

QRM FROM THE PRESIDENT
Larry Telles, K6SPP

I can't believe that the year 2018 is nearly over. We are winding down the month of December with our annual potluck Christmas Party. If you have never attended one, I highly suggest you don't miss it. Not only is the food good, but it's the time when club officers 2019 are installed.

The club has had a great year as for both membership and activities. There has been a surge in volunteering. That makes all the difference in the world to an organization like ours. The STEM event at North Idaho College was a huge success. Our Field Day in Rathdrum brought out some of our newer Hams who are recent members. The fair had more volunteers than any other event on our yearly calendar. All who volunteered had a lot of fun.

I think our biggest accomplishment is our new "Learn CW Class" which is moving forward. The driving force is an interesting one: Frank Krug, KD7FK, and Jerry Hart, W7KR. They just happen to be the president and vice-president elect for 2019. Jerry is conducting the CW classes held at our monthly meeting which represents the evening's program. Frank is proving that you can learn the code at any age. It looks like 2019 is going to be a great year at the Kootenai Amateur Radio Society.

I would like to thank those in my cabinet for all the help and work they did. I know that I couldn't have done it without my Vice-President Jim Petersen, AD0AZ. He spent lots and lots of hours making things work. For that I thank him big time. It was a pleasure to serve as your president for 2018. The job was easy especially when you have very talented people behind you. I truly believe that next year things will even be better.

73, Larry K6SPP

p.s. 73 is singular not plural.

Kootenai Amateur Radio Society (KARS)
November 2018 Meeting Minutes

The November 12, 2018 KARS meeting was held at the Search & Rescue Building located at 10865 N Ramsey Rd. Hayden, Idaho.

The meeting was called to order at 7:04 p.m. by Club President Larry Telles (K6SPP). The Pledge of Allegiance was led by Mike Slothower (KG7KSJ).

Attendance: Thirty-four members and six visitors were in attendance.

VE Testing: Eight people tested and the results were as follows:

Passed Technician	5
Passed General	2
Attempted Technician	1

Minutes: Mike Slothower (KG7KSJ) moved to accept the October 2018 minutes as written in the newsletter; Jim Petersen (AD0AZ) seconded; the motion passed by member vote.

The Treasurer's Report was given by Rod Anderson (K7ZBE):

October 2018

Checking	\$ 702.65
Savings	\$1,127.45
Petty Cash	\$ <u>83.56</u>

TOTAL \$1,913.66

Income: Savings interest (\$0.03), 50/50 Raffle Sept & Oct (\$15.00), Memberships (\$116.00), Donation (\$7.00). Total \$138.03.

Expenses: None reported

Bob Kesson (K7CGA) moved to accept the Treasurer's report; Mike Slothower (KG7KSJ) seconded; the motion passed by member vote.

Jim Petersen (AD0AZ) moved to approve an expenditure of \$125.00 for Christmas décor for the Christmas party; Bob Kesson (K7CGA) seconded; the motion passed by member vote.

Repeater Committee: Adam Crippen (N7ISP) reported that the fire chief would be presenting a memorandum of understanding (MOU) to the fire commissioners for their approval that evening. The MOU concerns the installation of the repeater on Little Blacktail. The equipment that will be installed is up and running. The frequency is 148.680 MHz; negative offset; 136.5 Hz tone.

Nominating Committee: Jim Petersen (AD0AZ) called on Lenny Gemar (N7MOT) to give a report on work completed by the nominating committee since the October meeting. Lenny (N7MOT) reported that the following people volunteered for the board positions:

President: Frank Krug (KD7FK)

Vice President: Jerry Hart (W7KR)

Executive Director: Tom Macy (W7UAT)

Treasurer: Rod Anderson (K7ZBE)

Chad Taylor (K0KAD) volunteered to be the Secretary during the meeting.

Adam Crippen (N7ISP) moved that if no one comes forward to run for a board position before the next meeting that the nominees would become the new board; Jim Petersen (AD0AZ) seconded; the motion passed by member vote.

Adam Crippen (N7ISP) moved to set aside the bylaws to allow Rod Anderson (K7ZBE) to serve another term as treasurer; Lenny Gemar (N7MOT) seconded; the motion passed by member vote.

