B.V.A.R.A. QRM

W3SGJ **May 2002**

144.710/145.310 MHZ - 100 HZ PL **447.975/442.975 MHZ - 100 HZ PL**

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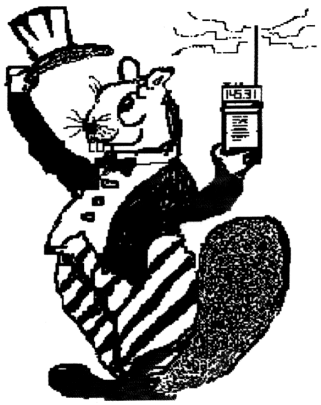

THE NET LIST

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.

Inside This Issue

==**CLUB NEWS**==

CLUB MEETING

The May B.V.A.R.A. meeting will be held on Thursday the 9th, 7:30 PM at the Beaver County Emergency Operations Center, 205 East End Avenue, Beaver, PA. Be sure to come help us get rid of all the coffee and donuts! Bring a friend.

KB3LS SK

The Club was saddened to hear about the passing of long time member Joe Kroen KB3LS. Joe was in poor health for some time but continued to operate and often participated in the morning Rip Van Winkle net. Joe will be terribly missed.

B.V.A.R.A. AT BEAVER VALLEY DISTRICT SCOUT CAMPOREE

On the weekend of April 27th the B.V.A.R.A. participated in the Boy Scouts of America, Beaver Valley District, Spring Camporee at Olde Economy Park in Ambridge. This consisted of a morning presentation of Amateur Radio to all the scouts in attendance and then 2 radio merit badge classes in the afternoon. A large number of boys attended the merit badge classes and completed most of the requirements. Perhaps this will inspire some of the boys and adults attending to pursue radio as a hobby. Thanks to all the B.V.A.R.A. members who assisted with this activity. They were: Wes N3ALS, Al WA3GFM, Dave KA3SMF, Debbie KB3EAQ, Bob N3SVM, George WA3ONU, Chris W3OUF, George NN3J,& Tony KE3ED. Also thanks go to John Nemmer KB3GXP from the North Hills radio club who is also an Assistant Scout Master.

The Scout committee had nothing but praise for the volunteers who helped with all the activities that took place including First Aid, Ceasar Rescue Dogs, Fire Rescue, and others.

The B.V.A.R.A. ran a net during the days activities to pass information between all the different set ups. Operations went so smoothly the Scouts asked if they could count on us to do this again in the future. Sounds like a good idea.

B.V.A.R.A. BAKE SALE

The B.V.A.R.A. had another bake sale recently. In spite of the inclement weather we still raised over $185.00 for the club. Phyllis N3KUG and Debbie KB3EAQ did a great job hosting the sale at Ames Department store in Franklin Township and they want to thank all who helped. The next sale is tentatively scheduled for September.

FIELD DAY COMING SOON

Believe it or not, it will soon be time for another Field Day operation. The Club is now preparing for our annual outing at Brady's Run Park for the weekend of June 21st. This years set up will be at Shelter #6. Bob N3SVM has volunteered to be FD Chairman and would appreciate any and all help he can get.

Stations will need to be planned and equipment will have to be lined up along with the operators and, of course, the food!! Stay tuned.

==>FCC CHIPS AWAY AT VANITY BACKLOG, PROPOSES VANITY FEE HIKE

The FCC continues to whittle away the vanity backlog. Another 268 call sign grants were issued this week. The latest run includes applications received by the FCC as of January 25, 2002.

Among the recent happy campers was Randy McAlister, W7CWW (ex-KD6AQB), of Ventura, California, who wrote ARRL to say that he and his family were pleased that he now holds the call sign once held by his grandfather, Eugene Brounty--something he'd wanted since his grandfather died in 1963.

Meanwhile, the FCC is proposing to raise the regulatory fee it charges vanity call sign applicants from $12 to $14.50 for the 10-year license term. The FCC included the proposed new fee in a Notice of Proposed Rulemaking (MD Docket No. 02-64) released March 27 to set Fiscal Year 2002 fees. The effective date will be announced in the Report and Order that terminates the proceeding. If it's approved, the new fee likely will become effective sometime in September. The FCC has estimated that 8000 applicants would apply for vanity call signs in FY2001.

Applicants for amateur vanity call signs will continue to pay the $12 regulatory fee per call sign (per 10-year license term) until the FY2002 fee schedule becomes effective. The vanity fee is paid at the time of application for a new, renewal or reinstated vanity license.

Comments are due April 23; reply comments are due May 3.

==>ALL-HAM ISS CREW'S DUTY TOUR EXTENDED

The Expedition 4 International Space Station crew of Commander Yuri Onufrienko, RK3DUO, and flight engineers Dan Bursch, KD5PNU, and Carl Walz, KC5TIE, will be spending an extra month in orbit. Problems with the Canadarm 2 robotic arm on the ISS will result in extending their mission to 189 days--a new record for the US crew members. March 29 marks 114 days in space for the current crew, which came aboard in December.

Late last week NASA decided to bump the launch of the Expedition 5 crew aboard the shuttle Endeavour (STS-111) from May 6 to May 31 in order to permit more training time for the shuttle crew to deal with the mechanical arm repair.

Shuttle astronauts will replace a wrist joint in the space station's mechanical arm. The Endeavour won't be returning to Earth until June 12, which means the astronauts on the Expedition 4 crew will beat NASA's current space endurance record by one day.

US astronaut Shannon Lucid, who spent 188 days aboard the Russian Mir spacecraft in 1996, is the current American record holder, and she will still hold the women's space endurance record.

Onufrienko, however, will not come close to topping the Russian 438-day endurance record set aboard Mir in 1994 and 1995 by cosmonaut Valery Polyakov.

