

Di-Dah-Dit

Official Newsletter of the Parkersburg Radio Klub 1733 Gihon Rd. Parkersburg, WV 26101

FCC ADOPTS RULE CHANGES FOR "SMART RADIOS"

The FCC has released a Report and Order (R&O) on cognitive or "smart radio" systems. In its 42-page R&O, "Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies" (ET Docket 03-108), the Commission declined to adopt any new regulations for Amateur Radio transceivers or for digital-to-analog (D/A) converters "at this time."

The ARRL and the National **Public Safety Telecommunications** Council had commented earlier on the impracticality of incorporating hardware features to prevent out-ofband transmissions. The League, AMSAT-NA and TAPR also opposed regulating the marketing of high-speed D/A converters as burdensome, more costly to consumers and unnecessary because the devices don't pose a risk of interference. "No parties have provided any information that shows that software programmable amateur transceivers or high-speed D/A converters present any significantly greater risk of interference to authorized radio services than hardware radios," the FCC concluded in its R&O.

The Commission went on to note that "certain unauthorized modifications of amateur transmitters are unlawful" and that it may revisit the issues "if misuse of such devices results in significant interference to authorized spectrum users."

In its December 2003 Notice of Proposed Rule Making (NPRM) leading up to this month's R&O, the FCC had proposed exempting manufactured software defined radios (SDRs) designed to operate solely in amateur bands from any mandatory declaration and certification requirements, provided the equipment incorporated hardware features to prevent operation outside of amateur bands. The Commission also had sought comment on the need to restrict the mass marketing of D/A converters "that could be diverted for use as radio transmitters." In its comments last May, the ARRL sympathized with the Commission's concerns about out-of-band operation and expressed its appreciation for the FCC's "sensitivity to the need to encourage, rather than discourage, amateur experimentation and innovation." But, the League characterized the FCC's fears as "overstated "

The Commission said its R&O, released March 11, is intended to "facilitate continued growth in the deployment of radio equipment employing cognitive radio technologies and make possible a full realization of their potential benefits." The hope is that cognitive

radios will allow more-efficient use of the radio spectrum. "Given their technical and operational flexibility, smart radios make possible the improved use of vacant spectrum channels--that is, spectrum that may be available in a specific frequency range at a particular geographic location or during a particular period of time--spectrum that would otherwise go unused," the FCC explained in a Public Notice.

"Smart radios have the technical capability to adapt their use of spectrum in response to information external to the radio." ARRL participates in international bodies that are currently working toward establishing standards for SDRs and cognitive radios. These include International Telecommunication Union (ITU) Working Parties 8A (Land Mobile Service, excluding IMT-2000; Amateur and Amateur-Satellite service) and 8F (IMT-2000 and systems beyond IMT-2000). The R&O is available on the FCC Web site http://hraunfoss.fcc.gov/ edocs public/attachmatch/FCC-05-57A1.doc>

Meeting Change!
Our Meeting place has changed due to the closing of Bonanza.
Meeting is at Shoney's on RT. 50 same time and day of month.

New TrustedQSL software released for Logbook of the World:

Version 1.11 of the TrustedOSL software used with ARRL's Logbook of the World system now is available. Windows, Linux and Mac OS users are encouraged to update their systems. The new version fixes a serious bug that affected Linux and Mac OS X versions of the software. This bug caused users' saved certificate (.P12) files to be corrupted. Linux and Mac OS X users are strongly advised to install the new version of the TrustedOSL software and save all existing certificates into .P12 files. Older .P12 files saved from these systems should be discarded. Windows users of the TrustedOSL software should update to the new version, in part because the updated Windows version of the TOSL program now signs log data much faster. Instructions for downloading and installing the software are available on ARRL's LoTW Web page http://www.arrl.org/lotw">.

FCC MORSE, RESTRUC-TURING PROPOSALS COULD HIT THE STREET BY MID-YEAR

The FCC continues to work toward developing a Notice of Proposed Rule Making (NPRM) that will spell out what the Commission has in mind with respect to possible changes in the current Morse code requirement and Amateur Radio licensing.

