
B.V.A.R.A. QRM

W3SGJ

www.qsl.net/bvara

April 2003

144.710/145.310 MHZ - 100 HZ PL

447.975/442.975 MHZ - 100 HZ PL

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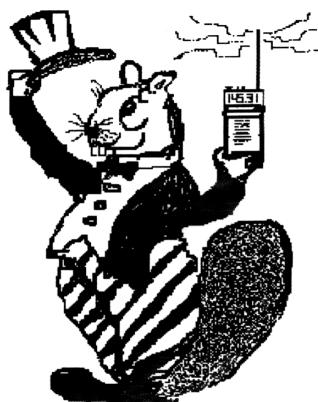
KB3EAQ.....Debbie Reid
N3GZZ.....Joe Streit
N3OJN.....Stan Riffle
N3ALS.....Wes Morar
N3SVM.....Bob Reid
WA3GFM...Al Belardia
KA3SMF.....Dave Heim
KE3ED.....Tony Petruccelli/Station Trustee

NEWSLETTER EDITOR

N3NBJ.....Janet Petruccelli

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

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, Packet: ke3ed@k3oiw.#wpa.pa.usa.na, or typed in text format on floppy disk. Thank you.

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CLUB MEETING

The April Club meeting will be held on Thursday the 10th, 7:30 PM at the Beaver County Emergency center located at 250 East End Avenue, Beaver PA. Tee shirts and hat orders will be in at that time. A big thanks to Phyllis N3KUG for all her time working on this.

HAMS NIGHT OUT

We would like to hear your suggestions on where you'd like to dine for "Hams night out" this month. Last month we had an enjoyable time and a good turn out at King's Family Restaunt in Center Twp. Where would you like to go this month? Come down to the April meeting and let us know.

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

The Beaver Valley Amateur Radio Association will sponsor an ARRL VE examination on Saturday April 5th, 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.
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

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Repeater: 145.310 (W3SGJ) minus offset & 100 hz pl tone.
E-mail: ke3ed@bellatlantic.net
Phone: (724) 774-4173

ARRL Western Pennsylvania Section Manager:

John V. Rodgers, N3MSE

n3mse@arrrl.org

Rich Beaver N3SRJ has appointed Larry O'Toole, K3LBP as DEC for Western Pennsylvania. Larry will serve as Rich's chief assistant. Join me in welcoming Larry to the ARES team.

During the early spring the National Weather Service conducts numerous SKYWARN training classes in different regions of the section. I encourage each of you to attend one of these sessions and become actively involved in the Skywarn program. Contact your local emergency coordinator for information about a class near you. As I write this, the news has warnings of war. In preparation for such an event we should all take the time to check our stations and other equipment. Check the condition of all your batteries for handhelds and also the status of your grab and go kit. I am hopeful as I am sure all of you are that we will not have this event in our lives. Should it occur we must be ready to lend our service to provide communications where needed. Please be sure you are registered with your local ARSE emergency coordinator and also with your county RACES radio officer. Remember the section emergency frequencies are 3983 or 7272 khz depending upon time of day and band conditions. Please be prepared to help in the event of a disturbance.

Join the WPA Phone and traffic net nightly at 6 PM on 3983 khz.

73 John Rodgers N3MSE W. Pa Section Manager
n3mse@arrrl.org

WPA SECTION ARES NEWS

Hello all,

It looks as if potential U.S. Military action in Iraq may be possible within days. If the U.S./Iraq situation escalates to full war, I think we can count on an escalation in our homeland security status, as many experts believe that the start of U.S. Military action may coincide with terrorist attacks here on U.S. soil and abroad.

Although cities within Pennsylvania are not usually expected to be the most likely targets of terrorist attacks, it's important to remember that the likelihood still exists. AND, keep in mind that a major terrorist event anywhere in the U.S. has the capability of crippling communications nationwide.

We could soon possibly find ourselves at this Nation's highest level of alert in DECADES. Those of us involved in Emergency Communications should not take this situation lightly. I would advise all Amateur Radio Operators involved in Emergency Communications to take action now to make sure you are prepared for major emergency operations. Check your equipment and batteries; make sure you have your emergency communications "GO BAG" properly equipped.

Let's hope our services as Emergency Communications Volunteers are not needed... and they probably won't be. But, proper Emergency Management preparedness does not ignore possible scenarios because they are unlikely. Rather, proper Emergency Management prepares for the worst and hopes for the best. Be vigilant. tnx es 73

-David Kleber, KB3FXI
ARRL WPA Bulletin Manager

==>AMATEUR RADIO SPECTRUM PROTECTION ACT NOW IN BOTH HOUSE AND SENATE

The Amateur Radio Spectrum Protection Act of 2003 now has been introduced in both chambers of Congress. Idaho Sen Michael Crapo introduced the Senate version of the bill, S 537, on March 6. Original cosponsors were Sen. Daniel Akaka (D-HI) and Sen. Larry Craig (R-ID). Florida Rep Michael Bilirakis put the latest House version of the bill, HR 713, into the legislative hopper on February 12. The measures, an ARRL initiative, have been introduced twice before in Congress. ARRL President Jim Haynie, W5JBP, believes this third time could be the proverbial charm.

"Actually, this is the best opportunity that we've ever had to get this bill through, because more members of Congress than ever before are paying attention to ham radio now," said Haynie, who's been in Washington this week to talk Amateur Radio with lawmakers and regulators. In addition, Haynie pointed out, the House and Senate will be considering major spectrum reform bills, and the Amateur Radio Spectrum Protection Act could serve as an amendment to that sort of legislation.

