



August 2019

([www.k7id.org](http://www.k7id.org))

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

Glancing back, Gazing forward

## REGULAR CLUB MEETINGS:

**Monday, Aug 13, 7:00 p.m.**

**Search & Rescue Bldg**

**10865 N Ramsey Rd.**

**Hayden, Idaho**

**Topic: No Meeting**

**Presenter: No Meeting**

**Refreshments: No Meeting**

**VE Testing**

**Monday, Aug 12, None**

**10865 N Ramsey Rd.**

**Hayden, Idaho**

**Monday, Sept 9, 7:00 p.m.**

**Search & Rescue Bldg**

**10865 N Ramsey Rd.**

**Hayden, Idaho**

**Topic: ???**

**Presenters: ???**

**Refreshments: ???**

**VE Testing**

**Monday, Sept 9, 5:30 a.m.**

**Search & Rescue Bldg**

**10865 N Ramsey Rd.**

**Hayden, Idaho**

**Upcoming Events**

**Spokane Hamfest and Wash-  
ington State Convention**

**Sept 28, 2019**

**University High School**

**32nd & Pines,**

**Spokane Valley, Washington**

As I see HamFest 2019 disappearing into the rear view mirror of activities, I am amazed at the success of our latest endeavor. So many hams from our club as well as wives, husbands, girlfriends, boyfriends ... whoever, all pitched in to make our event such a wild success! Some long-timers in the club said it was one of the MOST successful HamFests in our club's history! I am not surprised ... we have GREAT people!

We faced a few anxious moments as our location changed right before the event but the Post Falls School District (specifically the High School Activities Director Pam) made it all happen without a lot of mess. Getting the word out quickly was our challenge but thankfully we have a "Communications Hobby" which helps when needed. We also used our website, K7ID.org and Facebook page to alert the troops of the last minute change. KUDOS also to the North West Traffic Net and its control operators, spreading the word of the change ... so helpful! "Many Hams Make Light Work!" Our club financial situation is much better and we face this winter with a little more confidence that if we need something ... we can get it.

It seemed to me that our HamFest was a lot of fun to the attendees. The connector vendor called me the next day to say how much he enjoyed himself and the "atmosphere of the room" (his term) was one of excitement, friendship and fun. He does several shows each year and that is not the norm! Of course ... those "Breakfast Burritos" were just awesome and made the morning "fulfilling". The hamburger lunch helped sustain the weary shoppers. I am so proud of our club...thank you to ALL who contributed, especially wherever needed!

KARS will be at Center Target August 10th for their "Customer Appreciation Day" so checkout our website and bring some canned vegetables to enter the fun. Of course, the County Fair is also in August and our booth will be a busy one again. I HIGHLY recommend you take a shift. It is easy, fun, and you get to know each other. If you would like to help out and sit in on a shift, please let me know. NO REGULAR MEETING IN AUGUST due to all our activities. Please check the website for more details.

K7ID- It's about people ... with radios! ;-)

Our club is on the move ... join us! I'd like to know your thoughts. Please write me at [president@K7ID.org](mailto:president@K7ID.org).

Frank Krug, KD7FK

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Kootenai Amateur Radio Society (KARS)  
July 2019 Meeting Minutes

The July 8, 2019 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: Twenty-nine (29) members and two (2) visitors were in attendance.

First time visitors introduced themselves.

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

Passed Technician	1
Passed General	2
Passed Extra	1

Minutes: Dave Boss (KF7YWR) moved to accept the June 2019 minutes as written; Mike Slothower (KG7KSJ) seconded; the motion passed by member vote.

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

June 2019

Checking	\$ 481.27
Repeater Fund	\$ 55.00
Savings	\$1,327.70
Petty Cash	\$ 76.15
TOTAL	\$1,940.12

Income: Savings interest (\$0.03), Majestic Park deposit refund (\$75.00), 50/50 Raffle (\$3.00), Memberships (\$86.00), Donations-Repeater Fund (\$5.00). Total \$164.03.

Expenses: None.

Mike Glauser (AI7MG) moved to accept the Treasurer's report; Kathy Kent (KI7OVA) seconded; the motion passed by member vote.

