



October 2016

(www.k7id.org)

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

REGULAR CLUB MEETINGS:

Monday, Oct 10, 7:00 p.m.
Search & Rescue Bldg.
10865 N Ramsey Rd.
Hayden, Idaho
Topic: ???
Presenter: ???
Refreshments: ???

VE Testing
Monday, Oct 10, 5:30 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

Monday, Nov 14, 7:00 p.m.
Search & Rescue Bldg.
10865 N. Ramsey Rd.
Hayden, Idaho
Topic: ???
Presenter: ???
Refreshments: ???

VE Testing
Monday, Oct. 14, 5:30 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

Upcoming Events

**National Weather Service
Skywarn Recognition Day
December 2-3, 2016**
Showing appreciation for all of
the Skywarn volunteers nation-
ally.

No column received as of 7:00 p.m. Sunday, October 9.

Kootenai Amateur Radio Society
September 2016 Meeting Minutes

The meeting was called to order at 7:05pm by Club President Dave Boss (KF7YWR). The Pledge of Allegiance was led by Ted Graff (K7TED).

Volunteer Examination Testing: 8 individuals tested with 7 achieving passing scores.

Club Treasurer's Report: August - Checking \$4,644.32, Savings \$1,976.07, Petty Cash \$96.19, Total \$6,716.58. Monthly expenses consisted of: nothing! Motion was made by Adam Crippen to approve the Treasurer's Report as read; the motion was seconded and passed by member vote.

Meeting Minutes: Motion was made by Rod Anderson to approve the July meeting minutes, seconded and passed by member vote. Motion was also made by Frank TenThy to approve the August meeting minutes, seconded and passed by member vote.

Club Business: Yaesu System Fusion Repeater – The Fusion repeater for Idaho Mica Peak is advancing along, the repeater has been coordinated with a transmit frequency of 448.275 and a receive frequency of 443.275, a CTCSS tone of 136.5 Hz will be set on the transmit and receive for analog users who do not wish to listen to the digital radio traffic passed by the repeater. The repeater will be set to Automatic Mode Select which will allow analog and fusion digital users to communicate with each other if desired. There are some add-on options which could be added to the repeater if desired which require a firmware and hardware update that must be performed by Yaesu. Dave Boss made a motion that we send the repeater back to Yaesu for the firmware update so that if the club were to add these options later on the firmware update was already completed, the motion was seconded and passed by member vote.

Election Committee: The time has come around again to think about who we would like to see to lead our club for the next year. The beginning of this process is with the selection of the election committee. Three members must be chosen to serve on the election committee, one by the president, one by the board, and one by the general membership. President, Dave Boss, has chosen Dave Hopkins. The Board chose Adam Crippen, and the general membership was unable to choose someone to serve. Selections need to be made for the committee so that the club can be successful in the coming year. Please

think about your involvement with the club and strongly consider serving!

Christmas Party: The time has also come to begin thinking about the Christmas Party. The Coeur d'Alene Shriners have offered to host the Christmas Party again this year for the same cost as last year, \$250.00. Adam Crippen made the motion that the club have the Christmas Party at the Shriners' Club for \$250, the motion was seconded and passed by member vote.

Raffle Results:
50/50 \$8.00 KE7ADT BearPaw Galindo
Member \$128.00 N7BRD Dan Walker – Not Present

Gabbie Perry (KE7ADN) made the motion to adjourn the meeting at 8:47pm, the motion was seconded and passed by member vote and meeting was adjourned.

Retired Librarian Who Was Maine's First Woman Radio Amateur Turns 108

Mary Cousins, ex-W1GSC, who was the first woman in Maine to obtain an Amateur Radio license, celebrated her 108th birthday on September 20. Now a resident of a care facility in the coastal fishing village of Deer Isle, Cousins was treated to a party complete with a cake decorated with images of local newspaper articles from 1908, the year she was born. The confection also bore an image of her 1933 "Amateur First" radio license — issued to Mary Sibyl Wallace, her maiden name, by the old Federal Radio Commission, when Cousins was 24. The FCC came into being the following year. Cousins' old call sign has since been reissued at least once. Cousins said she operated Morse, although she does not remember the code anymore, and used to relay weather information in that mode.

