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# B.V.A.R.A. QRM

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W3SGJ

[www.qsl.net/bvara](http://www.qsl.net/bvara)

February 2003

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144.710/145.310 MHZ - 100 HZ PL

447.975/442.975 MHZ - 100 HZ PL

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## B.V.A.R.A. OFFICERS

PRESIDENT.....KB3EAQ Debbie Reid  
1.V.PRES.....N3GZZ Joe Streit  
2.V.PRES.....N3OJN Stan Riffle  
SECRETARY...N3SVM Bob Reid  
TREASURER...N3ALS Wes Morar

## TRUSTEES/DIRECTORS

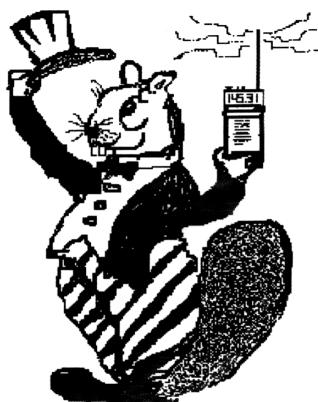
KB3EAQ.....Debbie Reid  
N3GZZ.....Joe Streit  
N3OJN.....Stan Riffle  
N3ALS.....Wes Morar  
N3SVM.....Bob Reid  
WA3GFM...Al Belardia  
KA3SMF.....Dave Heim  
KE3ED.....Tony Petrucci/Station Trustee

## NEWSLETTER EDITOR

N3NBJ.....Janet Petrucci

## NEWSLETTER DISTRIBUTION

KB3EAQ....Debbie Reid



## THE NET LIST

WPA CW NET.....7:00 PM DAILY.....3.585  
TRADERS NET.....7:00 PM MON & FRI 3.898  
HOSS TRADERS.....8:00 PM WEDNESDAY.3.910  
CALLOUS BOTTOMS...11:00 PM DAILY...3.912.5  
WPA PHONE & TFC NET...6:00 PM DAILY...3.983  
PA TRAFFIC TRAINING NET..6:30 PM...3.610  
E-CARS.....8:00 AM DAILY...7.255  
EAN NET.....2:30 PM DAILY..7.243  
RIP VANWINKLE.....7:00 AM DAILY..145.31  
B.V.A.R.A. 2 METER.....8:30 PM WED....145.31  
B.V.A.R.A. 10 METER...9:00 PM WED...28.370  
WPA TRAFFIC.....8:00 PM DAILY..146.88  
QCWA NET.....8:30 AM SUNDAY.147.03

VISIT THE B.V.A.R.A.'s WEBSITE AT:

[www.qsl.net/bvara](http://www.qsl.net/bvara)

If you have a submission for the B.V.A.R.A. QRM you may submit it to Janet N3NBJ by any of the following means.. E-mail: [ke3ed@arrl.net](mailto:ke3ed@arrl.net), Packet: [ke3ed@k3oiw.#wpa.pa.usa.na](mailto:ke3ed@k3oiw.#wpa.pa.usa.na), or typed in text format on floppy disk. Thank you.

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## Inside This Issue

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- 1 Club News
  - 2 FCC to renew Hackers Ticket
  - 3 Multimedia Hamming?
  - 4 "Consumer Friendly" Filing
  - 5 And More...
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**CLUB MEETING**

The February B.V.A.R.A. meeting will be held on Thursday the 13<sup>th</sup>, 7:30 PM at the Beaver County Emergency Center located at 250 East End Avenue, Beaver, PA. Plans for this year's field day event will be discussed as well as other activities for this year.

**CLUB HATS AND TEE SHIRTS**

Are you interested in a club hat or tee shirt? Debbie KB3EAQ and Phyllis N3KUG are now taking orders. Anticipated price of hats will be \$10. Tee shirt prices are not yet known however we should have firm prices on both at the upcoming meeting. Assorted colors will be available including the clubs "official colors" of blue with gold letters.

**REPEATER CODES TO CHANGE**

As of February 1, 2003 the auto patch code will change. You have been provided a wallet sized slip with the new patch codes. Keep this in your wallet in case of an emergency. Please do not disclose this information to anyone. Only 2003 members will be provided these codes. If someone has not received the new codes please **DO NOT** disclose them. Instead please refer this individual to Tony KE3ED for the new codes.

**EQUIPMENT NEEDED**

The Beaver Valley Amateur Radio Association is in need of a touch tone telephone with an extra row of buttons. These buttons would be the A, B, C, & D keys, just like on your hand held radio, in addition to the normal 1-9 and \* & #. Purpose of the telephone is for programming of the RC-850 controller. If you have one or know where one could be had, please contact Tony KE3ED. Thank you.

**B.V.A.R.A. SPONSORED TEST SESSION**

The Beaver Valley Amateur Radio Association will sponsor an ARRL VE examination on Saturday February 1<sup>st</sup>, 2003 at the Community College of Beaver County's Aviation Science building located at 125 Cessna Drive, (Chippewa Twp.) Beaver Falls, PA.

Testing will start promptly at 10:00 AM so please plan on arriving at least 15 - 30 minutes prior. Walk-ins are welcome. Talk-ins will be on the 145.310 (W3SGJ) repeater. Use minus offset and 100 hz pl tone. Also you can see our exact location via APRS on 144.39 Mhz. Look for W3SGJ.

All candidates wishing to take a test should bring the following:

1. Two (2) forms of identification.

**B.V.A.R.A. QRM**

2. A pencil and a blue or black pen.
3. Your original AND a photocopy of your current license (if any).
4. Your original AND a photocopy of any C.S.C.E's (if any).
5. The test fee of \$12.00.

