



THE OHM TOWN NEWS

Voice of the Bridgerland Amateur Radio Club

Summer 2009

June, July, August

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

HAM PROFILE

Peggy Elwood, KF7BGU
by Brent Carruth AD7VF

In the well-loved Snoopy comic strip by Charles Schulz, a beagle, named Snoopy, who aspires to be an author, begins his mystery novel with "It was a dark and stormy night."



In Cache Valley the evening of Tuesday, 2 June 2009, brought some severe stormy weather with torrents of rain and hail. Smithfield was particularly affected with many residents' homes flooded by nearby canals and others with hail covering their yards like snow twelve hours later. Mendon was without power for about an hour. There was a report on the 146.72 Mt. Logan repeater that at least one cell phone tower some-

where had lost power. Then the next day there was a 4.0 magnitude earthquake in northeast Box Elder county, just on the other side of the Wellsvilles from Cache Valley.

Instances such as these remind us, amateur radio operators, of our need to be prepared to assist both ourselves and our neighbors and townspeople, to be able to operate our radios on emergency power when other communications and power systems fail.

Peggy Elwood, KF7BGU, is doing just this. A resident of Logan, she views amateur radio as essential for emergency communications and has joined her family in becoming a licensed radio operator. Amateur radio also provides an excellent means to stay in touch with her family who loves to hike the beautiful trails in our canyons and mountains and camp overnight.

Peggy took her Technician class license exam on 19 March 2009 along with her husband, Richard, KE7GYD, who took his General class exam. Strong supporters of Cache Valley 4-H, Richard and son Nate took the 4-H amateur radio class taught by Kevin Kessler, KE7AAF, and Kevin Reeve, N7RXE, three years ago and both Richard and

(Continued on page 3)

PRESIDENT'S MESSAGE

The months of June, July and August are amateur radio public service months and there will be no club meetings during those months. There are plenty of public service events that you can volunteer your time and use your radio equipment which help supports a wide variety of events. Events might be parades, walks, runs, and bike tours. Sign up online on our club web page.

Also we have our Field Day activity June 27-28 at the USU Forestry Station in Logan Canyon. Field Day is an annual operating exercise in which amateur radio operators from the United States and Canada operate 24 hours on emergency (non-commercial) power. Communications is on amateur bands, including HF, CW, and maybe some PSK, RTTY, and SSTV. Field Day is a lot of fun, a great way to work with other amateur radio operators, and try out different radio equipment in one location. We are having a pot luck dinner on Saturday, June 27th, at 6 PM. The club will provide hamburgers & hotdogs w/fixins, and drinks. Just bring an item to share, such as a desert, chips, salad, fruit, etc. More information will be provided as the planning progresses.

The Dayton Hamvention 2009 trip. Made it to my first Dayton Hamvention with Tyler Griffiths, Ted Mc Arthur,



Bill Neville, and Bob Wood. Al, from Boise, met us in Salt Lake for the flight to Dayton and Bob, from Las Vegas, met us in Dayton. The 7 of us had a great time at Dayton.

There was a lot to see. Inside of the building there were about 250 vendor exhibits. The ham radio manufacturers were there, Kenwood, Icom, Yeasu,

Ten Tec, FlexRadio Systems to name a few. Many other vendors of ham gear such as Heil Sound, DX Engineering, Force 12, MFJ, AES, HRO and many more were there. AMSAT had a booth on amateur satellite. ARRL had W1AW/8 special event station set up for on-the-air operat-

(Continued on page 3)



UPCOMING ACTIVITIES 2009



BARC Club Officers



President

Cordell Smart KE7IK
president@barconline.org
(435)245-4581



Vice President

Tyler Griffiths N7UWX
vice-president@barconline.org
(435)752-7269



Secretary

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



Treasurer

Kevin Reeve N7RXE
treasurer@barconline.org
(435)753-1645



Board Members

Ted McArthur AC7II
ac7ii@comcast.net
(435)245-4904



Roger Ellis KE7HTE
ellis.roger@gmail.com
(435)753-7807



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



Newsletter Editor

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



Web Page Editor

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



Tour De Cure (Box Elder Co.) — 13 June

VE Exam — **18 June, 6:00 PM (changed)**
In room 204 of the Merrill Cazier Library (USU Campus)