A total of 18 petitions have been filed, including one from the ARRL, seeking Part 97 rule changes addressing the future of the 5 WPM Morse requirement (Element 1) and revisions to the overall Amateur Radio licensing structure. The FCC is planning to tackle all 18 rulemaking petitions within the framework of a single proceeding.

As far as the code issue is concerned, petitions--and comments in response to them--run the gamut from retaining or even beefing up the Morse requirement to eliminating it altogether. (The AR-RL's proposal would retain the 5 WPM Morse examination for Amateur Extra class applicants only.) The League and others have also put forth proposals for a new entry-level Amateur Radio license class.

At this point, personnel in the FCC Wireless Telecommunications Bureau are continuing to review the thousands of comments filed on the 18 petitions. While the FCC appears unlikely to release an NPRM any sooner than mid-2005, the issue still may be a major discussion topic during the FCC Forum at Dayton Hamvention, May 20-22.

Once public, the NPRM will initiate yet another round of public comments--this time on what the FCC has proposed. An FCC Report and Order to implement any new rules regarding Morse code and license restructuring is unlikely before the second half of 2006, although it's possible the Commission could wrap up the proceeding before then.

Do not forget meeting change to Shoney's on old Rt, 50

ARRL OFFERING FREE BASIC ELECTRONICS PRESENTATION

The ARRL Education and Technology Program is offering schools and clubs a CD-ROM presentation on basic electronics. The instructional presentation is available free of charge upon request.

"The Basic Electronics Course is intended for teachers and instructors who want a ready resource they can adapt to their instruction of electronics fundamentals," says ARRL Education and Technology Coordinator Mark Spencer, WA8SME. "The materials include a PowerPoint presentation and instructor's script."

Spencer says the course is designed around affordable components, a prototyping board and a volt-ohmmeter (VOM). The recommended text is Understanding Basic Electronics http://www.arrl.org/catalog/?category=&words=3983>.

"The course covers the very basics up to Ohm's Law and then touches on other components like capacitors, coils, diodes and transistors-components common to virtually all electronic circuits," Spencer explains. He says teachers or instructors can use the presentation "as is" with the script or "cut and paste and roll their own" course.

"The course should take on the order of 10 hours to present," he notes. The PowerPoint presentation is on the order of 19 MB, so it is being made available on CD-ROM by request. Spencer has included a parts list and source. Those with high-speed Internet connections may wish to download the PowerPoint presentation http://www.arrl.org/FandES/tbp/Basic-Electronics-for-the-New-Ham.ppt and the Instructor's Script MS-Word document http://www.arrl.org/FandES/tbp/Basic-Electronics-Script.doc.

NOTE - All items in news via ARRL unless otherwise noted.

PARKERSBURG AMATEUR RADIO KLUB

February 14, 2005

The Parkersburg Amateur Radio Klub held their monthly meeting at the Bonanza Steak House on Pike Street with President Blaine Auville (WA8IOE) presiding.

There was an introduction of 41 members and guests.

Brenda Lyons won the 50/50 drawing of \$24.50.

The Secretary's minutes were read and approved for the January meeting.

The Treasurer's report was given by Ray Johnson (KC8RUJ) current balance of \$4285.27.

It was reported by Curt Fouse (K8UC) that the paperwork for SERA had been sent in.

Ray Bodie (N8TWV) reported that he turned in the order for PARK Klub jackets and is still accepting orders. The price is \$21 plus tax, \$22.26 total, and 2X & larger are \$2 more.

Lloyd Boston (AB8KS) continuing to work on getting the Klub a copier.

Insurance for the Klub equipment continuing to be worked on by Curt Fouse (K8UC) and Lloyd Boston (AB8KS).

Lloyd Boston (AB8KS) and Dan Betts (N8OG) will help with making plans for Field Day. Connie Hamilton (N8IO) advised that some changes and should be checked on through ARRL.

Jeff Palmer (K8BOT) reported the repeaters are running good.

Irene Fouse (N8KYP) reported on Georgia Milhoan and a get well card was sent.

