



# THE OHM TOWN NEWS

*Voice of the Bridgerland Amateur Radio Club*

## Summer 2007

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

### PRESIDENTS MESSAGE

#### *Field Day 2007*

June is already upon us. That means that Field Day is only a few weeks away, the weekend of June 23-24. BARC will once again be holding field day up Logan Canyon at the Forestry Field Station with antenna setups, computer networking, contesting, and eating. Wait a minute, perhaps I am getting a little ahead of myself for those who haven't participated in Field Day before.

Field Day is a nation-wide Amateur Radio exercise in the rapid deployment and operation of radio equipment under simulated emergency conditions. What better way to turn up the intensity than to make the whole thing a contest where you try to get as many points as possible by making contacts all over the U.S. on various bands and modes.

While we do operate on emergency power, BARC has enjoyed relative comfort. While we like to make a showing in the contest, the atmosphere is generally relaxed and we want to make extra effort to make sure everyone has the opportunity to operate. I would like to see more families come up and take advantage of

the area and facilities and let their kids operate for a bit. I have heard positive feedback from families who have come up the past couple of years.



Field day is what we make it. Come join us. Bring a friend or family member, some ideas and enthusiasm. Lets have fun visiting and operating radios up the canyon away from it all.

*(Continued on page 3)*

### HAM PROFILE

by Boyd Humpherys W7MOY

A sure fire clue as to Ham residency is a tower or roof mounted pole and some sort of thing called an antenna mounted thereon. Two towers, masts, and antennas suggest some sort of "His and Hers" arrangement with possible quiet hours. Three towers, masts, and assorted antennas mean only one thing. Don Fullmer N7RVU must live there. There is also a strong possibility that additional enthusiasts may inhabit the dwelling, exerting a sizeable influence on the collection of sky

wires, namely son Dave, N7RRZ, who declined to comment on anything that might tend to incriminate him.



The evidence of a sizable collection of "radio stuff" scattered strategically hither and yon, inside is prima facie evidence that the affliction has grabbed the occupants with a vengeance. Now how many of you can exhibit 11 licenses in the family. As they say down under—Good on Ya!!!

Don has an assortment of HTs, an Alinco plus a Yaesu rig in the family prime movers and can blast you S9 plus, at a moments notice from about any room in the house.

He has held a ticket since 91 and has participated in quite a few activities, such as the Beaver Fire, search and rescue at Tony Grove, where radio skills really paid off.

Don was born in Spring City, Utah in 1930. For the uninformed, Spring City is about 8-9 miles due East of Wales. He graduated from North Sanpete High

*(Continued on page 3)*

# UPCOMING ACTIVITIES 2007



## Club Officers

### *President*

Jacob Anawalt KD7YKO  
president@barconline.org  
(435)753-9033

### *Vice President*

Eric Larson KD7YKQ  
vice-president@barconline.org  
(435)753-3867

### *Secretary*

Tammy Stevens N7YTO  
secretary@barconline.org  
(435)753-2644

### *Treasurer*

Dave Fullmer N7RRZ  
treasurer@barconline.org  
(435)753-2685

### *Board Members*

Kevin Reeve N7RXE  
n7rx@arrl.net  
(435)753-1645

Tyler Griffiths N7UWX  
n7uwx@comcast.net  
(435)752-7269

Kevin Kesler KE7AAF  
kevink@ext.usu.edu  
(435)563-1941

### *Newsletter Editor*

Dale Cox KB7UPW  
newsletter@barconline.org  
(435)563-3836

### *Web Page Editor*

Jacob Anawalt KD7YKO  
webmaster@barconline.org  
(435)753-9033

Cache Valley Biathlon - June 9th  
Test Session - Old Main Rm. 407 - June 16, 8:00 A.M.  
Wasatch Back Relay June 22  
Field Day - June 23 & 24  
(Club Meeting - dinner on the 23rd at 6:00 P.M.)  
Utah MS 150 - June 23 & 24  
Cache Cruise In - July 7th  
LOTOJA - September 8th  
Top of Utah Marathon - September 15th  
BEAR 100 - September 22nd  
JOTA - October 20 & 21