State RACES Net — 18 June, 8 PM

Wasatch Back Relay — 19 June

June Club Meeting/Field Day — 26-27-28 June

MS 150 — 27-28 June

Cruise In — 4 July

RACES HF Net — 18 July, 8 AM

Cache Valley Biathlon — **15 August (changed)**

State RACES Net — 20 August, 8 PM

LOTOJA — 12 September

Top Of Utah Marathon — 19 September

RACES HF Net — 19 September, 8 AM

Bear 100 — 25-26 September

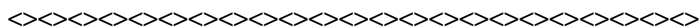
Swaptober Fest — 10 October, 8am to 3 pm

Jamboree On The Air — 17-18 October

Standard BARC Club Meetings are normally on the 2nd Saturday of the month but due to the activities during the summer are not held during the months of June, July and August.

We can still use a few additional people on many of the activities during the summer. If you are able to help 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.

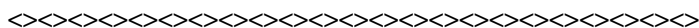
I'm still looking for a few more people to help with the Wasatch Back on June 19th. This is a Friday. If you have time part a day or the full day please let me know ASAP.
Thanx, Tyler N7UWX



The **VE exam session has been rescheduled** for Thursday June 18th at 6:00 pm in room 204 of the Merrill Cazier Library.

Please RSVP for the exam session by visiting the BARC website at this address and clicking on the RSVP
<http://www.barconline.org/licensing/local>

Please note that you must complete all exams you take by 8:30 pm as the library closes early during the summers. Kevin



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

(Presidents Message Continued from page 1)

ing at Dayton. Begali from Italy was there with their beautiful but expensive keys and paddles. So many items on display to look at and questions to ask.

The Flea market was outside and there were over 800 vendors. The flea market, the bargain hunter's paradise, was where the interesting stuff was; antique and used amateur radios, military surplus radios and stuff, used commercial radios, used cables and connectors, antennas, tubes, not so new test equipment selling for \$1/lb (no guarantee it works), computers and laptops, a huge 4 ft cube box full of old computer CDs, and lots of non-radio stuff like a person demonstrating aluminum welding with a propane torch.

There was a lot to look at during the two and a half days. The first day, Thursday, was sunny and we spent most of that day in the flea market checking who had what and their prices. Then the important decision, do I buy it now or look around more if someone else has a better price. Unfortunately, there were thousands of other bargain hunters and someone might be searching for that same item I found. Decisions, decisions. On the inside, there were many forums to attend. We went to the APRS and D-Star forums. The remaining afternoon was spent inside looking and talking to the various vendors whose products we were interested in.

Saturday's forecast was thunderstorms. We spent the first couple of hours outside until it started raining, then went inside for a while. Stopped by and looked at my dream radio. Wow, I can touch my dream radio, go through the different menus and settings, and listen to its reception on the different bands all while the salesperson is saying this is a really cool radio. Only if I had the money, dream on. There were so many things to look at, weather stations, antennas, antenna tuners, twin paddle keys, and much more. Also there were a couple of other forums that will be on my list to attend for next year. I did buy some items; a Carolina Window antenna, antenna masts, a rapid charger for my IC-92, Nifty radio guides for my radios, and some hats with call sign and name. In all, I had a great time at the Dayton Hamvention.

Cordell
KE7IK

(Ham Profile Continued from page 1)

Nate, KE7GYF earned their license at that time. Richard and daughters Kylie and Megan attended this class the following year with Megan, KE7LZQ, earning her license in March 2007. Kylie, KE7NTS, Kimberly, KE7NTR, and Heather, KE7NTT, earned their license three months later in June 2007. Peggy was at Girls' Camp when the three daughters took their exam else she would have, too.

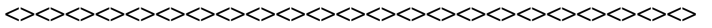
When Richard was studying for his General class license in March 2009, Peggy studied for her Technician class license. Kylie and Megan would quiz their mother facts such as amps, volts, ohms, Ohm's Law, etc. They enjoyed seeing this real-life application of the math they had learned in school. This is Peggy's first experience working in a techni-

cal field which she is happy to be involved in. Last year Kevin K. and Kevin R. had the 4-H youth come together and made twin-lead J-pole antennas. Kylie and Megan entered their antennas in the Cache County fair earning blue ribbons. Megan went the extra mile and prepared a poster describing the technical operation of the antenna for the 4-H fair and won a state fair ribbon. Her mother learned along with her.

