





de N1NC

February 2003 Volume 12 Number 2

# This Month's Meeting

This month's presentation, by Bob W1XP, will be on the WSJT weak signal software.

Earl WR1Y will have a laminator for people who need their license or other card-sized items protected.

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

# **February Board Meeting**

The February Board of Directors Meeting was held February 13<sup>th</sup> at the KA1RV QTH. Erik KA1RV, Ralph KD1SM, Les N1SV, Bob W1XP, Ian NZ1B, Den and KD2S were in attendance.

Ralph presented the Treasurers report to the Board and the details are published later in the newsletter. He also reported that He and Larry had attended the Groton Road Race planning meeting.

Information on known club equipment was forwarded to the Property Master, John KB1HDO. John has compiled the list published in this newsletter. If you believe there is something that should be added please contact the Board of Directors.

Den still collecting data on customized mugs.

Ron KB1GID reported the Townsend Cable Access interview has been postponed again. We will try to provide video of the Groton RR or other event that they can use when making the program.

The Board approved the purchase of paper and cardstock for member yearbooks. The yearbook editor intends to issue an update page to the yearbook "members list" at the March meeting.

The Board discussed having more member presentations and is soliciting three or four members to do a ten or fifteen minute presentation on a "Special Short Subjects Nite in February."

lan will update the Club information required by the ARRL for Special Service Clubs.

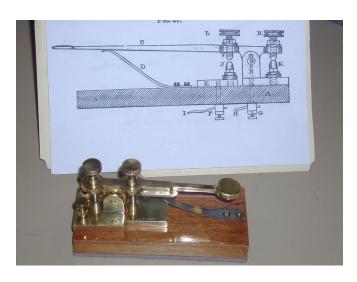
#### **Welcome to New Members**

Tom Schreiner K0UL from Tyngsboro
Hank Lane from Groton

### Last Month's Meeting



Last month's meeting presentation was "How the Internet gets your bits from here to there." by Ralph KD1SM. Ralph described the workings of the Internet addressing, name lookup, and routing systems.



Earl WR1Y brought a version of the 1843 Correspondent code key that was designed by Vale Lever for Mr. Morse. Earl machined and built it from the patent application information, which seemed to be lacking in consistency.



Earl also brought a pencil tube regenerative receiver he built (not shown) and the 1935 condenser used for tuning radios (shown above and below).





Bob W1XP brought a noise filter (above) he designed and built which mounts on the back of a standard PC power supply to reduce the noise that comes out on the power leads.



He also showed a beverage antenna matching transformer package he designed and built.

Also discussed at the meeting were the following items.

Ralph reported the club financial status.

Stan mentioned that the 2003 Field Day was closer than the past Field Day and getting closer. There was a short discussion about Field Day and the need to start the planning process.

Stan gave a summary of the newsletter survey.

There was a short discussion about purchasing NVARC mugs and Den will report back with more specific information on quantities and prices.

#### **Breakfast**



Breakfast is an opportunity to ask questions and have discussions on any topic. At the table above (L-R) are Erik, Wolf, Peter, Bruce, Camilla (facing the camera) and Stan, Ben, Tom, Bob, John and Jessie (back to camera). Bottom corner are Jeanine and Samantha with Ralph hiding behind the camera. Here there are a dozen people and a half a dozen simultaneous discussions. Since most people are participating in at least two it makes for a lively time.



We also have celebrations. Here, surrounded by restaurant staff, Camilla receives a small cake for her birthday.

## **NVARC Property List**

The Board created the position of Property Master and John KB1HDO has been appointed to that position. John has generated a list of the club property that is known. The list will be divided into two types of property. There will be items that are assigned to members performing a club function requiring them. In some cases the club may only be custodian of the property, as in the case of the road cleanup equipment, but we still must keep track of it. There will be a second class of equipment is available for loan to a member on a short-term basis. The list that follows only indicates where an item currently resides. If you have any items that should be added please contact John. If you believe there are other omissions please contact the Board of Directors. The following list is as of 2/5/2003