For more information about the ISS, visit NASA's Human Space Flight Web site, <http://spaceflight.nasa.gov /index.html>.--NASA, news accounts

==>AMATEURS SUMMON HELP AFTER SAILBOAT RUNS AGROUND

Vigilant members of the Maritime Mobile Service Net on 20 meters relayed calls for help from a sailing vessel that ran aground March 26 off the northern coast of Cuba. Aboard the sailing vessel Tao were Dave Beane, G0TAG, and his wife, Sara, whose frantic calls on the Net frequency got a quick response. The couple subsequently was rescued by Cuban authorities and their sailboat refloated.

"She was in a big panic, and then they just stopped transmitting," reported Ed Petzolt, K1LNC, in South Florida, who said he happened onto the situation when he turned on his transceiver.

US Virgin Islands ARRL Section Manager John Ellis, NP2B, said that less than an hour earlier, Beane had checked into the MMSN to say the couple had enjoyed a visit to Cuba and was planning to sail around to the south side. "There was no indication of any problem," he added. Since Ellis had the best copy, he managed the incident.

"It turned out that Dave and Sara had run upon a reef, had called for help from the Cuban authorities, but had received no response," he said. "Sara was rather frantic when she came on 14.300. We immediately gave her a clear frequency." Ellis said a net slightly higher in frequency yielded to give the Net a wide berth.

Mike Pilgrim, K5MP, in Texas notified the US Coast Guard. At about the same time, Petzolt contacted the Swiss Embassy--the US has no diplomatic relations with Cuba, and Switzerland often serves as an intermediary. The Swiss Embassy put him in touch with the Cuban mission in Washington, which, in turn, contacted authorities in Havana by radio. The US Coast Guard was only able to contact the Cuban authorities via telex.

"We tried to determine if they were in danger of sinking, but that is when we lost communication," Ellis said. "We never heard from them for the remainder of the evening."

Ellis said G0TAG checked into the Net later in the week to say that Cuban authorities were able to float the vessel off the reef and get the couple under way again. "Dave, G0TAG, had nothing but good words to say about the Cubans," Ellis said. "The authorities were very nice and helpful, they even sent two divers down to inspect the bottom of the boat--all at no charge!"

The MMSN had "excellent cooperation and assistance" during the incident from net control Frank Kelly, N3FK, Petzolt, Pilgrim and Dave Dalziel, N4ICE, Ellis said. "There were a number of others on frequency available to help, but all maintained top-notch order and control," Ellis added.--thanks to Brandon Horn, KC2HFG, for alerting ARRL to this incident

==>FCC PROCEEDING PUTS NEW PRESSURE ON AMATEUR MICROWAVE BAND

The FCC has again targeted Amateur Radio's primary allocation at 2390 to 2400 MHz for possible sharing or use by other radio services. A Notice of Proposed Rulemaking (WT Docket 02-55)--released in mid-March but not yet available for public comment--invites comments on either sharing the band with public safety services being displaced from 800 MHz or moving amateurs elsewhere. The ARRL plans to file comments in the proceeding.

The FCC says increasing incidents of harmful interference to public safety systems in the 800-MHz band prompted the proceeding, "Improving Public Safety Communications in the 800 MHz Band." To alleviate the problem, the Commission now is looking into restructuring the 800 MHz band and moving some occupants elsewhere.

"In this proceeding, if commenting parties believe that incumbent amateur services cannot co-exist with relocated 800 MHz services," the FCC said, "we seek comment on whether incumbent amateur services could be relocated, what spectrum could be used for their relocation, and what procedures would apply to such relocation." The FCC NPRM identifies 2390-2400 MHz as an "Unlicensed PCS Band." Unlicensed, asynchronous PCS devices were authorized there in 1995, but Amateur Radio remains primary.

The FCC also will seek comments on whether existing UPCS operations could continue in the band or be forced to cease. It also wants input on "the suitability of the 2390-2400 MHz band as replacement spectrum and whether there are other band segments with which this band could be paired." The FCC noted that the adjacent 2385-2390 MHz segment already is slated for auction.

The FCC said its discussion of 2390-2400 MHz and other segments in terms of replacement spectrum was intended to be "illustrative rather than exclusive" and that other bands "may also merit consideration."

Just last summer, the FCC invited comments on its proposals to reallocate some spectrum in the 2390 to 2400 MHz amateur segment--as well as in the non-amateur 1.9 and 2.1 GHz bands--for possible use by unspecified mobile and fixed services. The Commission has proposed 2390 to 2400 MHz and other bands to support the introduction of advanced wireless systems, including so-called third-generation (3G) mobile systems. The FCC also has asked for comments on whether amateurs could share the band with government users.

The complete NPRM is available via the FCC Web site <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-0281 A1.doc>. The FCC will officially invite comments for 30 days after the NPRM is published in the Federal Register. Reply comments will be due 60 days following publication in the Federal Register.

==>FCC COULD CONQUER VANITY BACKLOG IN A WEEK

If the FCC continues to process vanity applications at its current rate, the application backlog could disappear by next week. The FCC continues to whittle away the vanity backlog, issuing another 474 grants over the last five processing runs--although the last run only yielded 26 grants from one day's worth of applications. As of April 5, the FCC had processed vanity applications received at its Gettysburg, Pennsylvania office through March 8.

At the current pace--and barring any difficulties--the remaining backlog of some 500 vanity applications could be wiped out by April 12. The FCC does not process vanity applications on weekends. The typical wait for action on a vanity call sign application is about 18 days from the time the application is received by the Private Wireless Division Licensing and Technical Analysis Branch in Gettysburg. At its peak, the vanity backlog was estimated at more than 2000 applications.

