

THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

March 2009

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

PRESIDENTS'S MESSAGE

Winter has been here long enough and I hope that spring is around the corner. I am ready to start planning my activities and projects for the summer. Speaking of planning for the summer activities, BARC has a sign-up sheet for public service events where amateur radio operators can be of service to the community. These events include the Mountain Man Rendezvous, Little Red Riding Hood, Cache Valley Biathlon, Tour De Cure, Cache Classic, Wasatch Back Relay, Cache Cruise In, LOTOJA, Top of Utah, and Bear 100. Participating in these events



is a great way to use our hobby to help others and we can practice our radio communications skills. It is also about honing your skills on the airwaves and getting ready to be able to help under different circumstances. If you are new at Ham Radio, there is no better way to learn than by just jumping in and doing it. If you would like to do a

specific location or team up with someone, be sure to put that information in the activity comments box. Whatever you choose to do, the idea is to get involved. There are many options for everyone out there. There is bound to be something out there that you can be comfortable with.

To sign up for any of the events, go to the BARC web site (www.barconline.org) and log in, then click on 'Topics' then 'Activities'. There you will see the Activities page where the '2009 BARC Activities Sign-Up' section is listed. If you have any question on signing up, send us an email or see us at the club meeting on the 14th.

See you at our next club meeting.

73,
Cordell KE7IK

HAM PROFILE

Eldon Koyle, KE7ZCC
by Brent Carruth AD7VF

What got you interested in ham radio?

"I have always been interested in electronics," Eldon Koyle, KE7ZCC, explained. In the past little while Eldon began experimenting with a circuit based on the ATMEL AVR 8-bit RISC microcontroller (see reference [1]) and several relays. The relays are single-pole double-throw switches, like an A-B switch with one input and a switch between two outputs. The microcontroller is built onto a circuit board that has several input and output jacks and ports. With free software compilers, he writes C programs, compiles them, then downloads them through a serial port. The instructions control the relays and right now the relays go click-click-click.

How did you study for the General Class license?

Kevin Reeve, N7RXE, taught a Technician Class license course at Utah State University in September and October 2008. There is a study guide that Kevin

used for the Technician Class license and there is one for the General Class license which Eldon read. The study guide is fifty pages [2] and the questions and answers have been written together as statements.

He reasoned that the knowledge needed to pass the Technician Class license exam would be subsumed by the General Class license exam so he only read through the study guide for the General Class license. He is very good at remembering facts so a multiple choice exam is very easy for him to pass. He took the



(Continued on page 6)

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UPCOMING ACTIVITIES 2009

Amateur Radio License Exam — 5 March 7:00 PM
At USU Merrill Cazier Library room 202

March Club Meeting — 14 March 10:00 AM
Automatic Packet Reporting System (APRS)

ARES Meeting — 18 March 7:00 PM

RACES HF Net — 21 March 8:00 AM

April Club Meeting — 11 April 10:00 AM

ARES Meeting — 15 April 7:00 PM

Utah ARRL State Convention—25 April (South Ogden)

May Club Meeting — 9 May 10:00 AM

Mountain Man Rendezvous — 20-21 May

BARC Club Meetings are normally on the 2nd 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.

If you are able to help with the activities this year please sign up so that we can coordinate the work. The way to sign up is on the Internet, you can go to the club web site at: <http://www.barconline.org>. On the left side of the page in the Navigation area click on Topics and then Activities. If you have questions contact one of the Club Officers.

Presentation topic for BARC March club meeting

Greg Lundell, K7UHP, will be giving a presentation on Automatic Packet Reporting System (APRS). APRS is an amateur radio based system for real time tactical digital communications of information of immediate value in the local area. In addition, all such data is ingested into the APRS Internet system (APRS-IS) and distributed globally for instant access. In addition to messages, alerts, announcements and bulletins, the most visible aspect of APRS is its map display. Anyone may place any object or information on their map and it is distributed to all maps of all users in the local RF network or monitoring the area via the internet. Any station, radio or object that has an attached GPS is automatically tracked. Other prominent map features are weather stations and alerts.

Answers to questions on page 8:
1-C, 2-C, 3-D, 4-A, 5-C, 6-B, 7-B

Repeater News

Lots has been happening with the BARC Repeater System. Bob Wood won a new Repeater Controller from Link Communications at Dayton. He has let us use it on the 147.200 Repeater and IRLP Node. This is temporary while we learn how to use it so at a later date we will move it to Mt Logan. The new Controller and the 147.200 Repeater will be moving to the Penthouse of the Sheriffs Complex. The 146.64 Repeater will be moved from its location and rebuilt, then will be installed at a new site.