Call Sign Name		Cour	Count Description	
kd1le	Pozerski	15	Trash stabbers(MH*)	
kd1le	Pozerski	32	Safety Vests(MH)	
kd1le	Pozerski	20	pr Cotton Gloves(MH)	
kd1le	Pozerski	1	"Wall" (Five panels 7' h x	
2.5' w pin board)" for displays				
kd1le	Pozerski	1	Set of NVARC letters	
kd1le	Pozerski	3	5' brown folding tables	
kd1le	Pozerski	1	MFJ MFJ557 keyer	
kd1sm	Swick	1	NVARC banner 3'x5'	
kd1sm	Swick	1	Trash stabber (MH)	
kd1sm	Swick	1	Safety Vests (MH)	
kd1sm	Swick	1	Swingline M711 Stapler	
ka1rv	Piip	Kenv	vood TS-450 S/N	
61000025				
ka1rv	Piip	Cushcraft R-7 antenna		
ka1rv	Piip	Astron RS-35M S/N 9506184		
*MH indicates MassHighways property				

## **QRZ CD-ROM Discount**

The QRZ CD-ROM version 20 is shipping. It contains a complete US callbook database as of 24-Oct 2002 plus many DX stations; over 1.2 million calls. The database contains e-mail addresses. The QRZ search program that permits searching for a license record in a variety of ways and also prints QSL cards. Version 20 runs on MS-Windows, MS-DOS, Unix, and Linux. The Macintosh software apparently no longer fits on the CD but is available for download. For more details on the version 20 CD see http://www.grz.com/store/grz cd.html

QRZ offers a very attractive quantity purchase discount. If we purchase the CDs in groups of 10 we get them for \$10 each; that is half the single unit price and includes shipping.

Several of the Saturday morning breakfast gang are interested in a quantity purchase. Ralph KD1SM is coordinating the buy. If you want to get on the list, contact Ralph. It's first come, first served and orders will be placed as soon as 10 members have spoken for CDs.

### Club Email Reflector

Erik reported that he hoped the club email list would be available by the regular meeting. Members need to opt-in to the list. To get added to the list contact Ralph or send him email at <a href="mailto:kd1sm@arrl.net">kd1sm@arrl.net</a>. Les is also collecting names. Posting to the list will be limited to subscribers.

### East Mass 2003 SET

The 2003 SET took place February 8th. Previous SET's were little more than a net with a four-hour check in window. The 2002 SET began an attempt at creating a more realistic and challenging event. The 2002 SET introduced an event, which started with a game plan based on a predetermined scenario plus sealed envelopes to be opened at specific times with instructions modifying the game. The instructions caused traffic to be generated, questions asked of remote locations, and equipment to "fail". The 2003 SET built on that foundation adding participation from 15 Emergency Operation Centers (EOC's) and Simulated EOC's from participating towns in Eastern Massachusetts plus MARS and SHARES radio stations. These 'players' committed to the SET by creating a communications plan for their organization, be it a city, a town, or a response group like the Red Cross or Salvation Army. The plans varied in detail but included the definition of frequencies for callout, moving traffic short and long distance, and the optional simplex frequencies should repeaters and other equipment fail. The SET plan was to create an interesting amount of traffic and challenged the participants to get messages and information to and from locations that they may not be able to communicate directly with. That's where the MARS and SHARES stations came into play as they have HF nets and linked repeater systems that cover all of Southern New England.

I congratulate Mike Neilsen W1NPM for the effort he has put into the East Mass ARES organization. The effort is paying off and the proof is the greater level of

interest, participation, and effort people are willing to put into the exercises.

Stan KD1LE

## From The ARRL Letter and Bulletins

# AMATEUR RADIO COMMUNITY MOURNS LOSS OF COLUMBIA ASTRONAUTS

The flags of the United States, the ARRL and the International Amateur Radio Union (IARU) are flying at half staff at ARRL Headquarters as the Amateur Radio community has joined the rest of the world in mourning the loss of the seven shuttle Columbia astronauts. Through the Space Amateur Radio Experiment (SAREX) and, more recently, the Amateur Radio on the International Space Station (ARISS) programs, amateurs have enjoyed a special relationship with the astronaut corps, many of whom are licensees. Three of the Columbia astronauts were Amateur Radio operators, and the ARISS program is a joint effort of ARRL, AMSAT and NASA.

"The ultimate in public service was just given by these astronauts," said ARRL President Jim Haynie, W5JBP. "It's a sad thing that's occurred, and our thoughts are with the families of the astronauts who died doing what they loved. They were part of us."

