



# THE OHM TOWN NEWS

*Voice of the Bridgerland Amateur Radio Club*

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

## October 2015

*Some Contents...*

<b>President's Message</b> .....	<b>2</b>
<b>Upcoming Activities</b> .....	<b>3</b>
<b>SwaptoberFest</b> .....	<b>4</b>
<b>ARRL News and Information</b> .....	<b>6-13</b>
<b>Test Questions for General Class License</b> .....	<b>14</b>
<b>2015 Club Officers</b> .....	<b>15</b>



ARRL Affiliated



# PRESIDENT'S MESSAGE

The leaves have fallen and soon there will frost on the pumpkins. That means winter is just around the corner. As ham radio operators, we have our grab-and-go-kits that are ready for use to use in an emergency. We also need to consider the weather here as it changes with the different seasons. Each of the four seasons present different preparations needed to operate in. But first we need to have our own homes and families ready for weather related emergencies or when natural disasters occur.

Now is a good time for us to learn more about winter weather terms and safety rules and review your winter storm preparedness plans.

The National Weather Service has partnered with the Utah Department of Public Safety, Utah Department of Transportation, Utah State Parks and Recreation, the U.S. Forest Service, Forecast Service Utah Avalanche Center and the American Red Cross to provide winter weather preparedness information via a Winter Weather Preparedness Week Web site.

[Click here](#) for the National Weather Service's winter weather preparedness page to learn how to protect yourself, your family, and your livelihood this winter. Additionally, the Utah Department of Public Safety's Division of Emergency Management and American Red Cross offer excellent information and safety tips for winter storms at <http://bereadyutah.gov> and [www.utahredcross.org](http://www.utahredcross.org).

The Federal Emergency Management Agency (FEMA) has some general winter weather information on [Winter Weather Readiness](#) for the Rocky Mountain area.

Here is [Utah](#) and [Idaho](#) information from disastercenter.com that has various Federal, State, and County web sites.

Disasters happen anytime and anywhere. And when disaster strikes, you may not have much time to respond. A highway spill or hazardous materials incident could mean evacuation. A winter storm could confine your family at home. An earthquake, flood, tornado, or any other disaster could cut water, electricity, and telephones for days.

After a disaster, local officials and relief workers will be on the scene, but they cannot reach everyone immediately. You could get help in hours, or it may take days. Would you and your family be prepared to cope with the emergency until help arrives?

Remember to make a plan, gather supplies in advance for your emergency and disaster supplies kits, be informed and get involved.

73,  
Cordell  
KE7IK



# UPCOMING 2015 ACTIVITIES

- 08** October—BARC License Exam Session 7pm—9 pm RM 302 USU Eng Bldg
- 10** October — Swaptoberfest (more info see P. 4) (Bill Neville)
- 14** October, 7:30 PM — ARRL Rocky Mountain Division Net IRLP Node: 9871
- 15** Oct, 8:00 PM — RACES VHF Net 147.18 Snowbird 147.20 IRLP 146.72 Mt. Logan
- 16-18** October—JOTA-Scouting Jamboree On The Air (more info [here](#) & [here](#))
- 21** October, 7:00 PM — Cache County ARES meeting at the Sheriff's Office
- 24** October, 8:00 AM - 6:00 PM One Day Ham Class (Technician) ([more info](#))
- 11** Nov, 7:30 PM — ARRL Rocky Mountain Division Net IRLP Node: 9871
- 14** Nov, 10:00 AM — BARC Club Meeting and Elections for Next years Officers
- 18** November, 7:00 PM — Cache County ARES meeting at the Sheriff's Office
- 21** November, 8:00 AM — RACES HF Net 3920 KHz
- 03** December — Christmas Dinner and program (In place of regular club mtg)  
Will be at The Bluebird Restaurant at 19 North Main in Logan, UT
- 05** December-BARC License Exam Session 8am-10am RM 302 USU Eng Bldg
- 09** Dec, 7:30 PM — ARRL Rocky Mountain Division Net IRLP Node: 9871
- 16** December, 7:00 PM — Cache County ARES meeting at the Sheriff's Office
- 17** Dec, 8:00 PM — RACES VHF Net 147.18 Snowbird 147.20 IRLP 146.72 Mt. Logan

For more calendar information see the [barconline.org/calendar](http://barconline.org/calendar)

## Local Radio Nets:

The **Weekly BARC net** is for BARC members and anyone else that would like to check in, held **every Tuesday night at 9:00 p.m.** local time on the Mt Logan BARC Repeater and Linked Systems (146.720)

The **BARC Ladies Net** is every **2nd and 4th Tuesday at 8:00 p.m.** on the BARC Repeater and Linked Systems (146.720). All licensed lady amateur radio operators are welcome to check in.