HR 713 and S 537 are aimed at ensuring the availability of spectrum to Amateur Radio operators. The legislation would protect existing Amateur Radio spectrum against reallocations to or sharing with other services unless the FCC provides "equivalent replacement spectrum" elsewhere.

Haynie encouraged members of the Amateur Radio community to contact their senators and representatives to urge their cosponsorship, which lends support to legislation while it's in committee. The House bill has been referred to the Committee on Energy and Commerce; the Senate bill will be considered by the Commerce, Science, and Transportation Committee. In addition, although more members of Congress than ever understand and appreciate the benefits of Amateur Radio, some may remain reluctant to sign onto a technical

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piece of legislation without some indication of support from their own constituents.

"The League is doing all it can, but we know the success or failure will be in the hands of the amateur community," said Haynie, who pledged the ARRL's continuing efforts to get the bill enacted. "Letters and e-mails are the key to getting legislation passed."

A sample letter is available on the ARRL Web site <<http://www.arrl.org/govrelations/arspa.html>>. Those writing their lawmakers are asked to copy their correspondence to the League via e-mail <specbill03@arrl.org>.

The measures would amend the Communications Act to require the FCC to provide "equivalent replacement spectrum" to Amateur Radio and the Amateur-Satellite Service in the event of a reallocation of primary amateur allocations, any reduction in secondary amateur allocations, or "additional allocations within such bands" that would substantially reduce their utility to amateurs.

The text of HR 713 and S 537 is available (or will soon be available) via the Thomas Web site <<http://thomas.loc.gov/>>.

==>SUPPORT GROWING FOR FAVORABLE 40-METER REALIGNMENT PLANS

With World Radiocommunication Conference 2003 (WRC-03) getting under way in about three months in Geneva, support is growing for two favorable proposals to create a 300-kHz worldwide 40-meter allocation. ARRL and the International Amateur Radio Union (IARU) seek a return to the 300-kHz allocation that existed worldwide prior to World War II but that now exists only in the Americas. Delegates to WRC-03 will attempt to address--and possibly eliminate--the overlap on 40 meters between amateurs in the Americas (Region 2) and broadcasters elsewhere (Regions 1 and 3).

"There is encouraging news," says ARRL CEO David Sumner, K1ZZ, in his "It Seems to Us . . ." editorial set to appear in April QST. He reports that, thanks to the efforts of IARU volunteers and others, more than 30 countries now have gone on record to support either one or the other of two favorable 40-meter realignment formulas. Sumner said more support is needed, but he called the interim head count "a good start."

Most popular among the half dozen realignment schemes outlined by participants at last November's WRC-03 Conference Preparatory Meeting is so-called Method B. This approach calls for a three-stage transition that would begin by allowing Region 1 and 3 amateurs on 7100-7200 kHz on a secondary basis starting in 2005 and end with all ITU regions gaining access to 7000-7300 kHz by the end of 2009--with the top 100 kHz shared with fixed and mobile stations in Regions 1 and 3. Broadcasters would shift upward to 7300-7550 kHz worldwide.

For US and other Region 2 stations, such a change would mean an end to deafening nighttime phone band QRM from broadcasters and the necessity to operate split-frequency to work stations in Regions 1 and 3 on SSB.

Sumner says Method B is now a European Common Proposal with initial support from 17 CEPT administrations. At least three other countries in Africa, Asia, and the Pacific have also expressed support for Method B, he said. The IARU team now is working to gain the support of additional administrations in Regions 1 and 3 either for Method B or for the similar Method A, Sumner reports. Otherwise identical to Method B, Method A does not include any sharing with fixed and mobile services.

In the Americas, a dozen ITU Region 2 countries last month agreed to support an Inter-American Proposal that's virtually the same as the so-called Method D. Proposed by Canada, Method D would provide 300 kHz worldwide for amateurs by shifting broadcasters in Regions 1 and 3 upward by 200 kHz. Region 2's broadcasting allocation would remain unchanged. IARU Region 2 is now working to expand the list of Region 2 countries supporting that plan.

The US so far has taken no position on the 40-meter realignment issue, although it has long supported a 300-kHz worldwide, exclusive allocation for Amateur Radio. The FCC WRC-03 Advisory Committee has recommended that Method A be a US proposal, but the National Telecommunications and Information Administration (NTIA) has not yet agreed.

"Acting on behalf of the federal government users of the radio spectrum, the NTIA has been advocating 'no proposal' from the US, a position that the ARRL is working hard to overcome," Sumner points out. "A small number of federal agencies claim to be concerned that their backup circuits on HF would be affected by an upward shift of broadcasters."

Sumner also calls it "unfortunate" that some broadcasters persist in efforts to link the 7 MHz WRC-03 agenda item with another that deals with the adequacy of broadcasting spectrum between 4 and 10 MHz. Sumner said the broadcasting spectrum item is "a separate issue with an entirely different genesis."

==>ASTRONAUT TELLS GERMAN HIGH SCHOOLERS HE'LL MISS ABILITY TO FLY

Despite a last-minute glitch with an antenna rotator, an Amateur Radio on the International Space Station (ARISS) contact involving students at the Hochwald Gymnasium (high school) in Wadern, Germany, went off right on schedule. During the February 27 QSO, 16 students--all brand-new new amateur licensees--spoke via DL0WR in Saarland with ISS Science Officer Don Pettit, KD5MDT, at the controls of NA1SS. The high school was only the second school in Germany to experience an ARISS contact.

"Most significant is that the ARISS contact gave birth to 16 new members of the Amateur Radio community," said ARISS Mentor Peter Kofler, IN3GHZ, who called the accomplishment a "superb illustration of the educational power of the ARISS school contacts." That their first ham radio activity was a contact with the ISS was "a dream come true," he added.