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)

## Field Day

June 23 and 24  
Forestry Field Station, in Logan Canyon

This years Field day will be from 1800 UTC (noon) June 23rd to 1800 UTC June 24th at the Forestry Field Station about 19.6 miles up Logan Canyon. It is just before the Tony Grove turn off, and is on the south, or right side of the road. The site has several buildings, including bunk houses with twin sized mattresses, and several smaller rooms a family could take. There is running water, showers, flush toilets, and heat.

The site is run on generated power. We are lucky to have access to this site. We have reserved the facilities for Saturday and Sunday. There is plenty of room for trailers and tents if you want to camp out. A pot luck dinner will start at 6:00 PM on Saturday Evening.

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

*(Presidents Message Continued from page 1)*

## **IRLP Node**

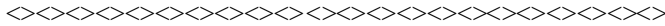
The repeater group has been putting time and effort into the IRLP node (#3381) on the 147.200 repeater. The system is currently in a testing phase at a temporary location in Logan. The longer term goal is to re-install the repeater up at a site above Clarkston.

The repeater has two functions. It can either be linked to the Mt. Logan hub of the BARC linked repeater system (code 220) or operate as a stand-alone repeater (code 221). When operating as a stand-alone repeater you can connect it to another IRLP node or to a reflector like the Western Reflector in Nevada (#9250) where many nodes can connect.

I am very excited about this new feature to our local repeater system. When I was first licensed I spent a number of evenings burning through my HT batteries on the simplex IRLP node talking to people around the country and world. I see that the new Technician book covers the topic. I hope others find as much enjoyment as I have, especially the new hams.

I connected to the Western Reflector from the new node the other night and enjoyed a long QSO with ZL1SAT who was testing a new IRLP node at home in New Zealand. I learned a lot about the Amateur Radio rules and operation down there. It was great to build international good will.

KD7YKO



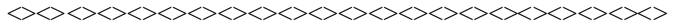
*(Ham Profile Continued from page 1)*

School in Mt. Pleasant, spent a year at Snow College, then served a mission for his faith amongst the Navajos and Hopis in New Mexico and Arizona. An enjoyable experience since they buried the hatchet down there a few years prior. Upon returning he was met by a gent in striped pants and top hat, saying "I want you". He did manage to hide out on the U of U campus camouflaged as a resident Indian for a quarter, however they eventually discovered his tepee and off he went. Thus began an eventful 20 year tour with Uncle Sam's Army.

The brief account which follows is not for the faint of heart. So hang onto your hats and feel comfortable with staying in one place for a while. He was introduced to the Army's KP service at Camp Roberts, then Fort Ord, Fort Benning, GA and OCS. Thence he went AWOL (after women on leave), met and married his sweetheart, Joan McDaniel, typically of Irish background. Then off to Germany for four years where a steady diet of Kraut brought tears to their eyes and two children. Back to the US of A and Fort Sill, OK where another harmonic was added. Next in the parade was Aberdeen MD, and the final and 4<sup>th</sup> harmonic. With schooling in the military plus the last year at the U, he graduated with his degree in 1963. You may think that is the end, but not so. During that 20 year hitch, a year was spent in Korea, another year in Vietnam, a year at the Tooele Army Depot, two more years in Germany (he told me Kraut really does start with a K), an assignment in California, two years in Alaska, four years in Iowa and Illinois, plus a few others here and there. In this process Don's odometer turned over twice.

In all this shuffling, spouse Joan did a bang up job of herding the kids, and making peanut butter sandwiches for Don as he and duffel bags regularly went out the front door. He admits that marrying Joan was a heap big affair and one to last, which it has.