Four generations of her family attended the celebration. Cousins, a native of nearby Stonington, Maine, worked as the town's librarian, a school bus driver, and a telephone operator. She said she never stops learning new things.

Cousins told Bangor TV station WFVX that ham radio in the 1930s "was something that the girls did not do, and the boys were all doing it at the time, and I said, 'I can do it too.' And I did."

Her cake also bore images of Stonington as it looked in 1908, when Teddy Roosevelt was the US president. Enlivening the party were 108 balloons and live piano music. Cousins received and read cards from many well-wishers, including US Senator Susan Collins.

Her son John told WFVX, “When she decides she’s going to do something, she’s going to do it. I think 100 was going to be the goal. She wanted to reach 100. She did. And then she said, ‘Well, might as well go for 105.’ I think she’s working on 110 now.” (ARRL News)

ARRL to Host CHIRP Radio Programming Webinar

ARRL will host a [CHIRP](#) Radio Programming [webinar](#) on Wednesday, October 19, at 8 PM ET (0000 UTC on Thursday, October 20, in US time zones). This presentation will offer a brief overview of the free, open-source *CHIRP* software, which can be used to program most radios.

Attendees will learn: What *CHIRP* is, which radios are supported, how to get *CHIRP*, and how to troubleshoot *CHIRP*. Presenter James Lee, N1DDK, became active in *CHIRP* development for the initial TYT9800 driver. He is a hardware development engineer for Qualcomm.

[Register](#) now! After registering, you will receive a confirmation e-mail containing information about joining the webinar. (ARRL News)

Amateur Radio-Military Interoperability Exercise Set for October 31-November 1

An Amateur Radio-military interoperability exercise will take place October 31 and November 1. The event will begin at 1200 UTC on October 31 and continue through 2359 UTC on November 1 on 60 meter channels 1-4 — 5.3305 MHz, 5.3465 MHz, 5.357 MHz, and 5.3715 MHz, respectively.

During this exercise, military stations will attempt to make radio contact with stations in as many of the 3007 US counties as possible. Radio amateurs providing “county status” information will receive a US Department of Defense “interoperability QSL card.”

For more information, [contact](#) the Military Auxiliary Radio Service (MARS).

AT&T’s New “AirGig” Not Your Father’s BPL

Recalling the earlier efforts of the FCC and telecommunications and utility interests to roll out “Broadband over Powerline” (BPL), the Amateur Radio community has been buzzing with questions about AT&T’s

just-announced “[AirGig](#)” BPL plan to make broadband available via apparently similar technology. ARRL’s earlier anti-BPL campaign, and market forces, eventually led to the demise of the prior BPL initiative. ARRL Laboratory Manager Ed Hare, W1RFI, who spearheaded the earlier effort to quantify BPL’s threat to Amateur Radio’s HF spectrum and remains the resident expert on the subject, said this newest BPL incarnation should *not* pose an interference issue for radio amateurs.

“This technology uses millimeter-wave RF signals (30 GHz to 300 GHz) coupled onto the surface of power lines to transmit the signal along the line with relatively low losses,” Hare explained. “After looking at this technology, it looks nothing like the type of HF and VHF BPL that caused us so many problems years ago. The sky is not falling.”

Hare added that it is not likely that the AT&T technology will even use Amateur Radio bands, so there is little reason for concern even among those amateurs who use spectrum above 24 GHz.

According to AT&T’s September 20 announcement, the company is “deep in the experimentation phase” of the developing technology, which it says would be “easier to deploy than fiber, can run over license-free spectrum, and can deliver ultra-fast wireless connectivity to any home or handheld wireless device.” AT&T said its initial — and continuing — testing at AT&T outdoor facilities “has been positive,” and initial field trials are set to begin in 2017.

Hare said the technique of putting RF signals onto the surface of conductors is not new. An [article](#) by Glenn Elmore, N6GN, and John Watrous, K6PZB, appeared in the May/June issue of *QEX*, describing the technique. In January 1953, the *Proceedings of the IRE* featured an article by C. E. Sharp and G. Goubau, “A UHF Surface-Wave Transmission Line,” and the *Radio Amateurs VHF Manual 11th edition* introduced the technique to amateurs in 1968.