The fact that each student had his or her own ticket also covered the sometimes-overlooked legal issue of third-party traffic between the US space station and the German students. Germany and US do not enjoy a third-party traffic agreement. Michael Kraus, DF3VM, conducted the students' training over a period of several weeks. Students ranged in age from 15 to 19. On the classroom side, the students had been working with physics teacher Marco Holzer since last November to prepare for the big day.

Pettit told the high schoolers that the thing he misses most in space is his family. The thing he'll miss the most when he gets back to Earth, however, is the possibility to fly while in microgravity. "When I get back to Earth, I'll miss that the most," he said.

He explained that while the ISS occupants are able to float freely, there is a "ceiling" and a "floor" to the spacecraft. The "floor," he said, has a darker color than the other surfaces.

Pettit also described how the crew enjoys the spectacular view of Earth below through the airliner-sized ports on the ISS, talked about what the astronauts do in their spare time and explained the scientific research the Expedition 6 crew is involved with. No, he said, there are no alcoholic beverages onboard Space Station Alpha.

In the parking lot of the auditorium where the contact took place, coordinating teacher Hubert Schäfer, DJ8VH, and some fellow members of the Wadern Deutscher Amateur Radio Club (DARC)-affiliate, which loaned its DL0WR call sign to the occasion, had set up a 12-meter-tall mast to support the antenna system. Barely an hour before the contact was to take place, the primary antenna rotator failed. A backup unit put into play worked flawlessly.

Reporters from two television, two radio stations and two newspapers covered the event. The Hochwald contact marked the 88th ARISS school contact.

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

==>HAMVENTION HOPES TO CALL HARA ARENA HOME A WHILE LONGER

Although 2003 marks the last year of a five-year contract to hold Hamvention at Hara Arena, organizers hope to keep the

show there for the indefinite future. Rumors crop up each year--and this has been no exception--that this year's event will be the last to take place at the venerable venue near Dayton, Ohio, that's served as Hamvention's home since 1964. Negotiations on a new contract to retain Hara for future shows remain in the offing. Billed as "the world's largest Amateur Radio gathering and trade show," Hamvention 2003 takes place May 16-18.

"We haven't made any decisions yet," Hamvention Production Manager Garry Matthews, KB8GOL, said this week. "We want to get this year's show under our belt and then renegotiate the contract." At the same time, Matthews said, there are no plans to go elsewhere, nor is Hamvention under any threat or pressure to relocate. "There's nothing planned to move," he said. "But," he conceded, "we've looked at alternative locations in case something happens. Anything could happen to Hara."

Matthews says the sponsoring Dayton Amateur Radio Association has explored several other possible locations for Hamvention, which has quietly dropped "Dayton" from the show's official name. Matthews says no other site in the Greater Dayton area will serve the purpose that Hara does. "None of the other venues will support the show at its current size," he said.

Speaking of size, Hamvention reported that attendance for last year's 50th anniversary event was 24,832--down about 5 percent from 2001's crowd of 26,151. 2002 marked the second year in a row that Hamvention's attendance had dipped.

Attendance climbed to 28,804 in 2000, the year of the ARRL National Convention at Dayton. Matthews has said that any crowd larger than 28,000 starts to push the envelope as far as Hara Arena is concerned--especially the human comfort factor. Hamvention attendance peaked in 1993 at 33,669--before the event date changed from April to May.

As for continued use of Hara Arena, Matthews points out that the building has never been sold, is not for sale now and never has been. As for a new contract with Hara? "We'll evaluate the show after June 1, and we hope to improve some things," he said, without revealing any details.

In the meantime, he's pouring his energy into the arrangements for this year's show, but, he reports, things have been slower to come together in terms of advance sales to visitors and vendors. "If we go to war, people might not want to travel," he said. "There's nothing to panic about, but it's tougher this year."

Some changes already have been announced. Among other things, Hamvention this year will replace its annual banquet and entertainment with a more low-key award winners' reception at Hara Saturday evening.

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Between now and show time, Matthews says Hamvention will--among other moves--boost its advertising and promotion to counteract the sluggish advance sales. "We're going to have a good show," he predicted confidently.

For additional insights and information on Hamvention, see "How Hamvention Happens," in April 2000 QST and available on the ARRL Web site <<http://www.arrl.org/news/stories/2003/03/06/4/0004053.pdf>>. For more information on Hamvention 2003, visit the Hamvention Web site <<http://www.hamvention.org>>.

==>AMATEURS RESPOND TO PENNSYLVANIA "BIG CHILL"

Amateur Radio Emergency Service/Radio Amateur Civil Emergency Service (ARES/RACES) team members in southern York County, Pennsylvania, activated March 3 after a natural gas shutdown forced residents to evacuate their homes to escape winter's chill. Some two dozen amateurs took shifts to assist the American Red Cross, staff the local emergency operations center and provide other necessary communication. ARRL Eastern Pennsylvania Section Manager Eric Olena, WB3FPL, reports that Amateur Radio involvement in the gas emergency ended around midday on March 5.

York County ARRL Emergency Coordinator Kerry Smeltzer, KA3KAR, says the problem, reportedly the result of a regulator failure, cut off the main natural gas supply serving the communities of Red Lion and Dallastown. Estimates vary as to the number of residents directly impacted by the gas failure, but they ran anywhere from 5000 to 10,000. Red Cross "mass care" facilities in two local schools let residents take advantage of heated facilities and hot meals. Smeltzer and his family were among those taking refuge.