Mike Slothower (KG7KSJ) moved to accept the list of candidates unless someone else comes forward; Adam Crippen (N7ISP) seconded; the motion passed by member vote.

Annual Christmas Party: Jim Petersen (AD0AZ) introduced Lindy Bryant (KE0AZD) and Melissa O'Neal (KI7QFJ) as this year's organizers of the annual Christmas party. The party will be held at the Rathdrum Senior Center. There will be a potluck dinner, white elephant gift exchange (\$20.00 limit), and raffle items. The party will be held during the regular club meeting in December (12/10/2018).

Michael Glauser (AI7MG) presented an aluminum 2m, vertically polarized, slot antenna.

Evening Presentation: Jerry Hart (W7KR) and Frank Krug (KD7FK) presented a continuing lesson on Morse Code.

Jim Petersen (AD0AZ) moved to skip the VE testing in December prior to the Christmas party; Lenny Gemar (N7MOT) seconded; the motion passed by member vote.

Raffle Results: 50/50, \$7.00, Allan Campbell KE7DFT (claimed)
Membership, \$12.00, Benjamin Ginter KG7QIK (not claimed)

Mike Slothower (KG7KSJ) moved to adjourn; Stephen Murphy (KG7UWB) seconded. The motion passed by member vote and the meeting was adjourned at 8:49 p.m.

Es'hail-2 Geostationary Satellite Carrying Amateur Radio Payload Launched

A SpaceX Falcon 9 vehicle lifted off flawlessly at 2046 UTC on November 15 from Cape Canaveral, carrying the first Amateur Radio payload destined for geostationary orbit. About 32 minutes after launch, SpaceX reports the spacecraft was successfully deployed into a geostationary transfer orbit (GTO).

Positioned at 25.5° E, the satellite will carry an Amateur Radio S-band and X-band payload capable of linking radio amateurs from Brazil to Thailand, although it's unlikely that Es'hail-2 will be accessible from North America with typical Amateur Radio satellite gear.

The recent subject of an AMSAT-UK Colloquium [presentation](#), Es'hail-2 carries two Phase 4 (P4-A) non-inverting Amateur Radio transponders operating in a 2.4 GHz up/10.45 GHz down configuration. This offers a 250 kHz bandwidth linear transponder intended for conventional analog operations, plus an 8 MHz bandwidth transponder for experimental digital modulation schemes and DVB amateur television.

The Qatar Amateur Radio Society and Qatar Satellite Company are cooperating on the Amateur Radio project, and AMSAT-DL is providing technical support. Es'hail-2 also carries commercial payloads. Following the launch, SpaceX landed its reusable Falcon 9 vehicle on a drone vessel in the Atlantic. (ARRL News)

FCC Approves Use of Galileo Global Navigation Satellite System in the US

The FCC [has granted](#), in part, the European Commission's request for a waiver of Commission rules so that non-federal devices in the US may access specific signals transmitted from the Global Navigation Satellite System (GNSS) known as Galileo.

The action means that consumers and industry in the US may access certain satellite signals from the Galileo system to augment the US Global Positioning System (GPS). The *Order* approved finds that the Galileo GNSS is uniquely situated with respect to the US GPS, since the two systems are interoperable and RF compatible pursuant to the 2004 European Union/United States Galileo-GPS Agreement.

Specifically, the *Order* permits access to two of the Galileo system's satellite signals - the E1 signal transmitted in the 1,559 - 1,591 MHz portion of the 1,559 - 1,610 MHz Radionavigation-Satellite Service (RNSS) band, and the E5 signal transmitted in the 1,164 - 1,219 MHz portion of the 1,164 - 1,215 MHz and 1,215 - 1,240 MHz RNSS bands.

The *Order* does *not* grant access to the Galileo E6 signal, which is transmitted over the 1,260 - 1,300 MHz frequency band, since this band is not allocated for RNSS in the US or used by the US GPS to provide position/navigation/timing (PNT) services. The FCC pointed out that granting access to the Galileo E6 signal could constrain US spectrum management in the future in spectrum above 1,300 MHz, where potential allocation changes are under consideration.

