
B.V.A.R.A. QRM

W3SGJ

www.qsl.net/bvara

July 2003

144.710/145.310 MHZ - 100 HZ PL

447.975/442.975 MHZ - 100 HZ PL

B.V.A.R.A. OFFICERS

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

TRUSTEES/DIRECTORS

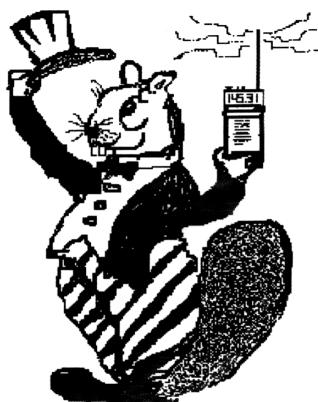
KB3EAQ.....Debbie Reid
N3GZZ.....Joe Streit
N3OJN.....Stan Riffle
N3ALS.....Wes Morar
N3SVM.....Bob Reid
WA3GFM...Al Belardia
KA3SMF.....Dave Heim
KE3ED.....Tony Petruccelli/Station Trustee

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.

Inside This Issue

- | | |
|----------|--------------------------------------|
| 1 | Club News |
| 2 | Maine Gov. and Ham Radio |
| 3 | 60 Meters Available July 3 |
| 4 | MARS Operation Begins in Iraq |
| 5 | And More... |
-

CLUB MEETING

The July B.V.A.R.A. 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. Planning for the annual corn roast in August as well as other items will be addressed. As usual the coffee pot will be on!

TEE SHIRT AND HAT ORDERS

Phyllis N3KUG wants to remind everyone that she is still taking orders for those who still would like a club tee shirt or hat. Prices again are \$8.00 for shirts and \$12.00 for hats.

FIELD DAY WRAP UP

Debbie KB3EAQ would like to say thanks to all who helped in any way with this years field day operation. The event was a great success and all had good time.

HAMS NIGHT OUT

This month our "Ham's night out" plans will take us to the Ponderosa Restaurant in Chippewa Township. We will meet at 4:00 PM on Saturday July 12. Hope to see you there and bring your appetite.

ARRL Western Pennsylvania Section Manager:

John V. Rodgers, N3MSE
n3mse@arrl.org

Summer will finally be here this Saturday and I for one am glad to have Spring behind us. We have been hit with some very severe storms and once again this past week the many amateurs of the area activated Skywarn and severe weather nets. In some areas even funnel clouds were reported. To the countless many amateurs that participate in these nets I want to thank you on behalf of the people we serve here in Western Pennsylvania.

I would like to take this opportunity to announce the appointment of Rich Beaver, N3SRJ, as Assistant Section Manager of Western Pennsylvania. Rich will serve as my chief assistant and will be my back up at any time I am out of section or unavailable. Rich will temporarily continue as Section Emergency Coordinator as we search for a replacement. Anyone interested in being considered for this position should contact Rich or myself. Rich may be contacted at n3srj@arrl.net and I am available at n3mse@arrl.org

We have had several successful hamfest thus far this year and the weather has cooperated with us. I hope this continues as we still have 6 additional hamfests this year. The next ones are July 12 at Union City sponsored by the Union City

B.V.A.R.A. QRM

Wireless Association. Then on Sunday the 13th the North Hills Amateur Radio Association will Hold its annual hamfest. I plan to attend both and look forward to seeing everyone there. Please stop at the league table and say hi. I am making plans for a club presidents meeting and emergency coordinators conference for the fall of the year. I am looking for help with a location and with ideas for topics that would be of interest to the participants. If you have anything you would like to have considered please contact me directly. If you have a facility available for the meeting I would appreciate the information. We still have a few counties in Western Pennsylvania that are without an emergency coordinator. If you live in a county that does not have an emergency coordinator please contact either myself, or Rich Beaver if you would be willing to volunteer. You must be an ARRL member and must submit monthly reports as well as coordinate the amateur emergency service activities in your county.

Each month reports compiled from the county Ec's and the various traffic nets are reported to Headquarters and also to myself. These reports will now be made available as part of the section web page. The section web page is available at <http://www.arrl.org/sections/?sect=WPA> Please visit it for additional information as it becomes available during the month.

This year's section convention will be on September 7th at the Butler Farm Show grounds. Our special guest this year will be Dennis Motschenbacher, K7BV. Dennis is the sales and marketing manager and an avid Dxer. Dennis has been on several Dxpeditions and will share some experiences with us. Card checkers for DXCC, WAS, and VUCC will be present at the convention to help people that would like to have qsl cards field checked for the awards. I would like to encourage you to take part in a traffic net. There are many of these nets in our section. VHF nets, cw nets and our section traffic net nightly at 3983 hz at 6 PM. Remember to send me formal traffic during field day according to the rules and receive 100 bonus points in the event. 73 de John N3MSE

==>ARRL RELEASES UPDATED "LOGBOOK OF THE WORLD" BETA SOFTWARE

"Logbook of the World" (LoTW) beta testers for the most part have reacted positively to the latest version of ARRL's secure electronic contact-confirmation system, but some users have run into difficulties. Responding to problems encountered by some early beta testers, the League has released an updated beta version of LoTW that should resolve these issues. Beta testers are encouraged to download the new version of the software, 1.02beta, from the LoTW page <http://www.arrl.org/lotw/>.

"While most installations and subsequent e-mailing and uploading of log data have gone flawlessly, as expected there have been problems," said ARRL's Dave Patton, NT1N, who's been a part of the LoTW project from the start. He says the

LoTW server software failed to recognize many of the new digital mode designations, such as MFSK-16 and JT6M. This caused fatal errors while digitally signing logs.

Patton says the beta update allows users to "map" any mode designation to one of the four main Amateur Data Interchange Format (ADIF) mode categories--CW, phone, image, and digital--without changing the actual log data. He said the beta upgrade also will correct other log data problems that caused fatal errors in signing a log, including allowing the signing process to complete the "good" parts of a log without crashing.

