



February 2014

(www.k7id.org)

P.O. Box 1765 Hayden, ID 83835-1765

## REGULAR CLUB MEETINGS:

**Monday, Feb. 10, 7:00 p.m.**  
**Search & Rescue Bldg.,**  
**10865 N. Ramsey Road**  
**Hayden, Idaho**  
**Topic: Nets and Message**  
**Handling**  
**Presenter: Ed Stuckey, AI7H**  
**Refreshments:**

**Monday, Feb. 10, 5:30 p.m.**  
**ARRL VE Test Session**  
**Search & Rescue Bldg.,**  
**10865 N. Ramsey Rd.**  
**Hayden, Idaho**

**Monday, Mar. 10, 7:00 p.m.**  
**Search & Rescue Bldg.,**  
**10865 N. Ramsey Road**  
**Hayden, Idaho**  
**Topic: ARDF Antennas**  
**Presenter: Tom Macy,**  
**W7UAT**

**Refreshments:**

**Monday, Mar. 10, 5:30 p.m.**  
**ARRL VE Test Session**  
**Search & Rescue Bldg.,**  
**Hayden, Idaho**

### Upcoming Events

**Idaho QSO Party**  
**March 8-9, 2014**

**Mike And Key Hamfest**  
**March 8, 2014**  
**Puyallup, Washington**

Letter from the President

Dave Boss KF7YWR

February 2014

### The Short Month

It is hard to believe that February is almost here, seems like just a few days ago I was putting up Christmas lights. I really like Christmas lights! Especially now that they are all LEDs! Now that is nearly February I have since been reminded a time or two that they need to come down. The lights however, do provide a nice gentle light on the way to the Ham Shack. Although I have yet find the motion detector light that I know is around here somewhere to mount on the newly constructed building, I fear the Christmas lights will have to come down rather soon, as the reminders are coming more frequently and with more intensity. Besides the days are getting a little longer as February approaches.

The weather this year has been in keeping with the normal North Idaho theme of never knowing what we will get. There is as much snow (ice really) now in the front yard now as was there in June from our monster winter of several years ago. Looking at all the dead grass and dry ground has me anxious and excited to get a tower up, however once I venture out to survey and plan the possible locations the frozen ground and temperature convince me that although it does not look like winter outside, it is indeed still well entrenched. P.S. Do not forget Feb 14th Valentine's Day, I have done so in the past and do not recommend it at all!

### Appreciation

I would like to thank **Randy, KB6YAV**, and **Larry, K6SPP**, for their presentation on Radio Direction Finding. I have had several comments expressing excitement over the possibility of a Fox Hunt.

**Ed Stuckey, AI7H**, will give our February talk on Nets and Message Handling; **Tom Macy, W7UAT**, [trmnm@yahoo.com](mailto:trmnm@yahoo.com) will be presenting a talk for our March meeting on RDF antennas and the like, which should give those interested, time enough to construct whatever is needed to participate in the yet to be planned event. I am looking forward to this event as it brings back memories of my teenage days and the primitive Rabbit hunts we had with our Citizen Band radios (on the other radio frequency). For ten bucks, which was a lot of money when you were only making \$1.50 an hour, you could put the venerable 102 inch stainless steel whip on your back bumper and couple it to your six channel crystal controlled radio and you were set. All that was needed now was a dollars worth of gas (about three gallons), a ten cent Coke and a parking lot to drive around in circles until the front of the car, pointed to the strongest signal. Drive a while in that direction. Then repeat these steps until you found the rabbit. Heck, you could kill a whole Friday night this way. Coeur d'Alene in the seventies didn't have a lot for teens to do. I am relatively sure our hunt will be as fun although I suspect it will

be significantly more technical. Tom has expressed that he would like some collaboration with this presentation, so if you are interested give Tom a call or talk to him at Donuts Thursday morning as he is usually there.