The omission of the E6 signal also means that radio amateurs would not have to protect Galileo receivers from interference on 23 centimeters, which has been a significant issue in Europe. (ARRL News)

GIVING THANKS FOR A LIFE-SAVING ARIZONA NET

JIM/ANCHOR: Here in the U.S., where Newsline originates, this has been the season for Thanksgiving. One young ham in Arizona, however, gives thanks every day for amateur radio. He shares his story now with us and with Paul Braun WD9GCO.

PAUL: We've all heard stories about ham radio playing a part in saving lives. However, for Travis Gardner, KE7EUL, it was much more than just a story.

Gardner's interest in radio started when his family would use FRS radios while hunting. After discovering re-runs of "The Dukes of Hazzard" on TV he developed an interest in CB radio. An invitation to visit a local science center introduced him to amateur radio, and he was hooked. Good thing it all worked out, because according to Gardner, things went very, very wrong one evening:

GARDNER: I have a seizure disorder. For those who have seizures, ham radio is a very, very good tool to have. So, I was sitting at the computer desk one night, on the 2100 Net, and I don't remember what happened but I went down on the carpet, grabbed a mic after the seizure, and said, "I need help."

The way that Arizona is laid out, I'm in Peoria and a radio operator picked that up 150 miles North. There's a linked system, W7ARA - Arizona Repeater Association. Where I'm sitting right now, there's a firehouse down the street. The firehouse in Flagstaff relayed down here and I got out of here. Thanks to the 2100 Net, I'm still alive today.

PAUL: The 2100 Net is an Arizona-based net that runs on a combination of 2 meter, 70 centimeter, and 900 Megahertz repeaters throughout the state. You can find out more at the URL in the online text version of this newscast (www.2100net.org).

The seizure that triggered the emergency SOS call was brought on by an undiagnosed case of meningitis, according to Gardner. To make matters worse, the disease also affected his optic nerves rendering him totally blind. So, he's also had to work out how to use his radios without sight.

But if it hadn't been for the fact that his radio was on, and he had been checked into the net, the outcome could have been much, much worse. Gardner said that he's thankful that he's still alive, and he now tries to do what he can to help others in similar situations, and to bring a smile to someone's face. And he owes that chance to ham radio and the quick-thinking of members of the 2100 Net.

For Amateur Radio Newsline, I'm Paul Braun, WD9GCO. (ARN)

Inaugural "Green Keys Night" Set for January 1

"Green Keys Night" - an event aimed at promoting the restoration and use of vintage mechanical teleprinters - will take place on January 1, 2019 (UTC), concurrent with Straight Key Night ([SKN](#)). As with SKN, GKN is an operating event and not a contest. "Green keys" refers to the color of the keys on Teletype Corporation machines. Participants are encouraged to get on the air and enjoy making casual contacts on RTTY. Call "CQ GKN."

"The use of mechanical teleprinters is preferred, or simply get on the air with the oldest equipment you can scrape together," said Jeff Stai, WK6I. "Real heavy-metal teletypes to be sure, but if that isn't available, analog hardware modems, VT100 terminals, pre-*Windows* computers, etc. And vacuum tubes. And maybe fire up that boat anchor rig that never gets enough air time."

Sponsors request no pre-recorded messages or "brag tapes," just "a real conversation by hand typing it keyboard to keyboard. Even those who do not own or have access to any old RTTY gear are invited to get on the air too, doing RTTY "the old-fashioned way," keyboard to keyboard.

Stai asks participants to [let him know](#) if they were active in the event and to share a favorite or most interesting QSO (worked or heard), a log, and equipment operated (including photos).

The [SARTG New Year RTTY Contest](#) runs from 0800 to 1100 UTC on January 1. Stai suggested operating in that event as well.

The [Greenkeys online group](#) is an email list devoted to the discussion of older RTTY gear, including mechanical teleprinters, terminal units, paper tape, gears, cams, oil, and anything else related to TTY/RTTY. (ARRL News)

India Gains Three New Bands, Sweden Gets Permanent 60-Meter Access

Radio amateurs in India now have access to three new bands. India's Ministry of Communications' Department of Telecommunications has published an updated [National Frequency Allocation Plan](#), effective October 25, which lists the new bands at 5 MHz (60 meters), 472 kHz (630 meters), and 136 kHz (2300 meters). All allocations are on a secondary basis.