BRIDGERLAND AMATEUR RADIO CLUB

Online

# SwaptoberFest

October 10, 2015

Cache County Fairgrounds Pavilion



**Barc Club Store**

**Lots of prizes**

146.72 - .600 103.5 \* DSTAR NU7TS B 449.575/N7RDS B 447.925 \*  
927.5125 -25 103.5 \* DMR 447.000/447.125

450 West 500 South Logan, UT

7:00 Set-up Doors Open 8:00 AM - 5:00 PM

Great Prizes

Refreshments

Admission & Tables Free



**YAESU**



**MFJ**



**ICOM**



## Some miscellaneous pictures of events from throughout the year



### *December Club Meeting*

The December BARC club meeting and Christmas Dinner will be on December 3rd and will be at the Bluebird restaurant in Logan, there is now an elevator so we can accommodate all. The dinner will be a prime rib and chicken buffet and the cost will be \$17. The dinner will be served at 6:30 pm. There will be prizes, more info to come. The money needs to be collected by November 23rd for all who would like to come.

The November club meeting will include the elections for the club officers for next year and we are seeking nominations for people to run for board members. The person must be willing to except the nomination to the position. If anyone is interested please email Tammy Stevens of your intent at [election@barconline.org](mailto:election@barconline.org).



# **The ARES E-Letter for September 16, 2015**

## **Why Public Service-Oriented Hams Should Participate in Contests**

You may have heard of the Fireman Olympics or lumberjack competitions. Most of you have seen a rodeo - at least on television - where cowboys (and cowgirls) do their thing in a stadium rather than on the range. What do all these have in common? They test skills used on the job in an enjoyable yet challenging environment. Guess what? Amateur Radio operators compete, too, in a variety of contests held throughout the country and the world. Internationally, this is called "Radiosport." Domestically, we just call it "Contesting." Many highly competitive radio amateurs consider their regular operating time to be part of their training for competitions. In a larger sense, though, radio contests are training that improves our ability to do whatever else we do in Amateur Radio more effectively.

Contesting helps prepare us for demanding communication tasks such as might be encountered during a major disaster. Why do I call contests training events? Simply put, all the skills built through contesting experience are valuable in emergency communications situations:

- Hearing, understanding and recording information quickly and accurately.
- Extracting information from weak signals or through interference and noise.
- Establishing and completing contacts with rapid efficiency.
- Finding work-arounds when the unexpected happens, rather than giving up.
- Knowing how to get the most out of your equipment and antennas.
- Understanding propagation and making those tough long-haul contacts.

Each contest has its own unique rules that define the challenge. There are specific starting and ending times, encompassing operating periods as short as four hours or as long as two days. Eligible stations (i.e., those with whom contacts count for contest credit) may be confined to a specific state or country or may include all hams worldwide.

There is a defined exchange, a set of information that must be sent, received and logged accurately. Exchanges can be as simple as three or four characters to a lengthy data set that simulates the message header in a formal radiogram.

Each contact adds points, and often there is a "multiplier" for each geographic area contacted. The sum of contact points times the sum of multipliers yields the final score. Participating operators usually submit their contest logs to the sponsoring organization in electronic form, which enables rigorous cross-checking for accuracy and facilitates timely publishing of the results.

Contests are not limited to the HF bands that are primarily the domain of many General-class and higher licensees. There are VHF, UHF and even microwave contests, all available to holders of every class of license. If you think that the two-meter or 70-centimeter band is limited to supporting nearby and repeater contacts, you're in for a surprise!

Communication over hundreds of miles and more is possible with suitable antennas and equipment. By participating in these competitions, you will learn what works best and how your station's effectiveness can be improved. You don't have to be in it to win it; just take part, and have fun while you're learning to enhance your and your station's performance.

When former FCC Enforcement Bureau Chief Riley Hollingsworth addressed an audience of hams at a major radio convention a few years ago, he advised them to watch and learn from contesters.