All classes of amateur radio license tests will be administered. CW tests will **NO LONGER** be multiple choice.

All Technician Plus operators licensed as such prior to March 21, 1987 should bring a copy and the original proof of this credit.

Candidates are welcome and encouraged to join us for breakfast at the Chippewa Brighton Hot Dog Shoppe at 8:00 AM. For more information contact Tony KE3ED at the following:

Packet: ke3ed @ k3oiw.#wpa.pa.usa.na  
 Repeater: 145.310 (W3SGJ) minus offset & 100 hz pl tone.  
 E-mail: ke3ed@bellatlantic.net  
 Phone: (724) 774-4173

**==>WPA SECTION NEWS**

The New Year is finally upon us and I would like to take this opportunity to thank the countless number of individuals that volunteered in various aspects during the previous year. The countless hours of time that each of you have given to serving others is greatly appreciated. With the New Year also comes the beginning of the hamfest season. The first hamfest will be on February 23 in the Pittsburgh area. This event is sponsored by the Wireless Association of South Hills. Additional information for this event can be found at <http://www.hky.com/~sanfordb/WASHfest2002.htm>. Either one of the assistant section managers or myself will be present at all ARRL sanctioned hamfest in W. Pa again this year. Stop at the league table to say hi or if we can help you with anything.

I am preparing my calendar of activities for the year and would like to hear from any groups that would like me to schedule a talk at their club or event. Please contact me to arrange for a date that will fit into your group's schedule.

I would like to introduce the section staff and explain the services they can perform to help you. Several members of the section staff are also available to make presentations on different subjects. ASM Jeff Leach, N3YEA, is available to talk about the EmComm courses that are being offered online and in the classroom. Jeff would be happy to make arrangements with any group that would like to sponsor a class. Jeff will be my primary backup at hamfests or meetings that I can not attend. Bruce Watson, AA3LX, is our ASM for education and youth. Bruce has been developing numerous

PowerPoint programs to introduce different areas of amateur radio. He is also available to help with forming school clubs and other youth programs. Tony Petrucelli, KE3ED, has had his position as ASM expanded to include not only packet but also all the digital and data modes. Rich Beaver, N3SRJ, is the section emergency coordinator of W. Pa. Rich can explain the ARES operation in our section. He is also looking for individuals to fill leadership positions in several counties. There is a need for emergency coordinators in several different areas and anyone interested should contact Rich. Rich will manage the entire operation of the ARES platform. Bob Livrone, N3WAV, is the section traffic manager. Bob can help with presentations on proper traffic handling techniques. These individuals and other staff members may be contacted by email by using "callsign";@arrl.net

Other members of the section staff that are available for help in special areas include Sally Cripe, N3MYZ, who as an ASM will be working with me on administrative functions and also available to help clubs with any problems. A new member to the staff is Dave Kleber, KB3FXI, who became the bulletin manager for W. Pa. Dave will be implementing some list serves as well as alert systems using email, pagers, cellular devices as well as other methods. More information will be provided on this as the services become available. Individuals needing technical assistance should contact Jim Salter, WR4W. If you need assistance with public relations or getting press releases put together contact Tony Zona, WB3KGT. Tony is our new public information coordinator and has an extensive background in news publications. Anyone experiencing interference or other areas of possible rule violations can contact Ralph Ofchinick Jr, W3ZPI for assistance. Ralph coordinates the official observer team here in W. Pa. He will be glad to assist with questions or issues.

There are many different ARES groups in the various counties. If you would like to become involved and do not know who the leader is in your area contact me and I will provide you with the contact information. Also please visit the section website at <http://www.bfdin.com/wpasec> for more information. Upcoming event about which we will provide more information next month are: Washfest February 23, Foothills ARC Hamfest March 2, Butler Co. ARC Tech fest March 15, Two Rivers ARC Hamfest March 23. 73 John Rodgers, N3MSE, W. Pa. Section Manager

### **==>ARRL CONCLUDES 5-MHz EXPERIMENTS, AWAITS FCC DECISION ON NEW BAND**

Without fanfare, the ARRL allowed its WA2XSY 5-MHz experimental license to lapse January 1 rather than request renewal for another year. Last May, the FCC proposed going along with the ARRL's 2001 request for a new domestic (US-only), secondary HF allocation at 5.25 to 5.4 MHz. Discussions with various governmental agencies--including the

## **B.V.A.R.A. QRM**

Interdepartment Radio Advisory Committee (IRAC) and the National Telecommunications and Information Administration (NTIA)--continue on how to accommodate amateur operation in the band, which is primary for several governmental agencies including the military. The NTIA regulates radio spectrum allocated to the federal government.

"At this point, we have every reason to believe the FCC will act on its proposal early this year," said ARRL Chief Executive Officer David Sumner, K1ZZ. "As to what the outcome will be as far as 5 MHz is concerned, we cannot predict."

In a December 24 letter, Sumner thanked the 15 Amateur Radio clubs and individual amateurs who took part in the 5-MHz experimental operation that began in January 1999 and largely concluded in 2002. "You assisted in providing an important part of the groundwork for our petition for a domestic allocation to the Amateur Radio Service in this frequency range by demonstrating the desirability and feasibility of a shared allocation," he wrote. "We hope it will not be long before amateurs throughout the country are able to enjoy the fruits of your efforts."

Sumner said the ARRL chose not to request another renewal of the WA2XSY license because it already had obtained sufficient information to justify its petition for the band.