She enjoyed the BARC April 2009 club meeting on ECOMM seeing the different kinds of antennas that Kevin R, N7RXE, displayed along with the grab and go kits that Bob, KD7BHB, and Boyd, W7MOY, Humpherys had brought. She also learned the importance of deep discharge batteries and how they are different from car batteries which deliver high current for a short duration. For operating on mobile power, such as in the Wasatch-Back relay, batteries are very important.

Peggy's sister and brother-in-law, Joan, N7OLZ, and Mike Fullmer, KZ70, in Roy, Utah have long encouraged her to get her license. For one family reunion at Island Park, Idaho, Mike organized a Radio merit badge activity. Peggy checks in to the weekly Bridgerland Amateur Radio Club nets using one of the family's Yaesu radios: VX-170, VX-7R, or FT 8800. Richard and Megan know all the local call signs and she is learning them, too. She has accompanied her husband twice on LOTOJA and is now looking forward to this year as an amateur radio operator. Also, this year, a sister rode with her on the Little Red Riding Hood bicycle ride, on 6 June 2009.

Peggy grew up in North Logan and graduated from Sky View High School. She moved to Logan when she married twenty-seven years ago. She has been involved with 4-H with her children and likes to team up 4-H with radio. Radio is a whole new experience for her. She is looking forward to being a part of it.



Activity Changes

The **Cache Valley Biathlon** has been changed from June 13 to August 15. If you were planning on helping with it in June and would like to help with something else that day your help would be appreciated with the Tour De Cure in Brigham City. Let one of the club officers know and they can put you in touch with those that are in charge.

Field Day Location: Our original plan was to go to a Camp that USU has up Logan Canyon but that is no longer an option, it is not available. The plans now are to go to a place up the canyon and do a camping Field Day. We will probably use the Sheriffs Ecomm Trailer like we did a couple of years ago, to operate the Radios in. More information will be available on the Tuesday nets or on the BARC Web site.

The BRRR (Bridgerland Radio Rocket Recovery team) will be going to Green River, Utah on June 25-26 when the rockets are scheduled to fly. For more information see <http://soundingrocket.org/default.aspx> or contact Guy Hatch KE7WAT at gmhatch@yahoo.com.

==> FCC RELEASES REDACTED BPL CASE STUDIES AFTER ARRL FOIA REQUEST

Earlier this month, the FCC released the redacted portions of the studies on which they relied with regard to its Broadband over Powerline (BPL) rulemaking in 2004 after ARRL filed an Freedom of Information Act request <http://www.arrl.org/news/files/BPL_FOIA_Request033109.pdf> on March 31 for the studies. In October 2007, the US Court of Appeals for the District of Columbia Circuit heard ARRL's case against the Commission <<http://www.arrl.org/news/stories/2007/10/25/102/>>, stating, among other things, that the FCC not only withheld the internal studies until it was too late to comment, but had yet to release portions of studies that may not support its own conclusions regarding BPL. The FCC claimed that the studies were "internal communications" that it did not rely upon in reaching its decision to adopt the BPL rules. In its April 2008 ruling, the Court ordered the FCC to release the studies <<http://www.arrl.org/news/stories/2008/04/25/10064/>>.

In its decision, the Court agreed with the ARRL that the FCC had failed to comply with the Administrative Procedure Act (APA) <http://biotech.law.lsu.edu/Courses/study_aids/adlaw/> by not fully disclosing for public comment the staff studies on which it relied and that "there is no APA precedent allowing an agency to cherry-pick a study on which it has chosen to rely in part." Writing for the three-judge panel of Circuit Judges Rogers, Tatel and Kavanaugh, Judge Rogers summarized in the Court's decision that "The Commission failed to satisfy the notice and comment requirements of the Administrative Procedure Act ('APA') by redacting studies on which it relied in promulgating the rule and failed to provide a reasoned explanation for its choice of the extrapolation factor for measuring Access BPL emissions." The Court concluded that "no precedent sanctions such a 'hide and seek' application of the APA's notice and comment requirements."