#### Bodies Needed

I have been with the club for over a year now and during that time have largely been a spectator. As January 1st rolled around, that came to an abrupt end and I moved into a position that required action not watching. Having been in VP and President in other organizations I had a good idea of what was expected. KARS, although is in a different league altogether, with numerous activities that have a considerable history behind them and require a significant amount of planning. With that said, we need help to maintain those endeavors we have had in the past, or we need to determine if some are to be eliminated. It is your choice.

By the time you read this our February meeting will be a week away, and we will only have that one meeting between now and the Idaho QSO party, March 8-9, an annual event KARS hosts. **Ed Stuckey, AI7H**, [ai7h@arrl.net](mailto:ai7h@arrl.net) will surely need help to make this happen.

Continuing on that same thought, Hamfest, has but four meetings between now and then, a number of decisions to be made rather soon so it can be advertised early to insure its success. Bonnie, KG6QQM, has compiled a very complete set of notes and records from the last few Hamfests, that I am sure will aid in the planning of this event. These are in my possession and can be relinquished at a moment's notice! Please step up and put your organizational skills to use, the club needs this event to be a success, as it is our primary fund raiser and its success this past year, is the reason we have such a wonderful new repeater system. Put on your thinking caps to see where we can use this year's proceeds. I recently had a net contact from within 8 miles of the Canadian border and crystal clear to boot. I was impressed, I'm sure his 11 element Yagi helped but we did make contact! Field Day is a June activity as well, that will need to have a location determined and other details worked out, another opportunity for just the right person, one with a pulse that's breathing!

#### Input needed

Now I would like input as to the direction that our club should go. It has been my experience that organizations without a goal eventually wither and eventually membership dwindles and then they become really boring and I really do not want to see that happen. Especially since I have to show up and run the meetings for the next year, so help me out. There are numerous services the club can provide and activities we can partake in. Perhaps the club should explore working with Red Cross, having a

booth at the Fair, sponsoring scouts or whatever. Possibly there are some old Hams in retirement homes that can't get on the air anymore that would like to get some ragchewing in before the inevitable days of silent keys. I am open to suggestions. As I have said before this is your club and we will go in the direction the club wants to go.

Suggestions for upcoming talks have expressed an interest in Portable Off-Grid Set-ups and demonstration of said gear. Are there any takers out there? Perhaps a group effort, as I know of several set-ups in existence. Good opportunity to brag a little.

If you need to contact me just drop me an e-mail and I should respond soon, I look forward to your comments.

**73's for now**

**God Bless,**

**Dave Boss KF7YWR**

[boss@infinityusers.com](mailto:boss@infinityusers.com)

---

#### Ham "Things To Do"

March 8, the Western Washington ARRL Convention (aka "Puyallup Hamfest"), see [www.mikeandkey.org/flea.htm](http://www.mikeandkey.org/flea.htm) for details

March 8-9, the Idaho QSO Party (IDQP), see <http://idahoarrl.info/qsoparty/index.html> for details.

March 5-11, W1AW/7 will be located in Idaho, as part of the ARRL Centennial Celebration. W1AW/7 will be operating all bands and modes! See [www.arrl.org/centennial-qso-party](http://www.arrl.org/centennial-qso-party) for details. There are two parts to the Centennial QSO party; the W1AW/X operation, and the "QSO's for Points" activity. Individual operators can earn points for working Club call signs as well as individuals who hold ARRL positions. The QSO's for Points activity continues through all of 2014. (This is definitely a worthwhile read!)

Spring Cleaning: Although details of the annual KARS Hamfest are undecided, the Club appreciates donations from members or other parties. So, if you will be cleaning up your shack over the next several months, and have pre-loved items no longer needed at your station, please consider donating such items to KARS for re-marketing at the Hamfest. (Donations have been a significant source of funds for the Club in past years!).

73,  
Ed AI7H

---

From the Editor: Please note the changes to the KARS Coffee Get-Together on page 6 and the change to the Repeater Technician on the back page. (Ed.)