Beta testing got under way May 15. So far, the 1300 or so beta testers have uploaded upward of five million contacts to the LoTW database. Once it's ready later this year, LoTW will provide a way for amateurs worldwide to qualify for awards such as DXCC or WAS without having to first collect and submit hard-copy QSL cards.

One beta tester from Brazil lavished praise on the LoTW project. "I applaud the creators of LoTW," he wrote. "This will be, for sure, the salvation of DXing and award collecting. Please keep up this essential work!" For now, log data are limited to contacts made no more than five years ago (on or after January 1, 1998) to get a representative sampling, Patton explained.

Patton promised "many more bells and whistles" over the weeks ahead. One of those will meld LoTW with DXCC. He noted that a major DXCC software revision, now under way, will need to be completed first.

Logging software developers now can get documentation and a Windows DLL library--as well as complete source code for the TQSL software--at the SourceForge Web site <<http://sourceforge.net/projects/trustedqsl/>>.

To join the beta testing program, visit the Logbook of the World--Getting Started site <<http://www.arrl.org/lotw/getstart.html>>. The beta testing period wraps up in mid-July.

All QSO data submitted to LoTW will be deleted when the beta test period ends, and users will have to obtain new digital certificates to submit log data to LoTW once it 'goes live.' As part of the security process for the live system, passwords will be mailed to US licensees at the address that appears in the FCC database. Users should make sure the FCC has their current mailing address.

Amateurs can modify their address online or via US mail by using instructions available on the FCC Web site <<http://wireless.fcc.gov/services/amateur/licensing/changingaddress.html>>. ARRL members may submit license modifications or renewals through the ARRL VEC <<http://www.arrl.org/fcc/forms.html>>.

B.V.A.R.A. QRM

==>ASTRONAUT THRILLS HOMETOWN YOUNGSTERS VIA AMATEUR RADIO

NASA ISS Science Officer Ed Lu, KC5WKJ, told youngsters at his hometown alma mater via ham radio this week that zero gravity (G) feels a bit like going over the top on a roller coaster. The May 27 Amateur Radio on the International Space Station (ARISS) contact with Klem Road South School in Webster, New York, was the first for a member of the two-ham ISS Expedition 7 crew and for Lu, who had attended the kindergarten through grade 5 school some three decades ago.

"If you've ever been on a roller coaster and you go over the top of the roller coaster you feel that feeling like you're kinda light--you're floating up on your feet," Lu explained. "It's almost exactly like that but a lot stronger." Weightlessness "feels great." After some time in zero gravity, however, "it feels like your legs weigh a ton," he added, describing his own post-space shuttle experience.

Lu told the youngsters that while he was speaking to them from NA1SS, he was floating--and relaxing--about a foot above the floor and about to have a lunch of lamb, a chicken omelet and cookies for dessert. "I like the food up here a lot," he remarked later. Most of the current cuisine is Russian, he said, but he anticipated some Chinese and Hawaiian fare to arrive aboard the next Progress supply rocket. The ISS crew typically eats three meals a day, he said.

The lack of gravity does make it necessary to secure everything, including eating utensils, so they don't float off. Another downside of zero G is that the astronauts aboard the ISS must exercise regularly. "If you don't exercise, all of your muscles get smaller, and that includes your heart," he explained in response to one boy's question.

In all, Lu answered about a dozen questions, although apparent signal dropout and noise plagued the last minute or two of the QSO, rendering his replies barely intelligible. Lu advised the youngsters that, while expertise in science and math was most important to becoming an astronaut, skills and specialties vary among those in the Astronaut Corps. "The common thing among all of them is that all of them did pretty well at whatever it was they chose to do," he said.

With the ISS was over Hawaii at the time, radio contact with NA1SS was established via Nancy Rocheleau, WH6PN, in Honolulu, who arose before 3 AM to serve as control operator for the QSO. An MCI teleconferencing circuit linked the school with WH6PN. ARISS is an international program with participation by ARRL, AMSAT and NASA.

==>MAINE GOVERNOR GETS A TASTE OF HAM RADIO

Maine Gov John Baldacci praised the dedication and value of Maine's Amateur Radio operators as he met April 24 with members of the Ellsworth Amateur Wireless Association and

other amateurs. He also checked into a 75-meter traffic net during his visit and promised to renew efforts—begun a couple of years ago—to get his ham ticket.

The governor assured the group that the Maine Emergency Management Agency (MEMA) relies on Amateur Radio operators to support the statewide communications system. Baldacci pointed out that communication will be the most difficult and expensive part of the state's homeland security strategy. While some federal money has been provided for basic protective equipment needs, the governor said Maine would rely on Amateur Radio volunteers if primary telecommunication systems go down.

Baldacci also pledged to squelch any legislation banning cell telephone use by motorists that also prohibited hams from talking on microphones. Such a bill was soundly defeated in the Maine Legislature two years ago, but there's a similar bill in the current legislative session. On the other hand, Baldacci was not very receptive to the idea of free or discounted amateur call sign vanity plates, which now cost \$35. Like many states, Maine is dealing with severe budget problems, he explained.

The Ellsworth Amateur Wireless Association presented Baldacci with a Certificate of Appreciation for his support of Amateur Radio during his tenure as US Congressman. ARRL Section Manager Bill Woodhead, N1KAT, also gave the governor a Certificate of Merit from the ARRL for his support.

Woodhead also provided Baldacci with the latest edition of the ARRL Technician study guide, *Now You're Talking*. Baldacci said he'd add the goal of getting his ticket to his to-do list and would rely on the encouragement and help of Maine's hams to achieve it.—Phil Duggan, N1EP

==>NEW 60-METER BAND TO BECOME AVAILABLE JULY 3!

The new five-channel 60-meter amateur allocation becomes available to US Amateur Radio operators at midnight (12:00 AM) local time on July 3. The local time designation means that amateurs in the US territory of Guam likely will be the first to get a crack at the new band.