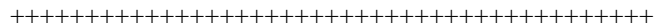
After all the transient hocus they purchased a home in North Logan, he went to work for the Cache County School District and retired in 90. They have now been stuck on 12<sup>th</sup>. East for some 32 years. It's no wonder that moss started to grow, stuff started collecting and antennas sprung up all over the place despite liberal applications of Round up. Glad to have both of you around to keep us humble. 73s.



The ARES E-Letter May 16, 2007

### **NYC/LI ARES Supports Storm Relief Effort**

New York City, April 18 -- In what many have called the worst rainstorm in a hundred years, NYC/Long Island ARES responded. SEC Mike Lisenco, N2YBB, reported "ARES members were placed on stand-by on Saturday in expectation of the Nor'Easter that was due." In New York City, the Red Cross of Greater New York called DEC John Healy, KA2ABV, to staff an expected nine shelters. Salvation Army SATERN also asked that NYC District ARES place themselves on stand-by. Shelter operations began at 8 AM Sunday morning at the request of the New York City Office of Emergency Management. By the time the shelters opened, Healy said "my five Borough ECs were able to fully staff the shelters, as well as the EOC at the Red Cross. We put together a staff of 30 ARES volunteers for the first 24 hour period, with more to come if needed." More than eight inches of rain fell on New York City. In Nassau County, DEC Jim Mezey, W2KfV, explained that "Nassau ARES ramped up on Saturday with a check of our communication systems at the Nassau Red Cross Chapter." "We were lucky as this storm did not wreak the havoc that was expected." Rain totals were three to five inches, with winds and coastal flooding, and power outages. The Red Cross set up three shelters staffed with ARES personnel. Some Fire Battalion EOCs were also staffed. Nassau OEM was staffed, and all ARES frequencies were monitored. OEM was briefed with updated conditions throughout the day and night. In Suffolk County, DEC Bill Scheibel, N2NFI, said that although ARES was placed on stand-by, they were allowed to stand down quickly as there was no communications mission. His 10 township ECs were alerted, however. ARES communicators are to be commended.—Mike Lisenco, N2YBB, New York City/Long Island ARES Section Emergency Coordinator <n2ybb@arrl.net>



### **2007 National Hurricane Conference A Hit**

Amateur Radio at the 2007 National Hurricane Conference in New Orleans was a hit. The ARRL had the entire afternoon on the second day, with media, hams and non-hams filling the room. Steve Ewald, WV1X of ARRL HQ moderated the Amateur Radio session. Speakers included Gary Stratton, K5GLS, Louisiana SEC, Mississippi DEC Tom Hammack, W4WLF, Alabama Section Manager Greg Sarratt, W4OZK,

New Orleans EC Joel Colman, NO5FD, and TS Cedric Walker, K5CFW. The conference filled several large meeting rooms of the downtown New Orleans hotel. The exhibits combined for a grand show of emergency and disaster resources, management, coordination and supplies. Many of ARES' served agencies and hundreds of manufacturers and suppliers were featured. Major speakers included the FEMA Director, American Red Cross President, and National Hurricane Center Director. Attendees heard about the "New FEMA," the "New Red Cross" and hurricane predictions for this season. The message was these agencies are evolving and Amateur Radio will have to adapt to their new strategies. About 2500 people in the disaster and emergency fields were in attendance. The hospitality of the local amateurs was tremendous and greatly appreciated. FEMA Director David Paulison outlined the "New FEMA," as an agency that will be more responsive, deploy more quickly, build better relationships and enhance training. FEMA now has directors in all 10 regions and plans to be at 95 percent staffing when the hurricane season begins June 1. Interim American Red Cross President Jack McGuire spoke on what the Red Cross has done to better prepare for larger disasters, including updating memoranda of understanding and hiring more permanent staff and placing them in critical locations within FEMA regions. "The Red Cross has purchased new technology and food, water and clean-up kits and have staged them in critical hurricane areas." The Tuesday afternoon Training Session at the Hurricane Conference focused on Amateur Radio's role in disaster communications, and it gave radio amateurs who experienced Hurricanes Katrina and Rita first hand a chance to discuss their experiences, share their best practices and lessons learned. Thanks to Tom Miller, AC5TM, for organizing and operating the ARRL and Amateur Radio exhibit booth at the conference in cooperation with Citizen Corps. There has been big progress on many fronts in the New Orleans area—especially in the downtown business district, the famous French Quarter and other tourist attractions—where activities are going "full steam ahead." Some parts of New Orleans, however, are still struggling, and it may take years for these areas to recover or re-gain what it had been like before Hurricane Katrina.—Reported by Greg Sarratt, W4OZK, Alabama Section Manager, and Steve Ewald, WV1X.

