



March 2020

(www.k7id.org)

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

REGULAR CLUB MEETINGS:

Monday, Mar 9, 7:00 p.m.
Search & Rescue Building
10865 N Ramsey Rd.
Hayden, Idaho
Topic:
Presenter:

VE Testing
Monday, Mar 9, 5:30 p.m.
Search & Rescue Building

Upcoming Events

Mike & Key Hamfest
March 7, 2020
Puyallup Fairgrounds
Puyallup, Washington

Idaho QSO Party
March 14th weekend

Desert 100
April 4-5, 2020
Odessa, Washington
Sponsored by the Stump
Jumpers Motor Cycle Club
(Motorcycle Motocross)
Contact Glen Day,
K7CPO@yahoo.com to sign up
to provide radio support. It is
the closest thing to an actual
disaster without having the
disaster radiowise. Combined
operations between Amateur
Radio, Ambulance, and
Lifeflight.

Presidential QRM!

KARS' Busy Summer Season is almost here!

We are in the "pre-season" warmups to an active summer! KARS radio club gets revved up for a big June 27-28 Field Day, 4th of July parade with our "float" (*REALLY!*), a Hamfest July 18 and the Center Target event and North Idaho State Fair August 26-30. There are a lot of moving parts in those 3 months. Many ways to show off our hobby to our community and have a blast!

Our fair booth this year will be filled with digital signals scrolling on large monitors! Lots of "eye candy". The HF bands are so "RF" noisy at the fair it is nearly impossible to get our signals in or out! Not so with digital and the visuals will draw people like never before! You are going to want to be involved with this! It's new, current and exciting!

Lots coming up for KARS but it takes people to pull it off. Last year we were late asking for help. This year we are asking now, *before* it gets crazy! Would you please consider getting on a committee to help with these projects? Begin thinking about it now and be ready to sign on at the March meeting. It takes many folks to do something well and we need your help...really! If you will not be attending the March KARS meeting, please respond to this email and let me know how you would like to help and in what areas. We need you! Watch our K7ID web calendar for upcoming dates and activities.

Thanks for representing our hobby well to our community!

73,
Frank, Krug, KD7FK
president@K7ID.org

Kootenai Amateur Radio Society (KARS)
February 2020 Meeting Minutes

The February 10, 2020 KARS meeting was held at the Search & Rescue Building located at 10865 N Ramsey Rd. Hayden, Idaho.

The meeting was called to order at 7:01 pm by Club President Frank Krug (KD7FK). The Pledge of Allegiance was led by Frank Krug (KD7FK).

Attendance: Forty-five (45) members and two (2) visitors were in attendance.

First time visitors introduced themselves.

VE Testing: Jerry Hart (W7KR) reported that six people tested this evening.

The results were as follows:

Passed Technician	2
Passed General	2
Passed Technician & General	1
Passed Extra	1

Frank Krug (KD7FK) reminded everyone that membership renewals are due. A letter has been sent out encouraging membership renewal.

Minutes: Todd Silk (AD7VB) moved to accept the January 13, 2020 minutes as printed in the newsletter; Michael Glauser (AI7MG) seconded; the motion passed by member vote.

The Treasurer's Report was given by Rod Anderson (K7ZBE). The KARS Club is in the process of setting up a PayPal account so that members can renew online. Also, the membership card is being redesigned. Majestic Park in Rathdrum has been reserved for Field Day. The areas reserved include the pavilion, kitchen, picnic area on top of the hill behind the pavilion, and the amphitheater.

January 2020

Checking	\$1,449.89
Repeater Fund	\$ 108.00
Savings	\$2,503.05
Petty Cash	\$ 42.70
TOTAL	\$4,103.64

Income: Savings interest (\$0.06), Tee-shirt sales (\$20.00), Memberships (\$614.00), Repeater fund donations (\$10.00). Total \$644.06.

Expenses: Majestic Park Reservation (\$75.00). Total \$75.00.

Bernard Schmitt (WA3OWP) moved to accept the Treasurer's report for January 2020 as read; Steve Murphy (KG7UWB) seconded; the motion passed by member vote.

Frank Krug (KD7FK) announced there are 6 red T-shirts and 1 blue T-shirt remaining for purchase from the KARS Club at \$20 each.

Old Business

Frank Krug (KD7FK) stated that maintenance at the Club's repeater sites has been deferred due to weather.

A sign up sheet was circulated for meeting attendees to indicate their interest in participating in a local, slow speed CW net on 10 meters.

New Business

Frank Krug (KD7FK) presented life memberships to Scott (AB7SC) & Diana (KE7DNK) Colgrove and Mike Glauser (AI7MG).

Jerry Hart (W7KR) purchased a portable sound system on a special sale for KARS Club use. The sound system was used at the meeting.

Jerry Hart (W7KR) and Curt Hurley (KI7TFC) were recognized for the modifications they made to the end-fed antenna at the Search & Rescue building.