The new band will be a secondary allocation—federal government users are primary—and the first on which the only permitted mode will be upper-sideband (USB) phone (emission type 2K8J3E). The FCC last month announced it would grant hams access to five discrete 2.8-kHz-wide channels instead of the 150 kHz-wide band ARRL had requested and the FCC initially proposed. The League remains optimistic, however, that Amateur Radio eventually may be able to enjoy a band segment with multiple mode privileges at 60 meters. ARRL CEO David Sumner, K1ZZ, has said that in the meantime hams will have to be on their best behavior when taking advantage of the limited

B.V.A.R.A. QRM

channelized allocation, open to General and higher class licensees.

The FCC has granted amateurs center-channel frequencies of 5332, 5348, 5368, 5373 and 5405 kHz—the last channel common to the amateur experimental operation under way in the United Kingdom <<http://www.rsgb-hfc.org.uk/5mhz.htm>>. To be "on channel," users of 60 meters should set their transmitted carrier frequency 1.5 kHz lower than the channel-center frequency. In terms of day-to-day operation, the new band is expected to resemble the sort of channel sharing typical on local repeaters.

ARRL Laboratory Manager Ed Hare, W1RFL, says hams need to be very careful if they're considering modifying their current transceiver or transmitter for 5 MHz. The ARRL advises that members check with the appropriate equipment manufacturers regarding specific modification information. Some modifications not only may void the warranty but could affect or alter a transmitter's operation in unpredictable ways.

"Hams need to be sure that any modifications put them right on the desired channel," Hare said. "Most hams are used to just having to think about band edges, so on other bands, if a mod were a bit 'off,' all operators would need to ensure that they are not transmitting outside the band."

Hare recommended that on 5 MHz amateurs remain within "a few tens of Hertz" of suppressed-carrier accuracy. He also pointed out that hams have a mandate not to have any of their signal occupy spectrum outside the assigned 2.8 kHz channels.

Noting that high-frequency audio response can vary considerably from radio to radio, Hare has suggested restricting occupied channel audio bandwidth to 2600 Hz, rolling off below 200 Hz on the low end and above 2800 Hz on the high end.

Last-minute opposition to the granting of a band segment at 5 MHz came last year from the National Telecommunications and Information Administration (NTIA), which cited the ongoing spectrum requirements of federal government licensees having homeland security responsibilities. The NTIA administers spectrum allocated to the federal government. A compromise between the FCC and the NTIA resulted in the limited, channelized allocation.

The NTIA selected the channels the FCC authorized to minimize the possibility of interference to federal government users, and it dictated the use of USB so that federal government users—who also use only USB—could readily identify amateur stations if necessary.

The FCC has set maximum power at 50 W ERP and said it would consider a typical half-wave dipole to exhibit no gain.

==>ARRL, DEPARTMENT OF HOMELAND SECURITY TO INK STATEMENT OF AFFILIATION

ARRL and the Department of Homeland Security (DHS) <<http://www.dhs.gov/dhspublic/>> will sign a Statement of Affiliation (SoA) at the League's 2003 National Convention later this month in Texas. The convention will be held June 20-22 at the Arlington Convention Center in conjunction with Ham-Com <<http://www.hamcom.org>>. Since both ARRL and DHS view community disaster preparedness and response as top priorities, they will pledge mutual support for Citizen Corps--a community-based training and outreach initiative that brings together volunteers and first responders.

"This is all part of the bigger picture of getting emergency communications, aligned with what our government needs," said ARRL President Jim Haynie, W5JBP, who will sign the SoA on the League's behalf. "Amateur Radio stands ready to serve the country as needed in times of emergency."

Chief Operating Officer of the Emergency Preparedness and Response Directorate Ron Castleman will represent the DHS at the signing and serve as the lead speaker during the ARRL Forum, Saturday, June 21, at 10 AM. The forum will take place in an unnumbered room that's to the right of the Ham-Com registration area, not in Room M5 as originally scheduled.

Programs under the Citizen Corps umbrella are aimed at helping communities prevent, prepare for and respond to terrorism, public health issues and disasters.

The Statement of Affiliation will call on ARRL and DHS to collaborate in several areas, including raising public awareness of Amateur Radio as a public safety resource and providing training and accreditation for Amateur Radio emergency communications. The DHS and the League also will work together to promote formation and assist Citizen Corps councils in education, training and volunteer service opportunities that support first responders, disaster relief organizations and community safety efforts.

A schedule of Ham-Com/2003 ARRL National Convention programs is available on the Ham-Com Web site <<http://www.hamcom.org/programs/Programs.pdf>>.

==>40-METER "REALIGNMENT" TOPS WRC-2003 AMATEUR RADIO ISSUES

When delegates gather June 9 in Geneva, Switzerland, for World Radiocommunication Conference 2003 (WRC-03), Amateur Radio will enjoy robust representation. The International Amateur Radio Union (IARU) is looking to WRC-03 to resolve the longstanding issue of a harmonized worldwide 40-meter amateur allocation. In addition, the IARU has taken positions on several other issues of importance to hams.

B.V.A.R.A. QRM

"Forty meters is the biggie," says ARRL CEO David Sumner, K1ZZ, who will attend the month-long international assembly in the role of administrative officer of the IARU observer delegation headed by President Larry Price, W4RA. "It's complicated, controversial and involves multiple radio services, and there's simply no way of predicting what the outcome will be."

Citing its desire to "meet the needs of communications for humanitarian assistance," the IARU has expressed strong support for a realignment of the band to make available to hams globally 300 kHz of spectrum in the vicinity of 7 MHz.

While Region 2 amateurs--including US hams--now enjoy 7.000 to 7.300 MHz, hams in most of the rest of the world--Regions 1 and 3--may use only 7.000 to 7.100 MHz. Methods to get the issue off the dime must address the incompatibility arising from how, where and on what timetable the broadcasters in Regions 1 and 3 should be shifted to higher frequencies while continuing to meet the needs of fixed and mobile services in the band.