*(Continued on page 7)*

"They're the best operators in the world," he said. Having participated with many top-notch contesters myself over the last four decades, I would have to agree. If my life depended on a message getting through quickly and accurately under difficult conditions, having world-class contesters at each end of the circuit would greatly enhance the likelihood that I would survive.

Of course, most of us aren't world-class contesters. Yet we, too, can sharpen our operating skills by exercising them in organized competitions. With standardized rules and widely disseminated results, we can compare our performance with that of our peers and measure our improvement from one year to the next.

We can identify and correct weaknesses in our stations, evaluate the impact of equipment and antenna changes, and push ourselves to solve real-time communication problems as efficiently as possible.

All this builds and hones transferable skills. It makes us better at what we do, which is getting the message through. Remember, when all else fails, Amateur Radio works, and properly trained, dedicated hams make it happen. - *Marty Woll, N6VI, ARRL Vice Director, Southwestern Division, from the [Southern California Contest Club](#) website, reprinted here by permission.*

## Make an Emergency Communication Plan

This article, from the Ready.gov website, [Make A Plan](#) page, explains what an emergency communication plan is and why you should make one for your family. It also provides tips and templates on how to make a plan.

### Why Make a Plan

Your family may not be together if a disaster strikes, so it is important to think about the following situations and plan just in case. Consider the following questions when making a plan:

- How will my family/household get [emergency alerts and warnings](#)?
- How will my family/household get to safe locations for relevant emergencies?
- How will my family/household get in touch if cell phone, internet, or landline doesn't work?
- How will I let loved ones know I am safe?
- How will family/household get to a meeting place after the emergency?

### Download and Print a Plan

Here is a template that you can download, print, and fill out:

- [For parents \(PDF\)](#)
- [For kids \(PDF\)](#)
- [For transit commuters \(PDF\)](#)
- [For your wallet \(PDF\)](#)
- [Steps to make a plan \(PDF\)](#)
- [Tips on emergency alerts and warnings \(PDF\)](#)



Here are a few easy steps to start your emergency communication plan:

- **Understand how to receive emergency alerts and warnings.**

Make sure all household members are able to get alerts about an emergency from local officials. Check with your local emergency management agency to see what is available in your area, and learn

*(Continued on page 8)*

more about alerts by visiting: [www.ready.gov/alerts](http://www.ready.gov/alerts). Examples of media for alerts include:

- phone (work, cell, office)
- email
- social media
- medical facilities, doctors, service providers
- school

Decide on safe, familiar places where your family can go for protection or to reunite. Make sure these locations are accessible for household members with disabilities or access and functional needs. If you have pets or service animals, think about animal-friendly locations.

Examples of meeting places:

- **In your neighborhood:** A mailbox at the end of the driveway, or a neighbor's house.
- **Outside of your neighborhood:** library, community center, place of worship, or family friend's home.
- **Outside of your town or city:** home of a relative or family friend. Make sure everyone knows the address of the meeting place and discuss ways you would get there.
- **Discuss family/household plans for disasters that may affect your area and plan where to go.** Plan together in advance so that everyone in the household understands where to go during a different type of disaster like a hurricane, tornado, or wildfire.
- **Collect information.** Create a paper copy of the contact information for your family.
- **Identify information and pick an emergency meeting place.**
- **Share information.** Make sure everyone carries a copy in his or her backpack, purse, or wallet. You should also post a copy in a central location in your home, such as your refrigerator or family bulletin board.
- **Practice your plan.** Have regular household meetings to review your emergency plans, communication plans and meeting place after a disaster, and then practice, just like you would a fire drill.

## The ARRL Letter for September 17, 2015 Orlando HamCation to Host 2016 ARRL National Convention

[Orlando HamCation](#)<sup>®</sup> will host the 2016 ARRL National Convention in February. The convention will mark the 70th anniversary of HamCation -- second only in the US to Dayton Hamvention<sup>®</sup> in terms of attendance. Orlando HamCation is sponsored by the Orlando Amateur Radio Club, an ARRL-affiliated radio club, and is supported by volunteers from radio clubs throughout the region. HamCation has regularly served as the host for the ARRL Southeastern Division Convention, and in 2014 -- the ARRL's centennial -- it was designated as one of the six regional centennial events.