The processing of routine Amateur Service applications has been unaffected by the vanity problems. The vanity troubles began after about two weeks of paper vanity applications sent off for anthrax decontamination were not returned to Gettysburg. FCC policy continues to give equal priority to paper and electronic vanity applications, and when the paper applications were waylaid, vanity processing ground to a halt. FCC staffers—with ARRL's assistance--used payment information to contact those who had filed and have them submit new applications.

The FCC said last month that it's finally starting to receive the applications that had been missing and were at the core of the major vanity holdup that had extended through much of the fall and winter. Outside of a short hiatus about a month ago to deal with a processing anomaly, the FCC has been proceeding cautiously with its effort to get current again on vanity applications.

Amateurs with pending applications may take advantage of the FCC Call Center's toll free number, 888-CALL FCC (888-225-5322) or may initiate an application search via the Universal Licensing System (ULS) <http://wireless.fcc.gov/uls>. Information on the amateur vanity call sign system is available on the FCC's Vanity Call Sign page <http://wireless.fcc.gov/services/amateur/callsigns/vanity/index.html>.

==>FCC ANNOUNCES WEB SITE, ELECTRONIC FILING INTERRUPTION

The FCC has announced that its Web site functions, databases and telephone service will be interrupted the weekend of April 5-7. From 9 PM Eastern Standard Time Friday, April 5, through 1 PM Eastern Daylight Time on Sunday, April 7, access to the FCC's electronic filing systems—including the Commission Registration System (CORES) and Universal Licensing System (ULS)--will be temporarily interrupted during preventative maintenance.

In addition, access to the entire FCC Web site, electronic databases and other information and telephone services will be interrupted. E-mail sent to the FCC during the down time will be queued for delivery when the system is restored on April 7.

The FCC asks that all electronic documents be filed before 9 PM EST on April 5 or after 1 PM EDT on April 7. In addition to CORES and ULS, systems affected include the Electronic Comment Filing System (ECFS), the Electronic Document Management System (EDOCS), and the OET Experimental Licensing Branch Electronic Filing Site.

For more information, see the FCC Public Notice <http://www.fcc.gov/Bureaus/Miscellaneous/Public_Notices/2002/pnmc0202.html>.

==>FCC VANQUISHES VANITY BACKLOG

The longstanding vanity call sign application backlog that had built up as a result of mail problems last October is now history. The FCC issued another 328 vanity call signs this week. That completed the processing of applications received at the FCC's Gettysburg, Pennsylvania, office through March 25--right at the typical 18-day vanity application waiting period.

"We are back on track for vanity processing," an FCC Private Wireless Division Licensing and Technical Analysis Branch staff member told ARRL. While not ruling out any problems down the road, she indicated that everything was working

fine now and that the FCC would resume its normal nightly vanity runs.

ARRL VEC Manager Bart Jahnke, W9JJ, congratulated the FCC's licensing staff on the accomplishment. "It's been a long time coming," he said. "A great deal of effort on the part of the FCC personnel in Gettysburg and some on the part of ARRL went into making this happen.

Among the latest happy customers was ARRL Chief Development Officer Mary Hobart, who traded in her government-issue KB1HYD for K1MMH, reflecting her initials.

At its peak, the vanity backlog was estimated at more than 2000 applications. Routine vanity processing resumed in early March. With the exception of a four-day hiatus to deal with a processing anomaly later that month, the FCC has been slowly but surely whittling away the application stack. The processing of routine Amateur Service applications was unaffected by the vanity problems.

The vanity holdup began after some two weeks of paper vanity applications sent off last October for anthrax decontamination were not returned to Gettysburg. Since FCC policy continues to give equal priority to paper and electronic vanity applications, vanity processing was halted when the paper applications didn't come back. FCC staffers--with help from the
ARRL--used payment information to contact those who had filed and have them submit new applications. Last month, the FCC began receiving the applications that had been missing.

The FCC has proposed increasing the regulatory fee it charges vanity call sign applicants from $12 to $14.50 for the 10-year license term. Comments on the proposal are due April 23, and reply comments are due May 3. The new, higher fee likely would go into effect in September. The vanity fee is paid at the time of application for a new, renewal or reinstated vanity license.

==>SPACE STATION COMES TO TEXAS CLASSROOM VIA HAM RADIO

The teenaged daughter of International Space Station crew member Dan Bursch, KD5PNU, was among several juniors and seniors at Pflugerville High School in Texas who got to speak to the astronaut April 5 via Amateur Radio. The contact was arranged via the Amateur Radio on the International Space Station--or ARISS--program. Emily Bursch declined, however, to submit a question to her dad, in deference to her fellow students.

After he'd answered a few of the students' questions, Bursch took a moment to acknowledge his daughter's presence. "Hello, Emily! I miss you," he said. "Hi, Daddy," Emily Bursch replied--at that point, in the background. While her father replied to several more questions, a teacher escorted Emily to the speakerphone the class was using.

"Hi, this is Emily. Over!" she said to her father, at the time some 200 miles above Earth over Australia. Bursh replied excitedly, "I love you, too, and I miss you."

"I love you too," Emily responded. The students' questions then resumed. At the tail end of the contact, she attempted to speak with her dad again, but the spacecraft already had gone out of range by then. During an earlier ARISS contact with St Thomas the Apostle Episcopal School in Nassau Bay, Texas, last month, Bursch got to chat briefly with his two younger children--daughter Robyn, and son Jackson, both of whom also asked questions.

"Emily admitted that she is able to talk to her father often through NASA provided 'phone calls' and e-mail, but it was fun to watch her friends as they experienced space communications for the first time," said Roy Walker, WA5YZD, who was on hand for the contact.

More than 100 other Pflugerville High School students listened in as their classmates asked about life aboard the station and safety concerns relating to space travel--14 questions in all. Most of the students were enrolled in physics and science classes at the Texas high school. Bursch told student An Tong that his most favorite thing to do during his free time is look out the window and view Earth as it passes by.