Connie Hamilton (N8IO) reported upcoming Ham fests.
Charleston - March 19

Toledo - March 18 & 19
Fayetteville - Feb.27
Cuyahoga Falls - April 17
Athens - April 24
Dayton - May 19, 20 & 21
Connie Hamilton (N8IO) also advised that BPL is a dead issue and that the 8th area call district bureau has moved from Columbus to Cincinnati.

Application for Lloyd Marcum (KD8AGK) was read Blaine Auville (WA8IOE). Connie Hamilton (N8IO) moved to accept the application, 2nd by Harold Dooley (N8KO). Application accepted.

Application for Mark Komperda (KB9LQN) to be read next month he also has offered to set up a web site for the PARK KLUB. Will be discussed further at the next meeting.

W5YI testing will be at the 911 Center, Core Rd. 2nd Saturday in April. Registration at 6:00 p.m., testing at 6:30 p.m.

For Show & Tell Dan Betts (N8OG) & David Mays (W8UI) brought their Elecraft K-2's.

Motion to adjourn made by Jeff Palmer (K8BOT), 2nd by Bob Lloyns (KB8EFB).

PARKERSBURG AMATEUR RADIO KLUB

March 14, 2005

The Parkersburg Amateur Radio Klub held their monthly meeting at the Bonanza Steak House on Pike Street with President Blaine Auville WA8IOE) presiding.

There was an introduction of 35 members and guests.

Libby Auville (KA8FUA) won the 50/50 drawing of \$23.00.

The Secretary's minutes were read and approved for the February meeting.

The Treasurer's report was given by Ray Johnson (KC8RUJ) current balance of \$4509.27.

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It was decided that mowing at the repeater site would be 1st Thursday of each month at 9:30am starting in April.

Field Day – Dan Betts (N8OG) and Lloyd Boston (AB8KS) continue the coordination of field day.

Jim Palmer (K8BOT) listed the PARK Klub on World Radio.

Hamfests – Cuyahoga Falls, OH – April

Athens, OH - April 24 Ripley, WV - May 1 Dayton, OH - May 20-21-22 Butler, PA - June 5

Copier - Lloyd Boston (AB8KS) continuing to work with his contact for the free copier for the Klub.

Insurance – Curt Fouse (K8UC) advised the last paper he saw was for liability insurance not equipment It appears we have no insurance on the equipment.

Next monthly meeting – After discussion a motion was made to have the next meeting at Shoney's on Route 50 at the same time, by John Dobson (W8WEJ) & 2nd by Georgia Millhoan.

Show & Tell – Silent/Automatic Keyer & Antenna Tuner.

Connie Hamilton (N8IO) announced the Great Lakes Convention & Hamfest - March 19th in Toledo, OH.

Jim Palmer (K8BOT) made a suggestion to put a GAS-FET pre-amp on the 97 repeater. Motion was made by Curt Fouse (K8UC) to purchase the pre-amp for the repeater. Motion 2nd by Connie Hamilton (N8IO).

Meeting adjourned by, President Blaine Auville (WA8IOE).

Minutes by Secretaries – Mike Davis (KC8SIP) & Pam Davis (KC8VPN)

SOYUZ A SMOOTHER RIDE THAN SHUTTLE, AS-TRONAUT TELLS STU-DENTS

Youngsters attending St John's School in Houston, Texas, used ham radio to pose 15 questions about life in space to International Space Station (ISS) Expedition 10 Commander Leroy Chiao, KE5BRW. For Chiao, the contact February 23 between NA1SS and W5RRR--the club station at the Johnson Space Center (JSC)--was a way to "phone home," in a manner of speaking.

The QSO was arranged through the Amateur Radio on the International Space Station (ARISS) program. One student was curious about the differences between traveling into space aboard the Russian Soyuz vehicle and the US space shuttle.

"The Russian rocket, because it doesn't use solid-rocket boosters, is actually much smoother. It's liquid engines the whole time and just feels a little bit different," Chiao explained. "Also, because it's a missile--not a winged vehicle like the shuttle--the actual trajectory is a little bit different that than of the shuttle, so we actually pull a few more Gs. We get up to about four and a half Gs as opposed to three Gs on the American space shuttle." So-called "G" forces refer to the force of gravity during acceleration.