Haynie, who was in Florida last weekend for the Miami Tropical Hamboree, said the news of the Columbia incident cast a pall over the festivities. "You could feel it in the crowd," he said. Haynie led those attending the ARRL forum in a moment of silence in remembrance of the lost crew members.

The STS-107 crew, headed by Commander Rick Husband, included Pilot Willie McCool, Mission Specialists Kalpana "KC" Chawla, KD5ESI; David Brown, KC5ZTC; Laurel Clark, KC5ZSU, Michael Anderson, and Payload Specialist Ilan Ramon, the first Israeli astronaut.

"The world has lost seven great heroes," said ARISS International Chairman Frank Bauer, KA3HDO, a NASA employee, in extending condolences to the families and friends of the STS-107 crew. Bauer said the Columbia catastrophe "clearly demonstrated the challenging and sometimes sobering aspects" of human spaceflight.

"Our quest for space must continue despite these tragic losses," he said.

ARRL and the ARISS Team received condolences from all over the globe. AMSAT-NA President Robin Haighton, VE3FRH--one of two Canadian ARISS rep-

resentatives--expressed his great sadness at learning of the Columbia disaster. "AMSAT has always been a strong supporter of the shuttle program and of ARISS," he said "Their understanding of the risks taken on this and other missions did not prevent them from performing at the highest level and, unfortunately, paying the ultimate price," he said of the lost crew.

Ken Pulfer, VE3PU, the other Canadian delegate to the ARISS International Team, said he was overwhelmed by the tragedy, both in sympathy for his US friends and because he had met so many of the astronauts himself. It was Pulfer who convinced the Canadian government to establish an astronaut corps of its own. "My condolences go out to all Americans at this time." he said, calling February 1 "a sad, sad day indeed."

ARISS International Secretary Rosalie White, K1STO, recalled meeting "KC" Chawla at an ARISS meeting at Johnson Space Center. "Kalpana was intelligent, quietaprofessional scientist with a genuine smile," she said. She also noted that Laurel Clark had done some "terrestrial SAREX QSOs" from W5RRR at Johnson Space Center with students in Kansas and New Mexico. The "terrestrial" SAREX QSOs took place at a time when the demand from schools for radio contacts with astronauts was high but the number of scheduled shuttle flights was very low.

Built in 1981, Columbia was the oldest shuttle in NASA's fleet and was the first to carry Amateur Radio. Retired astronaut Owen Garriott, W5LFL, became the first ham to operate from space in November 1983. Thousands heard W5LFL, and hundreds had direct QSOs with him on 2 meters. Refurbished in 1999, Columbia was on its 28th space mission. Columbia carried no Amateur Radio gear on its last mission into space, however.

# HAMS ASSIST IN SEARCH FOR COLUMBIA DEBRIS

In Texas this week, Amateur Radio Emergency Service and SKYWARN volunteers have been assisting federal, state and local officials and relief organizations in their search for shuttle Columbia debris and remains of the crew members.

"Ham radio has proven to be the only reliable communications options during the recovery effort," said Public Information Officer Tim Lewallen, KD5ING, of the Nacogdoches Amateur Radio Club. "The communications systems used by other federal and state organizations cannot penetrate 'The Pine Curtain' as we know it in East Texas," he said. He said even local authorities were having problems with their radio gear.

Lewallen says federal authorities have requested that every survey team have at least one Amateur Radio operator along to help keep the recovery efforts coordinated and organized.

Lewallen also cited the reliability of EchoLink connections among the various groups as key to getting the operation up and running and keeping it running smoothly. He suggested that prospective volunteers visit the North Texas Section Web site <a href="http://www.arrl.org/sections/?sect=NTX">http://www.arrl.org/sections/?sect=NTX</a> for additional information.

Alan Hayes, NE5AH, in the ARRL South Texas Section said February 6 that hams were urgently needed to assist in the search and recovery effort in the San Augustine County area east of Lufkin, site of the debris search command center at the Department of Public Safety. Hayes said a substantial amount of the debris recovery yet to be done--he estimates 50 percent--is in San Augustine County, which has few active hams. Debris from the Columbia has been recovered in more than three dozen Texas counties, and the search now has moved into parts of Arizona and California.