The cost for a booth at the North Idaho Fair has increased from \$350 to \$375.

Mike Slothower (KG7KSJ) was recognized for maintenance on the Club's Facebook page.

Refreshments: Kathy Kent (KI7OVA) was recognized for preparing the coffee and Kris Krug was recognized for providing home-baked cookies.

Evening Presentation: Four hands-on labs were presented:

Jerry Hart (W7KR) – HF Lab

Quint Webb (W7CQW) – CW Lab

Mike Slothower (KG7KSJ) – Yaesu Fusion Lab

Eric Anderson (AF7YQ) - RTS System 40m CW portable transceiver for remote use.

The meeting was adjourned at 8:48 PM.

France Authorizes Use of 60-Meter Band

France's telecommunications regulator ARCEP has authorized the use of a 60-meter band - as agreed upon at World Radiocommunication Conference 2015 - for French radio amateurs. The formal announcement was published in the *Official Journal of the Republic of France (JORF)* on February 13, IARU member-society REF (Réseau des Émetteurs Français) has reported. The

band 5351.5 - 5.366.6 MHz will be available at a maximum EIRP of 15 W. (ARRL News)



Yaesu Fusion lab...sending and tracking digital signals all across the nation! Raspberry Pi computer too!



Crowded room for our HF/ Fusion/ RTS/ CW labs. Lots of excitement!



RTS Commander demo- CW QRP remote XCVR for SOTA or remote locations. Keyboard entry and screen output, EASY and fun!



CW for fun. Several keys with expert instruction. Dah-Di-Dah!

The Surprising Way Solar Storms Beach Whales
<https://spaceweatherarchive.com/2020/02/28/the-surprising-way-solar-storms-beach-whales/>
(Space Weather)

A working scale model of a HF curtain

A working scale model of an HF curtain array antenna is on display at the [National Voice of America \(VOA\) Museum of Broadcasting](#) in West Chester, Ohio.

The model, which operates on 70 centimeters, is a 4 × 2 design with a screen reflector, and is the same style of antenna the VOA Bethany Relay Station used until its final transmission in November 1994.

West Chester Amateur Radio Association (WC8VOA) members Richard Kreuter, WC8RK, and Joe Burke, WA8OGS, designed and constructed this curtain array.

EZNEC Pro 4 models indicates the antenna has a gain of 21.35 dBi at 8° at a half-wavelength above ground. The club thanked Roy Lewallen, W7EL, for modeling the array.

The museum and WC8VOA will be open for extended hours during Dayton Hamvention ® for those interested in seeing the model. (Southgate Amateur Radio News)

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Can mobile networks connect first responders in remote areas?

The National Institute of Standards and Technology (NIST) has published an article that looks at the challenges of providing communications in remote areas

The high plateaus of Colorado's Rocky Mountains, known for panoramic vistas, wildlife, old gold mines and sports of all kinds, are attracting new pioneers: engineers working to improve emergency communications.

First responders face many communications challenges, including a lack of cell towers in uninhabited places and incompatible equipment. Public safety agencies need to find ways to share voice, text, instant messages, video and data reliably while responding to wildland fires and other emergencies.

Researchers with the National Institute of Standards and Technology (NIST), in collaboration with the Department of Homeland Security (DHS) Science and Technology Directorate, are mounting miniature mobile communications networks on pickup trucks and uncrewed aerial systems to measure signal strength and coverage in mountain areas lacking wireless infrastructure.

NIST researchers study "deployable systems" to help create ad hoc, interoperable networks. Deployable systems are needed not only for rural areas but also for other situations where wireless coverage is compromised or large-scale events cause network congestion. Some deployable systems are available commercially, but NIST is working on generic technologies that could be used by anyone.

The NIST experiments at the Gypsum site use Long Term Evolution (LTE) systems, the latest wireless standards that are widely available for cellphones. The nation's estimated 5 million public safety personnel have traditionally used walkie-talkies (land mobile radio), but many are supplementing their capabilities with LTE systems, which offer data transmission rates up to 1,000 times higher.

Read the full article at <https://www.nist.gov/news-events/news/2020/02/can-mobile-networks-connect-first->

[responders-remote-areas](#) (Southgate Amateur Radio News)

International Space Station Resupply Mission to Carry New ARISS Ham Radio Gear

The scheduled March 7 SpaceX CRS-20 mission to the International Space Station (ISS) will include the initial Amateur Radio on the International Space Station (ARISS) Interoperable Radio System (IORS) flight unit. The IORS is the foundation of the ARISS next-generation amateur radio system on the space station. The ARISS hardware team built four flight units, and the first will be installed in the ISS *Columbus* module.

A second flight unit expected to be launched on a later 2020 cargo flight will be installed in the Russian Service Module. NASA contracts with SpaceX to handle ISS resupply missions.

The IORS represents the first major upgrade of on-station ARISS equipment. The package will include a higher-power radio, an enhanced voice repeater, and updated digital packet radio (APRS) and slow-scan television (SSTV) capabilities for both the US and Russian space station segments.