#### OLD BUSINESS

\*Field Day: Jerry Hart (W7KR) gave a report on Field Day 2019. Field Day was held June 22-23 starting at 11:00 AM on June 22 and ending at 2:00 PM on June 23.

The CDA Press sent a reporter. Larry Telles took pictures. Some statistics:

Total Contacts: 266

By Mode:

Phone:	125
Digital:	111
CW:	25
SSB:	5

By Band:

2:	1
6:	1
10:	31
15:	77
20:	62
40:	41
80:	53

California was the state with the most contacts; Rhode Island was the farthest state contacted.

\*Hamfest: Frank Krug (KD7FK) announced that for this year's Hamfest tickets will be \$5.00, tables are \$20.00. Breakfast and lunch will be available for sale and there will be VE testing. There will be a table of KARS equipment with all proceeds going to the KARS Club. An equipment test table will be available. A meeting for the Hamfest volunteers will be held following the July monthly meeting.

#### NEW BUSINESS

\*Frank Krug (KD7FK) discussed the North Idaho Fair and Center Target Sports Customer Appreciation (8/10/2019) events. Sign up sheets were passed around for volunteers to be present in the KARS Club booths at these events.

\*KARS Club Facebook page: Mike Slothower (KG7KSJ) is in charge of the Club Facebook page under the supervision of Tom Macy (W7UAT).

\*The Spokane Hamfest is scheduled for 9/28/2019, 9 to 3, at University High School in Spokane Valley.

\*There will be no KARS meeting in August because of the Center Target Sports and North Idaho Fair events.

\*Frank Krug (KD7FK) presented two T-shirt designs for the KARS Club.

\*Evening Presentation: Mike Slothower (KG7KSJ) gave the evening presentation entitled "Can Hams Have Fun With The Internet?" The presentation provided

internet resources (websites) of interest to amateur radio operators.

\*Raffle Results: 50/50, \$6.00, Dan Latuseck KD2AN (claimed).

Membership, \$67.00, Caleb Danner KF7MSJ (not claimed).

Adam Crippen (N7ISP) moved to adjourn; Gary Roth (KE7IAT) seconded. The motion passed by member vote and the meeting was adjourned at 8:40 pm.



by Larry Telles, K6SPP  
Spotlight this month is on:  
Tom Macy, W7UAT.

Tom was here in Coeur d'Alene when the Kootenai Amateur Radio Society was established in 1952.

One day in 1951 after moving to Coeur d'Alene young Tom visited to the public library in town. There he found an article in Boy's Life magazine all about ham radio. Unknown to him his father was also interested. Shortly after Tom got his ham ticket.

Everyone remembers their first contact, and so does Tom. He was running a 6V6 oscillator into a long wire of unknown length in his back yard on 80 Meters CW. The QSO wasn't what you would call DX, since Tom was in Coeur d'Alene and his high school beer drinking buddy lived in Dalton Gardens.

When asked what is his favorite band Tom smiled and said, "I liked 75 Meters back in those days, but I find myself on 2 Meters these days because it's convenient."

Tom enjoys the technology of amateur radio. When not on the air, he is building solid state devices. He just loves gadgets, especially solid state. Tom spent a year with the University of Washington Neural Surgery where he built numerous pieces of solid state equipment for the researchers.

If you have a gadget idea, talk to Tom. He probably has a diagram for it, or knows where to find one!

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#### ARES Responds to Early July Earthquakes and Aftershocks in Southern California

On the morning of July 4, a 6.4 magnitude earthquake rocked the California High Desert, with its epicenter near Trona in the Searles Valley, not far from Ridgecrest, population roughly 29,000.

ARES volunteer Jerry Brooks, KK6PA, activated the Eastern Kern County ARES Net, and, as members assessed their own situations and were able to participate, activity grew on the Eastern Kern County ARES Emergency Net. Steve Hendricks, KK6JTB, took over net control duties through most of the first day, and others filled in as the activation progressed.

The Logistics Chief with the Ridgecrest Emergency Operations Center (EOC), Robert Oberfeld, contacted Eastern Kern County ARES to ask that a radio operator be assigned to the Ridgecrest Police Department mobile communications van at the EOC.