"We currently have the infrastructure and portable repeaters in place, thanks to all of the volunteer efforts from outside of our area," Hayes said. Volunteers have been making use of a portable repeater donated by the Garland Amateur Radio Club and set up at in San Augustine.

"To date, Amateur Radio has proven to be the only reliable communications in this area of operations, and approximately 25 operators per day have been needed," Hayes concluded. "Thus far, alternative communications from sources other than Amateur Radio have not been successful."

Hayes says that two dozen or more operators are needed each day, and he expects that need to continue for the next three weeks. Prospective volunteers may get in touch with South Texas Section Emergency Coordinator Bob Ehrhardt, W5ZX <w5zx@yahoo.com>.

Other agencies involved in the effort include the Texas Department of Public Safety, Texas Department of Transportation, the FBI, local law enforcement and fire departments and National Guard units from Texas and elsewhere. Relief organizations include the American Red Cross, The Salvation Army and the Texas Baptist Men's Kitchen. The Salvation Army also has been using Amateur Radio for its communication needs.

Hams also assisted students and staffers from the Humanities Undergraduate Environmental Sciences (HUES) Geographic Information Systems and Forestry Resources Institute labs at Stephen F. Austin State University.

Several amateurs in Texas reported hearing a reverberating, rumbling sound as the Columbia broke up above them and debris began to rain down on the landscape. "Very scary," said Ralston Gober, W5ZNN, of Corsicana, Texas. "It shook the heck out of my house and shack!"

### SIX-YEAR-OLD OREGON GIRL GETS GENERAL TICKET

A six-year-old girl from Roseburg, Oregon, has upgraded from Technician to General. Mattie Clauson, KD7TYN--a fourth-generation Amateur Radio operator in her family--could be the youngest General-class operator in the US. Her new ticket was granted January 13.

Mattie allowed that the Element 3 test "was pretty hard" and she had to study for a long time before passing it on her third attempt. "The Element 3 test was a lot harder than the Tech test," she said. She was ambivalent about the 5 WPM Element 1 Morse code exam, characterizing it as "not too hard, just a little, but kind of easy too."

Her parents, Tim and Charlotte Clauson, AC7SP and KD7QZB, say Mattie became interested in Amateur Radio when she was five. The Clausons discovered "a kid-friendly study book," Ride the Airwaves with Alpha and Zulu by John Abbott, K6YPB (no longer in print-Ed). The Clausons say Mattie, who already knew how to read, dove into it right away. Her mom and dad helped her to study, explained the "hard questions" and encouraged her to take practice tests at various Web sites. She obtained her Technician license last July and became KD7SDF.

The Clausons said Mattie learned Morse code using several different computer programs, and they helped her practice by tapping out letters--and later words--for her. In the end, she passed her code exam on the very first try. For the time being, Mattie says, she's sticking with phone operation but plans to give CW a try in the future. Mattie says she prefers HF over VHF "because I can talk to people in other countries."

Homeschooled with her sisters, Mattie loves to read, and that may contribute to her precocity. Among her favorites books are those by Cynthia Wall, KA7ITT, Encyclopedia Brown, and Nancy Drew. Her parents say ham radio has been a very useful tool in

homeschooling--in terms of letter recognition, spelling, science, geography and other subjects.

The Clausons say Mattie doesn't consider herself "someone special" since passing her General test, and neither do they. "We do not feel that Mattie has any abilities above any other child," Charlotte Clauson said.

For her part, Mattie says she hopes that she can be an inspiration to other youngsters her age to get involved with Amateur Radio. "I think that since I got my license, whether Tech or higher, other kids can do it also," she said. Mattie's late great grandfather, S.A. "Sam" Sullivan, was W6WXU; his daughter, Joan Brady--Mattie's grandmother--now holds his former call sign.

"The ham community has also been very supportive, especially in the Roseburg area," said Charlotte Clauson. "Their enthusiasm has made Mattie's experience with ham radio very positive." A article on Mattie Clauson appeared February 3 in the Statesman Journal of Salem,

Oregon <a href="http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news.statesmanjournal.com/article.cfm?i=5602">http://news

Tim, Charlotte and Mattie Clauson all are ARRL members. Mattie and her mom now are working on their Amateur Extra tickets.