Several students asked about physical fitness and staying in shape while enduring long periods in microgravity. Others wanted to know what kind of education, training and experience it takes to become an astronaut. As for space tourists, Bursch said, he didn't have anything against the idea. He noted that South African Mark Shuttleworth is scheduled to visit the ISS soon.

Providing Earth station facilities for the event was Tony Hutchison, VK5ZAI, in Australia--an ARISS veteran. Science Department Supervising Principal Larry Bradley expressed appreciation to all who made the experience possible for his students.

Listening in on the conference connection during the contact were members of the ARISS international team, which was meeting in Montreal, Canada. "We broke out in grins and with sighs of relief at the start of the QSO and in simultaneous applause at the end," said ARRL's Rosalie White, K1STO, a member of the ARISS committee.

ARISS is an international project with U.S. participation by the ARRL, AMSAT and NASA. More information is available on the ARISS Web site <http://ariss.gsfc.nasa.gov>.--Roy Walker, WA5YZD, and Gene Chapline, K5YFL, provided information for this report

==>AMATEUR RADIO HITS THE BIG SCREEN (AGAIN) IN NEW IMAX FILM

Amateur Radio again is getting a role on the silver screen, this time in the new IMAX film called Space Station. The film includes a segment depicting the Amateur Radio on the International Space Station (ARISS) program in action. ARISS team members will be on hand to demonstrate ham radio to the press and invited moviegoers when the film has its first screening Tuesday, April 16, at the National Air and Space Museum in Washington, DC.

Several ham-astronauts also are expected to be in attendance. The movie opens to the general public Friday, April 19. US International Space Station crews have included at least one Amateur Radio operator. The current Expedition 4 crew--Commander Yury Onufrienko, RK3DUO, and astronauts Dan Bursch, KD5PNU, and Carl Walz, KC5TIE, is the first to have all three members licensed.

The IMAX earthbound segments were filmed last August at Seabrook Intermediate School in Texas. Students there enjoyed an ARISS contact on September 4. The ISS segments was shot in January 2001 with Expedition 1 Commander Bill Shepherd, KD5GSL. The two segments were pieced together during editing.

An international educational program, ARISS brings students from the US and throughout the world together with ISS astronauts via ham radio, which was one of the first payloads accepted aboard the ISS by NASA. ARISS is sponsored by ARRL, AMSAT and NASA.

Coinciding with the IMAX film debut on April 16, second through sixth-grade students at The Quogue School in Quogue, New York, will get their turn behind the microphone to talk with either Bursch or Walz.

In 2000, Amateur Radio had a featured role in the science fiction thriller Frequency.--Jennifer Hagy, N1TDY

==>DRAFT ELEMENT 2 SYLLABUS RELEASED FOR COMMENT

The Question Pool Committee of the National Conference of Volunteer Examiner Coordinators has released a draft syllabus for the Element 2 (Technician) Amateur Radio examinations. The QPC is inviting comments on the document.

The syllabus is an outline of 10 question topic areas—called "subelements"--from which actual examination questions will be developed. For Element 2, these include FCC rules, methods of communication, radio phenomena, station licensee duties, control operator duties, good operating practices, basic communications electronics, good engineering practice, special operations, and electrical, antenna structure and RF safety practices. Subelement T0, Electrical, Antenna Structure and RF Safety Practices, has been expanded to include all safety issues--electrical, antenna/tower and RF.

A question pool based on the revised syllabus will be released later this year to take effect July 1, 2003. The QPC will invite public input on the Technician questions as well.

A new Amateur Extra class question pool released last November takes effect in the exam room on July 1 of this year.

QPC chairman Scotty Neustadter, W4WW, requested comments to the committee by May 9. The draft Technician (Element 2) syllabus <http://www.arrl.org/arrlvec/tech-syllabus.html> is available on the ARRL Web site, which also includes all current question pools <http://www.arrl.org/arrlvec/pools.html>. The amateur community may e-mail comments to the Question Pool Committee at qpc@arrl.org.

Commenters also may e-mail individual members directly: Scotty Neustadter, W4WW, w4ww@arrl.net; Bart Jahnke, W9JJ, w9jj@arrl.org; Fred Maia, W5YI, fmaia@texas.net and John Johnston, W3BE, johnston.john1@worldnet.att.net.

==>FCC INVITES COMMENTS ON NOVICE BAND, FIELD-REPARABLE GEAR PETITIONS

Comments are due by May 16 on two Amateur Radio-related Petitions for Rule Making put on public notice this week by the FCC. An ARRL petition, designated RM-10413, would eliminate the 80, 40 and 15-meter Novice/Technician Plus CW subbands and reuse the spectrum in part to expand the 80 and 40-meter phone allocations. Another petition filed by Nick Leggett, N3NL, designated RM-10412, would require most commercially manufactured Amateur Radio transmitters and transceivers to be field-repairable "in some manner."

Amateurs may view and comment on these proposals via the FCC's Electronic Comment Filing System (ECFS), http://www.fcc.gov/e-file/ecfs.html. (Click on "Search for Filed Comments." In the "Proceeding" field enter the rulemaking number, with "RM" in upper-case and the hyphen included.)

The ARRL's petition, filed in March, asks the FCC to eliminate the Novice and Technician-Plus CW bands and reapportion these "inefficiently deployed segments" to alleviate overcrowding elsewhere. If the FCC goes along, current Novice and Technician Plus (ie, Technician with Element 1 credit) licensees would be permitted to operate on the 80, 40, 15 and 10-meter General-class CW allocations at up to 200 W output. For General and higher class operators, the ARRL plan would implement changes in the 80, 40 and 15-meter phone bands, expanding phone segments for many amateurs.