# 100 Years of the ARRL and Counting!

## Part two: Those who came before ARRL

*By Larry Telles, K6SPP*

You can't jump into "wireless telegraphy" without first dealing with the regular wired kind. It isn't necessary to go all the way back to Ben Franklin to learn about electricity. However the discovery of the wireless telegraph can be traced back to a kite similar to Franklins' in 1811. This material is going to look at what came before the obvious components of the telegraph, the electromagnet. In the world of telegraphy there is still controversy today as to who did what first. They're many demonstrations, inventions and experiments taking place simultaneously that made the electromagnet possible.

The battery is not directly related to the electromagnet, but it shows how early people were interested in electricity in the 1800s. Italian born Alessandro Giuseppe Antonio Anastasio Volta (1745-1827), was its inventor. His invention became known as the voltaic pile which consisted of pairs of zinc and copper stacked on top of each other. Each layer was separated by a layer of cardboard or cloth, soaked in brine as the electrolyte. <sup>[1]</sup>

A very crude telegraph was invented by Samuel Soemmering (1755-1830) in 1809 Bavaria. Thirty-five wires were used with gold electrodes emerged in water. Two-thousand feet at the receiving end the message was read by the amount of gas caused by electrolysis. It doesn't sound practical. <sup>[2]</sup> A few years later in 1811, Soemmering took a different approach. He replaced wires with water and successfully transmitted telegraphically across basins in his laboratory. <sup>[3]</sup>

One of the electrical properties used in the electromagnet telegraph system came from Hans Christian Oersted (1777-1851). He was a Danish physicist who in 1820 discovered that when electric current travels down a wire it generates a magnetic field. This field can deflect a compass needle. <sup>[4]</sup>

The first time that the electromagnet was introduced was 1825. British inventor William Sturgeon (1783-1850) laid out the foundation for future developments in electromagnets. His crude device used bare wire, no insulation and the iron core was varnished and was bent into a U-shape. <sup>[5]</sup>

Sometime before 1827 a French physicist and mathematician Hans Marie Ampere (1775-1836) established a statement of electric current. It was the definition of the unit of measurement of current flow, the ampere. <sup>[6]</sup> Shortly after Ampere made his definition, Georg Simon Ohm (1789-1854) discovered the mathematical law for electric-current. The current flow through a conductor is directly proportional

to the potential difference (voltage) and inversely proportional to the resistance. He named this law after himself. <sup>[7]</sup>

Joseph Henry (1797-1878) took William Sturgeon's electromagnet beyond its crude design and made the device more operational and efficient. Henry used wire that he insulated by winding silk tightly coiled on the iron core. He didn't patent the device in 1828, because he believed in the dignity of science and that he shouldn't profit from it. This might be one of the reasons in 1893 why Joseph Henry's name was given to the standard electrical unit of inductive resistance, the "henry". <sup>[8]</sup>

Harrison Gray Dyar (1805-1875) an American chemist and inventor sent electrical sparks through chemically treated paper tape to burn dots and dashes. The paper was a ribbon of moistened litmus paper on a spool that revolved mechanically by a clockwork apparatus. Nitric acid formed on the litmus paper by the action of the electricity left appropriate legible small red marks for designated letters. Dyar's method was of frictional electrolytic nature where Morse's was an electromagnetic usage. This was performed in late 1828. Dyar did erect the first telegraph line and dispatched over it the first telegraph message ever sent in America, but no electromagnets were used in its operation. <sup>[9]</sup>

What was bound to happen did. Three individuals came forward with a working telegraph system. In 1830 Joseph Henry demonstrated William Sturgeon's device that he had improved. Henry sent an electronic current to the far end which activated an electromagnet causing a bell to ring. The distance involved was over one mile. Two British physicists, William Cooke and Charles Wheatstone were the second team to come forward with a telegraph system employing an electromagnet. However, it was Samuel Morse (1791-1872) in 1832 who came up with the most practical and commercial operation. <sup>[10]</sup>