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**Letters: Ham Shack as EOC**

This month's issues of "Emergency Management" magazine has a great article "The Ideal EOC". It's available to view online at: <[http://www.emergencymgmt.com/story.php?id=5338&utm\\_source=em&utm\\_medium=enews&utm\\_content=story](http://www.emergencymgmt.com/story.php?id=5338&utm_source=em&utm_medium=enews&utm_content=story)> In many ways, an Amateur Radio "shack" can be considered an EOC. Many lessons about designing your space for effective communications can be inspired by looking at well run EOCs. After Katrina, we took several steps to improve our shack, including creating "Fax Message Forms" based on IC-213 format. Now, next to the fax machine, there is a red folder with a dozen of these forms ready to go. Inside that folder is a list of the state EMA offices, with fax numbers. During the Katrina response, we were often able to send faxes to the Louisiana State Police or the Mississippi EMA office in minutes.

We also added battery-powered emergency lighting, installed a headset for the landline telephone, set up extra J-Pole antennas in the attic in order to "harden" our installation against storm damage and stay on the air. We've also recently installed a steel tornado shelter, added to our stockpile of food and water, camping gear, etc. A television set was added with both cable TV connection, and a set of rabbit ears as a backup. Small generators, safely operated outside provide backup for electrical power and large gel cell batteries keep us on the air, and the computer working during short term blackouts. Hams can't afford the GIS (Geographic Information System) software tools that professional emergency managers use, but you can add things like "Gibson Ridge," a very affordable weather radar suite that rivals the tools used by the pros, and Google Earth can be used to help locate streets or addresses during an incident. We've added these software tools and many others to our new shack. As noted in the article, a good scanner/printer/copier is an essential tool for the shack-EOC, as well. Extra batteries, office supplies, etc. is all part of a well rounded emergency communications station. And if you only have one radio, then consider purchasing a second. As my father used to say, "If you don't have a back up, then you don't have a plan".—Les Rayburn, N1LF



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 The ARRL Letter Vol. 26, No. 18 May 4, 2007

**==>MOTOROLA SUSPENDS POWERLINE  
 LV BPL DEVELOPMENT**

Less than two years after announcing its Powerline LV Access BPL product, Motorola has decided to suspend product development and to devote its resources to more promising markets, industry sources say. Motorola reportedly has decided to focus on a product called Powerline MU, which is for use within multiple-unit dwellings. The decision to stop work on its Access BPL product reflects declining interest in residential broadband service delivery among utilities coupled with more immediate demand for in-building BPL systems. Motorola has indicated that it's not scrapping Powerline LV altogether, however. Powerline LV united Motorola's Canopy wireless broadband Internet platform with enhanced ham band-notching HomePlug technology, drastically reducing BPL interference potential by restricting the application of high-frequency RF to the low-voltage side of the power transformers serving customers' homes, not the medium-voltage wires that line many residential streets. As a result, Powerline LV avoided the system architecture that poses the greatest risk of BPL interference to radio communication—radiation from the medium-voltage power lines. ARRL Chief Executive Officer David Sumner, K1ZZ, expressed appreciation for Motorola's approach to the thorny issue of radio interference from BPL systems. In an effort to minimize interference, particularly to the Amateur Radio bands, Motorola designed its Powerline LV system in close cooperation with the League's technical staff, Sumner noted. A test stand Access BPL system was in operation briefly at ARRL Headquarters. Measurements and subjective listening tests on the ham bands showed that Powerline LV was Amateur Radio-friendly. "As one would expect from a