Judge Tatel agreed with Judge Rogers, saying, "[I]n this very case the Commission redacted individual lines from certain pages on which it otherwise relied...there is little doubt that the Commission deliberately attempted to 'exclude [] from the record evidence adverse to its position'"

After almost a year after the Court's decision, the FCC had done "literally nothing" about releasing the complete studies <<http://www.arrl.org/news/stories/2009/03/04/10685/>>. When President Obama came into office in January 2009, new Freedom of Information Act (FOIA) guidelines <<http://www.state.gov/m/a/ips/>> were put in place. Using these new guidelines, the ARRL filed an FOIA request on March 31 for the studies. The FCC responded to the FOIA request and released the unredacted studies the last week of April.

A look at the unredacted studies show that the FCC knew BPL was not a point source, but these same studies in redacted form show just the opposite -- information proving BPL was not a point source was deleted. In one study concerning Main.net's BPL system, the FCC clearly disregarded information provided by a BPL provider's Chief Technical Officer, considering the point -- "[i]f distance scaling were

based on distance to the pole ground wire rather than the nearest part of the BPL system, measurements would have passed with 1 dB margin at the selected quasi-peak measurement location" -- as "invalid" <<http://www.arrl.org/news/files/Redacted1.pdf>>.

Another unredacted study from 2003 in Allentown, Pennsylvania, plainly showed that BPL was not a point source, noting: "NOT A POINT SOURCE. Emissions exhibit no noticeable decay 230 m down from the coupler." In the redacted version, this information was deleted, but all other information, including a graph, was left intact <<http://www.arrl.org/news/files/Redacted2.pdf>>.

A study regarding Access BPL showed the same thing, but all information had been redacted from the file, leaving just a blank page. The unredacted study concluded that "The tested overhead PLC devices do not act as point sources. Emission from line shows virtually no decay 230 m from coupler. Differential two-wire signal injection affects the polarization of radiated emissions from overhead devices" <<http://www.arrl.org/news/files/Redacted3.pdf>>.

"Comparing the redacted and unredacted documents will take some time," ARRL Chief Executive Officer David Sumner, K1ZZ, said, "but these three sets of pages...show exactly what prompted Judge Tatel to say what he did. We are continuing to analyze all the documents and we'll see just what has been going on."

+++++

==> OREGON HAMS PARTICIPATE IN STATE-WIDE DISASTER DRILL

The State of Oregon conducted a full-scale week long exercise April 24-30, simulating a 9.2 magnitude earthquake on the Cascadia Subduction Zone <http://www.pnsn.org/HAZARDS/CASCADIA/cascadia_zone.html>. According to Tillamook County Emergency Management Director Gordon McCraw, WX7EM, if an earthquake struck the zone, it would cause "major destruction" from the Cascade Mountains all the way to the West Coast. Instead of focusing on the actual disaster, the exercise instead concentrated on the 72 hours after the event. This, officials said, would put the primary focus on life-saving response and debris removal, as well as mass-casualty and short-term recovery.

The Cascadia Subduction Zone -- a very long sloping fault that stretches from mid-Vancouver Island to Northern California -- separates and connects the Juan de Fuca Plate and North American Plate. The Zone is creating new ocean floor off the Washington and Oregon coasts; as more material wells up along the ocean ridge, the ocean floor is pushed toward and beneath the continent.

"The simulation -- codenamed Cascade Peril -- included a major tsunami striking the coastline," McCraw said. "Such an event would result in a severe disruption to local utilities, including electricity and phone services, so local Amateur Radio operators were called upon to relay message traffic from the Tillamook County Sheriff's Office Command Center to the Incident Command Team. From there, officials evaluated the needs request and forwarded the traffic on to the Regional Facility that had been set up at a National



Guard Base near Cannon Beach, Oregon. Emergency Management officials then consolidated these requests and sent them to the State Emergency Management Office in Salem."

McCraw said that officials participating in Cascade Peril expected that if this were an actual event, roads would be affected, so as part of the simulation, the US Coast Guard dispatched a helicopter to the Tillamook Airport. There it picked up three Tillamook area Amateur Radio operators and flew them to Camp Rilea National Guard Base in Warrenton, about 65 miles north of Tillamook.