The League's petition also seeks FCC permission to use spread spectrum on 222-225 MHz; to expand the pool of special event call signs beyond the 1x1 format to include identifiers for US territories and possessions that do not provide for mailing addresses; to clarify rules to indicate that modulated CW (MCW) is permitted for repeater station identification; and to incorporate into the rules a 1990 FCC waiver authorizing amateurs in certain areas of Colorado and Wyoming to operate on certain segments of the 33-cm band.

The Leggett petition was filed in February. "Field repair is important to the Amateur Radio Service because it enhances emergency communications preparedness and the growth of technical knowledge in the Amateur Radio Service," Leggett said in his petition.

Leggett suggests that the FCC consider mandating easily replaceable modules or circuit boards, minimum component spacings on circuit boards, removable integrated circuits mounted in sockets and other requirements for commercially made amateur transmitters and transceivers. He would exempt ham radio receivers.

Leggett concedes that some manufacturers may drop out of the amateur market if the FCC were to adopt his recommendations, but he suggests that they would be replaced by other manufacturers, such as those making QRP equipment.

Last December, Leggett and attorney Don Schellhardt petitioned the FCC to require that all electronic equipment subject to FCC jurisdiction be shielded against electromagnetic pulse (EMP) damage.

==>ARISS LOGS TWO MORE SUCCESSFUL SCHOOL CONTACTS

Astronaut Dan Bursch, KD5PNU, aboard the International Space Station this week took time out of a busier-than-usual schedule to answer questions via ham radio from an enthusiastic throng of elementary schoolers. The April 16 contact with Quogue School on New York's Long Island gave 10 youngsters a chance to pose 17 questions to Bursch. On April 11, astronaut Carl Walz, KC5TIE, was interviewed via ham radio by youngsters at Caribbean Preparatory School in Puerto Rico. Both contacts with NA1SS were arranged through the Amateur Radio on the International Space Station—or ARISS--program.

"We don't get a whole lot of free time," Bursch acknowledged in response to a question from Emily Hubbard at Quogue School. "Right now the shuttle's docked, and we pretty much have no free time." A crowd of some 120 classmates and some 100 parents and other guests gathered in the school's auditorium to witness the Earth-to-space ham radio interview.

Sixth grader Colleen McKennet wanted to know how the crew got streaming video from Earth. Bursch replied that the crew used ProShare teleconferencing software aboard the ISS. Jared Carpenter wanted to know what DVDs the crew liked to watch. "Probably a mixture of comedy and action films," was Bursch's reply.

Third grader Sara Garcia asked what foods would not be good in space. Bursch explained that the worst foods were "anything that's crumbly" like cookies, because the crumbs float around and get into everything.

Shouts and cheers erupted from the audience after signals from the ISS faded over the North Atlantic horizon. "We did it!," coordinating teacher Roberta Keis, N2RBU, said after the excitement died down a bit. Keis said when the contact was over, the kids enjoyed one of the very foods not on the ISS menu--cookies! The post-contact celebration concluded several-months of classroom emphasis on space-related topics.

Members of the Peconic Amateur Radio Club set up the ground-station and antennas. ARRL Hudson Division Director Frank Fallon, N2FF, was on hand for the event. A WorldCom teleconferencing circuit carried audio to various listeners; ARISS International Chairman Frank Bauer, KA3HDO, listened in while from Washington, DC. Audio also went out via the IRLP (Internet Repeater Linking Project).

On April 11, students attending the Caribbean Preparatory School in San Juan, Puerto Rico, successfully completed Puerto Rico's first ARISS contact. Earth-station support came from the Puerto Rico DX Club and local amateurs, including Gladys Muñoz, NP3BY, a physics teacher at the school, Oscar Resto, KP4RF, and Angel Padilla, WP4G.

During the contact, 10 students were able to talk with Walz. As newspaper and TV reporters, fellow students and teachers looked on, the Caribbean Prep students asked questions that ranged from serious inquiries about space exploration to "What do you do with your dirty underwear?"

"Carl answered every question with great enthusiasm," said ARRL Puerto Rico Section Manager Victor Madera, KP4PQ, who added that downlink audio was easy to copy. "During the approximately 10-minute contact, you could hear a pin drop in the packed auditorium." Students and visitors concluded the event with a standing ovation, Madera said.

ARISS is an international project, with US participation by ARRL, AMSAT and NASA.--Gene Chapline, K5YFL; Victor Madera, KP4PQ

==>ARISS BOARD RESOLVES GREATER COOPERATION WITH CANADA

The Amateur Radio on the International Space Station International Group and the Canadian Space Agency have agreed in principle to cooperate in areas of mutual interest

such as educational outreach, public relations and Amateur Radio licensing of Canadian astronauts. The announcement during the ARISS committee meeting at the Canadian Space Agency in Ste Hubert, Quebec, April 4-6 prompted applause from delegates and observers. ARISS and CSA will hammer out the specifics of an umbrella agreement in the coming weeks.

Marilyn Steinberg of the CSA's Education Office outlined CSA's educational outreach programs and successful Canadian ARISS QSO activity. She told the gathering she sees a lot of potential in the ARISS program and that she'd like to see expanded Canadian participation in future ARISS school contacts. Steinberg also said she planned to explore ways to have more Canadian astronauts become licensed.

ARRL Field and Educational Services Manager Rosalie White, K1STO, serves as ARISS International Secretary-Treasurer and also represented ARRL at the session. She chairs the Educational Outreach School Selection Committee. "No matter how many times I monitor ARISS school QSOs, it still excites me when the connection is successful," White said.