Hare said the League will keep an eye and ear out for interference problems, but he believes that the frequencies involved and the fact that these signals should not

propagate far from the lines will pose little risk the Amateur Radio Service.

“So far, industry has not found a way to reliably put broadband signals on wires intended to carry power frequencies,” he said. “The technical difficulties of trying to use wiring not designed to carry RF signals [and] connected to all sorts of noisy loads, other conductors and even splices that are major discontinuities at these frequencies will probably prove to be quite the technical challenge. ARRL is interested in seeing all technology succeed, but its vested interest is in the interference potential of new technologies. Fortunately, in this case, there is little likelihood of interference.” (ARRL News)

Closer Look Reveals that Reported Transatlantic 2 Meter Contact Did Not Happen

The reported transatlantic 2 meter contact between PY1MHZ in Brazil and V51PJ in Namibia turned out to be a false alarm, based on an incorrect interpretation of screen captures from the event — possibly the result of using an unreleased “development” version of the *WSJT-X* protocol’s *QRA64* mode. As initially reported, extremely weak signals using *QRA64* were received and decoded on both the African and South American ends of the path across the southern Atlantic. Screen captures of the protocol software were supplied to document the contact, but the software’s lead developer, Joe Taylor, K1JT, noticed debugging information, indicating that a prototype version of the protocol was being used. On closer inspection, the indicator values showed that the decodes were probably based on call sign information being known in advance, as is common with scheduled contacts.

“There was no intention to deceive,” Taylor told ARRL. “It was a perfectly honest mistake. It’s unfortunate. Many of us wish the report of such a QSO could be true — but it’s not.”

Trying to complete a 2 meter contact over such distances is extremely challenging, and it remains to be accomplished. The Irish Radio Transmitters Society (IRTS) [Brendan Awards](#), established to reward the first transatlantic contact in which one station is in Europe, are as yet unclaimed. Another false alarm occurred in 2015,

when an apparent 2 meter contact between stations in Newfoundland and Ireland turned out to have been facilitated by reflections from the International Space Station, which was in low-Earth orbit above the midpoint of the signal path at the time.

The *WSJT* software suite includes several digital modes that are designed to work at extremely low signal-to-noise ratios — such as *JT65*, *JT9*, and *WSPR*. The *QRA64* mode — developed by Nico Palermo, IV3NWV, in collaboration with Taylor — has been incorporated into the *WSJT-X* digital suite. The protocol has several levels of decoding for which it can use previously available information such as call signs to confirm a match with information from the received signal. Decoding quality is most robust when no previously available information is required to make a successful decode.

This appears to simply be an honest error by both stations who deserve credit for an extraordinary effort and who have pledged to keep trying.

“V51PJ and PY1MHZ have put a big effort into seeing their dream of a transatlantic 2 meter QSO come true,” Taylor said. “They deserve a lot of credit for what they have done.”

Pieter Jacobs, V51PJ, said the effort to complete a contact is a work in progress. “Conditions are ever changing on this long stretch of water, so we are still trying,” he told ARRL. (ARRL News)

FCC Updates Notice on Amateur Radio Operation in CEPT Countries

The FCC has updated its *Public Notice* on Amateur Radio operation in European Conference of Postal and Telecommunications Administrations (CEPT) countries that have adopted certain recommendations regarding the US. The updated notice, in English, German, and French, includes some additional countries where operation is permitted. Licensees operating in CEPT countries must have a copy of the *Public Notice*, proof of US citizenship, and evidence of an FCC Amateur Radio license grant. These must be shown to “proper authorities” upon request.

Subject to regulations in force in the country visited, a US citizen holding an FCC General, Advanced, or Amateur Extra Class Amateur Radio license grant “is authorized to utilize temporarily an Amateur Station in a [CEPT] country that has implemented certain recommendations with respect to the United States,” according to the notice.

Advanced or Amateur Extra class operators are granted CEPT Radio Amateur License privileges, in accordance with CEPT *Recommendation T/R 61-01* (as amended). General class operators are granted CEPT Novice Radio Amateur License privileges, in accordance with ECC *Recommendation (05)06* (as amended).