In addition to the ARES/RACES teams activated in York County, Smeltzer said, ARES teams in surrounding counties and from nearby Maryland were on standby for the duration in case needed. ARES/RACES used two local VHF repeaters for most communications. Smeltzer said that the Baptist Men's Kitchen was on site to provide meals. The Civil Air Patrol also responded.

==>QUESTION POOL COMMITTEE RELEASES DRAFT ELEMENT 3 SYLLABUS FOR COMMENT

The Question Pool Committee of the National Conference of Volunteer Examiner Coordinators has released a draft syllabus for the Element 3 (General) Amateur Radio examination. This syllabus will be used to develop a new General class question pool that will become effective July 1, 2004. The QPC is inviting comments on the document as well as suggested questions for the General-class question pool.

ARRL VEC Manager Bart Jahnke, W9JJ, says comments and questions may include, but are not limited to, such things as

new material in terms of technology or operations, topics that might be deleted as no longer relevant and corrections involving grammar, spelling and technical details.

The General class syllabus is an outline of 10 question-topic areas--called "subelements"--from which actual Element 3 examination questions will be developed. These include FCC rules, operating procedures, radio wave propagation, Amateur Radio practices, electrical principles, circuit components, practical circuits, signals and emissions, antennas and feed lines and RF safety.

A question pool based on the revised syllabus will be released later this year. The QPC will invite public input on the General questions once they've been made public. A new Technician class question pool released last November takes effect in the exam room on July 1 of this year.

The draft General (Element 3) syllabus <<http://www.arrl.org/arrlvec/gp-syllabus-2004.html>> is available on the ARRL Web site, which also includes all current question pools <<http://www.arrl.org/arrlvec/pools.html>>.

QPC Chairman Scotty Neustadter, W4WW, has requested comments to the committee by July 15, 2003. The amateur community may e-mail comments to the Question Pool Committee at qpc@arrl.org.

==>UK TO AK ON 136 kHz

Reaching Alaska from the United Kingdom using just 1 W ERP is quite a feat for any band, but the Radio Society of Great Britain reports that Laurie Mayhead, G3AQC, was heard in Alaska on 136 kHz. In the early hours of February 15, he transmitted to Laurence Howell, GM4DMA/KL1X in Anchorage, and just before UK dawn at 0615 his call sign was clearly identified using software to read the signal.

G3AQC was using QRSS--very slow CW--with a 60-second-long dit. The 7278-km distance is a transmission record for 1 W ERP on 136 kHz.

Two years ago, Mayhead and Larry Kayser, VA3LK, made ham radio history when they completed the first two-way transatlantic exchange on 136 kHz, also using very slow speed CW. Last year G3AQC became the first person to span the Atlantic on 73 kHz.

Howell expressed surprise that the path involved in the latest accomplishment is "notoriously poor" between southeastern Alaska, on the east coast of the Pacific, and Europe. "The signal would theoretically go on a Great Circle route to nearly 80 degrees north, over the northern Canadian Arctic, northern Greenland, east of Iceland, Glasgow, then over the UK to the South Coast--across and through the auroral oval."

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He said there's speculation that the actual path might been around or even under the auroral zone, since there was no auroral Doppler seen on the received signal. Howell and Mayhead credited research and preparation carried out by G3NYK, G3LDO, W3EEE and W4DEX, for helping to set the new LF record.--RSGB

==>FCC SAYS STRENGTHENED RULE WILL HELP ENFORCEMENT

The FCC has revised its rules to strengthen the requirements for the submission of truthful statements. The Commission has amended §1.17, which prohibits written and oral statements of fact that are intentionally incorrect or misleading. The revised rule also covers written statements of fact made without reason to believe that a statement is true and accurate.

"The new rule is a clearer, more comprehensive, and more focused articulation of the standards for truthful statements than the old rule," the FCC said in a Report and Order released March 10. "The new rule will also enhance the effectiveness of our enforcement efforts."

The FCC says its amended rule applies to "investigatory and adjudicatory" matters and to tariff proceedings. It does not apply to general rulemaking or declaratory ruling proceedings. "The new rule prohibits written and oral statements of fact that are intentionally incorrect or misleading and written statements that are made without a reasonable basis for believing that the statement is correct and not misleading," the FCC said. The FCC says its old rule, which applied only to written submissions, "was less precise in defining the standard of care required."

The FCC also broadened the scope of individuals affected beyond applicants and licensees. The new rule also applies to any person undertaking an activity that requires Commission authorization, even if the activity is not authorized, and to any recipient of a citation or a letter of inquiry from the FCC or who is the subject of a Commission investigation--including an informal investigation. The revised rule also applies to anyone expressing interest in a proceeding to amend the FM or Television Table of Allotments (§73.1015) and to any cable operator or common carrier (§73.939).

The FCC said it received comments and reply comments from several sources, including the Federal Communications Bar Association (FCBA). ARRL did not comment in the proceeding.

"The revised rule would simply enable the Commission to impose sanctions more effectively in those instances where people intentionally or negligently submit incorrect or misleading information," the FCC said. The Commission acted in the proceeding on March 4. Its vote was unanimous.

==>ASTRONAUT FITS IN SAME-DAY CHATS WITH STUDENTS ON BOTH SIDES OF ATLANTIC

It was an Amateur Radio two-for-one special March 7 when International Space Station Science Officer Don Pettit, KD5MDT, spoke with students at technology-oriented schools in Italy and in Texas. The contacts with NA1SS on board the ISS were arranged as part of the Amateur Radio on the International Space Station (ARISS) program.

Questions from students at the Malignani Technical-Industrial High School (IV3FLG) in Cervignano-del-Friuli, Italy, covered many topics.

