

## THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

# October 2007

http://www.barconline.org <<<<<<

## This summer there has been a lot of great activities



#### PRESIDENTS MESSAGE

### Club Meeting

We will be touching on a few topics at this club meeting, covering some areas mentioned by club members and providing an opportunity to ask questions or increase your interest in new facets of ham activity.

The cool spring and hot summer are a memory of yesterday, and passed with them the lion share of public service activities. I have heard reports of fun had by all participants and praises of thanks from the organizations we have supported. I enjoy getting involved in these activities. They are an opportunity to communicate and organize with fellow ham radio operators in a more immersed fashion than the weekly nets. I thank all who participated and encourage you all to participate in future events like the scouting Jamboree On The Air (JOTA) this month. We will be reporting on, answering questions and sharing experiences about public service activities.



Using the lower frequencies (HF) and talking to operators in distant countries (DX) comes up more regularly in conversations with fellow hams now that the code requirement has been dropped. I am interested in helping in any way I can to organize a study group to prepare to pass the General Examination at the December test session. Operating HF is a fun skill to learn and opens up the chance to meet many people via ham radio. One catalyst for HF operation for many is the contest where you attempt to contact as many other stations as possible within a limited time frame. If you have questions about HF, or have fun experiences to share about contesting, please ioin us.

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October Club Meeting - October 13 Jamboree On The Air (JOTA) - October 20 & 21 November Club Meeting - November 10 December Club Meeting - Christmas Party

Thanks to all those that came to the testing session on October 6 and to all those that helped with the testing. The next test will be December 8. The tests are usually held in room 407 at Old Main on the USU Campus at 8:00 AM

BARC Club Meetings are normally on the second Saturday of the month at 10:00 A.M. on the 3rd floor of the Cache County Sheriffs Complex on 200 North and 1225 West, Logan, Utah

ARES Meetings are usually held on the Third Wednesday of each month at 7 P.M. at the Cache County Sheriffs Complex. Contact Tyler Griffiths for more information. (N7UWX@comcast.net)

(Presidents Message Continued from page 1)

Finally we hope to repeat the Internet Linking Radio Project (IRLP) demo with more success than our attempt last spring. The repeater committee identified and repaired the problem with the repeater the IRLP node was hooked to, so we should have success. You can use this node to listen in to nets, talk to people on handhelds around the world or to coordinate your scheduled (sked) HF contact with someone in another country at FM quality.

Speaking of the repeaters, I would like to thank those who have donated to the repeater fund so far, and those who are considering making a donation. We will post a notice of the donations recorded in this newsletter and in the December one. If you haven't gotten around to it yet, there is no deadline but the middle of November would be a good goal.

Finally, as a reminder of future months, November is drawing near and with it the elections for club dfice positions. The club is doing well and its members step up in many ways to help out. If you are not feeling as involved as you would like, have questions about how the club is run, or are interested in learning something new, please consider running for office or volunteering to serve as committee chairs or members.

> Answers to questions on page 6: 1-C, 2-A, 3-D, 4-B, 5-C, 6-B, 7-A



















### **Repeater Donations**

Gold - \$100.00

Brent LOTOJA\*
Utah 4H\*\*
Jacob KD7YKO & Anna KE7CMJ

Lyman N7PEF
Richard KD7GYD & Nathan KE7GYF
Wally N7YTL
Bill WA7KMF

Silver - \$50.00 Paul WO7N & Linda N7NIS

Bronze - \$25.00
Dave WN7L
Ray KD7GNV
Raymond KE7BBQ
Stan KE7JED
Keith AC7ZJ

These donations are what was recorded as of August 31, 2007. If we have made a mistake please contact the president or treasurer.

- \* A special thank you to Brent Chambers and Epic/LOTOJA for their generous donation of \$2,000.00. We are very grateful.
- \*\* A second special thank you to Kevin Kessler and the Utah 4-H for their donation of the time and funding of the donation mailing. It has had success including a reminder to a couple members to renew their dues.

Donations are still being accepted.