Until surprise opposition surfaced last fall from the NTIA, the FCC had the League's request for a new 60-meter band on the proverbial fast track. In a letter filed with the FCC last August--after the comment deadline had passed--the NTIA recommended that the Commission not go forward with the 5-MHz proposal. The NTIA said several government agencies with allocations in the proposed spectrum had expressed reservations about allowing amateurs to use the band, even on a non-interference basis.

The ARRL has been working with the federal agencies involved to resolve the impasse the NTIA letter raised. The NTIA said critical federal agencies, including the Department of Justice, the US Coast Guard and the Department of Defense, were making extensive use of 5 MHz frequencies. The FCC's May 2002 Notice of Proposed Rule Making (NPRM) fails to adequately protect these "critical government operations" from harmful interference, the NTIA asserted.

The ARRL has called the 5 MHz allocation "an urgent priority of the Amateur Service." In its July 2001 petition, the League told the FCC that a new band at 5 MHz would aid emergency communication activities by filling a "propagation gap" between 80 and 40 meters.

Experimental operations on 5 MHz continue on a very limited basis in the United Kingdom and in Canada. In Newfoundland, the Marconi Radio Club's VO1MRC has been operating under experimental authority from Industry Canada and an endorsement from Radio Amateurs of Canada to

conduct experiments on 5 MHz. On December 21, VO1MRC completed a cross-band (5 MHz/7 MHz) CW contact with VK7RO in Tasmania.

### **==>CHICAGO YOUNGSTERS ENJOY END-OF-YEAR ARISS QSO**

Amateur Radio on the International Space Station (ARISS) school and educational contacts resumed in late December after a hiatus to change crews. Expedition 6 Crew Commander Ken Bowersox, KD5JBP, spoke December 29 via NA1SS with a dozen youngsters visiting Adler Planetarium and Astronomy Museum <<http://www.adlerplanetarium.org/index.html>> in Chicago. It marked the 81st ARISS contact and the first contact for Bowersox' crew with youngsters in the US. Expedition 6 crew members also conducted successful ARISS contacts on New Year's Eve with participants at the World Scout Jamboree in Thailand and with students in France.

"I'd say the most important thing that I have learned in space is that people are very, very strong and flexible, and we can adapt to all types of different environments," Bowersox told a youngster who had asked the space veteran to describe the most interesting or important thing he'd learned in space.

Other youngsters were curious about food and eating in space. Bowersox said he missed pizza most of all aboard the ISS. His favorite space food, he said, was bread pudding. "And I can just open a packet and eat straight out of the packet with a spoon," he said. Bowersox also explained that the human body still digests food very well in zero gravity. He also noted that the crew was trying to grow some tomatoes and herbs in space. "We're not sure how they'll turn out," he said, "but we're hoping they'll be very tasty."

An audience of some 200 people, including TV and newspaper reporters, were on hand to watch the youngsters interview Bowersox via Amateur Radio. Participating youngsters ranged between five and ten years old. Organizing the ARISS event were ARISS mentor Charlie Sufana, AJ9N, and the planetarium's Geri Smith.

Audio and video (Quicktime) clips of the Adler Planetarium ARISS contact are available via the Adler Planetarium Web site <<http://www.adlerplanetarium.org/education/events/iss/>>.

On December 31, 15 Scouts at the 20th World Scout Jamboree <<http://www.worldscout.pacific.net.th/>> in Thailand spoke with Expedition crew member Don Pettit, KD5MDT, via special event station E20AJ. Among other questions, the Scouts asked Pettit if he wanted his own kids to grow up to become astronauts, how the crew members bathe in space, and how the lack of gravity affects the human body.

Also on December 31, Pettit spoke with students at the Rene Mure school in Commelle-Vernay, France. ARISS International Vice Chairman Gaston Bertels, ON4WF, said

## **B.V.A.R.A. QRM**

some 60 schoolchildren and their parents assisted in the contact. The French youngsters wanted to know if Pettit believed in extraterrestrial life, whether the crew could feel the speed of the ISS through space, and if microgravity made it difficult for crew members to find their way in the space station.

### **==>FCC POISED TO RENEW COMPUTER HACKER'S HAM TICKET**

An FCC Administrative Law Judge has recommended that the FCC grant the Amateur Radio license renewal application of convicted computer hacker Kevin D. Mitnick, N6NHG. The Initial Decision <[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-02D-02A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-02D-02A1.pdf)> by Chief Administrative Law Judge Richard L. Sippel released December 23 comes approximately one year after the FCC designated Mitnick's license renewal application for hearing.

"Right now, my goal in life is to live a productive life and to earn a living and try to make up for all the time that I lost and try to be a productive citizen," Mitnick told an FCC hearing last June 18. The Commission had cited character issues stemming from Mitnick's history of illegal computer-related activity--which included several convictions and prison sentences and two years on the run.

Mitnick testified that he's decided to turn his life around and dedicate himself to a career in broadcast radio, public speaking, and writing to help government, businesses, and individuals minimize the risks associated with computer intrusions. Following his release from prison, Mitnick said, he has been law-abiding and has no desire to return to his former life.

In his Initial Decision, Sippel wrote, "There is reliable evidence that Mr. Mitnick has focused on becoming an honest, productive citizen and that he has the means to continue to do so." Sippel said that Mitnick has been on the amateur bands since his release from prison and there have been no complaints regarding his on-the-air behavior. "The evidence in its totality shows Mr. Mitnick to have an overall record of compliance with Commission rules," Sippel concluded.