At Camp Rilea, the hams established communications on 2 meters and Winlink between all facilities. "Amateurs relayed message traffic on voice, and many new hams used Winlink for the first time, having received their license only a couple months prior to the exercise," McCraw said. "In Tillamook County, we used 11 hams at two locations. Four Tillamook hams at Camp Rilea participated with hams from neighboring Clatsop County. These hams sent and received a total of 37 messages on Friday and 32 messages on Saturday before the exercise was terminated around noon."

In the months leading up to the exercise, McCraw said Tillamook County installed amateur stations at the Tillamook County Sheriff's Office -- home of the Emergency Operations Center and the back-up 911 center -- and at the primary regional 911 center in downtown Tillamook, where the Incident Command Team operates during disasters. "Because of the excellent service the Amateur Radio community provided during the December 2007 storm events that saw a severe disruption of landline and cell phone service in many coastal communities, including Tillamook County, Emergency Management officials installed the Amateur Radio stations at these facilities," McCraw said. "Both the county and the state recognized the capabilities Amateur Radio offered and they provided some of the equipment needed to install these stations."

McCraw said that Tillamook County has been called the most "disaster rich" county in Oregon: "This past November, December and January, Tillamook County experienced three floods and a severe snow event that resulted in Oregon Governor Ted Kulongoski declaring these areas disaster zones. As has now become standard practice during activation of the Incident Command Team, Amateur Radio operators were on the scene, attending all briefings and manning the stations until the event was terminated."

ARRL District Emergency Coordinator for Oregon's District One David Kidd, KZ7OZO, told the ARRL that Tillamook County is "very lucky" to have Gordon McCraw, WX7EM: "Not only is Gordon the Emergency Coordinator (EC) for the County ARES unit, but he is now the County Emergency Management Director after serving as a Senior Deputy since his arrival in Oregon. Gordon brings his vast experience in law enforcement and emergency management to the county from his time spent working in both fields during Hurricane Katrina in New Orleans. This is important since Tillamook County has been the focal point for several severe weather events in the recent past. Gordon takes his job very seriously and has his people train hard so they are ready for the real thing."

Kidd said that McCraw -- appointed as EC in April 2007 -- has helped to build a very effective unit "from scratch" -- the county had not had an ARES unit for more than 10 years before McCraw's appointment.

"Tillamook County is a rural county and volunteers are an absolute necessity to get the mission accomplished here," McCraw concluded, "and Amateur Radio operators are at the top of that list. I consider them amateurs in name alone."

=====

The ARRL Letter Vol. 28, No. 19 May 15, 2009
==> **SCIENTISTS PREDICT SOLAR CYCLE 24
TO PEAK IN 2013**

At the annual Space Weather Workshop held in Boulder, Colorado last month <<http://www.swpc.noaa.gov/sww/index.html>>, an international panel of experts led by NOAA's Space Weather Prediction Center (SWPC) predicted that Solar Cycle 24 will peak in May 2013 with 90 sunspots per day on average. If the prediction proves true, Solar Cycle 24 will be the weakest cycle since Solar Cycle 16, which peaked with 78 daily sunspots in 1928, and ninth weakest since the 1750s, when numbered cycles began.

The panel predicted that the lowest sunspot number between cycles -- the solar minimum -- occurred in December 2008, marking the end of Solar Cycle 23 and the start of Solar Cycle 24. If December's prediction holds up <<http://www.arrl.org/news/stories/2008/01/07/100/>>, at 12 years and seven months Solar Cycle 23 will be the longest since 1823 and the third longest since 1755. Solar cycles span 11 years on average, from minimum to minimum.

An unusually long, deep lull in sunspots led the panel to revise its 2007 prediction that the next cycle of solar storms would start in March 2008 and peak in late 2011 or mid-2012. The persistence of a quiet sun also led the panel to a consensus that Solar Cycle 24 will be what they called "moderately weak."

Although the peak is still four years away, a new active period of Earth-threatening solar storms will be the weakest since 1928. Despite the prediction, the scientists said that Earth is still vulnerable to a severe solar storm. Solar storms are eruptions of energy and matter that escape from the Sun and may head toward Earth, where even a weak storm can damage satellites and power grids, disrupting communications, the electric power supply and GPS. A single strong blast of "solar wind" can threaten national security, transportation, financial services and other essential functions.