company with such a distinguished record in the field of radio communication, Motorola acknowledged at the outset the seriousness of the interference problem," he said. "Motorola's system architecture influenced other vendors, raised industry awareness of the interference issue, and demonstrated the value of working with the ARRL to find positive solutions."

ARRL Bulletin 15 ARLB015

From ARRL Headquarters

Newington CT May 30, 2007

**Files Federal Appeals Court Brief in Petition for Review of BPL Rules**

The ARRL has filed a federal appeals court brief outlining its case and requesting oral arguments in its petition for review of the FCC's broadband over power line (BPL) rules. The League has petitioned the US Court of Appeals for the DC Circuit to review the FCC's October 2004 Report and Order (R&O) in ET Docket 04-37 and its 2006 Memorandum Opinion and Order. In its brief filed May 17, the ARRL contends, among other things, that the FCC's actions in adopting rules to govern unlicensed BPL systems fundamentally alter the longstanding rights of radio spectrum licensees, including Amateur Radio operators. "For the first time ever, the FCC has permitted new unlicensed devices to operate in spectrum bands already occupied by licensees, even if the unlicensed operations cause harmful interference to the licensees," the League said in stating its case. "The orders under review reverse nearly seven decades of consistent statutory interpretation and upset the settled expectations of licensees without so much as acknowledging the reversal, let alone justifying it." The ARRL argues that the FCC's approach to adopting rules to govern BPL flies in the face of Section 301 of the Communications Act, which requires that operators of devices that emit radio frequency energy first obtain an FCC license. "For years, the FCC has consistently read Section 301 to apply to unintentional radiators, such as BPL devices, and has expressly embodied that interpretation in its rules," the League's brief recounts. The Commission then compounded its error by asserting that BPL devices do not fall within Section 301 at all, the League said. The ARRL contends that the FCC orders under review "jeopardize the license rights of ARRL's members and other license holders by authorizing providers of a new device—Access Broadband over Power Lines, or 'BPL'—to send radio signals across the electric grid in the frequencies the license holders occupy, but without having to obtain an FCC license." The League's brief further asserts that the FCC "has failed to discuss or disclose significant information in the record that potentially contradicts its key interference findings." The Commission not only withheld its internal studies until it was too late to comment, the ARRL alleges, but has yet to release portions of studies that may not support its own conclusions. The ARRL wants the appeals court to determine if the Commission acted in an arbitrary and capricious manner for not disclosing "significant information that potentially contradicts its key interference finding," the League said in its brief. The League also has taken issue with what it argues is the FCC's "arbitrary and capricious" adoption of a BPL emission measurement standard

that's unsupported by the record in the proceeding and ignores contrary evidence. The ARRL brief asserts that, for the first time ever, the FCC "has authorized the operation of unlicensed devices that it concedes interfere with licensed devices" and has declared that such devices "may continue operating even where proven to cause interference." The FCC, ARRL contends, has concluded that BPL's acknowledged interference risks are manageable, but it bases that conclusion—which ARRL calls "the linchpin of the challenged orders"—on FCC studies the Commission has declined to make public in unedited form. The FCC's response to the League's brief is due July 2.