Other Amateur Radio-related agenda items include proposed revisions to Article 25 of the Radio Regulations. Article 25 details the requirements for Amateur Radio and includes the obligation to demonstrate Morse code proficiency to operate below 30 MHz. Sumner said he expects the WRC-03 delegates to delete the international requirement, although administrations could continue to require Morse proficiency if they wished to do so.

The IARU favors a revision to Paragraph 25.6 to incorporate an ITU Recommendation (ITU-R M.1544) by reference to establish a minimum international standard for Amateur Radio licensing. The IARU also supports adding new provisions urging administrations to take steps to allow amateur stations to prepare for and meet communication needs to support disaster relief and to permit individuals licensed in another country to operate temporarily while in their territory. The IARU also supports giving greater flexibility to administrations in the formation of Amateur Radio call signs.

Expressing concern over interference potential, the IARU opposes allocating any spectrum to the Earth Exploration Satellite Service (Active) to deploy spaceborne synthetic aperture radars (SARs) in the 430 to 440 MHz band. Amateur Radio is co-primary at 430 to 440 MHz in Region 1 and in several countries in Region 2.

As an observer at the conference, the IARU can only request that ITU member-states take its views into consideration when deciding on WRC-03 agenda items. ARRL has launched a special WRC-03 campaign <<http://www.arrl.org/defense>> to help generate the funds needed to continue the defense of Amateur Radio spectrum. Sumner said "unquantifiable thousands of hours by volunteers and staff members" have gone into WRC-03 preparations.

ARRL Technical Relations Manager Paul Rinaldo, W4RI, and ARRL Technical Relations Specialist Jon Siverling, WB3ERA, will serve on the US delegation. More than a dozen other Amateur Radio licensees are expected to be in Geneva to help represent Amateur Radio. WRC-03 concludes July 4. More information on WRC-03 is available on the ITU WRC-03 Web page <<http://www.itu.int/ITU-R/conferences/wrc/wrc-03/index.asp>> and on the FCC Web site <<http://www.fcc.gov/ib/wrc-03/>>.

==>HAMVENTION REPORTS ATTENDANCE DOWN IN 2003

Hamvention reported June 4 that attendance for this year's 52nd show was 22,168, down a bit more than 10 percent from last year's crowd. "This is based on the number of admission tickets issued and exhibitor and staff badges issued," said a statement from the office of Hamvention Production Manager Garry Matthews, KB8GOL. Matthews told ARRL that weather played a big factor in attendance this year.

"Our biggest contributing factor to the drop was the near-constant rain on Saturday," he said. "We had a whole day washed out."

On the plus side, Matthews said, Hamvention 2003 came close to selling out vendor spaces, and many vendors reported that they had a good year, despite the smaller crowd.

The 2003 number marks the third year in a row that Hamvention's attendance had dipped. Attendance at last year's 50th anniversary event was 24,832, down about 5 percent from 2001's crowd of 26,151. The crowd size climbed to 28,804 in 2000, the year of the ARRL National Convention at Hamvention.

Matthews said Hamvention expects to wrap up negotiations within the next three weeks on a new, two-year contract with Hara Arena, Hamvention's home since the 1960s. The anticipated contract, in conjunction with support from local hotels and motels and area municipalities, "would allow Hamvention to stay in the Dayton area for the foreseeable future," Matthews' office said.

Hamvention 2004 will be held May 14-16. For more information, visit the Hamvention Web site <<http://www.hamvention.org>>.

==>WRC-03 UNDER WAY IN GENEVA

The International Telecommunication Union's (ITU) World Radiocommunication Conference 2003 got under way June 9 in Geneva, Switzerland. More than 2600 delegates and other participants are expected to attend the four-week conference, chaired by Dr Veena Rawat of Canada.

"Several items on the conference agenda are of great importance to radio amateurs, so the International Amateur

B.V.A.R.A. QRM

Radio Union has fielded its largest team of observers at an ITU conference in more than a decade," noted IARU Secretary (and ARRL CEO) David Sumner, K1ZZ, who's part of the IARU delegation in Geneva. In addition to Sumner, the core IARU team consists of IARU President Larry Price, W4RA, Wojciech Nietyksza, SP5FM, Michael Owen, VK3KI, and Ken Pulfer, VE3PU. Past ITU Radiocommunication Bureau Director Robert W. Jones, VE7RWJ, is serving as a consultant to the IARU.

Approximately a dozen other radio amateurs representing their national IARU member-societies are participating on national delegations, along with members of IARU regional executive committees who are serving on delegations and in other capacities. Dozens of other radio amateurs are present at WRC-03 in a wide range of professional capacities.

Amateur Radio is but a small part of the conference, which is trying to complete work on more than 40 agenda items. Three are especially important to Amateur Radio: Realignment of 7 MHz allocations, revision of the regulations governing the amateur and amateur-satellite services--including the Morse code requirement for HF operation, and consideration of an allocation for satellite-borne synthetic aperture radars (SARs) in the 70-cm band.

Two other agenda items with potentially great impact are the drafting of an agenda for the next WRC, scheduled for 2007 and the revision of footnotes to the Table of Frequency Allocations. A member of the IARU core team has been assigned to follow each of these five items, but the greatest focus is on 7 MHz, Sumner said.

Committee 4, chaired by Germany's Eberhard George, DL7IH, is handling the critical agenda items for Amateur Radio except for the SARs request.

Sumner said that, while there's been plenty of informal discussion about the issues, no final decisions have been made yet. "It is important to remember that nothing is final until the second reading of a document in the Plenary, which--in the case of controversial issues--will not take place until the final week of the conference, June 30-July 4," he said.--IARU news release

==>ON THE ROAD FOR ARISS

Three new hams based at NASA's Johnson Space Center (JSC) have been spending more than two-thirds of their workdays on the road highlighting Amateur Radio on the International Space Station (ARISS) and other NASA-supported educational programs. Aerospace education specialists for the NASA Aerospace Education Services Program (AESP) headquartered at JSC, the ham trio's combined territory includes Texas, Oklahoma, Kansas, Nebraska, North Dakota, South Dakota, New Mexico and Colorado. Forty education specialists work out of NASA

regional centers nationwide, serving kindergarten through college-level educators.