HamCation will take place February 12-14 at the Central Florida Fair and Expo Park in Orlando. In 2015, the convention sponsored 28 forums covering topics in Amateur Radio technology, public service, and education. ARRL Volunteer Examiners will conduct morning and afternoon license examination sessions on Saturday.



*(Continued on page 9)*



Special event station K1AA will be set up and operating from the fairgrounds, and licensed attendees are invited to participate.



The focus of the League's national convention will be [ARRL EXPO](#), which will feature an array of ARRL exhibits and programs. The League also will sponsor several presentations and forums.

On Saturday evening, the 2016 ARRL National Convention Banquet will take place at the nearby Highland Manor in Apopka, Florida. Banquet tickets, [available](#) from ARRL, are \$60, including transportation from the fairgrounds and some nearby hotels.

The HamCation [website](#) explains how to obtain convention tickets and offers more information about forums, exhibits, exam sessions, and local accommodations -- some offering special convention rates. Convention tickets are \$13 in advance or \$15 at the gate, offering admission for all 3 days.

The fairgrounds can accommodate recreational vehicles within walking distance of the main exhibit buildings. A reservation form is available on the HamCation [website](#).

## Ham Radio Team Supports Road Race Using High-Speed Mesh Network

Radio Amateurs in Utah have again made use of a broadband ham radio mesh network to support a public event. Charles Gray, KE6QZU, headed a group of ham radio volunteers that set up a high-



Brad Rupp, AC7BR (left), and Grant Gardner, KC7HOU, admire their handiwork after setting up a node on rugged

speed broadband ham net mesh (BBHN MESH) network in the rugged Wasatch Mountains of northern Utah to provide communication along the final 30 miles of the of the September 11-12 [Wasatch 100 Mile Mountain Endurance Race](#). Other hams covered the first 70 miles of the race using more conventional technology, including FM voice and packet.

Using the BBHN MESH system, the hams helped race officials to keep track of the racers and their progress along the extremely difficult course. BBHN MESH uses ordinary Wi-Fi technology on Amateur Radio frequencies, which meant the mesh network was able to cover a considerable amount of real estate, even in the challenging mountainous environment. The race course encompassed more than 53,000 feet of elevation change, and it's not unusual for participants to drop out before reaching the finish line.

For the hams, the terrain added a challenge to setting up the network; at some points they had to maneuver over huge boulders, some the size of cars, on their way to the summit of Clayton Peak, on the north side of the Brighton Ski Resort.

*(Continued on page 10)*

The radio amateurs had to work in teams to hoist their radio gear over the rocks to reach the top. The mesh network included five sites, including two unattended relay points. The group employed *TeamTalk* software for race communication.

In addition to Gray, other participants included Brad Rupp, AC7BR; Steven Baxter, K7SRB; Grant Gardner, KC7HOU; David Bauman, KF7MCF; Robert Jelf, KG7OHV; Doug Thompson, W1DUG; Taylor Brinton, KE7BME, and Rich Allen, N7HRA.

Last March, some of the same hams successfully used a broadband 2.4 GHz Wi-Fi network to help coordinate the Boy Scouts of America's "Scouting for Food" project. -- Thanks to [David T. Bauman](#), KF7MCF



The Reverend Robert Jelf (KG7OHV) manning the Soldier Hollow Race Finish Line Radio/Computer Station with his Service Dog Teal'c

## **The ARRL Letter for September 24, 2015 ARRL VEC Reminds License Applicants: The FCC is Now Paperless!**

The ARRL VEC is reminding Amateur Radio license applicants that the FCC no longer routinely prints or mails license documents. In an effort to streamline its procedures and save money, the FCC went "paperless" in February 2015.

"Customer contact with the VEC has tripled since this change, as many amateurs have not heard of the change or do not understand the FCC procedures for obtaining a license copy," said ARRL VEC Manager Maria Somma, AB1FM. She said the most frequently asked question comes from Universal Licensing System users who have applied for renewal or modification, but then think the transaction was not completed because they did not get a new copy of their license in the mail.

"Once we look up the info, our answer is nearly always that the requested transaction actually was completed and appears in the FCC database, but they won't be getting a copy of the updated license in the mail," Somma said. Less frequently, her department hears from exam applicants who ask why they did not receive a copy of their license after they passed the test.

To help clarify things, Somma has created a web page, [How to Obtain an Official FCC License Copy](#), devoted to explaining the various ways a licensee can get an official license document from the FCC. An official license displays the FCC logo and the "Official Copy" watermark across each page.