Unless exceptions are raised within 30 days or the FCC reviews the ruling on its own motion, Sippel's decision becomes effective 50 days after its release.

First licensed in 1976, Mitnick, 39, filed with the FCC through his attorney to renew his General ticket not long after his US District Court conviction in August 1999. His ham license was due to expire in December 1999, but the FCC extended his operating authority while his renewal application was pending. Mitnick reportedly spent some \$16,000 in legal fees to retain his ham ticket.

Following a similar hearing earlier this year on character issues, the FCC recently granted the Amateur Radio license application of Herbert Schoenbohm. Last month, Schoenbohm regained his previously held KV4FZ call sign via the vanity call sign system. Upon his return to ham radio after a nearly two-year absence, he initially was issued NP2MJ as a sequential call sign.

#### **==>ARRL PROVIDING FCC LICENSE RENEWAL, ADDRESS CHANGES, MODS TO NONMEMBERS**

The ARRL has announced that it's now providing FCC Amateur Radio license renewals, address changes and other license modification services to nonmembers. For a \$12 fee, the League will renew a nonmember's Amateur Radio ticket (the license must be within 90 days of expiration), file an application to change address or name or request issuance of a new sequential call sign. The ARRL Volunteer Examiner Coordinator is processing these applications.

"The \$12 is in line with our calendar year 2003 exam application fee," said ARRL VEC Manager Bart Jahnke, W9JJ. For several years, the ARRL has been handling renewals, address and name changes and modifications free of charge for members and has directed nonmembers to the FCC's free Internet or hard-copy application options or to other providers of such services.

Jahnke suggests that nonmembers who now choose to employ the League's application handling service also consider adding \$27 (based on the current under-65 full term member rate of \$39) for a full ARRL membership that includes free application handling and other services--not to mention QST.

Members or nonmembers taking advantage of this service should submit NCVEC Form 605 <<http://www.arrl.org/fcc/forms.html>> to ARRL VEC, 225 Main St, Newington CT 06111 USA for processing. Nonmembers should make the \$12 fee payable to "ARRL." For more information, contact ARRL VEC, [vec@arrl.org](mailto:vec@arrl.org).

#### **==>FCC THREATENS NEW YORK AMATEUR WITH HEARING**

The FCC has told a Technician-class operator from New York to stay off 20 meters or risk having to defend his license at a hearing. FCC Special Counsel Riley Hollingsworth wrote Alexander Sandbrand, N2NNU, of Yonkers December 12 notifying him that the FCC plans to designate his ham ticket for revocation and suspension proceedings if it learns of additional incidents of out-of-band operation.

"This serves as notice that if you engage in any additional incident of out-of band operation, the Enforcement Bureau intends to designate your Amateur station license N2NNU for a revocation hearing before an Administrative Law Judge," Hollingsworth wrote, "and, further, that we intend to designate your Technician-class operator license for

## **B.V.A.R.A. QRM**

suspension for the remainder of the license term, August 26, 2011."

An initial Warning Notice regarding alleged operation on the 20-meter phone band went out to Sandbrand in August 2001, but the FCC has reports that Sandbrand has operated on HF phone since then.

"Information before the Commission indicates that on at least nine occasions subsequent to receipt of that warning letter, you operated out of band," Hollingsworth wrote. He cited reports that N2NNU had operated at various times on 20, 17, 15 and 10 meters between September 2001 and June 2002.

Hollingsworth told ARRL that after the first Warning Notice, Sandbrand called him to complain that it wasn't fair that he had to pass additional examination elements to operate on HF phone. "I told him if he wants to operate on HF, he has to take the test like everybody else," Hollingsworth said.

In the latest Warning Notice, Hollingsworth informed Sandbrand that the FCC's Wireless Telecommunications Bureau will not process any upgrade applications from him until the matter is resolved. He said this week that he has not heard anything further from Sandbrand.

#### **==>FRENCH STUDENTS RENDEZVOUS WITH ASTRONAUT VIA HAM RADIO**

Students at the Immaculate Conception Elementary School in Brest, France, spoke January 8 via Amateur Radio with US astronaut Don Pettit, KD5MDT. A member of the Expedition 6 crew, Pettit is the chief science officer on board the International Space Station. The contact was arranged by the Amateur Radio on the International Space Station (ARISS) program.

Some 30 schoolchildren, their teachers and parents gathered in the room where the local Amateur Radio club had set up the satellite station. Once contact was established between NA1SS and ground station F6KPF and season's greetings exchanged, Pettit began answering questions, which included one asking if the crew celebrated Christmas in space. Other youngsters wanted to know about how the ISS was supplied with food and where the crew's drinking water came from. Pettit and his fellow crew members commander Ken Bowersox, KD5JBP, and Nikolai Budarin, RV3FB, will remain in space until March.

"The signal was strong, and Don's voice sounded as if he was addressing the audience from the floor," said ARISS Vice Chairman Gaston Bertels, ON4WF. By the end of the pass, 18 questions had been asked and answered. Those on hand for the early-morning contact included the mayor of Brest. The event received radio, TV and print media coverage.

Bertels reports that the 10 and 11-year-old pupils--students of Anne Jaouen--have been studying radio telecommunications

throughout the school year with support from the Brest Amateur Radio Club. "Hands-on experience consisted of building a crystal radio set, and the children also have communicated from their classroom with French Amateur Radio stations," Bertels said.

The youngsters also were actively involved in preparing the questions for the ARISS contact. "They studied some basics of astronomy, made models of the solar system, showing lunar phases, the sky, the sun and the earth," Bertels explained. "They also saw pictures taken on board the ISS and transmitted on television."