On 60 meters, hams now have access to 5,351.5 - 5,366.5 kHz at 15 W EIRP; on 630 meters, 472 - 479 kHz at 1 W EIRP, and on 2300 meters, 135.7 - 137.8 kHz at 1 W EIRP.

Sweden's IARU member-society SSA reports that radio amateurs there gained routine secondary access to 5,351.5 - 5,366.5 kHz at 15 W EIRP on November 1. Temporary permission has been available since 2016, by application. SSA recommends following IARU Region 1 guidelines for using the band; a [Swedish version](#) is available. - *Thanks to Paul Gaskell, G4MWO, Editor, The 5 MHz Newsletter; SSA (ARRL News)*

Maritime Mobile Service Network Operators Assist Vessel with Ill Crew Member

Amateur Radio operators associated with the Maritime Mobile Service Network ([MMSN](#)) played a significant part in summoning medical assistance on November 9 for a crew member suffering chest pains on board the 48-foot sailing vessel *Marie Elena*, some 300 miles east of Bermuda.

"The assistance we received from the ham radio operator[s] was crucial in helping us communicate with the vessel's crew," US Coast Guard Petty Officer 1st Travis Unser said afterward. Unser was the search-and-rescue coordinator for the incident.

MMSN member Donald Plunkett, VA6FH, heard a call for medical assistance at 1650 UTC on the net's 14.300 MHz frequency from Nick Cancro, KC2WRH, the captain of the *Marie Elena*.

Cancro reported that a crew member was experiencing severe chest pains and needed medical assistance. Fellow MMSN operator Fred Moore, W3ZU, of Inverness, Florida, had good propagation with the *Marie Elena* and contacted the vessel, linking it via a phone patch to the US Coast Guard Station in Norfolk, Virginia. The Coast Guard was able to connect the patient directly to medical personnel via the phone patch to ascertain symptoms and prescribe first aid measures prior to medical assistance arrival. Moore arranged with the *Marie Elena* to contact him at the bottom of the hour throughout the night and to call immediately if the patient's condition worsened. The US Air Force also came on frequency at the Coast Guard's request to evaluate the situation and see if it could assist.

Due to the sailboat's distance offshore, the Coast Guard directed the captain to head toward Cape Hatteras, North Carolina. The Coast Guard then redirected the cutter *Spencer*, under way near the Virginia-North Carolina border, toward the *Marie Elena*. The *Spencer* rendezvoused with the sailboat at about 1230 UTC on 11/10/18, launching a small boat crew and transporting the man aboard the cutter. A short time later, a helicopter crew was able to hoist the man aboard from the *Spencer* and transport him to a hospital in Norfolk. Moore was assisted by a relay station Mark Strothmann Sr., KC9YRX, in Wisconsin, who provided much-needed information throughout the incident. Additional MMSN members pitched in as well.

"This was a true team effort, and I am proud of the members of this organization who train for just this type of event. They performed in an exemplary fashion," said MMSN Manager Jeff Savasta, KB4JKL.

The Coast Guard [noted](#) that the *Marie Elena* has activated a Personal Locator Beacon and an Emergency Position Indicating Radio Beacon (EPIRB), permitting rescue personnel to hone in on the vessel's precise location. (ARRL News)

Repeaters, Amateur TV Play Communication Role in California Fire Emergency

Amateur Radio repeaters and TV (ATV) have helped to keep the broader community informed on the local status of widespread fires in Southern California, radio amateurs say. Benjamin Kuo, KI6YR, who had to evacuate but now is back home, said remote Amateur Radio Emergency Data Network ([AREDN](#)) mesh cameras captured video from fires across Southern California earlier this month, including the [early stages of the Woolsey Fire](#).

ATV cameras also offered views of some of the state's less prominent fires, including the [Briggs Fire](#) in Santa Paula, and the [Peak Fire](#) in Simi Valley.

"Another big success: When most of Southern California lost their internet and phone, local repeaters were used to relay information about the fire status to ham radio operators," Kuo told ARRL. "We also used our AREDN mesh to enable some of our members to be able to access key public safety information on their computers via our high-speed network when they had no phone or Internet."