CEPT countries participating in CEPT *Recommendation T/R 61-01* as of September 16, 2016, are Albania, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark (including Greenland, and the Faroe Islands), Estonia, Finland, France (including Corsica, Guadeloupe, French Guyana, Martinique, St Bartholomew, St Pierre and Miquelon, St Martin, Reunion and its Dependencies, Mayotte, French Antarctica, French Polynesia and Clipperton, New Caledonia, and Wallis and Futuna), Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and the United Kingdom (including Great Britain, Northern Ireland, the Channel Islands, and the Isle of Man).

CEPT countries participating in ECC *Recommendation (05)06* as of September 16, 2016 are Austria, Belgium, Belarus, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark (including Greenland, and the Faroe Islands), Finland, Germany, Hungary, Iceland, Liechtenstein, Lithuania, Luxembourg, Moldova, Netherlands, Poland, Portugal, Romania, Russian Federation, Slovak Republic, Slovenia, and Switzerland.

Information regarding countries participating in CEPT *Recommendation T/R 61-01* and *Recommendation*

(05)06 after September 16, 2016 is available from the European Communications Office (ECO).

The *Public Notice* includes complete details. For more information, contact [Scot Stone](#), FCC Wireless Telecommunications Bureau, (202) 418-0638.

“RF Seismograph” Improved to Better Reflect Band Activity

The [Scanning RF Seismograph](#), a real-time HF propagation-monitoring tool developed by the [MDSR Team](#) and Alex Schwarz, VE7DXW, now can show both combined band noise and activity and just band activity. The RF Seismograph, which covers 80, 40, 30, 20, 15, and 10 meters, is a project of the North Shore Amateur Radio Club ([NSARC](#)).

“We were able to extract signals from the noise and display the results in gray scale vertical lines - white is best propagation,” Schwarz said. “This separate display does not indicate changes in noise level.”

The site is in Lynn Valley (CN89li), North Vancouver, British Columbia, at 500 feet ASL. A transceiver connected to an omnidirectional multiband antenna monitors JT-65 frequencies on six HF bands (for 8 seconds each, repeating the scan every 52 seconds). Recorders monitor signals and background noise on a given band and display the results in six color-differentiated (one color per band), long-duration graphs covering 6 hours of scans. Vertical movement of the primary graph traces is caused by changes in noise level and by the reflection of noise off the D Layer off the ionosphere, Schwarz explained.

When signals are present on a band, white vertical bars, color-coded by band below the main graph, indicate propagation based on the degree of activity. The web link is updated every 10 minutes.

Schwarz said the RF Seismograph also now can create a log file of events by matching propagation (white lines) with the recorded band and signal.

The MDSR Team is hoping to develop a notification system that sends an e-mail when a band appears to be open. “The idea is that, once you have set up the software, you could have maybe up to 100 e-mail addresses that

will receive notification,” he said. Schwarz believes this would get more people on the air, “because they are aware of the band conditions.”

Schwarz said the RF Seismograph software confirms that solar flux is not the only indicator of HF propagation. “Even during times when the sun’s flux flatlines, decent propagation is possible,” he said. “Another finding is that propagation is very local, and it has to be measured at the amateur station’s location best results.”

For more information, [contact](#) Alex Schwarz, VE7DXW. (ARRL News)

Windows bug causes decoding performance with certain Soundcard Interfaces.

Anyone using a Soundcard Interface using the TI PCM2900 (Rev-C or prior) series chipset might not be aware that the windows driver is adding 60db+. This bug is known and it’s seen on Windows Vista and later.

Devices like the Signalink and radios like the Icom 7100/7200 and TS-590S use this chipset. Modes like JT65 would be more difficult to decode because of the added distortion. There is a fix thanks to KD9DAL, he posted his fix to reddit and made a video showing exactly what is going on

Source: https://www.reddit.com/r/amateurrad..windows_bug_ruining_your_receive_performance/

QRZ.com (discussion from July 2015)

IN WASHINGTON STATE, HE’S AN OM AT 7

PAUL/ANCHOR: We end this week’s report with an introduction to Toby Vander Wilt KI7GBB, a newly ticketed amateur in Washington State. At 7 years of age, he has a lifetime of on-air challenges ahead of him. He told Amateur Radio Newsline’s Neil Rapp WB9VPG how he’s starting out in his radio career.