In the spring of 1837 Morse began to expand on his telegraph by sending a message through ten miles of wire. He takes on a partner for financial assistance. Shortly after the partnership began, the partner claims that he invented the telegraph. Morse takes him to court and wins. This would be the first of many court appearances. On September 28, Morse files for a patent for his telegraph. January 1838, Morse makes a big change. He created a dot-and-dash code that used different combinations to represent letters of the English alphabet and the ten digits. This coding system was far superior since it didn't require coding or decoding, but could be "sound read" by operators. Later in 1838, at an exhibition of his telegraph, Morse transmitted ten words per minute using the new Morse code that would become standard throughout the world. It wasn't until 1840 that Morse received his patent. October 1842 Morse tried underwater transmission between two islands in New York harbor, a distance of two miles. The demonstration was a big success. Progress on the Morse telegraph began on March 3, 1843 when Congress appropriated \$30,000 for an experimental telegraph from

Baltimore to Washington D.C. The cable that carried the signals was installed and placed in lead pipes underground several months earlier. May 24, 1844 Morse sent a message from the Capitol building in Washington, D.C., to the Railroad Depot in Baltimore. The message, "What Hath God Wrought?" The telegraph line was expanded in 1846 from Baltimore to Philadelphia. While Washington D.C., is connected to New York. New telegraph companies begin to materialize and Morse patent claim are threatened once again. In 1854 the U.S. Supreme Court upholds Morse's claims for his telegraph system. He must be paid when companies use his system. <sup>[11]</sup>

With the common telegraph system up and running, inventors turned to wireless operation which will soon become a term called radio. <sup>[12]</sup> It appears that over the past centuries there have been several definitions of the meaning of "wireless telephony." If you were an observer in the sixteenth century you may have thought "sympathy" (an invisible force) existed between needles touched by the same magnet, and that deflection of one would cause a corresponding deflection of the other. This thought process came before, during and after the electromagnet arrived on the scene. <sup>[13]</sup>

In 1854 James Bowman Lindsay (1799-1862) took out a patent for his wireless telegraphy system that sends signals through water. The work he demonstrated never got out of the experiment stage. In 1860 Lindsay successfully sent a signal across the River Tay. He died two years later still believing he had a sound idea. <sup>[14]</sup>

When a lot of attention was focused on wireless, a large merger took place. The New York and Mississippi Printing Telegraph Company joins with other smaller telegraph companies to form the Western Union Telegraph Company. <sup>[15]</sup>

James Clerk Maxwell (1831-1879), a Scottish physicist, predicted the existence of radio waves in the early 1860s. This together with Heinrich Rudolph Hertz (1857-1894), a German physicist in 1886, established a theory that rapid variations of electric current could be projected into space in the form of radio waves similar to those of light and heat. <sup>[16]</sup>

Mahlon Loomis (1826-1886), a dentist who had invented and patented a process of making artificial teeth became interested in wireless telegraph. In October 1866 Loomis claimed that he transmitted signals between two Blue Ridge Mountain-tops fourteen miles apart in Virginia, using kites as antennas. However, he could not identify the names of any of the witnesses. His system used atmospheric electricity for telegraph communication. Loomis filed his patent #129,971 on July 30, 1872. With no financing at hand Loomis turned to Congress. A bill was introduced in 1869 and no vote was taken. He got a backer, but the person lost all their money on Black Friday, September 24, 1869. Again in July, 1870, his bill was once again introduced in Congress. It again went nowhere. In 1871 Loomis found a couple of backers in Chicago

who were willing to put up \$20,000 to underwrite the Loomis Aerial Telegraph Company. That all changed on October 8, 1871 when the great Chicago fire burned out the backers. Congress finally decided to vote on the Loomis bill. In May, 1872 the bill was voted on and defeated. The same bill came up on the daily calendar and was passed. Now Dr. Mahlon Loomis had a Congressional charter in one hand and a patent in the other. The year 1873 was a very bad year for business and no one had any money to invest. <sup>[17]</sup>