The most common measure of a solar cycle's intensity is the number of sunspots -- Earth-sized blotches on the sun marking areas of heightened magnetic activity. The more sunspots there are, the more likely it is that solar storms will occur, but a major storm can occur at any time.

"As with hurricanes, whether a cycle is active or weak refers to the number of storms, but everyone needs to remember it only takes one powerful storm to cause huge problems," said NOAA scientist Doug Biesecker, who chaired the panel. "The strongest solar storm on record occurred in 1859 during another below-average cycle." The 1859 storm shorted out telegraph wires, causing fires in North America and Europe and sent readings of Earth's

magnetic field soaring. It also produced northern lights so bright that people read newspapers by their light, he said.

Biesecker cited a recent report by the National Academy of Sciences that found if a storm that severe occurred today, it could cause \$1-2 trillion in damages the first year and require four to 10 years for recovery, compared to the \$80-125 billion of damage that resulted from Hurricane Katrina <http://www.nap.edu/nap-cgi/report.cgi?record_id=12507&type=pdfxsum>.

The Space Weather Prediction Center is part of the National Weather Service and is one of the nine National Centers for Environmental Prediction. It is the nation's official source of space weather alerts, watches and warnings. SWPC provides real-time monitoring and forecasting of solar and geophysical events that impact satellites, power grids, communications, navigation and many other technological systems.

=====

The ARRL Letter Vol. 28, No. 20 May 22, 2009
==> **FCC LOOKS TO RAISE VANITY CALL SIGN FEES FOR SECOND CONSECUTIVE YEAR**

The FCC released a Notice of Proposed Rulemaking and Order (NPRM) on May 14 seeking to raise fees for Amateur Radio vanity call signs <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-126A1.pdf>.

Currently, a vanity call sign costs \$12.30 and is good for 10 years; the new fee, if the FCC plan goes through, will go up to \$13.40 for 10 years, an increase of \$1.10. The FCC is authorized by the Communications Act of 1934 (as amended) to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. Instructions on how to comment on this NPRM are available on the FCC Web site <<http://www.fcc.gov/cgb/consumerfacts/howtocomment.html>>.

The vanity call sign fee has fluctuated over the 12 years of the current program -- from a low of \$11.70 in 2007 <<http://www.arrl.org/news/stories/2007/08/31/105/>> to a high of \$70 (as first proposed in the FCC's 1994 Report and Order). In 2007, the Commission lowered the fee from \$20.80 to \$11.70. The FCC said it anticipates some 15,000 Amateur Radio vanity call sign "payment units" or applications during the next fiscal year, collecting \$201,000 in fees from the program.

The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. The first vanity call sign licenses issued under the current Amateur Radio vanity call sign program that began in 1996 came up for renewal three years ago.

Those holding vanity call signs issued prior to 1996 are exempt from having to pay the vanity call sign regulatory fee at renewal, however. That's because Congress did not authorize the FCC to collect regulatory fees until 1993. Such "heritage" vanity call sign holders do not appear as vanity licensees in the FCC Amateur Radio database.

Amateur Radio licensees may file for renewal only within 90 days of their license expiration date. All radio amateurs must have an FCC Registration Number (FRN) before filing any application with the Commission. Applicants can obtain an FRN by going to the ULS <<http://wireless.fcc.gov/uls/>> and clicking on the "New Users Register" link. You must supply your Social Security Number to obtain an FRN.

The ARRL VEC <<http://www.arrl.org/arrlvec/>> will process license renewals for vanity call sign holders for a modest fee. The service is available to ARRL members and non-members, although League members pay less. Routine, non-vanity renewals continue to be free for ARRL members. Trustees of club stations with vanity call signs may renew either via the ULS or through a Club Station Call Sign Administrator, such as ARRL VEC.

League members should visit the "ARRL Member Instructions for License Renewals or Changes" page <<http://www.arrl.org/fcc/memberlicenseinstructions.html>>, while the "Instructions for License Renewals or Changes" page covers general renewal procedures for nonmembers <<http://www.arrl.org/fcc/licenseinstructions.html>>. There is additional information on the ARRL VEC's "FCC License Renewals and ARRL License Expiration Notices" page <<http://www.arrl.org/arrlvec/renewals.html>>.