#### YUGOSLAVIA BECOMES SERBIA-MONTENEGRO

Yugoslavia's parliament has voted to formally abolish that nation and replace it with a new country called Serbia-Montenegro, which were the two remaining Yugoslav republics. In accordance with a deal arranged by the European Union and aimed at keeping the two republics together, Serbia and Montenegro will continue to share a capital--Belgrade--and a joint administration for defense and foreign affairs. The new arrangement will have little immediate impact on Amateur Radio. For DXCC purposes, Serbia and Montenegro will be considered a single entity--at least for the time being--and amateurs there are expected to continue using YU/YT prefixes. The situation could change in three years when residents of the two republics would be allowed to vote to stick together or go their separate ways. Yugoslavia was established in 1918 as the Kingdom of Serbs, Croats and Slovenes. DXCC criteria are available on the ARRL Web site <a href="http://www.arrl.org/awards/dxcc/rules.html#sii">http://www.arrl.org/awards/dxcc/rules.html#sii</a>.

#### \$1 MILLION GIFT FUNDS NEW SCHOLARSHIP

The ARRL Foundation <a href="http://www.arrl.org/arrlf/">http://www.arrl.org/arrlf/</a>> has announced the Goldfarb Memorial Scholarship, a full, four-year undergraduate scholarship that will go to a meritorious young Amateur Radio operator about to

graduate from high school. The new award is the result of a generous endowment from the late William Goldfarb. N2ITP.

ARRL Foundation Secretary Mary Lau, N1VH, said the Goldfarb scholarship marks the first Foundation scholarship that funds a complete undergraduate education. Before his death in 1997, Goldfarb set up a scholarship endowment of close to \$1 million in memory of his parents, Albert and Dorothy Goldfarb, Lau explained.

Each year, to the extent of the funds available, the Foundation will select a deserving young Amateur Radio operator to receive a "full ride" for his or her undergraduate studies at an accredited baccalaureate degree-granting institution. The successful applicant must major in computers, engineering, the sciences, medical/nursing or a business-related area. Also, financial need must be demonstrated via submission of a copy of the applicant's Free Application for Federal Student Aid (FAFSA) <a href="https://www.fafsa.ed.gov/">http://www.fafsa.ed.gov/</a>. The grant will cover all conventional educational expenses--including tuition, room and board and textbooks.

A close friend of Goldfarb's--Richard Goldstein-characterized Goldfarb as "a wonderful person" who was genuinely interested in other people. "He placed a high value on education, and he saw this scholarship as a way to perpetuate the memory of his parents," he said. Goldfarb grew up in Brooklyn, and his parents died while he was a teenager. After a stint in the US Air Force, he worked for the New York City Department of Finance.

An on-line application for the Goldfarb Memorial Scholarship is available on the ARRL Web site <a href="http://www.arrl.org/arrlf/Goldappl.html">http://www.arrl.org/arrlf/Goldappl.html</a>. The application deadline for the 2003 Goldfarb Scholarship is March 15. For additional information, contact Mary Lau, N1VH, n1vh@arrl.org.

## PROMPT ACTION BY AMATEUR RADIO OPERA-TORS HELPS SAVE LIVES

As ARRL member Joe Giraudo, N7JEH, was on his long, daily commute to his office at a mining corporation outside Elko, Nevada, he came upon a car that had skidded on "black ice" and rolled over a number of times in isolated valley north of Carlin. A bus carrying emergency medical technicians to the mine had already arrived, and the EMTs were mobilizing to treat the three accident victims. Giraudo immediately called up the autopatch on the W7LKO 146.85 repeater to notify the Nevada Highway Patrol and the Carlin police and fire departments. He again used the autopatch so EMTs could relay situation reports to the responding emergency units. When the emergency units started

arriving, they found they were unable to communicate using their own radios because of the local terrain. Again, the autopatch under Giraudo's control allowed them to communicate with their central dispatcher to coordinate other responding units, warn them of the black ice and request helicopter support. At one point the W7LKO autopatch went down, but Gene D'Asto, WA7BWF, immediately came up on the repeater and began relaying information via landline. After a 30 minute extraction effort, all three victims were taken by ambulance to the Elko Regional Medical Center.--Dick Flanagan W6OLD/Carson Valley Radio Club Carson Currents.