In addition to the scientific side of space study, the children wrote poems on the theme and illustrated these with paintings--now decorating the walls of the school--that represent the adventure of space exploration and the planets, Bertels said.

ARISS is an international program with support from ARRL, NASA and AMSAT.

#### **==>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

## **B.V.A.R.A. QRM**

measure has been assigned to the Housing and Local Government Committee chaired by Assemblyman Jerry Green (D-Plainfield). The text of the proposed legislation <<http://www.njleg.state.nj.us/>> 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](mailto: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 <<http://www.njleg.state.nj.us/>> and look under "Members--Find Your Legislator."--Michael Adams, WA2MWT

#### **==>PETTIT TO SUB FOR BUDARIN DURING SPACEWALK**

International Space Station astronaut and Science Officer Don Pettit, KD5MDT, will fill in for Russian cosmonaut and Flight Engineer Nikolai Budarin, RV3FB, on a January 15 spacewalk or extra-vehicular activity--EVA. Pettit and Expedition 6 mission commander Ken Bowersox, KD5JBP, will spend more than six hours in space working on the ISS.

"Pettit replaced Budarin because on-orbit medical data raised concerns among US flight surgeons responsible for medical certification of spacewalk activity," NASA said this week in a statement. "This decision does not affect Budarin's other on-orbit duties. Both NASA and the Russian Aviation and Space Agency have agreed to the personnel change for the EVA." NASA said that because of privacy concerns, no further information would be made public. Associated Press has quoted Russian space officials as saying that Budarin failed to meet US standards in tests on a stationary bicycle. Budarin, 49, is a veteran of eight spacewalks.

AP quoted Russian officials as saying that they were aware of the "peculiarities" of Budarin's cardiovascular system and that he is healthy enough to do the spacewalk. Until US flight surgeons delayed it, the EVA was scheduled to take place last month.

Pettit, 47, himself was a last-minute fill-in for Don Thomas, KC5FVF, who was pulled from the Expedition 6 crew because flight surgeons worried about his exposure to radiation in space. During the EVA, Bowersox and Pettit will continue outfitting the newly delivered Port One truss segment. Expedition 6 was launched aboard space shuttle Endeavour last November 23. The crew will remain aboard the ISS until March.

The Expedition 6 crew also will be the first to not host any guests--either from Soyuz taxi missions or the space shuttle. Pettit has been filling some of his free time conducting casual QSOs from NA1SS on 2 meters.

## ==>NEW SAUDISAT GETS OSCAR DESIGNATION

A third satellite in the SaudiSat series has earned an OSCAR designation from AMSAT. SaudiSat-1C now will be known as SO-50. The Amateur Radio payload was successfully placed into orbit December 20 from Russia's Baikonur Cosmodrome by a modified Soviet-era ICBM. The German-made SAFIR-M Amateur Radio payload <<http://www.arrl.org/news/stories/2002/12/24/3/#German>> went into orbit during the same launch, as part of the RUBIN-2 scientific satellite. SAFIR-M has been designated as AO-49. SaudiSat-1C is a project of the Space Research Institute of the King Abdulaziz City for Science and Technology (KACST) <<http://saudisat.kacst.edu.sa/>>, an independent scientific organization of the Saudi Arabian government.

"On behalf of AMSAT-NA I wish to congratulate you and your associates at Space Research Institute of KACST on the successful culmination of this project and hope that amateurs all over the world will have an opportunity to use SO-50," said AMSAT-NA Board Chairman Bill Tynan, W3XO, in making the announcement this week.

SaudiSat-1C follows by a little more than two years the launch of SaudiSats 1A and 1B. Now in a 650-km (400 miles) orbit, SaudiSat-1C carries several experiments, including a new Mode J FM amateur repeater. The downlink frequency is 436.775 MHz. The uplink frequency is 145.850 MHz. A 67.0-Hz CTCSS tone is required for on-demand access to the satellite, which shares the same frequencies as AO-27 and SaudiSat-1A.

Space Research Institute Director Turki Al Saud reports that the SaudiSat-1C repeater was activated and tested this past week. Its receiving antenna is a quarter-wave whip atop the spacecraft. The 250-mW UHF transmitter is coupled to a quarter-wave antenna on the bottom of the spacecraft. He said the repeater will be available to amateurs worldwide as power permits.

AMSAT-NA President Robin Haighton, VE3FRH, has pointed out that SaudiSat-1C will require activation on each pass by a designated control operator. "A worldwide network of designated control operators is now being developed so that radio amateurs may begin using the satellite immediately," he said.

For tracking, the NORAD identifier for two-line Keplerian elements is 27607.

According to a report in Arab News <<http://www.arabnews.com/Article.asp?ID=21335>>, the new satellite is equipped with capabilities to provide "vital data" concerning weather conditions and oil exploration as well as to monitor the movement of vehicles in remote regions of Saudi Arabia.

## B.V.A.R.A. QRM

Turki Al Saud told AMSAT-NA that SaudiSat-1A (SO-41) recently has been used to conduct some tests and will return to service soon. SO-41 has been configured for FM voice repeater operation. SaudiSat-1B (SO-42) still is being used to conduct some experiments but could be made available for amateur use in the future.--AMSAT News Service; King Abdulaziz City for Science and Technology

## ==>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 <<http://www.arrl.org/hsmm/>> 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 enthusiasts 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 <<http://www.arrl.org/catalog/?category=&words=802.11>> 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."