April 2, 1872 Samuel Morse dies in New York City at age eighty-one. <sup>[16]</sup> A year later there were estimated to be 150,000 miles of telegraph lines in the United States. These lines were run by Western Union who had successfully bought up most of the smaller companies. <sup>[18]</sup>

While most telegraphy inventors were still working on wireless, Alexander Graham Bell (1847-1922) was looking to find a way to send multiple telegraph messages on each telegraph line to avoid the great cost of constructing new lines. Message traffic was rapidly expanding. So Bell was trying to create a harmonic telegraph or acoustic telegraphy. One of the multiple reeds was accidentally plucked by Bell's assistant Thomas Watson on June 2, 1875. Bell heard the overtones of the reed at the distant end of the wire. Bell at that moment knew he had developed an acoustic telegraph. He realized that to transmit voice over telegraph wires he would remove the multiple reeds and replace them with one reed or an armature. Bell applied for a patent the morning of February 14, 1876 (patent #174465). Another inventor, Elisha Gray arrived with a similar patent to submit that same afternoon. <sup>[19]</sup>

In 1878, David E. Hughes (1831-1900) in 1878 discovered that sparks would generate a radio signal that could be detected by listening to a telephone receiver. He developed his spark-gap transmitter and receiver by using trial and error experiments, until he could send and receive Morse code signals out to a range of 500 meters. One of the witnesses was Sir William Henry Preece. <sup>[20]</sup>

Nikola Tesla (1856-1943) began working at a telephone company in Budapest. That is where he claimed in 1881 to have developed a telephone repeater or amplifier. It was never patented nor publicly described. <sup>[21]</sup>

Physicist Heinrich Hertz set out to scientifically verify Maxwell's predictions of the existence of radio waves. In 1888 Hertz used a tuned spark gap transmitter and a tuned spark gap detector located a few meters away from each other. In a sequence of UHF experiments, Hertz established that electromagnetic waves were being formed by the transmitter. When the transmitter sparked, small sparks also appeared across the receiver's spark gap. <sup>[22]</sup>

Sir William Henry Preece (1834-1913) successfully transmitted and received Morse code signal over water for a distance of one mile in 1889. He and Arthur West Heaviside conducted experiments in parallel telegraph lines and discovered radio induction. In 1897 Preece began working

with Guglielmo Marconi (1874-1937) who sent and received his first radio signal in Italy in 1895. Four years later Marconi flashed the first wireless signal across the English Channel. Then in December, 1901, he received the letter “S”, telegraphed from England to Newfoundland. This transmission has been contested on theoretical work as well as a reenactment of the experiment. It is now known that long-distance transmission at a wavelength of 366 meters is not possible during the daytime. This is because the sky wave is heavily absorbed by the ionosphere. It is possible that what was heard was only random atmospheric noise, that he thought was a signal, or may have been harmonic of the signal.<sup>[23]</sup> So, the debate goes on.