"Don Pettit explained that the space station uses a variety of radio frequencies, from VHF to microwave communication via satellite," reported ARISS Mentor Peter Kofler, IN3GHZ. "He enjoys taking pictures of different areas of Earth. He also explained that it takes about eight and a half minutes to get from the surface of the earth into orbit, and it takes about another day and a half to reach the space station."

Kofler said the ISS 2-meter downlink signal was "absolutely clear and loud" for the entire 10-minute QSO, dropping out just as Pettit was answering the 14th question.

Maurizio Grendene, IV3ZCX, served as operator at the school station. A team from a local Amateur Radio club set up the necessary antennas as well as two 23-cm amateur television links with two other area schools in the area. "This increased the audience from the 100 students at Malignani to a total of about 600," Kofler said.

A TV station and several newspapers covered the ARISS event, Kofler added.

That same morning, aerospace students in Texas also were able to quiz an aerospace professional in space via Amateur Radio. Ten sixth, seventh and eighth graders at Krueger Middle School of Applied Technologies <<http://www.neisd.net/ksat/ksat.htm>> in San Antonio asked two questions apiece of Pettit via the school's club station, KD5OMG.

"It couldn't have gone better!" exclaimed Coordinating Teacher James Goslin, KJ5QB. Student Daniel Sheehan described the 10-minute ARISS QSO as "pretty cool!"

Pettit fielded questions such as, "How do you maintain breathable air?" and "Once you're done with your solar panels, how much energy will you be pulling in?" Students also wanted to know what the crew was attempting to grow in its plant experiments and how they were turning out.

Putting technical issues aside, student Brooklynne Jackson asked the now almost-inevitable food question: "Does the food taste gross up there?" Pettit laughed and assured her that the food was "great." He told her that he was looking forward

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to his next meal in a couple of hours and that chili stew was on the menu.

The late-morning QSO was over much too quickly for the students, but teacher Goslin, who is Krueger's applied radio-satellite communications teacher, continued the culinary theme by making sure that pizzas, ordered earlier, were still on the way. Goslin teaches ham radio to five classes per day, and in the past two years, he's helped 52 students get their ham tickets.

Reporters and camera crews from two local television stations covered the ARISS contact. ARISS is an international program with US participation by ARRL, AMSAT and NASA.--Peter Kofler, IN3GHZ; Gene Chapline, K5YFL

==>WILL HAM RADIO BE SHUT DOWN IF WAR IS DECLARED?

Some amateurs have been wondering if the FCC will shut down Amateur Radio in the event that war breaks out in the Middle East. The short answer is "no."

Just prior to the Gulf War, §214.4(b)(4) of Title 47 of the Code of Federal Regulations was deleted. This section had mandated the closing of all Amateur Radio stations except Radio Amateur Civil Emergency Service (RACES) stations in the event that the president proclaimed a war or national emergency. The last time Amateur Radio was shut down was during World War II, although the FCC continued to give Amateur Radio examinations.

While the Amateur Radio Service will not automatically be shut down if the president invokes the War Powers Act, Amateur Radio licensees must continue to observe any directives the FCC may issue in the interests of national security and of making spectrum available for government use.

The FCC is directed to work in coordination with the National Telecommunications and Information Administration (NTIA) to issue "appropriate rules, regulations, orders and instructions" for use of the spectrum "as may be necessary to ensure the effective use of those portions of the radio spectrum shared by government and non-government users." Amateurs share most UHF allocations with the US government.

==>FCC PROBES ALLEGED MICHIGAN REPEATER VIOLATIONS

The FCC has ordered a Michigan Amateur Radio repeater to cease operating under automatic control while the agency's Enforcement Bureau investigates allegations of various FCC rule violations. FCC Special Counsel Riley Hollingsworth sent a Warning Notice February 24 to the repeater's co-owners, Sheri A. Gilbert, K5YHA, and William E. Gilbert, K5EKP, of Lupton. The repeater now is off the air.

"The Commission is aware of numerous rule violations on the repeater and of interference caused by the repeater to the K8GER repeater system," Hollingsworth said. "Violations on the repeater have consisted of failure to identify by users, use of false or misleading call signs by users and failure to have a control operator for the repeater."

Hollingsworth told ARRL that an apparent spur on 144.615 MHz was interfering with the input of the K8GER system at 144.65 MHz. He said the Gilberts have notified the FCC that they've shut down their repeater and are looking into the problem.

The order removing automatic control privileges means a repeater must have a live control operator present at the machine's control point whenever it's in operation.

Hollingsworth also said that sometime in January, the couple apparently turned the operation of the repeater over to a car rally and rule violations such as he'd described occurred for more than 12 hours during a two-day period.

"The decision to operate a repeater is a totally voluntarily one. Repeaters are a convenience in the Amateur Radio Service, not a necessity," Hollingsworth said, reprising a refrain he's used in dealing with other repeater cases in recent months.

"You must prevent recurring and deliberate violations on your repeater by locking rule violators out, using tones, warning users, limiting its operation or taking whatever steps necessary commensurate with your responsibility as the licensee of the station," Hollingsworth advised the Gilberts. The consequences of not heading off violations on the K5YHA/K5EKP repeater could be fines and even license suspension or revocation proceedings, he said.

In addition to asking the Gilberts to describe what actions they've taken to resolve complaints of interference to the K8GER repeater, Hollingsworth also asked for information on how the repeater identifies and any steps taken to ensure that users of the repeater properly identify.

He also asked the couple to detail how the repeater was controlled during the January car rally and to list by name, address and telephone number any users during that event who did not use call signs.