#### ==>2002 A GROWTH YEAR FOR ARRL CONTESTS

The year 2002 was a banner year for ARRL's Contesting Branch. Manager Dan Henderson, N1ND, reports a record number of total entries for ARRL-sponsored operating events.

"The total of 18,817 beats 2001's 18,505, a nearly 1.7 percent increase!" Henderson said. Despite the downward slope of Cycle 23, the 2002 ARRL 10-Meter Contest saw a more than 18 percent jump in log submissions over the previous year, he added, even as logs continued to arrive.

"Activity is up across the board for almost all contests, and I think we would have seen more than 19,000 logs returned," Henderson said, "but the World Radiosport Team Championships (WRTC 2002) in Finland last July affected numbers for the IARU HF World Championships, as several hundred of the world's top contest operators were there." Henderson notes that since WRTC 2002 used slightly different rules, the logs from those operators could not be entered in the IARU event, which ARRL administers.

The 2002 ARRL 10-Meter Contest, proved to be record-setter in several ways. According to Henderson, not only was the December 14-15, 2002, operating event the most active 10-meter contest on record, it had the single highest number of participants returning logs of any single contest in League history. As of January 16, the Contest Branch had logged 3051 entries and was still counting. "That's the very first time a single-weekend ARRL contest has topped the 3000 mark in entries," Henderson said.

## B.V.A.R.A. QRM

Other ARRL operating events that also saw increased numbers of logs over 2001 were Straight Key Night, up 22 percent; the ARRL 160-Meter Contest—a CW event--up 19 percent; the ARRL 10 GHz and Up Contest, up 11 percent; and ARRL Field Day, up by one-half of one percent. For the first time ever, the 160-meter event topped 900 entries.

ARRL November Sweepstakes entries jumped between two and three percent for the CW and SSB weekends in 2002, Henderson said. Entries received for the ARRL international DX Contest remained approximately level for each mode last year as did submissions for the ARRL's four major VHF-UHF-SHF events in 2002.

Henderson said the move to require Cabrillo-format electronic logs has proved a major boon to the Contest Branch. The elimination of most manual log entry has moved up the posting of contest results by about a month, he said. He said he expected the Contest Branch would be fine tuning electronic log-processing during 2003.

Rules for all ARRL-sponsored operating events are available on the ARRL Web site <<http://www.arrl.org/contests/calendar.html>>.

#### ==>MONTANA ARISS CONTACT "A GRAND SUCCESS"

Youngsters at Sacajawea Middle School in Bozeman, Montana, conversed via ham radio on January 8 with International Space Station resident Don Pettit, KD5MDT. The contact between NA1SS and the school club station's K7BZN was the first Amateur Radio on the International Space Station (ARISS) QSO this year with a US school.

"I am happy to say that it was a grand success," said Vivian Linden, K7CUB, a retired science teacher who continues to serve as advisor to the school's Amateur Radio club. "The contact was crystal clear, the kids did a great job with their questions, and the adult ham club--the Gallatin Ham Radio Club--put it all together."

Some young radio amateurs were among the student questioners. Arianna Haines, KD7RHA, wanted to know if Pettit had any radio experience before becoming an astronaut and if it influenced his decision to become one. Pettit explained that he became a ham only after joining the astronaut corps.

Jeff Nickelson, KD7TQL, asked Pettit how he was chosen to be an ISS crew member. "You get chosen for the ISS program partly based on interest and partly based on who they happen to need for the mission involved," Pettit replied. "So they look at background, and they look at interest."

Nickelson later expressed a desire to become an astronaut and asked Pettit's advice on what he should do now. "What you need to do is to follow what you want to do in your heart,"



Pettit responded. He also advised the youngsters to do their best in school and to keep up their grades.

Food is never far from the minds of most youngsters, and so it was with the kids at Sacajawea Middle School. One student wanted to know how the crew ate and how the food was cooked. Pettit explained that it's not that much different from pre-packaged food on Earth. "We eat with spoons, just like you eat with spoons on Earth," said Pettit. Most of the crew's food is freeze-dried. You add hot water and mix, then "just dig in with your spoon," Pettit said.

Pettit also told the youngsters that the crew doesn't have too much time for "fun" activities. "There's really not much spare time up here," he said. "We're always working." But, he added, the crew does get enjoyment out of the work it does, which sometimes includes just observing Earth through one of the ISS portholes.

Some 50 youngsters, teachers and a handful of reporters were on hand for the contact. Linden said audio was piped throughout the school. "I was told later that the school was in a buzz the rest of the day," she said. Students from Morning Star Elementary School also attended.

ARISS is an international project with support from ARRL, NASA and AMSAT. For more information, visit the ARISS Web site <<http://ariss.gsfc.nasa.gov>>.

### **==>FCC LAUNCHES "CONSUMER-FRIENDLY" ELECTRONIC COMMENT FILING SYSTEM**

The FCC has launched "ECFS Express," an updated electronic system that the Commission says will make it easier for at least some members of the public to file comments on FCC proceedings. ECFS Express is a simplified version of the popular Electronic Comment Filing System (ECFS), but it is not available for all FCC proceedings.

ECFS Express is accessible from the FCC home page <<http://www.fcc.gov>>. Users just click on the "File Comments" logo--which is on the left-hand side of the page about one-third of the way down under the words "Filing Public Comments." To comment, users click on a topic, fill in their personal information, write their comments and hit "SEND."

"ECFS Express will highlight the proceedings most likely to generate consumer interest," the FCC said this week in a Public Notice. "The topics will change periodically as new issues emerge."