The ARRL Letter Vol. 26, No. 20 May 18, 2007

**QCWA, Newsline to collaborate in mentoring program:** The Quarter Century Wireless Association (QCWA) <<http://www.qcwa.org>> and Amateur Radio Newsline (ARNewsline) <<http://www.arnewsline.org>> have joined forces in cosponsoring the Roy Neal, K6DUE, Amateur Radio Mentoring Program. ARNewsline launched the post-licensing educational service in 2004. It's designed to pair newcomers with veteran radio amateurs who can share their skill and experience. "Amateur Radio is a tremendously complex arena", says Newsline Executive Producer Bill Pasternak, WA6ITF. "We have hams who are truly experts in numerous fields [and] we want to take advantage of that talent pool to help educate the next generation of operators and generations to follow." The collaboration with QCWA makes thousands of veteran radio amateurs available as potential mentors—each with at least 25 years of experience in the hobby. QCWA President John B. Johnston, W3BE, called the arrangement "a good deal for all of Amateur Radio." A retired FCC employee and Dayton Radio Amateur of the Year, Johnston says he believes that it is important to keep ham radio traditions alive. ARNewsline and the QCWA are now seeking both new radio amateurs and potential QCWA mentors—or Elmers. E-mail <[mentor@arnewsline.org](mailto:mentor@arnewsline.org)> your name, call sign, address with ZIP code, telephone number and a convenient time to call.

The ARRL Letter Vol. 26, No. 21 May 25, 2007

**ARRL and MetLife® team up for new membership benefits!**

The ARRL inaugurated a partnership with MetLife® at Dayton Hamvention to provide new membership benefits. An announcement to ARRL members went out last week outlining the program, which offers group automobile and home insurance as well as banking products. This program also makes available insurance for renters, boats, condos, recreational vehicles (RVs) and fire. "I am very excited to see this program launched after nearly a year of planning and development," ARRL Membership Manager Katie Breen, W1KRB, said. At Hamvention, MetLife representatives set up at ARRL EXPO where they held a giveaway for a giant Snoopy—MetLife's marketing mascot—and handed out nearly 8000 Snoopy toys. All ARRL members are eligible for this new program, which offers a wide range of policies. For a free, no-obligation quote, just call toll-free 800-GET-MET8 (438-6388). When calling, have your ARRL membership number ready, and explain that you're inquiring as a group member.

### Questions for General License

1. (G1B01) Provided it is not at or near a public-use airport, what is the maximum height above ground an antenna structure may rise without requiring its owner to notify the FAA and register with the FCC?
  - A. 50 feet
  - B. 100 feet
  - C. 200 feet
  - D. 300 feet
2. (G1F05) What is the maximum symbol rate permitted for RTTY emissions transmitted on frequency bands below 10 meters?
  - A. 56 kilobauds
  - B. 19.6 kilobauds
  - C. 1200 bauds
  - D. 300 bauds
3. (G2C05) During an emergency, what power output limitations must be observed by a station in distress?
  - A. 200 watts PEP
  - B. 1500 watts PEP
  - C. 1000 watts PEP during daylight hours, reduced to 200 watts PEP during the night
  - D. There are no limitations during an emergency
4. (G3B07) During periods of low solar activity, which frequencies are the least reliable for long-distance communication?
  - A. Frequencies below 3.5 MHz
  - B. Frequencies near 3.5 MHz
  - C. Frequencies on or above 10 MHz
  - D. Frequencies above 20 MHz
5. (G4D05) What is the output PEP of an unmodulated carrier transmitter if an average-reading wattmeter connected to the transmitter output indicates 1060 watts?
  - A. 530 watts
  - B. 1060 watts
  - C. 1500 watts
  - D. 2120 watts
6. (G7A02) What components are used in a power-supply filter network?
  - A. Diodes
  - B. Transformers and transistors
  - C. Quartz crystals
  - D. Capacitors and inductors
7. (G9C05) What happens to the feed-point impedance of a ground-plane antenna when its radials are changed from horizontal to downward-sloping?
  - A. It decreases
  - B. It increases
  - C. It stays the same
  - D. It approaches zero

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PROVIDENCE, UT 84332**



***Summer, 2007***

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