"NASA personnel are involved in amazing research and engineering programs truly unique to the agency," said Ota Lutz, KD5UQZ <lutz@aesp.nasa.okstate.edu>, whose territory includes Kansas and Nebraska. "The opportunity to share a glimpse inside those programs with education audiences and observe the excitement it generates provides my greatest source of satisfaction."

Lutz, Joan Sanders, KD5UQW <jsanders@aesp.nasa.okstate>, and Angelo Casaburri, KD5UQS <casaburri@aesp.nasa.okstate.edu>--and Linus Guillory <linus@aesp.nasa.okstate>--travel to schools and museums as AESP representatives. Casaburri's area is North and South Dakota, while Guillory's is Colorado and Oklahoma.

AESP specializes in providing free professional development workshops for teachers of science, mathematics, geography and technology. Workshops introduce participants to hands-on activities and NASA curriculum support materials.

Lutz, Sanders and Casaburri studied for and passed their licensing exams in December, not only because they have a lot of respect for Amateur Radio but because they believe in the benefits of the ARISS program. "ARISS offers lots of opportunities, has a fairly simple application procedure and an in-place support network--local ham clubs--and is available to nearly anyone, regardless of geographic location," Lutz said.

Fellow aerospace education specialist Sanders agreed. "Without exception, the men and women of the Astronaut Corps are heroes to school children," said Sanders, who travels in Texas and New Mexico. "Amateur Radio makes contact possible with our astronauts on orbit for audiences around the world, and it provides a method of direct access that otherwise may be impossible."

They've found that teachers respond very positively to the their presentations. As Lutz explained, "Our focus is on providing inquiry-based hands-on activities that are aligned with state educational standards and utilize inexpensive materials. NASA Enterprise topics are the driving theme, so our material is current and of high interest to students, teachers and the general public."

NASA's Aerospace Education Services Program began in 1961. Oklahoma State University, the current contract administrator, recently approved the three new hams for a portable ham station to take on the road. The aerospace education specialists want to give teachers an idea of how easy it is to operate a ham station, and they're hoping local radio club members will partner with schools.

Amateurs may check the NASA AESP Web site <<http://aesp.nasa.okstate.edu/jsc/aesp>> and the OSU AESP

B.V.A.R.A. QRM

Web site <<http://www.okstate.edu/aesp/AESP.html>> to learn what the specialists have to offer and where they expect to be during the summer.--Rosalie White, K1STO

==>FCC WRITES PART 15 DEVICE USERS ABOUT ALLEGED INTERFERENCE TO AMATEUR

Hold the phone! The FCC has written two Northern Virginia residents to follow up on complaints from a local amateur who's alleging that he's on the receiving end of harmful interference from telephone devices with the capability to support multiple cordless remotes. Both are unlicensed Part 15 consumer electronics devices made by a well-known manufacturer. The complaints from Bernie Keiser, W4SW--an ARRL member in Vienna, Virginia, near Washington, DC--represented a bit of a turnabout from the typical interference scenario, where ham operation occasionally generates complaints of interference to cordless consumer equipment. "Harmful interference to a licensed radio service from a Part 15 device is a violation of FCC rules," warned Sharon Bowers, deputy chief of the Consumer Inquiries and Complaint Division of the FCC's Consumer and Governmental Affairs Bureau. Bowers explained that the equipment was classified as an "intentional radiator"--a device that generates an RF signal as part of its normal operation. In separate letters June 2 to the two Part 15 users--both also Vienna residents--she pointed out that if their cordless telephone devices cause harmful interference to licensed spectrum users, "the operator of the device is responsible for correcting the interference, ceasing operation, if necessary, whenever such interference occurs."

Keiser told ARRL that the interference--in the form of broadband noise from 2400 to 2450 MHz--impairs his ability to hear the AO-40 downlink and beacon on the band. "I have a 2.4-GHz cordless telephone that does not cause problems," he said. According to Keiser, the devices in question electronically poll various remote stations, and it's the polling function that apparently causes the noise. He was able to track down the noise sources on his own and has discussed the issue with his neighbors, with whom, he says, he remains on friendly terms. He said the owner of the device that's causing the worst interference is a communications attorney who understands the problem and hopes to deal with it through the manufacturer.

In her letters, Bowers cited the applicable sections of Part 15 and advised that the alleged harmful interference must be corrected before they may use the devices legally. She suggested the consumers contact the manufacturer or retailer of the devices to see if they'd either allow them to return them or exchange them for devices that don't cause interference.

==>60-METER RULES ADD NEW RECORD-KEEPING REQUIREMENT

When the five new 60-meter channels become available to US Amateur Radio operators at midnight (12 AM) local time on

July 3, the rules will impose a new record-keeping requirement for hams. The requirement applies only to those using something other than a simple half-wave dipole for an antenna on the 5-MHz allocation.

According to §97.303(s), a half-wave dipole on the 5 MHz allocation will be presumed to have a gain of 0 dBd. "Licensees using other antennas must maintain in their station records either manufacturer data on the antenna gain or calculations of the antenna gain," the newest addition to the FCC's Amateur Service rules says.

Because the new rules also require hams to run no more than 50 W effective radiated power (ERP) on the new channels, the choice of antenna becomes an important compliance factor. The FCC rules stipulate, "For the purpose of computing ERP, the transmitter PEP will be multiplied with [sic] the antenna gain relative to a dipole or the equivalent calculation in decibels."

If you use a half-wave dipole--about 87 feet 3 inches for the "middle" channel according to the formula--setting your transmitter's power output power at up to 50 W peak envelope power (PEP) should ensure compliance.