Kuo said a near round-the-clock net, which secured on November 14, took place in Ventura County on the Conejo Valley Amateur Radio Club's BOZO repeater and the WD6EBY Repeater Network (PVARC) countywide, with updates, important evacuation information, and more. Kuo copied information from the repeaters and his scanner onto his Twitter feed, for broader dissemination.

He credited Stu Sheldon, AG6AG, and Zak Cohen, N6PK - the two primary net operators - for working to make sure everyone had current information on the fire. "Many others were also involved providing first-hand reports - in many cases, eyes on the fire and where it was at any point," Kuo added. He said that with landline telephones, television cable, and internet service disrupted and cell phones intermittent, repeaters were often the only source of information.

"Personally, the whole disaster cemented for me how much more resilient Amateur Radio is in these kinds of situations, and how it's actually pretty critical to keeping informed and aware of what's going on," Kuo said.

Elsewhere, Scott Bastian, AK6Q, of the Catalina Amateur Radio Association (CARA) in Southern California, said a ham in Malibu used his club's repeater to call for help at the onset of the Woolsey Fire that decimated Malibu and surrounding areas.

"This ham - and I do not have her call sign - used the CARA 2-meter repeater located on Catalina Island, calling for someone to make a phone call to the fire department as there was a large fire approaching her home, and she had no power or phone service due to our power company shutting off power due to the high winds and fire danger," Bastian told ARRL. "Two of our members - Bob Parker, KI6UPJ, in Bellflower, and Gabriel Saldana, K6GLS, in Avalon were able to pull her information out of the 'mud,' as she had a poor signal. They were able to notify Los Angeles County Fire and get her aid." (ARRL News)

RF-Seismograph records "a rare wave" in Earth Magnetic Field

On [Spaceweather.com](#) there is a story about Rob Stammes of the Polarlightcenter, a magnetic observatory in Norway. He recorded a sine wave with a period of 15s that lasted for hours on his magnetometers on November 18 between 1800 to 2000 UTC.

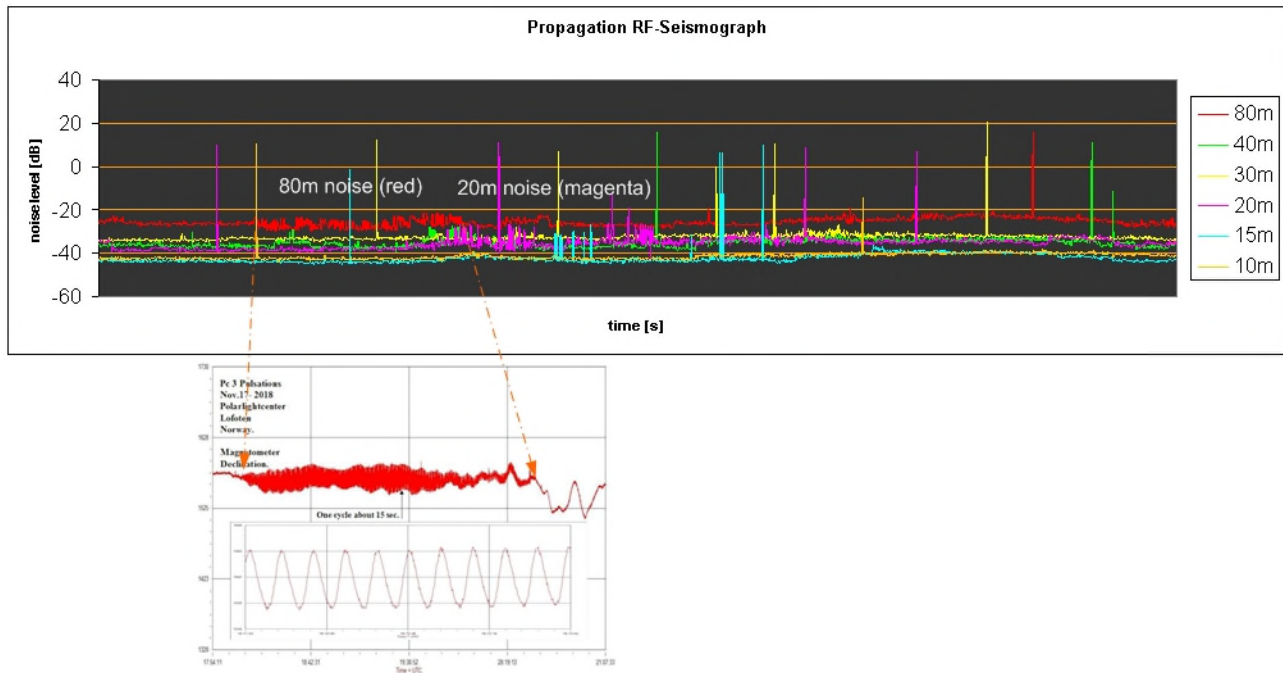
After I read this story, I was thinking about this oscillation. Would it show up in the RF-Seismograph? So I went back into my data and recreated the day Rob saw the incident. After reviewing the graph it was easily visible on 80m (red). Also interesting is the fact that the 20m (magenta) band