==>PERSISTENCE MAKES PERFECT FOR SPACE STATION QSO

Persistence paid off March 11 when students at Eugene Field School in Park Ridge, Illinois, finally got to quiz astronaut Don Pettit, KD5MDT, about life aboard the International Space Station. One earlier effort failed when the earth station and NA1SS ended up on different 2-meter frequencies due to a communication breakdown.

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The contact, arranged by the Amateur Radio on the International Space Station (ARISS) program, also was postponed several times because of schedule conflicts. When everything came together, however, Pettit was able to answer 19 questions put to him by the students, who were obviously well-prepared for the occasion.

Among other topics, Pettit described his interest and research into thin films of water, which, he said, look much like soap bubbles in space. He also described how a tin of food that would normally float off the table while he was eating would stay in place if he applied a small drop of water to the tin's bottom. Pettit explained that the surface tension of the water will keep the container from floating off.

"Thunderstorms look like giant flashbulbs going off in the clouds," Pettit told one student who asked what they looked like from the vantage point of the ISS. To see meteor showers, he explained to another student, the astronauts have to look down toward Earth--rather than up--to see the meteors burn up in the atmosphere. The crew also has been able to see the change of seasons on Earth.

Pettit--who has been handling the bulk of the ARISS school contacts for the Expedition 6 crew--also told another youngster that he is not afraid of being in space. "So far I haven't been afraid while I've been in space, but I do get afraid when I see scary movies at the movie theater," Pettit said. His reply drew a round of laughter in the classroom back on Earth.

Zero gravity, which Pettit has said he'll miss when he returns to Earth, is a favorite question topic. "Being in zero gravity is like flying in your dreams," Pettit said in describing the experience. Brushing your teeth in space involves one twist. "You've got to swallow your toothpaste, because there's no place to spit it out," he explained.

Audio of the contact was distributed to five other elementary schools and two middle schools in the suburban Chicago school district. Several local TV and radio affiliates showed up to record the contact and interview the students afterwards.

The contact was handled via W6SRJ at Santa Rosa Junior College in California. Two-way audio was handled via a WorldCom teleconferencing circuit. Tim Bosma, W6ISS, moderated the QSO. ARISS is an international project with participation by ARRL, NASA and AMSAT. For more information, visit the ARISS Web site <<http://ariss.gsfc.nasa.gov>>.

==>ARRL SURVEYING INTEREST IN HIGH-SPEED DIGITAL NETWORKS

The ARRL High Speed Multimedia (HSMM) Working Group is surveying the amateur community to gauge interest in IEEE 802.11b "Hinternet" activity. The HSMM Working

Group encourages spread-spectrum communication modes including such protocols as IEEE 802.11b operating on Amateur Radio frequencies under FCC Part 97 rules. It's adopted Hinternet (a contraction of "ham" and "Internet") as a way to describe the technology. The HSMM Working Group's survey is on the ARRL Web site <<http://www.arrl.org/hsmm>>.

"The primary goal of the survey is to encourage amateurs to get on the air and start playing with this cheap digital microwave gear," says HSMM Working Group Chair John Champa, K8OCL <k8ocl@arrl.net>. Hinternet Radio Local Area Networks (RLANs) typically use direct-sequence spread spectrum between 2412 and 2437 MHz and are capable of simultaneously carrying audio, video and data signals. Hinternet aficionados adapt commercial 802.11b interfaces designed for Part 15 operation to amateur use.

The HSMM Web survey is brief and permits an opportunity for open-ended input. It asks if respondents have a IEEE 802.11 or "other high-speed digital station" running under Part 97. If so, amateurs are asked to register their stations. It also asks respondents to explain how they might use a high-speed digital system or network if they were to set one up.

Champa urged Hinternet-minded amateurs to also report what they've learned and any new applications to the ARRL IEEE 802.11b reflector operated by Texas A&M University <<http://listserv.tamu.edu/archives/arrl-80211b.html>> (and linked from the "HSMM Resources" menu under "Contacts").

Asked if the Hinternet is catching on within Amateur Radio, Champa simply points to the more than 15,000 hits to the HSMM Working Group's Web site. The Hinternet also is the focus of the article "High Speed Multimedia Radio" by Kris Mraz, N5KM, in the April 2003 issue of QST.

Hinternet proponent Mark Williams, AB8LN, of Milford, Michigan, says he envisions growth of amateur 802.11b operation to cover all large metropolitan areas in the US, not just the few miles some contend is the outer limit for such point-to-point connections. "This is just too easy," he says. "With some of the Amateur Radio pioneering that we are famous for, we should be able to push this technology to its limits--50, 75 and 100-mile links at 2.4 GHz." He said wireless networks dedicated to Amateur Radio stretching across states and linking hams everywhere with high-speed voice and video are possible.

"File-sharing and e-mail, network gaming and pop-up chat are just the tip of a titanic iceberg," he predicted.

Applications abound for public service work too. Amateurs recently involved in the Texas search for debris from the shuttle Columbia used a 802.11b high-speed system on ham radio to link the net control station in Nacagdoches with the Internet.

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More information is available on the ARRL High Speed Digital Networks and Multimedia Web page <<http://www.arrl.org/hsmm/>>.

==>RADIO COMMENTATOR PAUL HARVEY PLUGS HAM RADIO'S EMERGENCY COMMUNICATIONS ROLE

Veteran ABC Radio Networks commentator Paul Harvey this week offered some kind words for Amateur Radio. The mention was the second item on "page four" of his March 19 Paul Harvey Noon News and Comment program.