Both spacecraft convey crews into space--the Soyuz can hold three passengers, while the shuttle can accommodate a crew more than twice that size, and both take the same amount of time to get into space--about eight and a half minutes, Chiao pointed out. The Soyuz vehicles have been the sole means of transporting crews to and from the ISS since NASA grounded its shuttle fleet following the 2003 shuttle Columbia tragedy. As a result, ISS crew complements dropped from three to two members. NASA hopes to return the shuttle to flight this summer.

Chiao said haircuts and shaving in zero gravity present minor challenges to the ISS crews. "For haircuts we do have an attachment we hook up to the vacuum cleaner to keep the hairs from flying all over the place when we cut each other's hair, and so we've both become amateur barbers," he told the students. Chiao said that for shaving, the crew has a choice of electric razors or blades.

The Expedition 10 Commander also said humans are naturally curious and explorers. "We want to know what's on the other side of that mountain," he said.

St John's teacher Rene Wright thanked Chiao for selecting the school for an ARISS school group contact. "For us it has been the experience of a lifetime," she said. Chiao allowed that the contact was a real pleasure for him and that it was "great to be talking to home again."

Ten St John's students ranging from elementary through high school age participated in the QSO. Looking on were some 400 students, teachers and parents. The Johnson Space Center's Nick Lance, KC5KBO, served as control operator for the contact. ARISS http://www.rac.ca/ariss/ is an educational outreach with US participation by ARRL, AMSAT and NASA.



Not quite an earth ground! © Gary Milton 2003

NEW QST COLUMN AIMS TO TAKE MYSTERY OUT OF MODERN HAM GEAR

A new QST column, "Getting to Know Your Radio" debuts in the April edition of QST. Author and ARRL Product Review Editor Joel Hallas, W1ZR, says the column "basically talks about what all those knobs do" on modern equipment.

"The idea is to acquaint users with the typical features of modern radios." Hallas says there was a time when radio receivers were pretty easy to understand--in some cases not all that much different from the broadcast set in the kitchen or living room--so most new amateurs could quickly learn their way around the front panel. It's a new world now.

"It's fair to say that modern transceivers have come a long way since the boat anchors of the 1950s and earlier," he says. "Many transceiver makers seem to sell their wares by claiming the most and newest features." As a result, modern ham transceivers can be pretty intimidating, making operation daunting for newcomers and veterans alike.

The first installment of "Getting to Know Your Radio" will cover the now-popular-and common-passband tuning feature. Hallas says a column on audio compression systems is in the works.

HAM RADIO SAVES A HAM IN ALASKA

Two Alaskan hikers on a day outing in rugged mountains near Anchorage saw their afternoon tturn into something entirely unexpected February 12. One of them--Jesse Jones, KL1RK--slipped and fell more than 200 feet down a steep ravine, losing his snowshoes in the process. Jones found himself trapped between a low overhang on one side and a swift-moving stream on the other. Even worse was the fact that his descent could continue into the water at any moment, and almost certain death from hypothermia. With more than 10 feet on the ground, the loss of his snowshoes meant he could not walk out. On the plus side, Jones had taken along his 2-meter handheld transceiver After several unsuccessful tries, he finally was able to access the wide-area WL7CVG repeater atop Mt Susitna, almost 40 miles distant.

"As a control operator for the repeater, I heard his weak 'Mayday! Mayday!' call just a few minutes after 4 PM local time," reports Jim Wiley, KL7CC. "I immediately called 911 and was placed in contact with the local fire department rescue coordinator. I was able to pass on Jesse's messages to the local rescue coordinator, including coordinates from a GPS unit he was carrying." Wiley says the rescue coordinator's office called out the local mountain rescue group and the Alaska State Troopers, who immediately left for the scene.

The rescue team met with Jones's climbing partner, who had been able to hike out to a place where he could assist the rescuers.

Jones was able to keep in touch via 2 meters to report his condition, but his signal into the repeater was marginal. Although uninjured, the subzero cold was numbing his extremities to the point that he was having trouble operating his transceiver.