## NEXT ISSUE

### Part three: Spark-gap, Hams and the ARRL

1. [http://en.wikipedia.org/wiki/Alessandro\\_Volta](http://en.wikipedia.org/wiki/Alessandro_Volta)
2. <http://inventors.about.com/od/tstartinventions/a/telegraph.htm>
3. Before Spark, Gil McElroy VE1PKD, QST, January 1994, p.57.
4. [http://en.wikipedia.org/wiki/Hans\\_Christian\\_%C3%98rsted](http://en.wikipedia.org/wiki/Hans_Christian_%C3%98rsted)
5. <http://inventors.about.com/od/tstartinventions/a/telegraph.htm>
6. [http://en.wikipedia.org/wiki/Andre-Marie\\_Ampere](http://en.wikipedia.org/wiki/Andre-Marie_Ampere)
7. <http://inventors.about.com/library/inventors/blohm.htm>
8. [http://inventors.about.com/od/hstartinventors/a/Joseph\\_Henry.htm](http://inventors.about.com/od/hstartinventors/a/Joseph_Henry.htm)
9. [http://en.wikipedia.org/wiki/Harrison\\_Gray\\_Dyar](http://en.wikipedia.org/wiki/Harrison_Gray_Dyar)
10. <http://inventors.about.com/od/tstartinventions/a/telegraph.htm>
11. [http://en.wikipedia.org/wiki/Samuel\\_Morse](http://en.wikipedia.org/wiki/Samuel_Morse)
12. The Man before Marconi, Joseph R. Rebo, W2OEU, QST, August 1948, p. 42.
13. Before Spark, Gil McElroy VE1PKD, QST, January 1994, p.57.
14. [http://en.wikipedia.org/wiki/James\\_Bowman\\_Lindsay](http://en.wikipedia.org/wiki/James_Bowman_Lindsay)
15. <http://corporate.westernunion.com/History.html>
16. [http://en.wikipedia.org/wiki/Guglielmo\\_Marconi](http://en.wikipedia.org/wiki/Guglielmo_Marconi)
17. The Man before Marconi, Joseph R. Rebo, W2OEU, QST, August 1948, p. 43.
18. [http://en.wikipedia.org/wiki/Samuel\\_Morse](http://en.wikipedia.org/wiki/Samuel_Morse)
19. [http://en.wikipedia.org/wiki/Alexander\\_Graham\\_Bell](http://en.wikipedia.org/wiki/Alexander_Graham_Bell)
20. <https://www.google.com/#q=David+E.+Hughes+>
21. <http://history1900s.about.com/od/people/a/Tesla.htm>
22. [http://en.wikipedia.org/wiki/Heinrich\\_Hertz](http://en.wikipedia.org/wiki/Heinrich_Hertz)
23. [http://en.wikipedia.org/wiki/Invention\\_of\\_radio](http://en.wikipedia.org/wiki/Invention_of_radio)

---

## ATTENTION KARS MEMBERS

2014 Dues are now due!

Single Membership for 1 year - \$15

Family Membership for 1 year - \$23

Single Membership for 2 years - \$28

Family Membership for 2 years - \$42

Single Life Membership - \$150

Dues are delinquent on April 1.

## Canada to Get Five 60 Meter Channels

Industry Canada has granted Amateur Radio operators there the use of five 60 meter channels on a non-interference basis. The center-channel frequencies harmonize with those available to US radio amateurs on 60 meters: 5332 kHz, 5348 kHz, 5358.5 kHz, 5373 kHz, and 5405 kHz.

“[G]iven that use of these frequencies was requested, in part, to allow for cross-border communications in times of emergency,” Industry Canada said, “harmonization of the frequencies with the United States would facilitate such communications between the Canadian and the US Amateur Radio communities.”

Amateur stations will be restricted to USB, data, RTTY and CW modes, with a maximum bandwidth of 2.8 kHz, and a maximum power output of 100 W ERP — the same the US allows.

“Canadian amateur operations shall not cause interference to fixed and mobile operations in Canada or in other countries,” Industry Canada ruled, “and, if such interference occurs, the Amateur Service may be required to cease operations. The Amateur Service in Canada may not claim protection from interference by the fixed and mobile operations of other countries.” — *Thanks to Industry Canada and Bryan Rawlings, VE3QN (ARRL)*

---

## FCC Opens Brief Window for Comments on WRC-2015 Draft Recommendations

The FCC has invited comments by February 18 on the latest batch of draft recommendations of its Advisory Committee for World Radiocommunication Conference 2015 (WRC-2015). At its January 27 meeting, the Advisory Committee (WAC) approved draft recommendations on a number of issues that will be considered by WRC-2015. Some items, including one which could possibly lead to changes to 60 meters in the long term, could affect the Amateur and Amateur-Satellite services. ARRL Chief Technology Officer Brennan Price, N4QX, is a member of the WAC, which is chartered to allow non-federal government entities to “provide to the [FCC] advice, technical support, and recommended proposals for the 2015 World Radiocommunication Conference.”