NEIL: The Tri-Cities Amateur Radio Club near Kennewick, Washington has a new member. His name is Toby Vander Wilt, and his callsign is KI7GBB. At first this may not seem so newsworthy, but Toby is only seven years old. His father, Nathan Vander Wilt, AF7TB, is his extra class mentor who has been licensed for a year. He studied for his license along with his mother, Hannah, KI7GBA, who also became a Technician license holder. I recently had a chance to talk to Toby, and swap some stories about being licensed at a very young age.

TOBY: “I do use my radios on my bike, but I don’t have a battery I can actually put on my bike or an antenna or anything. I, like, bring one of my handhelds and clip in on my shirt or something.” NEIL: At first it wasn’t easy, and with Dad’s help he progressed. TOBY: “My dad asked me the questions and I had to answer them. Yes, I did take a practice test. I didn’t get any of the practice tests right, but some of them I did get really close I think.”

NEIL: He’s been making good use of that license by talking to the people in his life who matter most.

TOBY: “I usually talk to my Mom on walks when I take my handheld with me on my bike. I sometimes try to talk to my Dad, but sometimes it doesn’t work. I talk to Mom the most, and sometimes I talk to a ham, and his name is Bernard and his callsign is AB7HB... and the first person I talked to was him.”

NEIL: At age 7, with a lifetime of on-air experiences ahead of him, he can rest assured this contact won’t be his last. For Amateur Radio Newsline, I’m Neil Rapp, WB9VPG. (Amateur Radio Newsline)

This space intentionally blank.

COFFEE & DONUTS
EVERY THURSDAY MORNING

0:00 A.M.
To
10:00 A.M.



Community Mtg Rm
Silver Lake Mall
Coeur d’Alene

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

Bring a Writing Instrument **Community Mtg Rm**
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 (KARS) MEMBERSHIP APPLICATION

One year membership Rates:

New Member: \$15.00 Renewal: \$15.00 Family Membership: \$23.00

Two year membership Rates:

New Member: \$28.00 Renewal: \$28.00 Family Membership: \$42.00

Lifetime membership:

Member: \$150.00

Information Update Only

Are You An ARRL Member? Yes / No (Please Circle One)

Callsign: _____ Class: _____ Expiration: _____

First Name: _____ M.I. _____ Last Name: _____

Nickname: _____

Address1: _____

Address2: _____

City: _____ State: _____ ZIP: _____ - _____

PHONE NUMBER: (____) _____

OK to publish phone number? Yes / No (Please Circle One)

EMAIL ADDRESS: _____

OK to publish Email address? Yes / No (Please Circle One)

Do you want to receive the emailed Newsletter? Yes / No (Please Circle One)

Note: If this is a family membership, (all members with the same address), please complete the following section for your family.

Name: _____ Call: _____ Class: _____

Name: _____ Call: _____ Class: _____

Name: _____ Call: _____ Class: _____

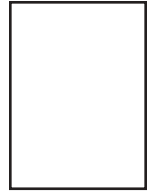
Name: _____ Call: _____ Class: _____

*RETURN THIS FORM WITH YOUR DUES, (CASH OR CHECK), TO THE KARS TREASURER,
OR, MAIL TO: KARS MEMBERSHIP, P.O. BOX 1765, Hayden, ID. 83835-1765.*

(Office use only.)

Cash:		Check #:		Money Order:	
Membership Card:		Roster:		Newsletter:	

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.

2016 CLUB OFFICERS

President: Dave Boss, KF7YWR
president@k7id.org

Vice-President: Alan Campbell, KE7DFT
vicepresident@k7id.org

Exec. Director: Lenny Gemar, N7MOT
N7MOT@gemar.org

Secretary: Adam Crippen, N7ISP
secretary@k7id.org

Treasurer: Rod Anderson, K7ZBE
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: Lenny Gemar, N7MOT
208 691-4735 N7MOT@gemar.org

Past President: Dave Boss, KF7YWR

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 \$23.00 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.