Under no circumstances may amateurs on 5 MHz radiate more than 50 W ERP in any direction, so those choosing to employ gain antennas will have to "do the math" and calculate their ERP. They also will have to keep a record of such antenna gain calculations on file. This might include documentation such as output from a computer modeling program for a homebrew antenna design. For example, an amateur using an array for 5 MHz exhibiting a calculated or modeled gain of 3 dB would have to cut power to 25 W PEP to comply with the new rules.

Operating on 60 meters is the subject of the July 2003 QST "It Seems to Us . . ." editorial <<http://www.arrl.org/news/features/2003/07/01/1/>> by ARRL CEO David Sumner, K1ZZ. "If we demonstrate that we can use [the 60-meter channels] responsibly, cooperatively and in the public interest, there is no reason we cannot seek expanded access at an appropriate time," Sumner wrote. "If your personal operating practices are inconsistent with that, please do yourself and everyone else a favor and confine your operating to the traditional bands."

The FCC Report and Order in ET Docket 02-98 is available on the FCC's Web site <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-05A1.doc>. The ARRL has posted a list of frequently asked questions concerning 5 MHz operation on the ARRL Web site <<http://www.arrl.org/FandES/field/regulations/faq.html#sixty>>.

==>AMATEUR RADIO ON THE INTERNATIONAL SPACE STATION LOGS 100TH SCHOOL CONTACT

The Amateur Radio on the International Space Station (ARISS) program reached a milestone June 12 with its 100th

B.V.A.R.A. QRM

school group contact. Doing the honors was Expedition 7 NASA Science Officer and Flight Engineer Ed Lu, KC5WKJ. Lu took the controls of NA1SS aboard the space outpost to answer a dozen questions from students gathered at Lively District Secondary School in Sudbury, Ontario, Canada.

"I would choose to go on a mission to Mars," Lu told the students, answering a question about what mission he would pick if he had the choice. "Because I think that's the place in our solar system that has the best chance of having life besides our Earth, and I would love to go there to try and find that." Lu said that while a human spaceflight mission to Mars is not yet on NASA's schedule, he hopes to one day have the opportunity to journey there. "Maybe one of you kids down there will get a chance to do it if I don't get to go."

Lu says he sees a lot of things that are "incredibly interesting" from his vantage point in space, including looking down at Earth and viewing the northern and southern lights. But he said he hasn't been inspired to want to live in space indefinitely.

Aboard the ISS since late April, Lu is part of the first two-person crew headed by Expedition 7 commander Yuri Malenchenko, RK3DUP. They arrived aboard a Russian Soyuz vehicle, which also serves as the escape vehicle for ISS crew members. The Expedition 7 crew is scheduled to return to Earth in October.

Asked whom he would like to have accompany him into space if he could pick one person, Lu replied, "If I could bring one person with me, it would be my fiancée, and if I said anything else, boy would I be in trouble."

On Earth, Steve Gorecki, VE3CWJ, served as control operator. He had assistance from members of the Sudbury Amateur Radio Club, who helped to install antennas on the roof of the school's gymnasium and equipment inside. Students participating in the contact came from several area schools.

"It definitely had an impact on the kids," Gorecki told ARRL after the contact, "but it only dawned on them later what they'd actually done." Students involved were in grades 7 through 12.

On June 14, pupils at another Canadian school--École primaire de l'Apprenti-Sage in Québec--enjoyed a successful ARISS contact. Among other topics, the primary schoolers wanted to know how long Lu would be in space, if it hurt during liftoff on the Soyuz, his favorite activities in space and how the crew "drives" the ISS. Youngsters at the school had been studying space and space-related topics leading up to their scheduled contact. Members of the Club Radio Amateur de Québec (VE2CQ) <<http://www.craq.qc.ca/>> set up and managed the Earth station for the direct contact.

Gaëtan Trépanier, VE2GHO, handled control op duties as some 500 students and visitors looked on. A dozen students each got to ask a question before the ISS zipped over the

horizon. "It was a resounding success," said Daniel Lamoreaux, VE2KA, the Radio Amateurs of Canada Quebec director who was on hand for the event. Lamoreaux is a member of the ARISS Educational Outreach/School Selection Committee.

On June 18, students at Kuise Elementary School in Amagasaki, Japan, chatted with Lu during a direct contact between NA1SS and 8N3ISS. Among other topics, youngsters wanted to know what country's time the crew followed aboard the ISS, whether zero gravity was "convenient" and if zero gravity changed the intensity of odors.

ARISS is an international project with participation by ARRL, NASA and AMSAT.

==>WELL-KNOWN CONTESTER, DXer DIES IN FALL FROM TOWER

Well-known contesteer and DXer Steve Miller, N8SM (ex-WD8IXE), of Prosper, Texas, died June 15 as a result of a fall while working on his Amateur Radio tower. He was 38. An ARRL member, Miller had extensive experience in tower work and antenna installation. With the assistance of several other hams, Miller had erected a 136-foot tower on his property and installed several antennas as part of his overall effort to build a competitive contesting station.

Details of the mishap that claimed Miller's life are not available. According to unofficial accounts, Miller had been working on his tower the morning of June 15, and, after a lunch break, told his wife, Radhicar, that he had another hour's work left. Later, she heard a noise from the yard and found her husband lying on the ground. Miller's wife called 911, but the rescue squad was unable to revive him.

ARRL antenna guru Dean Straw, N6BV--who had corresponded with Miller on several topics--was among those expressing shock and sadness at his death. "Steve was always most responsive, and he always had the most intelligent comments and questions concerning whatever technical topic we were discussing," said Straw. "I will miss his innate, contagious enthusiasm."

First licensed as WD8IXE in 1977 at the age of 12, Miller--an Ohio native--enjoyed contesting and DXing. He was routinely active during the CW weekends of the CQ World Wide, ARRL International DX and ARRL November Sweepstakes events. He also operated as J68AG from St Lucia in the Caribbean and participated in a few DXpeditions, including several stints as a member of the J6DX team in the 1980s and 1990s. He was an ARRL DXCC Honor Roll member, with 332 entities confirmed (mixed).