There are different commands on the 147.200 Repeater during its time with the new controller.

<u>Old Commands</u>	<u>New Commands</u>	<u>Function</u>
220	660	Connecting 147.20 to Mt Logan System
221	661	Disconnecting from Mt Logan and the IRLP Capability
	675	Time of Day Male Voice
	676	Time of Day Female Voice

The Mt Logan Repeater System is getting upgrades also. A new 449.625 Repeater has been built and has been in testing mode down on the valley floor on 449.250. There have been equipment malfunctions this year with the 2 meter side and we had to do some swapping of equipment so we have ordered new radios and a new Power Amp. When the snow clears we will be able to replace the equipment along with replacing the feed line.

On the 147.260 Promontory Point Repeater the Link Radio has been replaced.

Some other news that is on the forefront is that the State and Homeland Security has informed us that we have been selected to put up a D-Star Repeater. The D-Star system would consist of a 2 meter, 70 centimeter Digital Repeater. This system uses 3600 baud for digitized Voice, then 1200 baud for data for message type traffic on those 2 bands. Then there is one more Repeater on 1296 Mhz for Data. This is setup to be able to make an internet connection. To use these Repeaters you would need to have D-Star capable radios, mostly ICOM, some of them that you have may work but you will need to buy the D-Star Module.

Ted McArthur
AC7II

Proposition # 1 - Expenditure of donations for specific projects

Kevin Reeve, N7RXE
BARC Treasurer

A vote of Yes on Proposition # 1 would give the BARC Board the approval by club members to spend money for repeaters and other projects as money is donated for them. Why the need? According to the Bylaws, the BARC Board must present a proposed budget to the club members, for voting each year. While most expenditures are known for the year, some specific to the repeater system and other things are not. Additional monies might be donated during the year for repeaters that may allow a certain upgrade to happen that was on the list but not considered because funds were not available at the time members approved the budget. As you know, we can only visit some of our repeater sites a couple of months out of the year.

Another example is LOTOJA. We have received some donations to help cover some gas, printing, and other expenses we have related to that event. Even though these funds were to reimburse specific expenditures, they were for the most part expenditures not planned on or voted on during the year. Another project in the works is the Rocket Recovery project. We expect to receive some donations from club members and an organized group to help us buy beacons and other things needed for this project.

The simple intent of Proposition # 1 is to give the BARC Board the authority to allocate and spend monies donated for specific projects as needed and as those funds are available. It does not change anything related to the general BARC budget for club expenses during the year, nor the voting of the annual budget for such expenses.

The General Class license course is continuing, it started on 29 January and will go until 12 March. This is the first time such a course has been offered in Cache Valley in a very long time. Brent Carruth, AD7VF, Ted McArthur, AC7II, Bob Wood, WA7MXZ, Boyd Humpherys, W7MOY, Cordell Smart, KE7IK and Kevin Reeve, N7RXE, will each share their expertise in a lesson on an aspect of amateur radio relating to the General Class license operator. Classes are held from 7:00 pm-9:00 pm on Thursday evenings at Ellis Elementary School 348 West 300 North, Logan, Utah. The BARC VE exam session for March will be on Thursday, 5 March 2009, at which time you may upgrade your license by successfully passing the General Class license exam. For questions, comments, or to express interest in attending the course, please contact Brent Carruth at ad7vf@arrl.net.

2009 Bridgerland Amateur Radio Club Budget

Income		Amount
	Dues	\$1,605.00
Total Income		\$1,605.00
Expenses		
	Promontory repeater site rental	\$600.00
	Field day	\$380.00
	Newsletter	\$180.00
	Club Fees (PO Box Rental & Non-Profit Corporation)	\$85.00
	Christmas Party	\$150.00
	Socials and Refreshments	\$160.00
	Swaptoberfest	\$50.00
	BARC Banner Signs (<i>money from savings</i>)	\$100.00
Total Expenses		\$1,705.00

Proposition # 1 - Expenditure of donations for specific projects

The BARC Board shall have authority to spend monies donated to specific projects by members and others as needed, and as monies are available for such projects.

Example: Money donated specifically to the BARC repeater system.

See article in Newsletter.