Those attending the meeting, moderated by Roy Neal, K6DUE, learned that the remaining two Amateur Radio antennas are scheduled for installation on the ISS Service Module. ARISS International Chairman Frank Bauer, KA3HDO, said the antennas would be installed during spacewalks either this summer by the Expedition 5 crew or in late 2002 or early 2003 by the Expedition 6 crew. The flexible tape antennas are designed for either VHF or UHF use. The gathering also heard updates on so-called Phase 2 Amateur Radio hardware. Crews continue to use the ARISS initial station hardware, which consists primarily of 2-meter and 70-cm hand-held transceivers.

An ARISS slow-scan television system called SpaceCam also may be in the offing, although no installation timetable has been set. At this point, testing and development of SSTV system components continues. ARISS delegates also said they would welcome a proposal for an Amateur Radio external payload to be developed by the US Naval Academy and ARISS, with US Navy sponsorship.

==>SECOND "SPACE TOURIST" EN ROUTE TO ISS; AMATEUR CONTACTS PLANNED

Space tourist and amateur researcher Mark Shuttleworth this week journeyed to the International Space Station. The South Africa native, who now lives in London, and his two crewmates--Russian cosmonaut and ISS veteran Yuri Gidzenko and European Space Agency astronaut Roberto Vittori, IZ6ERU, blasted off April 25 from Russia's Baikonur Cosmodrome aboard a Soyuz vehicle. They were scheduled to arrive at the ISS April 27. During their eight-day stay, Shuttleworth and Vittorio are scheduled to speak via Amateur Radio with youngsters at schools in South Africa and Italy.

"This live communication represents a major turning point for the image of South African education," Shuttleworth said in a statement released by a South African marketing firm he's hired, "and puts a group of our school learners uniquely into the global spotlight of space exploration." Shuttleworth, 28, has been issued a "temporary, honorary Amateur Radio station license" by the Independent Communications Authority of South Africa. The license, good for three months, bears the call sign ZS RSA--not an amateur configuration.

If successful, the contacts will mark the first ARISS QSOs with schools in Africa. The initial contact is set for Monday, April 29, with Shuttleworth's alma mater, Bishops in Cape Town. Students in three South African provinces submitted questions, the best of which will be posed by winners of a nationwide competition. Additional contacts are on the ARISS roster with three other South African schools. Vittorio is scheduled to attempt a direct 2-meter ARISS contact with a school in Italy on May 4.

Shuttleworth's adventure, which NASA calls "a private commercial agreement with the Russian Aviation and Space Agency," is costing him an estimated $20 million. After the visit of the first space tourist, businessman Dennis Tito, KG6FZX, almost a year ago, NASA, Russia and the other international partners established some guidelines for future visits of this type. As did Tito, Shuttleworth says space travel has been a lifelong dream.

According to media accounts, Shuttleworth has rankled at being described as a "space tourist." He points out that he's trained eight months for the mission. In addition, Shuttleworth says, he and Gidzenko have been trained by Russian and South African biologists in how to carry out genetic engineering studies using animal stem cells while aboard the ISS.

The crew's primary mission is to deliver a fresh Soyuz spacecraft to the ISS, where a Soyuz craft remains available as a lifeboat. The trio will return to Earth in early May aboard the Soyuz spacecraft now attached to the station. Gidzenko, a veteran of the ISS's first resident crew, will become the first former resident to revisit the complex.

==>FLORIDA YOUNGSTERS, FRENCH TEACHER QUIZ ASTRONAUT VIA HAM RADIO

Youngsters at Shenandoah Elementary School in Orlando, Florida, and a teacher in Arles, France, this week chatted via Amateur Radio with astronaut Carl Walz, KC5TIE, operating NA1SS aboard the International Space Station. The contacts were arranged by the Amateur Radio on the International Space Station (ARISS) program.

On April 23, 15 Shenandoah Elementary pupils were able to talk with Walz about life aboard the ISS. One youngster, Alessandra Patteson, wanted to know if Walz was able to

communicate with his family while in space and, if so, how often. Walz explained that he speaks with his family almost daily using an Internet telephone system.

Another student, Charles Babir, asked Walz if he had time to read while aboard the ISS and, if so, what he enjoyed reading. Walz said that he reads several electronic newspapers, including the New York Times.

Austin Gentry posed an out-of-the ordinary question: "What would you do if your ship went out of control because of a black hole?" Walz allowed that such an unlikely occurrence would be scary, since the ISS would not be able to escape a black hole. He went on to explain that the ISS did experience control problems some time ago because of computer problems, and that the controllers in Houston and Moscow helped the crew to regain control of the spacecraft.

Kimberly Campbell, KG4IZR, did double duty as both the organizing teacher and the control operator at Shenandoah. Assisting were local amateurs Joe Singer, N4IPV, who provided a lot of the equipment; Ed Cox, K3SWJ; and Lou McFadin, W5DID.

On April 25, schoolteacher Christophe Candebat, F1MOJ, at the Louis Pergaud Primary School in Arles, France, got a chance to interview US astronaut Walz as his young charges and students from a second school observed. Invited to the demonstration were students of the nearby Lycee Jeanne d'Arc. During the contact, Walz answered 16 questions as Jean-Pierre Roux, F1EVQ, operated the station for the direct contact.

Walz answered questions in English. To overcome the language barrier, two teachers translated his answers into French and displayed them on a computer screen so the pupils could better understand what was being said.

ARISS-Europe representative Gaston Bertels, ON4WF, called the Arles contact "a splendid success" that culminated a longstanding educational project. Bertels said that for the past two years, the class has been involved in projects centered on space science. The youngsters' studies incorporated mathematics, French, history, astronomy, geography, physiology, botany and radio-wave propagation.

"They observed the apparent movement of the sun, built models and sundials as well as a meteorological station," Bertels explained. The pupils also participated in the Starshine 2 and Starshine 4 projects <http://www.azinet.com/starshine/index.html> by polishing aluminum mirrors for the satellites.