### VIRGINIA AMATEUR GROUP SETS NEW 145 GHz DX RECORD

Four amateurs from the Lynchburg, Virginia, area celebrated the new year January 12 by breaking their own distance record on 145 GHz and by confirming a fifth grid for VUCC <a href="http://www.arrl.org/awards/vucc/">http://www.arrl.org/awards/vucc/</a> on yet another microwave band. Brian Justin, WA1ZMS; Pete Lascell, W4WWQ; Hal DeVuyst, KA4YNO; and G. P. "Geep" Howell, WA4RTS, spanned a nearly 80-km path to set a new North American and world DX record.

"This claim should be the very first VUCC for that band, and it took two years of hard work to make it happen," said Justin. Both stations exchanged contact information using FSK-CW. All participants are members of the Lynchburg Amateur Radio Club (K4CQ), of which Justin is president. The group already has earned the first-issued VUCC awards on the 47 and 76 GHz bands.

Justin, who designed and built all of the equipment, set up his station in grid square EM96wx in Southwest Virginia. On the other end of the circuit was the W2SZ/4 station, with Howell, Lascell and De Vuyst. W2SZ/4 was at approximately 4000 feet above sea level in Virginia's Bedford County in grid square FM07fm. Lascell said while the team was setting up, he was able to snag a 20-meter contact with KM1CC, the Marconi special event station on Cape Cod. "A neat way to tie the bottom of the spectrum and the beginning of radio to a new frontier 100 years later," he said.

Weather conditions were just right for the QSO to take place with little wind and an extremely low dew point and no haze. Both stations ran about 4 mW of power and used one-foot dish antennas, which must be precisely aimed.

Additional information is available on the Mt Greylock Expeditionary Force Web site <a href="http://www.mgef.org">http://www.mgef.org</a>.

### HIGH SPEED MULTIMEDIA HAMMING COULD BE THE NEXT BIG THING

High-speed multimedia hamming via the "Hinternet" could be the next big thing for Amateur Radio. That's the hope of the ARRL High Speed Multimedia (HSMM) Working Group, which is adapting the highly popular IEEE 802.11b Part 15 wireless Internet protocol to Part 97 amateur operating.

"We expect it to be nothing less than revolutionary!" says John Champa, K8OCL, who chairs the ARRL HSMM Working Group--a subset of the League's Technology Task Force. The Working Group's new "High-Speed Digital Networks and Multimedia" page <a href="http://www.arrl.org/hsmm/">http://www.arrl.org/hsmm/</a> recently premiered on the ARRL Web site.

Champa's team is calling the specific techniques, software and hardware involved "the ARRL 802.11b protocol" to distinguish it from the unlicensed, commercial protocol. Systems employ direct-sequence spread spectrum techniques and operate in the 2.4 GHz range. The term "Hinternet" (ham + Internet), Champa says, is a user-friendly way to refer to the development of high-speed Radio Local Area Networks (RLANs) capable of simultaneously carrying audio, video and data signals.

"The development of the ARRL 802.11b protocol will significantly enhance Amateur Radio, especially with respect to emergency communication and support of public service activities," Champa predicted. He and his HSMM Working Group colleagues also expect that it will attract many technically oriented users of the Internet and wireless LANs to get their amateur tickets.

In addition to emergency communication, Hinternet applications could include two-way streaming video, full-duplex streaming audio, Voice over Internet Protocol (VoIP) applications such as eQSO, EchoLink, iLink and IRLP, and digital voice. As on the wired Internet, communication can be point-to-point, point-to-multipoint and multicast at high bandwidth.

"An emergency volunteer equipped with a laptop or a wireless PDA (personal digital assistant) with a microphone and a small video camera now has the tools to be a mobile set of eyes and ears in the midst of a communications emergency," says Working Group member Kris Mraz, N5KM.

In Michigan, the Livingston County HSMM Experimenters Team already has three HSMM access points--called "APs" in the commercial world--and about a dozen stations on the air centered on 2437 MHz. Another group of Amateur Radio 802.11b enthu-

siasts has recently organized in the San Antonio, Texas, area.

Although other amateur allocations also would be appropriate for Hinternet operation, the use of 2.4 GHz was an easy choice, since Part 15 WiFi (wireless fidelity) devices already operate in that part of the spectrum, and inexpensive commercial equipment is widely available. Acting on an ARRL petition, the FCC has proposed elevating amateurs to primary at 2400 to 2402 MHz.