*(Continued on page 11)*



A [printer-friendly version](#) of the instructions is available on the ARRL website.

Somma said the *easiest* way for a license holder to obtain a license copy is to call the FCC at (877) 480-3201.

Licensees can also download and print their own official license copy by logging into the Universal Licensing System ([ULS](#)) using their FCC Registration Number (FRN) and password, then clicking on "Download Electronic Authorizations" in the menu on the left. The ULS has also added a green informational banner that says, "Change your paper authorization preferences [here](#), or download your official electronic authorizations [now](#)." Somma points out that the green banner is only temporary, and it eventually will go away.

At least for now, though, clicking the "[here](#)" hyperlink will take you to the Paper Authorization Preferences" page. To continue receiving paper license documents, click "Yes." Clicking the "[now](#)" hyperlink will take you to the "Download Authorizations" page.



Click on "Download Electronic Authorizations" in the ULS menu on the left side of your account page to access the "Download Authorizations" page.

On the "Download Authorizations" page, scroll down to the "Filter by Radio Service" box (remember, the ULS is *not* just for the Amateur Service). First, **highlight your call sign** and then click "ADD>" to put your call sign into the "Authorizations to Download" column. Scroll down a little further and click "DOWNLOAD>" to create an official FCC license PDF document that can be saved or printed.

When modifying, renewing, or requesting a duplicate license copy, a licensee who already has an FCC Registration Number (FRN) and provides a valid e-mail address under "Applicant Information" while logged into the ULS system will receive an official ULS-generated electronic authorization via e-mail.

All Amateur Radio exam applicants should include a valid e-mail address on their NCVET 605 form, in order to receive a copy of their license electronically.

## In Brief

**South Sandwich/South Georgia DXpedition Dates Announced:** [The Intrepid DX Group](#) has announced its itinerary and operating schedule for its January 2016 South Sandwich/South Georgia VP8SGI/VP8STI DXpedition. South Sandwich Islands is No 3 on ClubLog's [Most Wanted DXCC List](#); South Georgia is No 8. The Intrepid DX Group's Paul Ewing, N6PSE, said the team expects to arrive at South Sandwich on January 17, depending on weather and sea conditions. The team will spend 10 days on South Sandwich, operating as VP8STI before sailing to South Georgia Island to start operations as VP8SGI about February 1. "Our main priority is to make a great impact to the need for South Sandwich contacts, and we will sacrifice our time at South Georgia to ensure that we make that impact from South Sandwich," Ewing said. -- *Thanks to the Intrepid DX Group*



*(Continued on page 12)*



# The ARRL Letter for October 1, 2015

## MARS Invites ARES/RACES Participation in Coronal Mass Ejection Disaster Exercise

A disastrous coronal mass ejection (CME) will be the focus of a national Military Auxiliary Radio System (MARS) communication exercise in early November, and MARS is hoping to collaborate with Amateur Radio Emergency Service (ARES) and Radio Amateur Civil Emergency Service (RACES) groups. The MARS exercise will get under way on November 8 and continue into November 10. It will be a quarterly contingency HF exercise in support of the US Department of Defense.

"The exercise scenario will simulate a CME event and focus on actions that radio operators should take prior to and following a CME event," explained Army MARS Program Manager Paul English, WD8DBY. "One thing we want to continue to work on is the interface with the greater Amateur Radio community."

CMEs are huge explosions of gas, plasma, and electromagnetic radiation from the Sun, which are responsible for geomagnetic storms. Solar flares can accompany CMEs, but they are not the same thing. A CME can take anywhere from 1 day to 3 days to reach Earth. CMEs occur all the time, but most bypass Earth with minor effects. A major CME that hits Earth directly could damage or destroy satellites as well as terrestrial communication and electrical power infrastructure.

English said the November exercise would simulate a radio blackout as well as infrastructure damage. "During the exercise, we will simulate the blackout with a 3 hour pause, and then we will bring stations back on air and begin handling requests for information," he told ARRL.

Training objectives for this exercise will include understanding what a CME is and how much forecast lead time can be expected; the effects associated with a CME, and what precautions radio operators take to protect their equipment prior to a severe CME.

After the simulated CME, operators will assess its effects and begin reporting that information. This will involve "interoperation with Amateur Radio operators and groups to assist in assessment."