started doing the same oscillation, even after the main wave stopped. Even though Rob used a magnetometer for his measurement the effects of the "rare wave" on background noise in the HF bands is quite strong! Also interesting is the effect on a global scale, since the two recording stations were basically on opposite sites of the world.

How these waves effect propagation is not very well understood yet!

For more information on how these "rare waves" are created in the magnetosphere check this link: http://roma2.rm.ingv.it/en/themes/22/magnetic_pulsations

RARE WAVE IN EARTH'S MAGNETIC FIELD



Watch it live here:

<http://users.skynet.be/myspace/mdsr/>

Small Scam - Case of the Fake Stamps

I'd like to share with you an interesting new "small scam" that I was the target of recently.

It's not every day that a W2 gets a QSL request from a DX station with a SASE enclosed, but this was for an operation I made from IOTA NA-055 last summer. A DX station in Europe (I will not specify further) sent such a request with the SASE shown in the picture.

Something about the old-timey stamps didn't look right so I took the envelope down to my local USPS office and determined that the blue 5-cent Lincoln stamp and the brown 90-cent Lincoln stamps were fakes: you can find images of these on the Internet, and you can download and print them, which is what my correspondent did.

I am not the morals police, and it's not my place to call this guy out for bad behavior, but had I tried to use this envelope I would have been on the hook for whatever the USPS wanted to do to me. Too bad, because if the 90-cent Lincoln stamp were real it would be worth somewhere north of \$400,000.



(Editor's note: The images have been altered slightly to keep the counterfeit stamps from being easily used from this article.) (www.eham.net)

NO VALID LICENSE? WELL, NO VALID TRAFFIC TICKETS EITHER

STEPHEN/ANCHOR: We all know that getting on the air without a license isn't legal. As Andy Morrison K9AWM tells us in this week's final story, that's true even for the local traffic cops.

ANDY: Hams are not the only ones who can get in trouble for not having an appropriate and valid FCC license. Take the case of the Buckeye Lake Police Department in Ohio. Village officers have been writing speeding tickets, as police are known to do, for any motorists driving in excess of the 35 mph village limit - but apparently every ticket that's been handed out since 2013 has been unlawful, according to Buckeye Lake Police Chief Vicki Wardlow. According to an Associated Press story quoting the local Newark Advocate newspaper, the chief told the village council members at a meeting in October that the department's license with the FCC expired in 2013, which means the radar guns used to measure the speed of motorists whizzing by cannot be calibrated for use.

No one applied to renew the license so the tickets issued in the past five years simply aren't valid, she said. She told the council that the law requires the department to have that license in order to operate both its radar units and its radios. That means the department can't write valid tickets, at least for now.

A new license could cost anywhere from \$840 if she files the application herself, or a total of \$1,400 if the village outsources the process and would not expire for another 10 years. It was unclear what penalty if any would be assessed for the department's 5 years of unlicensed operation.

The Village's clerk treasurer Rochelle Menningen said the police department's budget has the funds to cover the cost of a new license and so, presumably, it will apply as quickly as possible for its FCC license - but of course, at a speed within the legal limit.

For Amateur Radio Newsline, I'm Andy Morrison K9AWM. (JOHN HILLIARD W8OF)