Unable to execute the rescue themselves, the team called an Air National Guard unit, which flew a helicopter to the scene. While the presence of high-voltage power lines just above Jones' position complicated matters, the chopper was able to lower some para-rescue jumpers to a nearby location, from which they could rappel to his position and, after a few hours, extricate him

Briefly hospitalized for a checkup, Jones was released just before midnight, cold and a bit hungry, but otherwise okay. Wiley says several local hams also assisted the effort, either directly or by their connection with local emergency service groups.

Additional details of the rescue and photos are available on the ARRL Web site http://www.arrl.org/news/features/2005/02/24/1/.

AMATEUR RADIO LINKS EARTHQUAKE-STRICKEN ISLAND WITH OUTSIDE WORLD

Working under harsh conditions, Indonesian Amateur Radio Emergency Service (ARES) volunteers this week established VHF links between earthquake-stricken Nias Island and northern Sumatra. Nias Island was hit March 28 by nearby magnitude 8.2 and 8.7 underwater earthquakes. More than 1000 people are reported to have

died as a result of the earthquakes. The tremors affected some of the same areas still recovering from the December earthquake and tsunami. Although officials and residents remained on alert for tsunamis this week, none occurred. A magnitude 6.3 aftershock occurred in the vicinity March 30.

Organization of Amateur Radio for Indonesia (ORARI) headquarters in Jakarta this week called on its members to be ready to assist. An ORARI team deployed by air to Nias Island March 29 set up "zulu" (emergency) station YB6ZAH in Gunung Sitoli, the island's largest city. YB6ZAH has been in contact with the ORARI District 6 command post in Medan, North Sumatra. The ORARI team already had experience supporting communication following the December 2004 tsunami that claimed an estimated 300,000 lives in South Asia.

In the earthquake's immediate aftermath, ORARI ARES members reportedly were on duty with little or no food to eat, although they did have drinking water. At that point, many victims had not yet been evacuated, and some remained trapped in the debris.

ORARI team members include Zulkarman Syafrin, YC6PLG, Herman Rangkuti, YC6IQ, and Soejat Harto, YB6HB-a medical doctor. Syafrin reports that the earthquake damaged the power, telecommunication and transportation infrastructure or took them out altogether on Nias Island. Buildings in Gunung Sitoli were reportedly flattened and roads severely damaged or impassable.

In the early going, the team was using portable generators and

had to restrict operation to every two hours to conserve scarce fuel. TELKOM, the Indonesian Department of Public Telecommunication, has since provided the ORARI ARES team with a bigger generator, and the operation has relocated to the TELKOM building, where fuel is no longer a problem. ORARI District 6 plans to supply more logistical and radio equipment, while Ady Susanto, YB6VK, was preparing a set of solar cells for the ORARI ARES team's use in Gunung Sitoli.

New Mexico radio amateur Earl Campbell, N8TV, now working with the International Red Cross in Banda Aceh on post-tsunami relief, plans to set up an emergency Amateur Radio station on Simeulue Island, which also was affected by the earthquakes. Campbell's IT team reportedly is headed for Nias Island to set up a satellite Internet connection and to support the ARES team in Gunung Sitoli.

Updates on ham radio earthquake relief activity in Indonesia are available on the AB2QV Website http://www.qsl.net/ab2qv/nias.htm --Wyn Purwinto, AB2QV

ARRL VEs, number of sessions served now on League Web site:

The ARRL Web site now makes it possible to access a list of ARRL Volunteer Examiner Coordinator (VEC) volunteer examiners (VEs) and the number of volunteer exam sessions each has served. The listings via the "VE Session Counts http://www.arrl.org/arrlvec/veparti.php" page are in alphanumeric cal sign order according to VE location by state. Activity (count) is measured by being present and ready to serve--or providing service--at an ARRL/VEC-coordinated test session. "Celebrating 20 years of service, the VEC system enjoys a reputation of high integrity and is a prime example of a successful privatized licensing system," said ARRL VEC Manager Bart Jahnke, W9jj. "The VE Session Counts page serves to highlight the accomplishments of the 25,000-plus current and actively accredited ARRL VES."



Leave my stapler alone! Go and get your other glasses!' You can insert you own choice of ham here! (ka8njw) © Gary Milton 2003 www.qsl.net/g0cuq/index.htm

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