License application and renewal information and links to the required forms are available on the ARRL Amateur Application Filing FAQ Web page <<http://www.arrl.org/FandES/field/regulations/application-filing-faq.htm>>. The FCC's forms page also offers the required forms <<http://www.fcc.gov/formpage.html>>.

+++++

==> **"THE DOCTOR IS IN" THE ARRL LETTER**

This week, ARRL Letter readers are in luck! The ARRL's very own Doctor, author of the popular QST column "The Doctor Is IN," answers a question from his mailbox:

Question -- Mario Bedard, VE2FZH, of St-Andre de Kamouraska, Quebec, Canada, asks: Is an antenna tuner of any use in a receiving system with a long wire or dipole antenna? If not, should I disable it while strictly receiving?

The Doctor Answers -- This is one of those "that depends" kind of questions. A mismatched receive antenna will result in a reduction of both signal and atmospheric noise reaching your radio. If the atmospheric noise is much stronger than the internal noise in your radio, the resulting signal-to-noise ratio will be almost the same, even though the signal will be weaker. It is often the case -- especially on 20 meters and above -- that the external noise may not dominate and you won't hear weak signals that you might have heard with the tuner properly tuned.

It is somewhat more complicated than with a transceiver with an internal automatic tuner. There may be no way to adjust it without transmitting, especially a problem if listening outside the amateur bands. That means that in listening mode -- unless it remembers the settings for each band -- you may have a mistuned tuner. That can be much worse than no tuner. If it's easy to bypass the tuner, try it each time and see which is better.

==> **ARRL FIELD DAY TIPS AND TECHNIQUES
THAT EVERYONE CAN USE**

Many amateurs treat ARRL Field Day (June 27-28) as a contest, even though it isn't one <<http://www.arrl.org/fieldday>>. But if your idea of Field Day fun is to go for the highest score possible, ARRL Contest Branch Manager Sean Kutzko, KX9X, offered the following suggestions at the ARRL Field Day Forum at the 2009 Dayton Hamvention.

- 1) You will get many more stations in your log by calling CQ than by tuning the dial and answering CQs; however, if you're calling CQ and not getting any replies, keep calling. Most major contesters call CQ for several minutes at a time before giving up. Giving up after three or four CQs is giving up too soon.
- 2) Keep your CQs short and to the point: "CQ Field Day, CQ Field Day, Whiskey-One-Alfa-Whiskey, Field Day." Wait about 5 seconds between CQs -- this gives stations enough time to answer you.
- 3) Use standard phonetics. "Cute" phonetics don't always get through and they can confuse newer operators.
- 4) When working a station, you should give your exchange information only once and keep it simple. "Whiskey-One-Alfa-Whiskey, copy three Foxtrot Connecticut, QSL?" If they didn't get all of the exchange, they will ask for a repeat.
- 5) If you are running a pileup: Once you have pulled a call out of the pileup, give your exchange information first. Here's an example: "Whiskey-One-Alfa-Whiskey, copy 3F Connecticut, QSL?" Don't ask for the calling station's information first -- this will reduce any sense of rhythm and timing in the pileup.
- 6) If you get a pileup of stations and can't make out an entire call, listen for one letter and ask for it specifically: "The station with Delta only, go ahead."
- 7) When you get the other station's information, keep your acknowledgment simple. "QSL, thanks, QRZ Field Day from Whiskey-One-Alfa-Whiskey."
- 8) Find a comfortable pace for you and maintain that pace. You will tire quickly if you are screaming into the microphone or trying to work stations too quickly. This leads to inefficiency.
- 9) Use a headset with a boom microphone and a foot switch -- this frees up your hands to log QSOs. Writing or typing with a mike in your hand slows you down.
- 10) Go for as many bonus points as you possibly can. Numerous opportunities exist, from copying the Field Day message to sending traffic to using natural power for QSOs.

These tips should help maximize your score on Field Day. Remember: No matter how you choose to enjoy Field Day, maximize your fun, however you define it.

+++++

==> **HAM RADIO DIY AT MAKER FAIRE**

Ham radio demonstrations and displays are in the works for Maker Faire, May 30-31, the world's largest do-it-yourself (DIY) festival <<http://www.makerfaire.com/>>. This year, the festival will take place at the San Mateo County Expo Center in California. According to ARRL Sales and Marketing Manager Bob Inderbitzen, NQ1R -- who is attending the fair along with dozens of San Francisco Bay Area hams -- this annual event showcases the country's best innovations in science and technology, engineering, arts and crafts, food and music. "It's no surprise that such an event has captured the attention of the ham radio community. Do-it-yourself, or DIY, has always been a signature of the Amateur Radio Service," he said.