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The ARES E-Letter June 20, 2007 QUICK LINKS: Batteries

See the quick links below for some good information.—Bob N3DOK

The ARRL Letter Vol. 26, No. 25 June 22, 2007

**ARRL** Membership Numbers on the Rise

With now close to 152,000 members, the ARRL is going, and growing, strong. ARRL Customer Service Manager Amy Hurtado, KB1NXO, says the "ARRL is a viable, up-to-date organization that every ham should be a part of." Hurtado credits the rise in membership in part to the FCC rule changes earlier this year that eliminated Morse code testing for the General and Amateur Extra license classes. "Since more people were upgrading their licenses as a result of there being no Morse code requirement, we were successfully able to show them the benefits of being an ARRL member," she said. One of the many benefits of ARRL membership, Hurtado said, is

the monthly subscription to QST, the official journal of the ARRL. Other benefits of ARRL membership include a QST/QEX/NCJ index search on the ARRL Web site; operating awards; outgoing QSL service; access to the Technical Information Service; available ham radio equipment insurance program and more. Members can also get an arrl.net e-mail address through the ARRL e-mail forwarding service. Hurtado went on to say that new, renewing and lapsed members can join the ARRL in many ways. "About 40-50 percent of membership enrollment is online. We also have people join after taking a licensing exam, by calling us on the phone, by answering a direct mail package or by joining up at their local hamfest."

If you are interested in joining the ARRL or renewing your present membership, please see the ARRL Web site <a href="http://www.arrl.org/join">http://www.arrl.org/join</a>>.

Kenwood Purported to Merge with JVC in 2008

A consumer electronic magazine, This Week in Consumer Electronics (TWICE), reports that Kenwood has agreed to merge in 2008 with Victor Company of Japan (JVC) under a holding company. JVC is owned by Matsushita Electric Industrial Company. Japan's Nikkei business newspaper eports that the final details should be worked out by the end of the month, and that under the plan, Kenwood will buy 20 billion yen (\$161,469,466) in JVC shares as early as this summer, raising its stake to 13 percent. Matsushita will also sell part of its 52.7 percent of JVC to Kenwood's top shareholder, the Sparx Group. When JVC and Kenwood integrate operations under the holding company in 2008, Matsushita will sell the rest of its JVC shares to the holding company to complete the transaction. The holding company's stock will be listed instead of Kenwood and JVC, according to Nikkei. Combined, Kenwood's and JVC's sales are \$7.3 billion dollars annually for their fiscal year that ended March 31.

Astronaut Suni Williams, KD5PLB, Back on Terra Firma

Suni Williams, KD5PLB, International Space Station (ISS) Expedition 15 Flight Engineer, came back to Earth Saturday, June 23 on the space shuttle Atlantis (STS-117), wrapping up a six month stay during which she became the new record holder for the longest single spaceflight by a woman. While on the ISS, Williams participated in 33 Amateur Radio on the International Space Station (ARISS) contacts. ISS Expedition 12 Commander Bill McArthur, KC5ACR, holds the record for the most ARISS school contacts in a single mission at 37. Williams launched with the crew of the space shuttle Discovery (STS-116) on December 9, 2006. She docked with the ISS on December 11. Clay Anderson, KD5PLA, part of STS-117, replaced Williams as ISS Flight Engineer. STS-117 was launched from Florida June 8 and docked with the ISS June 10. Its mission lasted almost 14 days. "The space station's just a stepping-stone to get us to understand space, and how to live and work in space, and then potentially get back to the moon is the next steppingstone. How to work in a low-gravity environment and how

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## **Some Summer Activity Fun**





(Continued from page 3)

to work in an environment that is not habitable for us that will take us to the next place, maybe Mars and then beyond," Williams said. While in space, Williams, a US Navy helicopter pilot who holds the rank of Commander (O5), worked with robotics operation on the ISS and participated in four spacewalks. She was also NASA ISS Science Officer for part of her time in space. The primary focus of US science on the ISS is research on how people can live and work safely in weightlessness. Williams participated in the 2007 Boston Marathon from the ISS. She competed as an official entrant in the annual Patriots Day event from 210 miles above Earth. Williams ran on an ISS exercise treadmill, circling Earth at least twice in the process and going as fast as 8 MPH while flying more than 5 miles per second. "I [hope to] encourage kids to start making physical fitness part of their daily lives," she said. "I think a big goal like a marathon will help get this message out there."