“Based upon an initial review of the draft recommendations forwarded to the Commission, the International Bureau, in coordination with other Commission Bureaus and Offices, tentatively concludes that we can generally support most of the attached WRC-15 Advisory Committee draft recommendations,” the Commission said in a January 28 *Public Notice*.

The FCC also seeks comment on draft proposals from the National Telecommunications & Information

Administration (NTIA) as well as on the International Bureau's initial conclusions with regard to the WRC-15 Advisory Committee draft recommendations.

WRC-2012 Resolution 649 invited WRC-2015, to consider allocating "an appropriate amount of spectrum, not necessarily contiguous," to the Amateur Service on a secondary basis within the band 5250 to 5450 kHz. "In order to maintain effective and reliable communications capability throughout the sunspot cycle, allocations at regular intervals are desirable, in order to permit operation as close to the maximum usable frequency as possible," the WAC said in its draft recommendations. Incumbent services in the 5250 to 5450 kHz range include fixed, mobile, and radiolocation services.

"A secondary allocation from 5275 to 5450 kHz avoids the unsuitable segment allocated to the Radiolocation Service, reduces the interval between HF amateur allocations below 10 MHz to permit reliable operation throughout the sunspot cycle, and maximizes the flexibility of Amateur Service stations to effectively communicate within the secondary allocation and fulfills their obligations to avoid harmful interference to primary services," the WAC concluded.

WRC-2015 will also consider a number of issues that could impact amateur allocations above 420 MHz, including a possible extension of the current worldwide allocation to the Earth Exploration-Satellite service in the band 9300 to 9900 MHz by up to 600 MHz "within the frequency bands 8700 to 9300 MHz and/or 9900 to 10,500 MHz" Incumbent services in the 9900 to 10,500 MHz range include the Radiolocation, Fixed, Mobile, Amateur, and Amateur-Satellite services.

The Amateur Service is secondary at 10,000 to 10,500 MHz worldwide, and the Amateur-Satellite Service is secondary at 10,450 to 10,500 MHz worldwide.

The FCC said comments provided by interested parties will assist it in its consultations with the US Department of State and NTIA in the development of US positions for WRC-2015. "The recommendations...may evolve in the course of interagency discussions as we approach WRC-15 and, therefore, do not constitute a final US Government position on any issue," the FCC *Public Notice* stressed.

Comments should reference IB Docket 04-286 and specific recommendations by WAC document number. Interested parties may file comments via the FCC's Electronic Comment Filing System (ECFS). The ARRL plans to file comments in this proceeding. (ARRL)

## STRANGE TECHNOLOGY: APPLIANCES BECOME SPAMBOTS

Possibly the first proven cyber attack to originate from connected smart appliances occurred between December 23rd and January 6<sup>th</sup>. This according to the e-mail security company Proofpoint which says that the scam involved some 750,000 e-mails from more than 100,000 appliances that had been commandeered by so called thingbots. These are robotic programs that can be remotely installed on digital devices.

Proofpoint noted that connected appliances typically aren't protected by anti-spam or anti-virus software. Nor are they routinely monitored for security breaches. As such they didn't require sophisticated hacks but the mere use of default passwords was enough to make them vulnerable.

A complete description of this latest in robot based hacking can be found at the Proofpoint website. It's in cyberspace at [tinyurl.com/robot-appliance-spam](http://tinyurl.com/robot-appliance-spam). (Zee News of India, other published reports) (AR Newswire)

---

**COFFEE & DONUTS**  
**EVERY THURSDAY MORNING**

8:00 A.M.  
To  
10:00 A.M.



The Golden Spike  
Community Center  
Rathdrum

**TALK-IN: 146.980, PL127.3**  
**443.975, PL136.5**

Bring a writing instrument. The Golden Spike  
has the napkins for our breakfast table engineering!

Deadline for submitting articles, stories, reports, etc., is the 25th of each month for the following month's newsletter.