The ARRL publications catalog now includes the book 802.11 Wireless Networks: The Definitive Guide <a href="http://www.arrl.org/catalog/?category=&;words=802.1">http://www.arrl.org/catalog/?category=&;words=802.1</a> 1> by Matthew S. Gast. The book covers the topics of creating and administering wireless networks.

Champa says that taken in a nationwide context, the meaning of the term Hinternet goes deeper than just an amalgamation of words. "In nautical terms the word hinterland is 'the land beyond the coast," he said. "And so it is with us. 'The Hinternet' is the radio net beyond the Internet."

### NEW JERSEY LEGISLATURE HONORS AMATEUR RADIO'S 9/11 ROLE

The New Jersey Legislature has honored the role of Amateur Radio operators in the aftermath of the September 11, 2001, terrorist attacks. On hand in Trenton to witness a joint proclamation December 12 were ARRL Hudson Division Director Frank Fallon, N2FF, Hudson Division Vice Director Steve Mendelsohn, W2ML, Northern New Jersey Section Manager Bill Hudzik, W2UDT, and Bergen County District Emergency Coordinator Mike Adams, WA2MWT, who's also a member of the New Jersey PRB-1 Task Force.

"I would like to take this opportunity to commend you for your hard work and efforts," said Assembly Speaker Albio Sires. "During times of disaster, your group has displayed superior service and dedication to the safety of our citizens. I applaud the efforts of the independent radio operators and thank you for your selfless actions on September 11, 2001. Allow me to express my sincere gratitude for your participation with the New Jersey General Assembly on this day, December 12, 2002."

On behalf of the amateur contingent, Hudzik thanked the 80 members of the Assembly. Among the cosponsors of the resolution was Assemblyman Matthew Ahearn, KB2PNN, a Democrat from Fair Lawn and sponsor of an Amateur Radio antenna bill, Assembly Bill 3065, in the Garden State.

While in the state capital, the ham radio delegation took the opportunity to promote A3065, "The Amateur Radio Antenna Bill." The measure would codify the limited preemption known as PRB-1 into New Jersey's statutes. In addition, it would preclude local ordinances or regulations that effectively prohibit an antenna support structure of 70 feet or less above ground level exclusive of any antenna upon the structure. The measure has been assigned to the Housing and Local Government Committee chaired by Assemblyman Jerry Green (D-Plainfield). The text of the proposed legislation <a href="http://www.njleg.state.nj.us/">http://www.njleg.state.nj.us/</a> is available on the New Jersey Legislature Web site. Search on "A3065" in the "Bill Search" engine.

Ahearn will be seeking cosponsors in the New Jersey General Assembly and Senate. Interested New Jersey amateurs may contact him via e-mail <asmahearn@njleg.org>. Amateurs may contact their state lawmakers to express their opinions on the bill or to urge their cosponsorship. Visit the New Jersey Legislature page <a href="http://www.njleg.state.nj.us/">http://www.njleg.state.nj.us/</a>> and look under "Members--Find Your Legislator."--Michael Adams, WA2MWT

## **\$February Treasurers Report\$**

Income for January was \$45 from membership dues and \$52.85 in bank interest from the previous quarter. Expenses were \$44 for the PO Box 900 annual renewal and \$14.80 for newsletter postage. Net income of \$39.05, leaving fund balances of:

General fund: \$5032.49 Community fund: \$1842.55



Welcome to new members Tom Schreiner of Tyngsboro and Hank Lane, a neighbor of Russ WR1Y in Groton de kd1sm

#### Fleamarket Calendar

20 Apr MIT, Cambridge, MA



# Nashoba Valley Amateur Radio Club

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Pres.: Erik Piip KA1RV V Pres.: Earl Russell WR1Y Secretary: Ian Norrish NZ1B Treasurer: Ralph Swick KD1SM Board Members: Den Connors 2000-2003 Bob Reif 2001-2004 Les Peters 2002-2005

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Photographer: Ralph Swick KD1SM
PIO Ron Wood KB1GID
Librarian Peter Nordberg N1ZRG
Property Master unfilled
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

442.90 + 100Hz Repeater 53.890 – 100Hz Repeater

This newsletter is published monthly. Submissions, corrections and inquiries should be directed to the newsletter editor. Articles and graphics in most IBM-PC formats are OK. You can send items to

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