The ARRL Letter Vol. 26, No. 28 July 13, 2007

FCC Releases Post-Katrina Order, "Final Rule"

On July 11, the FCC released their Order regarding the recommendations of the independent panel reviewing the impact of Hurricane Katrina on communications networks (the Katrina Panel). It contained their conclusions following a review of the comments filed in response to the FCC's Notice of Proposed Rulemaking (NPRM). The Commission asked for comments a week after the release of the report and recommendations of the Katrina Panel and directed the Public Safety & Homeland Security Bureau (PSHSB) to implement several of the recommendations. The FCC also adopted rules requiring some communications providers to have emergency/back-up power and to conduct analyses and submit reports on the redundancy and resiliency of their 911 and E911 networks. The FCC's actions are to go into effect August 10. The Commission noted that "the amateur radio community played an important role in the aftermath of Hurricane Katrina and other disasters," and instructed the PSHSB to "include the amateur radio community in its outreach efforts." The FCC invited comments on the Katrina Panel's recommendation that the FCC "act to enhance the public safety community's awareness of non-traditional emergency alternative technologies that might be of value as back-up communications systems in a crisis." Several commenters suggested that the public safety community be educated about the applicability of Amateur Radio in a crisis. The FCC agreed with these comments, saying that improving the public safety community's knowledge of, and training in, alternative technologies would improve preparedness for future crises. They directed the PSHSB to "develop and implement an awareness program to educate public safety agencies about alternative technologies and to encourage agencies to provide regular training on any alternative technologies to be used," including educating public safety agencies about alternative technologies. The recommendations said that several Amateur Radio operators recommended changes to Part 97 of the FCC's rules; Part 97 is the section that covers Amateur Radio. Many of the suggestions, the report said, have already been imple-

mented, and as such, require no further action. For example, "the Commission recently eliminated Morse Code proficiency as a license qualification requirement, an action supported by several commenters in this proceeding." The FCC once again made clear that Part 97 "does not prohibit Amateur Radio operators who are emergency personnel engaged in disaster relief from using their amateur radio bands while in a paid duty status." This changed this past December in WT Docket 04-140, the "Omnibus" Amateur Radio Report and Order (R&O). The Commission also previously decided to phase out RACES station licenses, "making proposed changes to rules relevant to these licenses moot." ARRL Regulatory Information Specialist Dan Henderson, N1ND, notes that the FCC "is not phasing out the RACES program, just the RACES station licenses." In his comments to the Katrina Panel, W. Lee McVey requested that the FCC initiate a rulemaking to create a new radio service in the 148-150 MHz band "to facilitate interoperability between different first responders during and following a national emergency." The FCC noted that the 148-149.9 MHz band is allocated on a primary basis for the federal mixed, mobile and mobile satellite (Earth-to-space) service, and the 149-150.05 MHz segment is allocated on a co-primary basis for federal and nonfederal mobile satellite (Earth-to-space) and radio navigation. The FCC's report said "[This] petition does not address this use nor does it explain what rules would be necessary to govern access to this spectrum. Given the potential impact of McVey's proposal to spectrum allocated for federal use, we direct PSHSB, together with the Office of Engineering and Technology (OET), to seek feedback from the National Telecommunications and Information Administration (NTIA) on this petition." The FCC said that when it receives the feedback, they will direct PSHSB and OET to make a determination on the appropriate action to be taken on McVey's peti-