"America's quiet warriors are the legion of ham radio operators, 700,000 of them, who are always at ready for backup duty in emergencies--amateur, unpaid, uncelebrated, civilian radio operators, during and after floods and fires and tornadoes," Harvey said. "After the 9/11 attacks, hams were indispensable in reuniting friends and families. Most recently it was they who expedited the search for debris after the disaster to the space shuttle Columbia, and right now, at this moment, they are involved in homeland security to a greater degree than you would want me to make public."

The commentary's enigmatic and mysterious final sentence--typical of Harvey's habit of leaving his listeners hanging--apparently refers to the fact that many Amateur Radio Emergency Service (ARES) and Radio Amateur Emergency Service (RACES) teams have ramped up their alert status as hostilities get under way in the Middle East.

The entire Wednesday noon broadcast is available on Paul Harvey's Web site <<http://www.paulharvey.com/>>. Click on the Wednesday noon link under "Listen Now."

==>FCC PROPOSES TO HIKE VANITY CALL SIGN FEE

The FCC has proposed increasing the regulatory fee to apply for, renew or reinstate an Amateur Radio vanity call sign from \$14.50 to \$16.30 this fall. The Commission included the new fee in a Notice of Proposed Rulemaking (NPRM) "Assessment and Collection of Regulatory Fees for Fiscal Year 2003" (MD 03-83), released March 26. The closing date for comments on the new fee schedule is April 25. Reply comments are due by May 5.

"We estimate that 9800 applicants will apply for vanity call signs in FY2003," the FCC said in its NPRM. That's up by 800 from FY2002. The agency expects to collect revenues of nearly \$160,000, an increase of almost \$30,000 from FY2002.

If all goes as it has in the past, the FCC will adopt a Report and

Order on the FY2003 fee schedule this summer, and the new fee will become effective sometime in early September.

The FCC NPRM also seeks comments on its efforts to review, streamline and modernize its fee assessment and collection processes and procedures. "We welcome comments on a broad range of options in this regard," the FCC said. Areas of particular interest include suggestions for improvement in the agency's electronic payment system.

Applicants for amateur vanity call signs will continue to pay the \$14.50 regulatory fee per call sign (per 10-year license term) until the FY2003 fee schedule becomes effective. The FCC has said in the past that because it continues to incur costs related to vanity call signs even after their issuance or renewal, it believes a regulatory fee at renewal is appropriate.

Interested parties may comment via the FCC's Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/cgb/ecfs/>>. Enter "03-83" in the "Proceeding" field. The FCC said it expected to have the docket available by March 28 for the posting of electronic comments.

Electronic comments by e-mail also are welcome. To receive filing instructions for e-mail comments, send an e-mail to ecfs@fcc.gov and include the words "get form <your e-mail address>" in the message body. The ECFS will reply with a sample form and directions on filing comments.

A copy of the FCC Notice of Proposed Rule Making is available on the FCC Web site <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-4A1.doc>.

==>FORMER ASTRONAUT FILLS IN FOLLOWING FAILED ARISS CONNECTION

Former NASA astronaut and Mir veteran Dr Norm Thagard, ex-K4YSY, did yeoman's duty answering youngsters' questions about life in space after an effort to contact the International Space Station via ham radio failed March 22. Thagard spent about 15 minutes during the grand opening celebration for the Challenger Learning Center of Tallahassee answering youngsters' questions originally intended for ISS Expedition 6 crew commander Ken Bowersox, KD5JBP. NASA said Bowersox had priority duties aboard the ISS that prevented him from being on hand at NA1SS for the scheduled Amateur Radio on the International Space Station (ARISS) QSO.

"For astronauts in low-Earth orbit, the main entertainment is going to be just looking out the window," Thagard said in response to one of the questions posed by teams of 12 middle school students. Thagard serves as board chairman for the center and is associate dean of College Relations at the Florida A&M University-Florida State University College of Engineering. The 32,000-square-foot Challenger Learning Center in downtown Tallahassee is a kindergarten through grade 12 outreach facility of Florida A&M.

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Thagard also explained that surface tension of liquids helps to keep foods in place while eating. "You have to be real careful," Thagard added, recalling a time he accidentally released some hot chocolate into zero gravity.

Because there's no atmosphere in space, the weather is "always sunny if it's day," he said. A "day" in space consists of 50 minutes of light and 40 minutes of darkness, as the spacecraft orbits Earth approximately every 90 minutes. "It certainly does foul up your circadian rhythm, your normal sleep-wake cycle," Thagard said. Astronauts can see weather on Earth below, however, such as clouds and storms, he added.

Thagard said he knows Bowersox and Expedition 6 crew member Nikolai Budarin, RV3FB, with whom he trained for his Mir stint in 1994 and spent five days aboard the Russian space station during a crew transition in 1995. He told another pair of student questioners that "folks get along pretty well in space."

The Challenger Center, named to honor the shuttle Challenger crew lost in 1986, uses an aerospace theme to foster interest in math, science and technology and motivate students to pursue careers in those fields.

ARISS International Chairman Frank Bauer, KA3HDO, said he appreciated the fact that Thagard stepped up to the plate to handle the questions. The College of Engineering's club station KF4LOA also was on the air for the grand opening celebration.

==>IN BRIEF:

*** FCC cites RV owners in RFI complaint:** The FCC has told an Oregon couple to stop using its Winegard amplified television antenna (Model Sensar/Roadstar) on their recreational vehicle "until the condition causing harmful interference has been corrected." The FCC contacted Jimmy and Jan Bowen of Gresham, Oregon, following a February 3, RFI complaint from an Amateur Radio operator to the FCC Portland office. The interference was reported on 447.375 MHz. An FCC agent investigating the allegation tracked the interfering signal to the Bowen's RV in Portland. The FCC cited Part 15 rules and noted that certain Winegard antenna amplifiers "have been the source of radio frequency interference in a number of cases." Due to the complaints, Winegard <<http://www.winegard.com>> has agreed to replace defective units at no charge. The FCC advised the couple to contact Winegard to make necessary arrangements.