_____ I approve of the 2009 Budget.

_____ I do not approve of the 2009 Budget.

_____ I vote Yes for Proposition # 1

_____ I vote No for Proposition # 1

Vote on March 14th at Club Meeting or mail your vote to P.O. Box 111, Providence UT to arrive before March 14th. You may also send it with another club member.

Membership in The Bridgerland Amateur Radio Club, Inc. is open to anyone interested in Amateur Radio. You do not need an amateur license to join. Learn more online at <http://www.barconline.org/> or by emailing membership@barconline.org.

The Bridgerland Amateur Radio Club provides the following to its members:

- A repeater system that covers northern Utah from Bear Lake to Salt Lake Valley.
- An opportunity to meet and learn from other amateur operators. (Club meetings are held the second Saturday each month from October to May.)
- Events where you can practice your radio skills in a fun learning environment.
- Social activities where members can make friends and interact with other members.



Your tax deductible membership fees maintain the repeaters and support club activities.

The Bridgerland Amateur Radio Club, Inc.
Application for the Year 2009 Membership
Dues are in effect January 1, 2009 through December 31, 2009

Name _____ Call Sign _____ Date Paid _____

P.O. Box _____ Street Address _____

City _____ State _____ Zip Code _____

Home Phone () _____ Work Phone () _____

E-mail _____

I Individual Membership - \$25 \$ _____

I Additional Family members in same household - \$3 ea \$ _____

I Equipment Donation \$ _____

(One Newsletter per household)
 Names and call signs of additional family members Total \$ _____

Name _____ Call Sign _____

Name _____ Call Sign _____

Name _____ Call Sign _____



Mail your completed form and a check to: B.A.R.C., P.O. Box 111, Providence, UT 84332-0111 or pay online at <http://www.barconline.org/?q=node/242>

B.A.R.C. is a non-profit organization

(Ham Profile Continued from page 1)

FCC license exams on 13 December 2008 and received his call sign, KE7ZCC, on the 19th. He is the first in his family to earn his license.

What radio do you have?

Eldon has a VX-7R and he checks into the weekly BARC nets. Being inventive, he made a plug with a one-eighth inch mono jack on end and a one-eighth inch stereo jack on the other end and used a connector that Kevin provided him to plug into the microphone-speaker jack on his radio and connect his radio to the sound card of his computer. There is free software to decode APRS audio signals sent from his radio to the sound card and turn it into text which he can read. He has noticed that there is a large upward spike when the squelch opens and a large downward spike when the squelch closes and he finds that listening to APRS audio on his radio is sort of hard. Eldon has spent a few hours with Kevin working on APRS.

He monitors traffic on the Mt Logan and Sedgwick Peak repeaters and some of the public service frequencies.

Eldon also helped Ted McArthur, AC7II, and Kevin on Saturday, 21 Feb 2009, with some repairs on the antenna coax lines for the HF amateur radio on campus with the hope that it might be used more often now that at least one student on campus has a General Class license. Others present on that eventful Saturday morning when the radio sprang back to life were Cordell Smart, KE7IK, Gary Hawkins, KC7EUW, David Allen, KB7RAY, and Brent Carruth, AD7VF. Later on Bob Wood, WA7MXZ, lent his expertise to some repairs. Altogether, this fine Kenwood radio is now once more working very well.

Are you looking towards Field Day this summer?

I am interested in going, I just don't have a good understanding of what goes on there.

What are you studying at Utah State University?

Eldon is studying computer science with an emphasis on the science. He is also interested in digital circuit design. He has a minor in math and almost a minor in chemistry and is close to graduating. He used to work with one of the professors in Chemistry prior to being hired by Information Technology at USU as a Systems Administrator in April 2007. He recalls that the IPAM (Internet Protocol Address Management) project was quite a difficulty last August during a campus-wide switch over.

What High School did you graduate from?

Eldon attended Bear River High School but he never graduated. Instead, after his Junior year, he left to begin studying at USU. He was born in Burley, Idaho and moved to Sacramento at the age of three then moved to Tremonton at age eight.

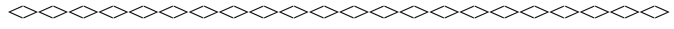
What else would you like readers of this column to know about you?

Eldon's wife's name is Courtney who is from Iowa and together they have a fifteen-month-old son, named Joe. They live in Hyrum, Utah.

References:

[1] For the ATMEL circuit see http://www.sparkfun.com/commerce/product_info.php?products_id=766
This site has a lot of interesting and useful devices/kits.