In addition to ARRL, Miller belonged to the North Texas Contest Club <<http://www.qsl.net/ntcc/>> and 10-10 International <<http://www.ten-ten.org/>>. Besides ham radio, he enjoyed playing jazz saxophone.

B.V.A.R.A. QRM

An Ohio State graduate, Miller worked for Texas Instruments as part of its broadband wireless access group in Dallas. Survivors include his wife and their young daughter. A memorial service was held June 19.

==>HAM'S TICKET SET ASIDE AS FCC INVESTIGATES ALLEGATIONS OF FALSE DISTRESS CALLS

The FCC's Wireless Telecommunications Bureau (WTB) has set aside the nearly month-old Technician-class license of a California man while it looks into allegations that the now-former licensee may have made false marine distress calls. In a June 3 letter, FCC Special Counsel Riley Hollingsworth notified Michael V. Swift of San Ramon of the WTB's action--taken on the bureau's own motion. The FCC granted Swift the call sign KG6QOB on May 1 and canceled his ticket May 29.

In his letter, Hollingsworth said the cancellation was "based upon evidence that you made numerous false distress calls on Channels 16 and 22A Marine frequencies." Hollingsworth warned Swift that in view of the WTB's action, he had no authority to operate Amateur Radio transmitting equipment.

Hollingsworth told ARRL that agents in the FCC's San Francisco office--in cooperation with the US Coast Guard--reportedly tracked transmissions on the marine channels to Swift's residence, where they interviewed him.

The FCC also sent a Warning Notice May 30 to Ronald E. Shapiro, N2CQT, of Kerhonkson, New York, citing information alleging that the licensee "deliberately interfered with and harassed operators on 3.906 MHz" on May 24.

"It appears that you were operating under some type of impairment," Hollingsworth wrote, "and during the transmissions played music, made transmissions to no one in particular and deliberately transmitted on top of ongoing communications." The FCC alleges the transmissions, which began at about 1 AM, continued for almost an hour.

Hollingsworth gave Shapiro 20 days to explain the circumstances of the operation detailed in the Warning Notice.

==>MARS OPERATIONS BEGIN IN IRAQ; MORE OPERATORS SOUGHT

The Military Affiliate Radio System (MARS) is poised to start the flow of messages between troops in Iraq and Kuwait and their families and friends back home. The first MARS licenses have been issued to soldier stations in Iraq and Kuwait, and a broad range of frequencies has been assigned for MARS use. MARS also is operational in Afghanistan.

Daniel Wolff, assistant affiliate MARS coordinator for Europe, Africa and Southwest Asia, reports that four soldier

licenses had been issued as of June 1 but he hopes there will be many more as active hostilities continue to wind down. These new operations will open up MARSgram and phone patch communications for troops stationed beyond the reach of e-mail and cell phones. Just about every company-size unit overseas has high frequency radio equipment in house--or, more likely, "in tent."

While preparedness to provide emergency or contingency communications backup now occupies first place, handling "morale and welfare traffic" is another role MARS members still can play. The only drawback is the shortage of stations to receive it. MARSgrams are being handled at least one-way. Those addressed to Iraq or Kuwait are transmitted by radio to the nearest MARS gateway station, then refiled into the Military Postal System for delivery. This shaves days or weeks off the time it takes a message going by mail.

Information on sending MARSgrams is available on the Army MARS Web site <<http://www.netcom.army.mil/MARS>>. Now that most hostile action has ceased, Wolff says, MARS should be among the organizations assuming a humanitarian and support role--if only there were more stations in the region.

FCC-licensed amateurs may apply for an overseas MARS license much as they would in the US, except that some additional information is required. Commanding officers may also apply for a MARS station license for their units and are exempt from the FCC Amateur Radio license requirement, he explained. Full information and application forms are available to overseas applicants by e-mailing Wolff <aem1wf@qsl.net> or for US amateurs by visiting the US Army MARS Web site <<http://www.netcom.army.mil/MARS>>.—Bill Sexton, N11N/AAA9PC

==>AMATEURS "FIRST OF THE FIRST RESPONDERS," DHS OFFICIAL SAYS

ARRL now is an official affiliate program of Citizen Corps <<http://www.citizencorps.gov>>, an initiative within the Department of Homeland Security <<http://www.dhs.gov/dhspublic/>> to enhance public preparedness and safety. ARRL President Jim Haynie, W5JBP, signed the formal Statement of Affiliation between DHS and ARRL during the ARRL 2003 National Convention June 21. Chief Operating Officer of the Emergency Preparedness and Response Directorate (FEMA) Ron Castleman represented Under Secretary for Emergency Preparedness and Response Michael D. Brown at the signing. Citizen Corps Liaison to the White House Liz DiGregorio called ham radio operators the "first of the first responders."

"You are there. You are part of that very, very first response when it happens locally," especially in the initial stages of an emergency or disaster, DiGregorio told an overflow audience. She urged amateurs to explore ways to expand their role in the community beyond being the last resort when other

B.V.A.R.A. QRM

communication systems fail. "You need to show your community that you're engaged," she said. "They need to know as a community that ARRL is there."

Castleman said his agency really needs Amateur Radio's help. "Hams have a long and distinguished history of assisting and cooperating with FEMA," he said. He said FEMA wants to continue to work with Amateur Radio operators as partners and expand hams' community safety role. "We also want to help prepare every citizen across our country before disaster strikes," Castleman said.

The League joins the National Safety Council, Points of Light Foundation, National Voluntary Organizations Active in Disaster, National Volunteer Fire Council, National Fire Protection Association, Save A Life Foundation and The Jaycees as Citizen Corps affiliate programs.