Individual radio amateurs as well as ARES and RACES teams are encouraged to participate in this exercise. [Contact](#) MARS and provide your contact information, if your organization is interested.

## ARRL Foundation Scholarship Program Accepting 2016-17 Applications

[The ARRL Foundation](#) is accepting academic year 2016-17 applications from eligible young radio amateurs planning to pursue higher education. All applicants must be active FCC licensees and submit an online application. More than 80 scholarships ranging from \$500 to \$5000 will be awarded in 2016. In addition, one applicant will be selected to receive the prestigious [William R. Goldfarb Memorial Scholarship](#), awarded to a high school senior pursuing a degree in



*(Continued on page 13)*

Marginal Notes: Everybody is somebody else's weirdo.

business, computers, medical, nursing, engineering, or science. Students submitting 2016 applications should read the [ARRL Scholarship descriptions](#) carefully and apply only for those scholarships for which they are eligible. Some scholarships have [geographic criteria or other requirements](#).

All applicants must [submit](#) a completed online application. Applicants must also forward a copy of their academic transcripts from their most recently completed school year. *Applications without accompanying transcripts will not be considered. Cell phone photos of transcript(s) will not be accepted. All transcripts must be scanned into a PDF and [sent](#) via e-mail.*

Applicants for the William R. Goldfarb Memorial Scholarship must also [submit](#) a PDF of their FAFSA form by February 18, 2016, as well as a copy of their academic transcript from their most recently completed school year. Applicants will receive a confirmation message when their applications have been successfully processed.

The 2016 application window opened on October 1. Applications for the 2016 scholarship process must be received by 11:59 PM Eastern Standard Time on January 31, 2016. Transcripts must be received by Thursday, February 18, 2016. Award recipients are typically notified by mid-May by USPS mail and e-mail. Read [more](#).

## In Brief

**AMSAT's Fox-1A to Launch from California on October 8:** The much-awaited Fox-1A CubeSat is set to launch from Vandenberg Air Force Base in California on October 8. It will ride aloft on an Atlas V rocket as part of the National Reconnaissance Office Launch 55 (NROL-55), which will carry an auxiliary payload called Government Rideshare Advanced Concepts Experiment (GRACE). Sponsored by the NRO, GRACE will carry 13 CubeSats into space -- nine sponsored by the NRO and four -- including Fox-1A -- by NASA. GRACE is the fourth NRO-sponsored CubeSat mission. -- *Thanks to AMSAT News Service*



**LAPAN-A2 FM and APRS Satellite Launched:** It's getting even busier in space. Indonesia's IARU Amateur Radio society ORARI reports that the LAPAN-A2/ORARI satellite was launched on September 28, from India. LAPAN-A2 is in a 650 km orbit and takes about 110 minutes to orbit Earth. The low-inclination equatorial orbit of 6° to 8° means it will be receivable only from about 30° N to 30° S, limiting the satellite's accessibility to users outside of that footprint. LAPAN-A2 has been heard. It now is undergoing activation and systems testing, and it is expected to be 1 month before the Amateur Radio FM transponder will be generally available. The primary aims of the mission are Earth observation using an RGB camera and maritime traffic monitoring using AIS -- both using frequencies outside the Amateur Satellite Service. The telemetry beacon is on 437.425 MHz; the FM voice uplink is 435.880 MHz; the FM voice downlink is 145.880 MHz. The transponder runs 5 W. The APRS digipeater is on 145.825. [Reports](#) are welcome.



**Radio Amateurs Track Signal Interfering on Public Safety Frequency:** Radio amateurs in New Hampshire recently were able to help track down the source of a constant mystery signal on 155.340 MHz -- the "Med 1" frequency for local hospitals. "The offending transmitter was easily received in Dover on a handheld, and was interfering with ambulance-hospital communications," New Hampshire Technical Coordinator Dee Hebert, AB1ST, told New Hampshire Section Manager Pete Stohrer, K1PJS. "George [Whitehead, W1BOF] and I began looking for the transmitter in Dover, and, after a few hours, we had traced it down to Exeter Hospital. George knows the emergency preparedness coordinator at that hospital and contacted him." Communications technicians at the hospital, responding to a report that users were unable to transmit or receive on any frequency, were unaware of the constantly keyed transmitter. They started shutting down systems there until the offending signal disappeared. "We suspect that all of the problems at Exeter Hospital were due to that single transmitter," Hebert said. "It was good to see Amateur Radio and our fox hunt skills put to practical use in the community." -- *Thanks to Dee Hebert, AB1ST*