Inderbitzen said that this year's Maker Faire theme -- Re-Make America: Building a Sustainable Future -- is based on President Obama's call to action to participate in a new era of DIY. "The Amateur Radio community fits this mold perfectly," Inderbitzen said. "Hams represent the very best of service-to-country and community. We're both doers and makers of things."

A large exhibit area at Maker Faire is planned to help spotlight ham radio. The Foothills Amateur Radio Society is the primary sponsor of the Amateur Radio exhibit, but volunteers from many participating ham radio clubs and other related groups -- including the Silicon Valley Amateur Television Group, the Palo Alto Amateur Radio Association, the Mad Scientist Amateur Radio Club, the Kings Mountain Amateur Radio Club, the Burlingame Red Cross, BAERS Ham Cram and Ham Radio Outlet are going to be there, as well. The coordinating effort is being lead by ARRL Santa Clara Valley Assistant Section Manager Michael Pechner, KI6QNZ, of Palo Alto.

Inderbitzen said that the exhibit will include equipment demonstrations, a basic radio station setup intended for beginners, home brew project displays, an emergency communications van, live amateur television demonstrations and ham radio and radio control planes, as well as a demonstration pairing APRS <<http://www.aprs.net/>> and model rocketry. Club representatives will be on hand to discuss public service opportunities and to assist newcomers with information for getting started in Amateur Radio. Teachers and students who attend the Maker Faire on May 29 will get to see ham radio educational demonstrations on the day before the official Faire opening.

Started in California in 2006, Maker Faire is held annually in San Mateo, California and Austin, Texas. Maker Faire is supported by Make Magazine, craftzine.com and O'Reilly Media. Additional details about ham radio at Maker Faire, including special event operating frequencies, are posted on the Foothills Amateur Radio Society's Web site <<http://www.fars.k6ya.org/>>.

For more information on the 2008 Maker Faire in Austin, Texas, check out this article by ARRL Contributing Editor H. Ward Silver, N0AX <<http://www.arrl.org/news/features/2008/06/21/10175/>>.

Questions for General Class License

1. (G1A05) Which of the following frequencies is in the General Class portion of the 40 meter band?
A. 7.250 MHz
B. 7.500 MHz
C. 40.200 MHz
D. 40.500 MHz
2. (G2A03) Which sideband is commonly used in the VHF and UHF bands?
A. Upper Sideband
B. Lower Sideband
C. Vestigial Sideband
D. Double Sideband
3. (G3A06) What is a geomagnetic disturbance?
A. A sudden drop in the solar-flux index
B. A shifting of the Earth's magnetic pole
C. Ripples in the ionosphere
D. A significant change in the Earth's magnetic field over a short period of time
4. (G4A09) What does a neutralizing circuit do in an RF amplifier?
A. It controls differential gain
B. It cancels the effects of positive feedback
C. It eliminates AC hum from the power supply
D. It reduces incidental grid modulation
5. (G5B03) How many watts of electrical power are used if 400 VDC is supplied to an 800-ohm load?
A. 0.5 watts
B. 200 watts
C. 400 watts
D. 3200 watts
6. (G7B10) Which of the following is a characteristic of a Class A amplifier?
A. Low standby power
B. High Efficiency
C. No need for bias
D. Low distortion
7. (G9C13) Approximately how long is each side of a cubical-quad antenna driven element?
A. 1/4 wavelength
B. 1/2 wavelength
C. 3/4 wavelength
D. 1 wavelength
8. (G0B14) What is the maximum amount of electrical current flow through the human body that can be tolerated safely?
A. 5 microamperes
B. 50 microamperes
C. 500 milliamperes
D. 5 amperes

THE OHM TOWN NEWS
PO BOX 111
PROVIDENCE, UT 84332



Summer, 2009

Some Contents...

Presidents Message.....	1
Ham Profile: Peggy Elwood.....	1
Upcoming Activities.....	2
Activity Changes and BRRR.....	3
ARRL News and Information	4-7