The downside is that if the particular issue you want to comment upon is not listed among the ECFS Express topics, you'll have to use the "expert version" of ECFS to comment, the FCC said. At the moment, the ECFS Express list includes no Amateur Radio-related petitions. The FCC says the original Electronic Comment Filing System--which includes

## **B.V.A.R.A. QRM**

all docketed FCC proceedings--will remain accessible on its Web site <<http://www.fcc.gov/e-file/ecfs.html>>.

### **==>AMATEUR RADIO BOOSTS MARCONI CENTENNIAL COMMEMORATION INTO ORBIT**

The magic touch of a princess helped to put Amateur Radio center stage January 18 on Cape Cod, Massachusetts, during events marking the 100<sup>th</sup> anniversary of the first transatlantic wireless message transmitted by Guglielmo Marconi. For the occasion, Marconi's youngest daughter--Princess Elettra Marconi--launched greetings into space via an Amateur Radio on the International Space Station (ARISS) hookup to ISS crew commander Ken Bowersox, KD5JBP.

"One hundred years ago today, my father, Guglielmo Marconi, sent the first wireless message across the Atlantic Ocean from Cape Cod," Princess Elettra said from a packed auditorium at the Cape Cod National Seashore Salt Pond Visitor Center in Eastham. "In this same spirit of his achievement and also from Cape Cod I send this wireless greeting to you in space. Cordial greetings, good wishes and God bless you"

Replied Bowersox from NA1SS, "It's wonderful to hear your voice across the radio waves. It's amazing how far our societies and radio communication have come in the past 100 years."

On January 18, 1903, Marconi sent wireless greetings on behalf of President Theodore Roosevelt to Great Britain's King Edward VII. Events throughout the week leading up to the ARISS contact included two Amateur Radio special event stations. KM1CC operated from a National Seashore site not far from Marconi's original Cape Cod radio station, transmitting a commemorative message from President George W. Bush and retransmitting Marconi's original 1903 text. Another special event station, WA1WCC, was on the air from the former WCC shore station in Chatham, where Marconi had relocated operations after the ocean threatened to claim the antenna support towers of his original station. Princess Elettra also visited the WA1WCC special event site.

Following Princess Elettra's introductory remarks, eight students from three Cape Cod high schools took turns firing a total of 18 questions at Bowersox as hundreds of visitors and some two dozen news media representatives looked on. Serving as mentor for the noontime Cape Cod contact was ARISS International Chair Frank Bauer, KA3HDO. The students' curiosity ranged from research goals to whether Bowersox had any desire to undertake a trip deeper into space--perhaps to Mars.

Bowersox said his wife has forbidden him to go to Mars--a comment that drew a chuckle from the audience--but said he'd volunteer for a deep-space mission if he could bring his family along.

"I think someday we're going to leave Earth," Bowersox predicted in response to one of the students' questions. "We're going to move on out of our solar system out to the stars, and we're just taking the baby steps now. Your generation will take us a lot farther, I hope."

Handling earth-station duties for the ARISS contact was Nancy Rocheleau, WH6PN, in Honolulu. A WorldCom teleconferencing arrangement made two-way audio available on Cape Cod. Students selected were from Provincetown High School, Cape Cod Technical and Vocational School and Nauset Regional High School.

"The ARISS contact at the Marconi centennial event was a tremendous success," said Bauer. "I must say that this contact was one of the more impressive and awe-inspiring ARISS contacts we have accomplished." ARISS <<http://ariss.gsfc.nasa.gov>> is an international effort with support from ARRL, NASA and AMSAT.

### **==>LIMITED "LOGBOOK OF THE WORLD" TESTING IS A HIT**

The long-anticipated "Logbook of the World" (LoTW)--the ARRL's secure electronic contact-confirmation system--took a major leap toward public release this month with several weeks of limited--or "alpha"--testing. Dozens of Amateur Radio operators checked out a preliminary version of the LoTW software, which is still under development. Once it's ready, LoTW will provide a means for participants to qualify for awards such as DXCC or WAS without having to first collect hard-copy QSL cards.

"This is cool!" exclaimed one alpha tester. "Slick!" declared another tester. "It's pretty neat so far. This looks like a good start."

ARRL staffer Dave Patton, NT1N, said the limited test run was extremely helpful. "One of the main things that will come out of this phase of testing is a good package that will be ready to give to logging program developers to incorporate into their software," he said.

ARRL Web and Software Development Manager Jon Bloom, KE3Z, explained that the League hopes that logging software vendors will choose to add value to their products by integrating LoTW client-side functions. "But the software we provide to individual amateurs will be sufficient for basic use of LoTW," he added. ARRL will not be releasing the LoTW server code, however.

Linked via e-mail, the LoTW testers spent two weeks registering their call signs, uploading logs and attempting to push the system to extremes. One tester was amazed at its robust nature after he uploaded a complete station log of about 320,000 QSOs. "I sent this blob expecting it to croak the server, but it didn't!" he said.

## **B.V.A.R.A. QRM**

Logbook of the World Project Leader Wayne Mills, N7NG, says LoTW won't spell the end of QSL cards. Instead, he says, it will provide an avenue for increased speed and accuracy for hams chasing awards, as well as remove some chances for human error that can occur in the traditional process.

"This is really a system to offer credits for awards," said Mills, who is also ARRL's Membership Services manager. Mills said LoTW will minimize opportunities to "game the system" or otherwise cheat--something that's not always possible to detect even with paper QSLs. He emphasized that the League has no plans to do away with accepting traditional QSL cards as it's been doing all along. "We're not replacing the whole paper QSL scheme with Logbook of the World," he said.