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

==>ARES TEAMS ACTIVATE FOLLOWING FATAL TRAIN WRECKS

Amateur Radio Emergency Service (ARES) teams in California and Northern Florida activated recently to assist in the wake of separate train wrecks.

In Florida more than half the cars of an Amtrak "Auto Train" carrying 418 passengers and 34 crew members derailed April 18 near Crescent City. Putnam County ARES established emergency communication from the site—on the Putnam/Volusia county line--shortly after the wreck and also staffed a shelter and two hospitals. Four people died as a result of the mishap and more than 100 others were injured.

Billy Williams, N4UF, of Florida Crown District ARES, said the American Red Cross responded in the accident's immediate aftermath. Red Cross communications were set up on a VHF repeater with help from Duval County amateurs. Other amateurs pitched in to staff a Red Cross shelter and the Putnam County emergency operations center. ARES members also were deployed at a local hospital as well as at hospitals in Jacksonville that were put on alert to receive patients.

Within 15 minutes of the wreck, the Florida Crown Emergency Net activated on a linked repeater system. A third repeater served as a base of operation for Putnam County ARES, under the direction of Putnam County Emergency Coordinator Mark Bradford, WF3F. That repeater was linked to a Jacksonville repeater (W4IJJ) to handle Red Cross requests between the Jacksonville Red Cross Headquarters and the scene of the wreck some 60 miles away, Williams said.

The shelter and triage center at Crescent City High School reported a peak population of more than 300 via Amateur Radio--most believed to be passengers who were able to walk away from the scene. Amtrak later bussed remaining passengers from the shelter to hotels for the night, and the amateur operation was able to shut down.

More than a dozen hams assisted in the ARES response. Additional details are on the North Florida Amateur Radio Society Balanced Modulator Web site <http://home.earthlink.net/~bfwillia/_wsn/page4.html>.

In California, a freight train collided head-on April 23 with a Metrolink double-decker commuter train. Ironically, the mishap occurred just as hospitals and emergency responders in Orange County were about to hold a large-scale drill to test patient triage and transportation procedures for mass casualty incidents.

Two dozen members of the Hospital Disaster Support Communication System (HDSCS)-- a special ARES group that always participates in the drill—were awaiting assignments when word came in of the train collision. Two passengers were killed and more than 200 were injured--

many seriously. Orange County ARES Emergency Coordinator and HDSCS Net Control April Moell, WA6OPS, immediately assigned the drill-ready hams to the 14 hospitals expected to receive crash victims. For the next 4-1/2 hours, 28 HDSCS members provided vital links among the hospitals, the county's ambulance dispatch center and the county's emergency medical service agency.

Net traffic included verifying victim dispatch and patient counts, providing hospitals with information for inquiring family members, and liaison with hams supporting the Red Cross. Within some hospitals, hams provided direct communication among triage areas, emergency departments, and command posts.

Moell is founder and Emergency Coordinator of the ARES group. More information is available on the HDSCS Web site <http://www.hdscs.org>.--thanks to Billy Williams, N4UF and Joe Moell, K0OV

==>IMAX FILM SPACE STATION CALLED "BREATHTAKING

ARISS International Chairman Frank Bauer, KA3HDO, used the words "fantastic" and "breathtaking" to describe the world premiere of the IMAX film Space Station on April 16 and 17. The film, now showing (or scheduled to show) in selected theaters nationwide, includes a segment on the Amateur Radio on the International Space Station program. ARISS set up a display booth at the movie's opening at the National Air and Space Museum in Washington, DC.

"It was pretty awesome to see Bill Shepherd [KD5GSL] talk to the Texas students with our ARISS equipment in 3D," Bauer said afterward. "This is a must-see movie." Space Station is the first 3D IMAX space movie. Made possible by NASA, the film is presented by Lockheed Martin and narrated by Academy Award nominee Tom Cruise.

Seabrook Intermediate School in Texas provided the earthbound setting for ARISS' role in the IMAX production. Footage with Shepherd answering a question during a school contact was shot in January 2001 during Shepherd's tour of duty as Expedition 1 commander. The question segment and the answer segment then were matched up during editing for the final production.

Bauer said that seeing Space Station is the closest one can get to experiencing space without actually going there. "It was spectacular from the perspective that you really felt like you were there," he said.

The ARISS display at the National Air and Space Museum premiere attracted visits from member of Congress, Bauer said, as well as officials from NASA, IMAX and Lockheed Martin.

Among the special guests were Shepherd, the ISS Expedition 1 crew commander; Yuri Usachev, the Expedition 2 commander, Brian Duffy, N5WQW, an ardent SAREX/ARISS supporter on several shuttle flights; Toni Meyers, the IMAX film producer; and Jack Dailey, the museum's curator.

"We now have a permanent legacy in film," Bauer said. For more information, visit the IMAX Web site <http://www.imax.com/spacestation/>.--AMSAT News Service provided some information for this report

==>ARRL GETS IN SOME PRIME FACE TIME AT NAB CONFAB

ARRL officials this month took advantage of the National Association of Broadcasters convention in Las Vegas to promote Amateur Radio among members of the broadcasting community--many of them already amateur licensees themselves. ARRL President Jim Haynie, W5JBP, this year became the first League president to attend the annual NAB gathering since it's been held in Las Vegas. While there, he also met with local amateur leaders and spoke at the Las Vegas Amateur Radio Club meeting.

Other ARRL officials attending the April 8-12 convention included Pacific Division Director Jim Maxwell, W6CF, and Vice President Fried Heyn, WA6WZO--the former Southwestern Division Director. "President Haynie, Director Maxwell and I covered a lot of ground," Heyn recounted.

The ARRL booth--larger than in years past--was managed by Bill and Carolyn Cornelius, K8XC and K9XC, with help from volunteers who included Nevada ARRL Section Manager Jan Welsh, NK7N. Heyn thanked NAB Vice President for Science & Technology John Marino, KR1O, for hosting ARRL at the show, which typically draws some 100,000 attendees.

