless, Ventura County ARES/RACES members did not hesitate to volunteer for the assignment.

"Steve King, KE6WEZ, immediately packed his vehicle with supplies and extra radio equipment, and headed out," Gilmore said. Although his trip was hampered by closed or flood-damaged roadways, the California Highway Patrol immediately let King through. "He drove the perilous journey along High-

way 126 to Piru, navigating through flowing water and mudslides that already littered the road," Gilmore said.

Although two more operators--Dan Halpert, WA6JQB, and Karl Baird, KG6KRN, had also prepared to go, King's vehicle was the last allowed in before nightfall, when the highway became too dangerous to travel.

Once there King spent a busy--and uncomfortable-night supporting communication for the more than 500 flood refugees, who had little in the way of supplies. King was able to help coordinate the delivery of needed provisions. At one point, he also handled traffic for the emergency evacuation of a Piru resident who required medical treatment. The area lost electrical power around 3 AM, and Gilmore says King was instrumental in locating a small generator and getting it on line as dawn approached.

Fortunately, the anticipated heavy rain did not materialize, and the release of water over the dam was held back enough to avoid affecting residential housing. Piru residents were allowed to return home the next morning, and King was able to get back home for a well-deserved rest, Gilmore said.

As the severe weather wound down, so did the Ventura County ARES/RACES activation. Gilmore said the team remains on standby if additional communication problems arise.

Heavy rainfall in California in recent days has resulted in mudslides that left at least two dozen people dead. California Gov Arnold Schwarzenegger, who toured La Conchita January 12, has declared a state of emergency in Ventura County. The Salvation Army and the American Red Cross are cooperating in meeting the needs of those displaced by the flooding and mudslides.

ISS CREW OFF DIET, ASTRONAUT TELLS JAPANESE YOUNGSTERS

International Space Station Expedition 10 Commander Leroy Chiao, KE5BRW, says he and his crewmate, Flight Engineer Salizhan Sharipov, are off their NASA-imposed diet. Chiao spoke via Amateur Radio January 7 with youngsters at Mori Elementary School in Hyogo, Japan. The contact between 8N3M in Japan and NA1SS aboard the space station was arranged via the Amateur Radio on the International Space Station (ARISS) program.

"We received a Progress resupply ship on Christmas day, so now we have plenty of food and water,

so we're no longer on our diet," Chiao reported in response to a "bonus" question, "Are you hungry now?" from 8N3M control operator Kazuyoshi "Kaz" Tanaka, JG3QZN. In early December, NASA had asked the Expedition 10 crew to trim 300 calories or so from its typical 3000 calorie daily intake to keep food supplies from running dangerously low before the Russian Progress supply rocket arrived Christmas Day.

The unmanned spacecraft brought 2.5 tons of food, fuel, clothing, supplies and Christmas gifts to the complex. Chiao and Sharipov are now roughly half-way through their six-month mission. Replying to the "food question" that students typically ask, Chiao said the crew has a varied menu aboard the ISS, including, he noted, "some Japanese curry that I brought with me--curried rice--and also some tofu dishes."

Chiao fielded a total of 20 questions from the school during the approximately 10-minute direct VHF contact. He told the youngsters that he and Sharipov underwent lengthy and extensive training for their current space mission.

"In fact, my crewmate and I trained for the better part of three and a half years," Chiao said, "We were studying systems in both Russia and in the United States and we also practiced working in spacesuits and we also had to do physical exercise to stay in good shape." He urged a student who asked about becoming as astronaut to study lots of math and science.

Chiao noted the crew will undertake a space walk later this month. On the task list is moving some Japanese experiments from one side of the ISS to the other, he said.

Responding to another question about the convenience of living aboard the ISS, Chiao said the lack of gravity presents a mixed blessing. "Many things are inconvenient about living in space," Chiao said, "because in zero gravity it's very easy to lose things. They just float away." The upside, he noted, is that "floating makes it very easy for you to move around, so some things are convenient also."

A dozen Mori pupils prepared 19 questions for the contact, and Chiao answered them all, plus the query from Tanaka just as the pass was coming to an end. Looking on were about 100 visitors. The event attracted news media coverage from five newspapers and a local TV cable channel. Founded in 1872, Mori Elementary School is located near the

city of Kakogawa and has an enrollment of 363 pupils.

ARISS is an international educational outreach with US participation by ARRL, AMSAT and NASA.--thanks to Satoshi Yasuda, 7M3TJZ/AD6GZ, who provided information for this story

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

February

19-20 ARRL International DX Contest - CW 25-26 Russian PSK WW Contest - PSK31 26-27 CQ WW 160-meter Contest - SSB 26-27 North American QSO Party - RTTY

March

5 Open Ukraine RTTY Championship 2200Z-2359Z, Mar 5 (Low Band) and 0000Z-0159Z, Mar 6 (Low Band) and 0800Z-1159Z, Mar 6 (High Band) 13 North American Sprint, RTTY, 4 hours only! 19-21 BARTG HF RTTY 26-27 CQ WW WPX Contest, SSB

DXpeditions

Call

| 8Q7WP | Maldives | 09/05 |
|---------|------------------|--------------------|
| T98AQL: | Bosnia-Herzegovi | na * by IZ4AQL Mai |
| 5H3HK | Tanzania | till March 2006 |
| ZD8I | Ascension Is | till March 2006 |

Location



Nashoba Valley 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: Ron Wood W1PLW 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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Until