#### ARRL Board Adopts Policy on Background Checks

A major concern at the ARRL Board of Directors meeting last month was the topic of served agencies and background investigations. The Ad Hoc Background Investigation Committee agreed that pursuing federally recognized credentialing for Amateur Radio volunteers was critical for ARES to function. The Committee chairman, ARRL Atlantic Division Director Bill Edgar, N3LLR, proposed that the Board adopt a policy with regard to Memoranda of Understanding with the various served agencies. The Board adopted a policy that "communications volunteers participating in ARRLsponsored programs should not be required by served agencies to undergo background investigations of any kind," but notes that criminal background checks-performed by law enforcement agencies—are "generally acceptable." The policy continues, "It is not reasonable for a served agency to require these volunteers to consent to credit checks, mode of living investigations or investigative consumer reports. In negotiating or renegotiating Memoranda of Understanding that commit the League to provide volunteer emergency communications support, the League must be assured that these

volunteers will not be required by the partner organization to consent to credit checks, mode of living investigations or investigative consumer reports."

## GET READY FOR THE SECOND ANNUAL ARRL ON-LINE AUCTION!

The Second Annual ARRL On-Line Auction kicks off October 24, running until November 2 on the ARRL Web site <a href="http://www.arrl.org/auction">http://www.arrl.org/auction</a>. This is your chance to pick up one-of-a-kind Amateur Radio items. To see what the Auction will offer this year, be sure to check out the Auction preview that begins October 17. Last year, the Auction attracted more than 4300 bidders from 36 countries. While the majority of buyers were from the USA, Canada and the UK, there were buyers from Australia, Malaysia, Grenada and Tanzania

According to ARRL Chief Operating Officer Harold Kramer, WJ1B, "Last year's on-line auction was our first and it was a great success. When the bidding ended, we realized that we had sold 104 items and we had raised just over \$37,000." Proceeds from the auction benefit ARRL education programs including activities to license new hams, strengthen Amateur Radio's emergency service training, offer continuing technical and operating education, as well as creating instructional materials.

This year's auction will include many products tested by the ARRL Lab for QST Product Review. These items include an ICOM IC-7800, a Ten-Tec Omni VII, a Palstar Auto Antenna Tuner, an MJF 974H Balanced Antenna Tuner and a Heil Traveler Headset. There will be many vintage items offered, including the antique transmitter featured in John Dilks' "Old Radio" column in the November 2007 issue of QST. Also, returning by popular demand will be five ARRL Lab unique "junque" boxes.

Jamboree on the Air will celebrate its 50<sup>th</sup> year this year when it gets on the air October 19-21. Normally a 48 hour event, this year's JOTA will be 50 hours long in recognition of the anniversary. The fun begins at 2200 (local time) October 19 and ends at midnight (local time) October 21.

An on-the-air operating event sponsored by the World Scout Bureau, JOTA was founded in 1958 by Les Mitchell, G3BHK. It has grown to become the largest international Scout event. More than half a million Scouts and Guides in more than 100 countries participate in JOTA, involving as many as 10,000 Amateur Radio stations.

The event relies on the Amateur Radio community and local hams for its success. Getting Boy and Girl Scouts (including Cubs and Brownies) on the air to talk with other Scouts around the world provides a great opportunity to expose youth to Amateur Radio. Some troops and clubs team up to make a big splash with lots of activities, radios and antennas, offering a variety of modes to experience. For others, JOTA provides an opportunity to coach a smaller group of Scouts and to just have fun talking on the radio. Scouts usually enjoy communicating by speaking into a microphone, but some ra-

dio amateurs are able to provide other modes, such as slow-scan TV or amateur TV, satellites, packet radio, RTTY or even EME!

For more information on the 2007 Jamboree on the Air, please visit the ARRL JOTA Web site <a href="http://www.arrl.org/scouts/jota">http://www.arrl.org/scouts/jota</a> where you can find general rules, suggested exchanges and recommended frequencies. There will also be a place on the ARRL Web site to tell your JOTA stories at <a href="http://www.arrl.org/scouts/jota/Stories/">http://www.arrl.org/scouts/jota/Stories/</a>>.

The ARRL Letter Vol. 26, No. 40 October 5, 2007

ARRL/TAPR CELEBRATE 26<sup>TH</sup> ANNUAL DIGITAL

COMMUNICATIONS CONFERENCE

The ARRL and TAPR held their 26<sup>th</sup> Annual Digital Communications Conference this past weekend, September 28-30, in Hartford, Connecticut. The DCC is an international forum for radio amateurs to meet, publish their work and present new ideas and techniques. Presenters and attendees had the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results and practical applications.