The IORS consists of a custom-modified JVC Kenwood TM-D710GA transceiver, an AMSAT-developed multi-voltage power supply, and interconnecting cables. Once at the space station, the IORS will be stowed for later installation. (ARRL News)

Down Under Special Event Will Use Former Radio Australia Antennas

Over the March 14 - 15 weekend, members of the Shepparton and District Amateur Radio Club (SADARC) in Australia will be on the air as VI3RA (Radio Australia), connecting their transceivers to the curtain array and rhombic antennas at the former Radio Australia site in Shepparton. Radio Australia ceased transmitting from the site in 2017. VI3RA will operate on 40, 30, 20, 17, and 15 meters.

“Local amateurs will be given the unique opportunity to explore the use of high-gain antennas whilst giving

amateurs throughout the world a unique opportunity to contact a station using such high-gain antennas,” said SADARC President Peter Rentsch, VK3FPSR (Australia’s call sign structure accommodates four-letter suffixes). “This is a rare opportunity for amateur radio operators, who are only allowed a peak output power of 400 W in Australia when compared to 100 kW of Radio Australia transmitters to hopefully achieve some remarkable communication outcomes. We expect to get a gain of 15 dB on the lower frequencies and at least 20 dB on 21 MHz.”

The special event is being conducted in cooperation with BAI Communications (Broadcast Australia). More information is on the club’s website. (ARRL News)

New QO-100 Band Plan announced

Just in time for the 1-year anniversary of the successful commissioning of the two transponders of Qatar-OSCAR 100, an encore is pending: the capacity of the NB transponder will be expanded from about 250 KHz to almost 500 KHz.

In addition to extended areas for the various operating modes, more space is also being created in particular for “mixed mode” and other special operating cases. In addition to frequencies reserved for emergency radio operations, more experiments are to be made possible here.

But all this only with a maximum bandwidth of 2.7 kHz. Automatic operation requires a special license from the local licensing authorities and must be coordinated with the operator beforehand; this task is performed by **AMSAT-DL** on behalf of QARS and Es’hailSat. To take account of user behavior, AMSAT-DL has almost doubled the SSB range in particular.

Detailed information is available at <https://amsat-dl.org/en/neuer-qo-100-bandplan/>

(Courtesy of AMSAT-DL, ANS)

New World Distance Record Claimed on 122 GHz !!

A new world distance record of 139 kilometers (86.2 miles) is being claimed by radio amateurs in northern California. This tops the record of 114 kilometers set in 2005 by WA1ZMS and W4WWQ, according to the Distance Records on the ARRL website.

The February 17, 2020, contact was between Mike Lavelle, K6ML, on Mount Vaca (CM88WJ75ON) at 835 meters (2,739.5 feet) above sea level, and Oliver Barrett, KB6BA (at 1225 UTC), and Jim Moss, N9JIM (at 1250 UTC), both on Mount Umunhum (CM97BD18VJ) at 1,016 meters (3333.3 feet) above sea level.

Lavell reports the dew point was -11°C , the air temperature was 15°C , the path loss was about 225 dB, and atmospheric loss was approximately 0.35 dB/kilometer.

“CW was used, 122 GHz signals were very weak (7 dB above the noise in 22 Hz; -13 in 2500 Hz equivalent) with [fading] down to the noise floor,” Lavelle told ARRL. “Dishes were aligned on 24 GHz (71 dB above the noise) prior to [moving] to 122 GHz; we heard signals right away on 122 GHz.” The stations employed 60-centimeter satellite TV dishes and ran “somewhat less than half a milliwatt” on 122 GHz, Lavelle said. (ARRL News)



We have been contacted quite frequently over the past few months with requests to conduct amateur radio examinations sessions remotely in locations in the Lower 48 and one in Canada. Most of the folks requesting these sessions had legitimate reasons for making

those requests in that testing sessions aren't offered at all or on a very infrequent basis in their local areas, or the distance to travel to a testing session was extreme.

We believe that we have a legitimate reason to try to help folks in these situations take their examinations. To that end, on Tuesday, February 18th, 2020 I requested permission from the AARC Board of Directors to expand our remote testing program to areas outside of Alaska. The Board unanimously approved my request. This expansion, which could be the biggest in our VEC history, allows for remote testing to take place anywhere within the United States and even Canada.

For a remote testing session to be given, a process has been created which requires the applicant to explore all possibilities for reasonable on-site testing opportunities before we will approve and undertake the remote examination process. As part of the process, the applicant will be asked several questions to help determine eligibility. If the VEC Chairman determines there is merit in the request, approval will be given to the applicant followed by instructions for them to find an eligible examination proctor.

JOIN THE K7ID GANG EVERY THURSDAY MORNING!

WE ARE BACK AT THE SILVERLAKE MALL. BRING YOUR OWN COFFEE!

START LOOKING FOR US ACROSS FROM JOANN FABRICS.



8 till 10

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:	