Haynie also greeted those attending the popular Amateur Radio reception--sponsored by Kenwood Communications and CQ Communications. The reception drew an estimated 600 to 800 amateurs. Haynie briefly mentioned ARRL's Amateur Radio Education & Technology Program ("The Big Project") and said he hoped to be back again next year to promote it at the NAB gathering.

Heyn said the ARRL contingent found several of the NAB convention programs of particular interest. These included separate breakfast sessions hosted by FCC Chairman Michael Powell and by Sen Conrad Burns of Montana and six members of the US House. Heyn noted Burns' pronouncement that Congress needs to provide better guidance in the radio spectrum allocation and management arena. The Montana Republican told broadcasters he plans to file a spectrum reform bill, and he predicted a two to three-year battle. Burns sits on the Commerce, Science and Transportation Committee--the same panel that now has the Amateur Radio

Spectrum Protection Act bill before it. He's the ranking minority member of the communications subcommittee.

The Senator also said he hopes to see the empty Democratic seat on the FCC filled soon. The White House nomination of Jonathan Adelstein is tied up in Senate political wrangling. Burns has said he backs Montana Public Utilities Commission member Bob Rowe for the job.

Heyn said after the show, "My general impression was that 'the digital age' is coming together."

==>IN BRIEF:

*** German vote favors retention of Morse requirement:** The results of a mail-in vote of Deutscher Amateur Radio Club (DARC) members on whether to retain a Morse code requirement as an examination criterion for HF access indicates DARC members almost split on the issue. Of the 17,455 votes cast, 8530 (48.8%) favored retaining the existing 5 WPM requirement in Germany while 7781 (44.6%) favored abolishing the requirement. DARC said 1133 ballots were nullified (for a variety of reasons that included ballots from nonmembers and duplicate ballots), and 11 took no position.--Hans Berg, DJ6TJ/DARC.

*** Pacific Seafarer's Net handles emergency call:** Clark Lowry, N7AAC, in Arizona reports that the Pacific Seafarer's Net <http://www.tidepool.com/~psn/> handled an emergency call that came in April 9 during the net's roll call on 20 meters. Roll call was moved to another frequency, and Lowry (as net control), Jim Donaldson, VE7ZVT, and Fred Moore, W3ZU, remained on the net's 14.313 MHz frequency to handle the call with help from Jeff Nelson, N6NXL; Martin Stitt, D6RGV/XE2 and Peter Bowman, VE7YAP/XE2. Lowry said the initial call, without a call sign, indicated that the vessel Sunrise had struck a log off the Baja Peninsula and was sinking. "The caller indicated that he was busy transferring the crew and passengers to another vessel and could not give us a better position report," he said. A subsequent transmission indicated that everyone had been transferred safely. Lowry called the US Coast Guard, which, in turn, contacted Mexican naval authorities. He later ascertained from a YOTREPS <http://www.pangolin.co.nz/yotreps/index.asp> report that all four passengers had been rescued by the vessel Fisher II.

*** PCsat back in the black:** Bob Bruninga, WB4APR, reports that over the April 6-7 weekend, PCsat (NO-44) made it back into a positive power budget and achieved a full charge on its batteries. This allows the spacecraft to remember its commands for more than the one hour sunshine of each orbit, he said. Bruninga also expressed thanks to the various command stations around the world that attempted commands on more than 400 orbits since the problem began March 10. PCsat had been resetting and running the batteries dead on every eclipse. In addition, the satellite has one faulty solar panel. "We have enabled the digipeater again for limited operations probably through 10 May," Bruninga said. Because PCsat's batteries were severely weakened, Bruninga has requested that operations be limited to daylight only and that operators cease when telemetry packets display "11111111." Bruninga advised users to be conservative, and minimize the number of packets they digipeat. He also requested no routine automatic unattended operations. For more information, visit the PCsat Web site <http://www.ew.usna.edu/~bruninga/pcsat.html>.

*** Atlantic Division ARRL Director gets Scouting award:** ARRL Atlantic Division Director Bernie Fuller, N3EFN, has received the District Award of Merit from the French Creek Council of the Boy Scouts of America. Fuller was recognized for his work with the Venturing program of the Boy Scouts in his capacity as Venturing Chairman of the council's Oliver Perry District. The District Award of Merit is the highest award that a district can bestow upon a volunteer. The Venturing program of the French Creek Council was recognized recently as second in the nation during the past year in terms of increased participation and number of new Venturing Crews. Fuller also has been elected Vice President-Venturing of the French Creek Council Executive Board. In his new volunteer position, he is responsible for the Venturing program for the entire Council, one of the largest in the US. The Venturing arm of the Boy Scouts of America is composed of young men and women ages 14 through 20. A number of Venturing Crews who have chosen to concentrate their activities around Amateur Radio.

*** International Marconi Day special events:** To commemorate International Marconi Day April 27, the Maritime Radio Historical Society will operate special event K6KPH (starting at 1700 UTC) using the original transmitters, receivers and antennas of ex-RCA coast station KPH, and Radio Austria International will operate special event station OE1M. K6KPH transmitting frequencies will be 7050, 14,050 and 21050 kHz and occasionally 3545 kHz. K6KPH QSLs and reception reports go to D.A. Stoops, PO Box 381, Bolinas CA 94924-0381. For OE1M details visit the Radio Austria International Web site <http://roi.orf.at/intermedia>. Current working frequencies will be announced on the Web site. Operators entering their call signs in the "QRZ" field will immediately get a call on the band from OE1M. International Marconi Day <http://www.users.globalnet.co.uk/~straff/> takes place each year on a weekend close to the birthday of radio pioneer Guglielmo Marconi.