With more than 150 in attendance during the three-day event, ARRL Chief Operating Officer Harold Kramer, WJ1B, said, "It was exciting to see and hear about the latest developments in Amateur Radio digital technology. The depth of knowledge, commitment and enthusiasm were very impressive and bode well for the future of Amateur Radio."

According to QST Editor Steve Ford, WB8IMY, many of Friday's seminars were devoted to the Automatic Position Reporting System (APRS). Bob Bruninga, WB4APR, gave the first session of the conference, "The APRS Local Voice Repeater Initiative." Bruninga is the developer of APRS.

Other seminars at the conference included "The Flex 5000 and Software Defined Radio Software," "HPSDR Update," "AMSAT's Phase IV," "A Method for Automatic Image Balancing in IQ Mixer Based Software Defined Receivers" and "Suit-Sat 2 Update." Ford also gave a standing-room-only seminar on an introduction to HF digital.

Ford said one of the highlights at the DCC was the NUE-PSK device. This gizmo makes it possible to do PSK31 without a PC. There is no word yet on when kits will be available for this item. "The latest Flexradio software-defined transceiver also drew a great deal of attention," Ford said. RPC Electronics debuted their all-in-one APRS tracker (2 meter transmitter, packet TNC and GPS receiver in one compact package). The company said it would be available for sale in December, just in time for holiday giving.

A popular feature of the DCC was the Demonstration Room. This was a place for participants to set up their projects for everyone to see, as well as a place for vendors to demonstrate their equipment.

ARRL New England Division Director Tom Frenaye, K1KI, spoke to conference participants Saturday morning, welcoming them to the DCC. TAPR held their annual meeting later that day.

The 2008 Digital Communications Conference will be in Chicago, but no date has been set. Check out the TAPR Web site <a href="http://www.tapr.org">http://www.tapr.org</a> for more information.

#### **Questions for Extra License**

- 1. (E1A02) What exclusive frequency privileges in the 75-meter band are authorized to Amateur Extra class control operators?
- A. 3775-3800 kHz
- B. 3800-3850 kHz
- C. 3750-3775 kHz
- D. 3800-3825 kHz
- 2. (E1E03) What is a telecommand station in the amateur-satellite service?
- A. An amateur station that transmits communications to initiate, modify or terminate functions of a space station
- B. An amateur station located on the Earth's surface for communications with other Earth stations by means of Earth satellites
- C. An amateur station located more than 50 km above the Earth's surface
- D. An amateur station that transmits telemetry consisting of measurements of upper atmosphere data from space
- 3. (E2B19) Which of the following systems is used to transmit high-quality still images by radio?
- A. AMTOR
- B. Baudot RTTY
- C. AMTEX
- D. Facsimile
- 4. (E3C11) For a 3-element beam antenna with horizontally mounted elements, how does the main lobe takeoff angle vary with the downward slope of the ground (moving away

from the antenna)?

- A. It increases as the slope gets steeper
- B. It decreases as the slope gets steeper
- C. It does not depend on the ground slope
- D. It depends of the F-region height
- 5. (E5A02) What is resonance in an electrical circuit?
- A. The highest frequency that will pass current
- B. The lowest frequency that will pass current
- C. The frequency at which capacitive reactance equals inductive reactance
- D. The frequency at which power factor is at a minimum
- 6. (E5F11) What is the term for energy that is stored in an electromagnetic or electrostatic field?
- A. Amperes-joules
- B. Potential energy
- C. Joules-coulombs
- D. Kinetic energy
- 7. (E6C02) What logic state do the inputs of a TTL device assume if they are left open?
- A. A high-logic state
- B. A low-logic state
- C. The device becomes randomized and will not provide consistent high or low-logic states
- D. Open inputs on a TTL device are ignored

THE OHM TOWN NEWS PO BOX 111 PROVIDENCE, UT 84332

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