## Questions for General Class License

1. (G1A01) On which of the following bands is a General Class license holder granted all amateur frequency privileges?
  - A. 60, 20, 17, and 12 meters
  - B. 160, 80, 40, and 10 meters
  - C. 160, 60, 30, 17, 12, and 10 meters
  - D. 160, 30, 17, 15, 12, and 10 meters
2. (G2C05) What is the best speed to use when answering a CQ in Morse code?
  - A. The fastest speed at which you are comfortable copying
  - B. The speed at which the CQ was sent
  - C. A slow speed until contact is established
  - D. At the standard calling speed of 5 wpm
3. (G3B08) What does MUF stand for?
  - A. The Minimum Usable Frequency for communications between two points
  - B. The Maximum Usable Frequency for communications between two points
  - C. The Minimum Usable Frequency during a 24 hour period
  - D. The Maximum Usable Frequency during a 24 hour period
4. (G4C09) How can a ground loop be avoided?
  - A. Connect all ground conductors in series
  - B. Connect the AC neutral conductor to the ground wire
  - C. Avoid using lock washers and star washers when making ground connections
  - D. Connect all ground conductors to a single point
5. (G5B07) What value of an AC signal produces the same power dissipation in a resistor as a DC voltage of the same value?
  - A. The peak-to-peak value
  - B. The peak value
  - C. The RMS value
  - D. The reciprocal of the RMS value
6. (G6B03) Which of the following is an advantage of CMOS integrated circuits compared to TTL integrated circuits?
  - A. Low power consumption
  - B. High power handling capability
  - C. Better suited for RF amplification
  - D. Better suited for power supply regulation
7. (G7B03) Which of the following describes the function of a two input AND gate?
  - A. Output is high when either or both inputs are low
  - B. Output is high only when both inputs are high
  - C. Output is low when either or both inputs are high
  - D. Output is low only when both inputs are high
8. (G8B06) What is the total bandwidth of an FM phone transmission having 5 kHz deviation and 3 kHz modulating frequency?
  - A. 3 kHz
  - B. 5 kHz
  - C. 8 kHz
  - D. 16 kHz
9. (G9B10) What is the approximate length for a 1/2 wave dipole antenna cut for 14.250 MHz?
  - A. 8 feet
  - B. 16 feet
  - C. 24 feet
  - D. 32 feet
10. (G0B15) Which of the following is true of an emergency generator installation?
  - A. The generator should be located in a well-ventilated area
  - B. The generator must be insulated from ground
  - C. Fuel should be stored near the generator for rapid refueling in case of an emergency
  - D. All of these choices are correct

(For answers to test questions see page 15)



# BARC Club Officers

## *President*

Cordell Smart KE7IK  
[president@barconline.org](mailto:president@barconline.org)  
(435)245-4581

## *Vice President*

Ted McArthur AC7II  
[ac7ii33@gmail.com](mailto:ac7ii33@gmail.com)  
(435)770-9169

## *Secretary*

Tammy Stevens N7YTO  
[secretary@barconline.org](mailto:secretary@barconline.org)  
(435)753-2644

## *Treasurer*

Kevin Reeve N7RXE  
[treasurer@barconline.org](mailto:treasurer@barconline.org)  
(435)753-1645

## *Board Members*

Tyler Griffiths N7UWX  
[N7UWX@comcast.net](mailto:N7UWX@comcast.net)  
(435)881-3834

Laurie Littlelike KF7DKM  
[laurie9088@gmail.com](mailto:laurie9088@gmail.com)  
(435)752-8029

Russell Lekis KE7VFI  
[rleikis@gmail.com](mailto:rleikis@gmail.com)  
(435)512-8166

## *Newsletter Editor*

Dale Cox KB7UPW  
[newsletter@barconline.org](mailto:newsletter@barconline.org)  
(435)757-4063

## *Web Page Editors*

Kevin Reeve N7RXE and Bob Wood WA7MXZ  
[webmaster@barconline.org](mailto:webmaster@barconline.org)

Answers to questions on [page 14](#): 1-C, 2-B, 3-B, 4-D, 5-C, 6-A, 7-B, 8-D, 9-D, 10-A