*** Amateur high-speed Internet link used during shuttle debris recovery:** Amateurs involved in the Texas search for debris from the shuttle Columbia used a 802.11b high-speed Internet link, using equipment provided by Michael Willett, KD5MFM. Others involved in the system installation were Robert Judy, KD5FEE; James McLaughlin, KD5POY; and Tim Lewallen, KD5ING. The link utilized a mix of

directional antennas to provide a robust connection through the intense radio traffic in the area. The 2.4-GHz radio cards were set to produce 100 mW of power and utilize direct sequence spread spectrum encoding. A 24-inch parabolic dish was installed on one end of the link. On the other end, an 11-element shrouded Cushcraft antenna was mounted on a temporary mast. Net control utilized the link to look up call signs and for quick e-mail communication, weather-radar monitoring and weather tracking. "This application and installation of the 802.11b link was one of many examples demonstrating the extensive capabilities of volunteer ham operators, government authorities and local businesses teaming together to help during a crisis event," said Doug Kilgore, KD5OUG. Pictures of the link as well as other operations are available on the Richardson Wireless Klub, K5RWK, Web site <http://www.k5rwk.org/Shuttle/index.html>.

*** Florida ARES/RACES groups takes part in simulated plane crash exercise:** Seminole County, Florida, ARES/RACES group participated February 25 in a simulated airplane crash at the Sanford, Florida, airport. "This simulation is required by the FAA every three years to test local first responders," said Bud Thompson, N0IA, who adds that the ARES/RACES group supplied both voice and digital communications. The ham radio group's task was to provide communications from incident command in the field to and among the emergency rooms at three local hospitals. The plan was to have both voice and digital messaging capability at all four locations. Voice communications utilized both VHF and UHF repeaters. Digital communications utilized 1200-baud packet. "This was a good test and successful demonstration of how modern digital messaging works--and it did," Thompson said. More information is available on the Florida Amateur Digital Communication Association Web site http://www.fadca.org/n0ia_6.html.

*** Digital Communications Conference issues first call for papers:** TAPR and ARRL have issued the first call for papers for presentation at the 2003 Digital Communications Conference. The 22nd annual conference will be September 19-21 at the Marriott Hartford Windsor Hotel near Hartford, Connecticut. Paper topics could include software defined radio, digital voice, digital satellite communications, GPS, APRS, DSP, HF digital modes, Internet interoperability, spread spectrum and 802.11 technologies, using Linux in Amateur Radio, updates on AX.25 and other wireless-networking protocols. Presentation at the conference is not required for publication. The deadline to submit papers for consideration is August 5. Submissions may be sent either by e-mail or postal mail to Maty Weinberg, KB1EIB, ARRL, 225 Main St, Newington, CT 06111. The DCC is designed for all levels of technical experience, not just for the expert, and is meant to be a weekend of fun and learning for all who have more than a casual interest in any aspect of amateur digital communications. For more information on the DCC, visit the TAPR Web site www.tapr.org/dcc/index.html.

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*** New York antenna bill reported out of Senate committee:** An e-mail and letter-writing campaign in New York has resulted in that state's pending Amateur Radio antenna Senate legislation, S 63, being reported out of the Senate Local Government Committee March 5. The measure now is on the Senate calendar for a vote. A parallel bill, A 2662, is pending in the New York Assembly, where it's in the Assembly Local Government committee. ARRL Hudson Division Director Frank Fallon, N2FF, and Atlantic Division Director Bernie Fuller, N3EFN, urge all New York amateurs to let their state senators know how they feel about the bill. The New York Senate approved the same legislation last year, but it died in an Assembly committee. In addition to incorporating the wording of the limited federal preemption known as PRB-1 into New York statutes, the bill would set a 90-foot statewide minimum regulatory height standard. Contact information on legislators is available via the New York State Resources on the Legislature, Assembly and Senate Web site <http://www.nysl.nysed.gov/ils/legislature/legis.html>.

*** ST0RY Sudan operation continues apace:** Despite dust storms, heat and nearby civil unrest, the ST0RY DXpedition continues in full swing on most intended bands with more than 17,000 QSOs now logged--6000 of them between 40 and 10 meters on March 25 alone. ST0RY plans to be on the air for the CQ World Wide WPX SSB Contest March 29-30 weekend. According to The Daily DX <http://www.dailydx.com>, several West Coast DXers reported hearing big signals from ST0RY on 17 and 15 meters for several hours during the afternoon of March 25. ST0RY operator Chris Sauvageot, DL5NAM, says all the antennas now are up, and the operators are in good shape. "We have to be careful about local demonstrations here in town (Khartoum) from students," he said. "We have a safe place here at the River Nile; the hosts are great here." So far, 40 and 30 meters have yielded the most CW QSOs, with more than 2000 logged on each band. Op Dietmar Kasper, DL3DXX, says the team will attempt more 20-meter CW activity. "It's really hot during the day," he reports, with temperatures in the 100+F range. DL3DXX says it's nearly impossible to get past the wall of East Coast stations on 40 and 80 meters to work stations further west, but the team has worked a number of W6 and W7 stations. The operators have been experiencing high noise levels on 160 meters. Six-meter activity also is planned. The team reports its getting used to living in the sand, but there was a dust storm all day on March 25. More information and an on-line log search engine is available on the ST0RY Web site <http://www.df3cb.com/st0ry/>.—some information provided by The Daily DX

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