# Kootenai Amateur Radio Society



PO Box 1765, Hayden, Idaho 83835-1765

Please complete the entire form and return with your payment

## Single Year membership

New member \$15.00     Renewing \$15.00     Family \$23.00     Info Update Only

## Two Year Membership

New member \$28.00     Renewing \$28.00     Family \$42.00

Call Sign \_\_\_\_\_ Class \_\_\_\_\_ Expires \_\_\_\_\_

First Name & Initial \_\_\_\_\_ Last Name \_\_\_\_\_

If renewing, only fill in information below that has changed since last application, otherwise complete.

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone Number \_\_\_\_\_ E-Mail Address \_\_\_\_\_

ARRL Member \_\_\_\_\_ May we publish Limited information \_\_\_\_\_ (Y/N)

For Family Membership, Please complete an additional application and staple together.

Signature \_\_\_\_\_

## K7ID.org Request Form

First and Last Name \_\_\_\_\_ Call Sign \_\_\_\_\_

Would you like your (call sign )@k7id.org email be forwarded to an existing email account or would you like to Access it through a web or post office protocol (POP) system?

Please Forward to my existing Email     Webmail access     POP Access  
(Please complete the bottom & Sign)     I wish to opt-out of K7ID.org

Please select a user name \_\_\_\_\_@K7ID.org

Please select a Password \_\_\_\_\_

For forward request only

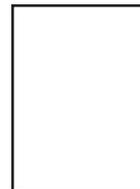
Email address \_\_\_\_\_

Signature \_\_\_\_\_

### Internal Use Only

|        |                          |                 |                          |             |                          |
|--------|--------------------------|-----------------|--------------------------|-------------|--------------------------|
| Cash   | <input type="checkbox"/> | Check           | <input type="checkbox"/> | Money Order | <input type="checkbox"/> |
| Roster | <input type="checkbox"/> | Membership Card | <input type="checkbox"/> |             |                          |

**KOOTENAI AMATEUR RADIO SOCIETY**  
**P.O. Box 1765**  
**Hayden, ID 83835-1765**



## **DIRECTIONS TO KARS MEETING:**

Take U.S. Highway 95 to Miles Avenue (Miles is about 1 mile North of Hayden Avenue). Instead of proceeding west from the corner of Miles and Ramsey, go north about ¼ mile, to the first building on the left (West) side of the road.

## **2014 CLUB OFFICERS**

President: Dave Boss, KF7YWR  
president@k7id.org

Vice-President: Jim Monroe, N7ESU  
vicepresident@k7id.org

Exec. Director: Scott Howard, KF7USV  
excdirector@k7id.org

Secretary: Open, due to illness  
secretary@k7id.org

Treasurer: Bob Bluhm, W6CRA  
treasurer@k7id.org

Newsletter Editor: Gary Roth, KE7IAT  
509 993-8468 ke7iat@comcast.net

Repeater Trustee: Rick Van Landingham,  
KI7I ki7i@arrl.net

Repeater Tech: Dale DuRee, KE7VMN

Webmaster: Larry Telles, K6SPP  
208 762-2548 ltelles@icehouse.net

Past President: Bonnie Patterson,  
KG6QQM

## **Notice**

Propagation is published monthly by the Kootenai Amateur Radio Society (KARS). The club is located in Coeur d' Alene, Idaho and serves the North Idaho and the Spokane, Washington areas.

All opinions expressed in this newsletter are those of the individual contributors and not the radio club as a whole.

KARS operates a voice repeaters on 146.980 and 443.975, and a packet repeater on 145.510 Mhz.

Anyone interested in Amateur Radio is welcome to join. Dues are \$15.00 (individual) and \$20.00 for a family membership. Contact the Treasurer if you wish to join.

If you know of anyone interested in joining KARS, you can notify the newsletter editor as to that parties' email address. A copy of this newsletter will be sent with no obligation to join.

Material can be submitted for publication in Propagation. The deadline for articles, etc., is the 25th of each month for the following month's issue.