Unlike electronic QSLing systems now in use, LoTW is not set up to exchange QSL "cards" via the Internet. The main idea is that ARRL will maintain a secure log database that will be constantly updated by DXers, testers, DXpeditions and thousands of individual amateurs. Registering and uploading electronic logs cost nothing; the only time a user will incur a charge is when applying accumulated contact credits toward an award.

LoTW beta testing for the general Amateur Radio public is expected to begin soon. The ARRL has not announced a specific inauguration date for Logbook of the World.

### **==>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 <<http://www.arrl.org/awards/vucc/>> 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.

#### ==>IN BRIEF:

**\* Packet users requested to not send e-mail messages to ISS crew:** Amateur Radio on the International Space Station (ARISS) International Chairman Frank Bauer, KA3HDO, has requested that amateurs refrain from sending e-mail to the ISS crew via the onboard RS0ISS Personal Message System (PMS). "The crew is not answering the e-mail, and we really don't expect them to," he said. "If things change, we'll let you know." Reports have indicated that the ISS packet mailbox is filling up with unread messages, many of them greetings to the crew or holiday greetings. The all-ham Expedition 6 ISS crew consists of Crew Commander Ken Bowersox, KD5JBP, cosmonaut Nikolai Budarin, RV3FB, and astronaut Don Pettit, KD5MDT.

**\* ARRL seeks Repeater Directory listings from coordinators:** The deadline for repeater coordinating entities to submit repeater listing information for the 2003 edition of The ARRL Repeater Directory is Friday, February 7. According to League policy, the ARRL only accepts repeater listings from recognized frequency-coordinating bodies. "All information on repeaters intended for The ARRL Repeater Directory must come through a recognized repeater coordinating body," said Brennan Price, N4QX, who compiles and edits the annual publication for the League. "With the exception of the Pacific Insular Territories, the Canadian Territories, and Nunavut, there is currently a coordinator serving all parts of the US and Canada." Price urges repeater owners to provide their coordinators with updated information as soon as possible for inclusion in the 2003 edition. For more information, contact Brennan Price, N4QX, [n4qx@arrl.org](mailto:n4qx@arrl.org).

**\* Maritime Mobile Service Network celebrates 35th anniversary:** The Maritime Mobile Service Network (MMSN) marked its 35th anniversary on January 3. The net now operates on 14.300 MHz. According to Bobby Graves, KB5HAV, the net's original purpose was to assist those serving in the US military during the Vietnam War. In its early years, the MMSN saw a lot of phone patch traffic. "Our primary purpose now is that of handling legal third-party traffic from maritime mobiles, both pleasure and commercial, and overseas deployed military personnel," said Graves, who serves as the nets schedule coordinator and Webmaster. He said the net also helps missionaries in foreign countries. The MMSN has grown from its original nine founding members to nearly 60 net control stations and relief operators. It's recognized by the US Coast Guard and has been instrumental in handling hundreds of incidents involving vessels in

## B.V.A.R.A. QRM

distress. During severe weather, the net also acts as a weather beacon for ships and relays weather warnings and bulletins from the National Weather Service and the National Hurricane Center. "The Maritime Mobile Service Network has a legacy of serving people and will continue to do so," Graves said.

**\* Second Ducie DXpedition set for March:** The second DXpedition to the newest DXCC entity, Ducie Island, is expected to take place in March, according to an announcement this week. Ducie Island DXpedition leader Yuichi Yoshida, JR2KDN, reports he will depart from Narita, Japan, on March 3 heading for Tahiti, French Polynesia, and then on to Gambier Island. Presumably this is where the vessel Braveheart will meet up with the DXpedition team members. They expect to arrive at Pitcairn Island to pick up the remaining team members on March 5 and then head for Ducie Island. Plans are to begin operations March 8 from VP6DI2 (yes, that's a "2" at the end of that call sign) and continue about a week. The operator list includes Dieter, DJ9ON; Hans, DK9KX; Philippe, FO3BM; Hiro, JA1SLS; Yuichi, JR2KDN; Doug, N6TQS; Dave, VP6DB; Mike, VP6AZ; and Meralda, VP6MW. Activity is being planned for 6 through 160 meters on CW, SSB, RTTY and AO-40. QSL via JR2KDN (bureau or direct). Pilot stations for this DXpedition are JE2EHP, DJ8NK and WA2MOE. The initial Ducie Island DXpedition in March of 2002 racked up some 50,000 contacts. A 2.5-square-mile Pacific atoll, Ducie was approved for DXCC credit in November 2001.--The Daily DX <<http://www.dailydx.com>>

**\* Poptronics ceases publication:** Poptronics magazine--which evolved from the former Popular Electronics and Electronics Now magazines--ceased publication with the January 2003 edition (Vol 4, No 1). "After 94 years of publishing electronics magazines Gernsback Publications is no longer in operation," said Larry Steckler, Poptronics' editor in chief and publisher. "Negotiations are under way to provide an alternative publication to Poptronics subscribers." Steckler says a new on-line edition of Poptronics will soon be available. Poptronics Interactive, a separate on-line, paid subscription site announced in the October issue of Poptronics, also is scheduled to return soon, Steckler said. The company plans to post the latest information on its Web site <<http://www.Poptronics.com>>. The site has been undergoing "remodeling," but Steckler said it should be back in operation by the end of January. Many veteran amateurs may recall the "Carl and Jerry" stories by John T. Frye, W9EGV (SK), which appeared in Popular Electronics in the 1950s and 1960s. The tales involved the ham radio-related exploits of a couple of teenaged hams.

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