The SoA calls on DHS and ARRL to raise public awareness of Amateur Radio as a safety resource. "That's what you are all about, and we need a safer America," DiGregorio said.

In addition, DHS and ARRL will cooperate in providing training and accreditation for Amateur Radio emergency communications. They also will work together to promote the formation of local Citizen Corps councils and assist them with education, training and volunteer service opportunities "that support first responders, disaster relief organizations and community safety efforts." As an affiliate, ARRL will be linked from the FEMA and Citizen Corps Web sites.

"We need you, and you need us, and we want to work together with you to make this all happen," DiGregorio concluded, "because we all share the same goal, and that goal is a better, stronger, more secure America."

The ARRL National Convention 2003 was held in conjunction with Ham-Com <<http://www.hamcom.org>> in Arlington, Texas. FEMA announced the SoA signing on its Web site <http://www.fema.gov/nwz03/nwz03_138.shtm>.

==>NO MORSE CODE CONTROVERSY AT WRC-03

Whatever else happens at World Radiocommunication Conference 2003 (WRC-03), there's no mystery about the delegates' direction regarding the Morse code requirement. Morse code proficiency will disappear as a treaty obligation for high-frequency access when the International Telecommunication Union (ITU)-sponsored gathering under way in Geneva concludes July 4.

"One matter on which there appears to be no disagreement is the Morse requirement," said International Amateur Radio Union (IARU) Secretary (and ARRL CEO) David Sumner, K1ZZ, in a report <<http://www.iau.org/re1030623.html>> on the second week of activity at WRC-03. "It is clear that the outcome will be to leave it to administrations' discretion whether or not to have a Morse receiving and sending

requirement." He said no administration participating in the sub-working group spoke in favor of retaining the Morse code treaty requirement.

The modification of Article 25.5 of the international Radio Regulations cleared Working Group 4C on June 24. Working Group 4C is dealing with this and other proposals relating to Article 25. The modified text says, "Administrations shall determine whether or not a person seeking a license to operate an amateur station shall prove the ability to send and receive texts in Morse code signals."

It's possible but unlikely that the text would be tinkered with further at the committee level or even in the Plenary, which considers items for adoption. Sumner said delegates continue to wrangle over other aspects of Article 25, which defines Amateur Radio operation.

Adoption of the Article 25.5 modification would not mean the immediate disappearance of the Morse requirement to operate on the amateur bands below 30 MHz. Each administration, including the FCC, would then decide whether or not to drop the requirement from its domestic regulations. Some countries have indicated a desire to retain a Morse code requirement.

Sub-working groups this week funneled their reports to larger working groups assigned to tackle various pieces of the huge WRC-03 agenda. More than 2600 delegates and other participants are attending the four-week conference. For WRC-03, the IARU has fielded its largest team of observers at an ITU conference in more than a decade.

There's less consensus on efforts to secure a "harmonized" 300-kHz-wide amateur allocation at 7 MHz. Sumner said initial discussions in Sub-Working Group 4C1 "were spirited and reflected sharp differences of opinion" between those advocating realignment and those favoring no change out of deference to the disruption that any realignment would cause broadcasting services now occupying 7.1 to 7.3 MHz in Regions 1 and 3, and the fixed services above 7.3 MHz that would be affected by any upward shift in broadcasting. Amateurs in the US and the rest of Region 2 enjoy a 300-kHz allocation from 7.0 to 7.3 MHz, but hams in the rest of the world, Regions 1 and 3, have only 7.0 to 7.1 MHz.

Three alternative proposals have been passed on to Working Group 4C. "The largest group favored realignment in two stages," Sumner explained. That group included the US, CEPT, CITEL and the African Telecommunications Union. The two steps would expand the band in Regions 1 and 3 by 100 kHz in 2007 and add the remaining 100 kHz in 2015. Other plans put forth contained longer time lines. By week's end, Sumner said, the issue could be passed on to Committee 4 and then to the Plenary, where items need two readings for ultimate WRC-03 approval.

B.V.A.R.A. QRM

The issue of an allocation for satellite-borne synthetic aperture radars (SARs) in the 70-cm band (432-438 MHz) also appears well on the way to resolution. "While it appears very likely that there will be an allocation, it will be secondary," Sumner explained.

Full reports on WRC-03 activities are available on the IARU Web site <<http://www.iaru.org/news-releases.html>>.

==>LEAGUE WARNS OF BOGUS QST SOLICITATIONS

Someone has been attempting to sell "subscriptions" to QST, but it's not the ARRL. ARRL Customer Service/Circulation Manager Kathy Capodicasa, N1GZO, reports she's received several telephone calls and e-mails from members reporting the scam.

"Apparently, there is some kind of bogus telephone solicitor out there trying to get people's names, addresses and credit card numbers," she said. "ARRL does not solicit for 'subscriptions' to QST." She warned that under no circumstances should a member give out a credit card number to someone trying to sell them QST over the telephone.

As the official membership journal of the ARRL, QST is not available to the general public from a magazine distributor or outside publishing house. Capodicasa advises those getting calls from the phony solicitor to try to get the solicitor's name and to check the caller ID box, if they have one, to obtain the caller's number. She requested that members share any such information with her via e-mail to n1gzo@arrl.org or telephone, 860-594-0257.

==>IN BRIEF:

*** Echo satellite a no-go for 2003 launch:** AMSAT-NA President Robin Haighton, VE3FRH, says launch of the ECHO Amateur Radio satellite now under construction will be delayed about six months, so the satellite will not be launched this year as previously hoped. "This is not an AMSAT delay, but we have learned that the launch organization does not have a primary payload for their fall launch," Haighton said in this month's "President's Letter" via AMSAT News Service. "On the positive side, it gives us a few more months to complete the work on ECHO, complete the software and complete the tests. It may also slightly reduce our overall launch costs."--AMSAT News Service

Material from The ARRL Letter may be republished or reproduced in whole or in part in any form without additional permission. Credit must be given to The ARRL Letter and The American Radio Relay League.