[2] The study guide can be found at <http://kb6nu.com/2007GeneralStudyGuide.pdf>

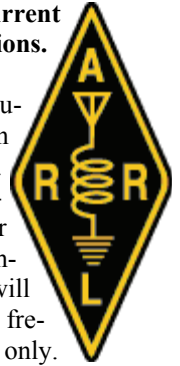


The ARES E-Letter for February 18, 2009

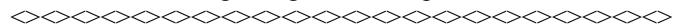
FCC Emergency Declarations Policy

[Recent questions have arisen concerning current FCC policy on emergency frequency declarations. Here is the policy as it was last stated. - ed.]

In 2004, the FCC formalized its policy for issuing an emergency communications declaration (ECD) on Amateur Radio Service frequencies. This policy became effective on August 2, 2004 and states that ECDs will be issued for VHF or UHF repeaters--if the licensee consents--or on simplex channels in the 60-meter band. The FCC will not entertain requests to specifically sequester frequencies in other HF bands for emergency traffic only. The FCC said frequencies in other amateur bands--where emergency nets already have been established--may be used during emergencies under the provisions of §97.101(c). That rule stipulates that emergency communications have priority at all times and on all frequencies. This is the basis for the decision, as these nets already receive protection under Part 97.



Past emergency communications declarations--typically issued during weather-related emergencies--have put frequencies on 75 and 40 meters off limits to general use in an affected region. "ECDs may only be issued after a disaster disrupts normal communication systems in a geographic area subject to FCC regulation," the FCC said, citing §97.401(b). Under its provisions, when a disaster disrupts normal telecommunications systems in a given area, the FCC may declare a temporary communication emergency that sets forth any special conditions and special rules stations must observe while it's in effect. The policy clarifies that the FCC has authority to issue ECDs only for communication emergencies and not on the basis of anticipated emergencies. It also tightens up the requirements to request an ECD. The policy calls for VHF and UHF Amateur Service channels to receive preference for ECDs. Requests may indicate a specific repeater system, subject to permission from the repeater's licensee or trustee. On HF, the FCC says, an ECD may authorize the use of one or two 60-meter channels, centered on 5332, 5348, 5368, 5373 and 5405 kHz, subject to §97.303(s). See ARRL's [Frequently Asked Questions](#) regarding 60-meter operation for details.



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BSA UPDATES RADIO MERIT BADGE REQUIREMENTS

The Boy Scouts of America (BSA) has updated the requirements needed to earn the Radio merit badge. The new requirements became effective with the publication of Boy Scout Requirements 2009. While no new content has been added to the program, the new merit badge pamphlet features

Questions for General Class License

1. (G1A10) Which of the following frequencies is within the General Class portion of the 15 meter band?
 - A. 14250 kHz
 - B. 18155 kHz
 - C. 21300 kHz
 - D. 24900 kHz

2. (G1E07) With which of the following is third-party traffic prohibited, except for messages directly involving emergencies or disaster relief communications?
 - A. Countries in ITU Region 2
 - B. Countries in ITU Region 1
 - C. Any country other than the United States, unless there is a third-party agreement in effect with that country
 - D. Any country which is not a member of the International Amateur Radio Union (IARU)

3. (G2F04) What does it mean when a CW operator sends "CL" at the end of a transmission?
 - A. Keep frequency clear
 - B. Operating full break-in
 - C. Listening only for a specific station or stations
 - D. Closing station

4. (G3C02) When can the F2 region be expected to reach its maximum height at your location?
 - A. At noon during the summer
 - B. At midnight during the summer
 - C. At dusk in the spring and fall
 - D. At noon during the winter

5. (G4C10) Which of the following is covered in the National Electrical Code?
 - A. Acceptable bandwidth limits
 - B. Acceptable modulation limits
 - C. Electrical safety inside the ham shack
 - D. RF exposure limits of the human body

6. (G9C17) Approximately how long is each leg of a symmetrical delta-loop antenna Driven element?
 - A. 1/4 wavelengths
 - B. 1/3 wavelengths
 - C. 1/2 wavelengths
 - D. 2/3 wavelengths

7. (G0B05) Which of the following conditions will cause a Ground Fault Circuit Interrupter (GFCI) to disconnect the 120 or 240 Volt AC line power to a device?
 - A. Current flowing from the hot wire to the neutral wire
 - B. Current flowing from the hot wire to ground
 - C. Over-voltage on the hot wire
 - D. All of these choices are correct

**THE OHM TOWN NEWS
PO BOX 111
PROVIDENCE, UT 84332**



March, 2009

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