Eastern Kern County ARES was able to relay information from mobile operators to the EOC regarding roadway conditions in the area, as several main highways - including Highway 178, the only route between Ridgecrest and Trona - had been rendered impassable. CalTrans was alerted, and repair crews had the route opened for limited traffic within a short time.



As the aftershocks lessened and the extent of the damage by the first temblor had been assessed, the EOC requested that ARES stand down but remain on standby.

Everyone's worst fears were realized the next day - Friday, July 5 - when a 7.1 magnitude earthquake struck in the early evening. This was followed over the next 2 hours by 19 aftershocks, ranging in magnitude from 4.5 to 5.5. The epicenter of the 7.1 temblor was some 11 miles north of Ridgecrest in Indian Wells Valley, within the boundaries of the China Lake Naval Air Weapons Station (NAWS).

When Eastern Kern County ARES reactivated, significantly more damage had occurred, with the result that fewer operators were immediately available as many residents dealt with serious issues within their own homes. Additional operators eventually become available to provide their observations to the EOC, however. With sufficient depth of resources, the communications van was now being staffed by two operators working in 4-hour shifts, some of them husband-and-wife teams. In all, 57 operators were active at various times on the emergency net, providing status and updates. Eastern Kern County ARES stood down from active status at 9 PM on Sunday.

"The ensuing days have brought thousands of aftershocks of generally small magnitude, but the threat of larger aftershocks remains, so Eastern Kern County ARES remains on stand by for now," said Dennis Kidder, W6DQ. He said few injuries were reported as a result of the two earthquakes. "A number of homes were either destroyed or severely damaged, and a number of businesses sustained damage and some were red tagged. Some 150 residents are in shelter at this time," Kidder added. Water service and electrical power have been restored to most areas.

Kidder said that while most of the thousands of aftershocks were inconsequential, several have been as high as magnitude 5.5, "which gets everyone's attention." Aftershocks are expected to continue for a long time, he said. - *Thanks to Dennis Kidder, W6DQ, Eastern Kern County ARES (ARRL News)*

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ARRISS-Russia Planning SSTV Test Transmissions from Space Station

ARRISS-Russia has announced plans to conduct a slow-scan television (SSTV) event via RS0ISS on the International Space Station. The schedule calls for transmissions on Monday, July 29, 1315 - 2125 UTC, and on Tuesday, July 30, 1350 - 1950 UTC. Other transmissions may take place through August 4.

Transmissions will be on 145.800 MHz FM in SSTV mode PD120. The ISS should be available to most of the world except North America during the 2 days of SSTV transmissions. For more information, visit the Amateur Radio on the International Space Station ([ARRISS](#)) website or the ARISS Facebook page. - *Thanks to Gaston Bertels, ON4WF*

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Centenarian Radio Amateur's Efforts Helped Pave the Way to the Moon

*The Nashville Tennessean* newspaper recently featured the story of a 104-year-old ARRL member who contributed to NASA's effort to put the first humans on the moon 50 years ago this month. Cary Nettles, W5SRR, of Columbia, Tennessee - who calls himself the nation's oldest rocket scientist still alive - was a NASA project manager and research engineer on rocket propulsion systems in the 1950s and 1960s.

While working on the Centaur second-stage rocket program, Nettles, a Louisiana State University engineering graduate, determined that rocket engine failures NASA was experiencing were a result of misdirected exhaust destroying the vehicles' engines. Nettles told the *Tennessean* he came up with an "exhaust pipe" that solved the problem. In May 1966, an Atlas-Centaur launcher propelled the first *Surveyor* lander toward the moon. That year, NASA awarded Nettles and colleague Ed Jonash with its Distinguished Service Medal for "their superhuman effort in turning the troubled rocket into a reliable upper stage," according to a 2004 NASA publication, "Taming Liquid Hydrogen - The Centaur Upper Stage Rocket 1958 - 2002."

A Saturn V rocket with a liquid hydrogen-fueled second stage carried astronauts Neil Armstrong and Buzz Aldrin to their rendezvous with the surface of the moon on July 20, 1969. Nettles retired from NASA the following year.

Nettles got his Amateur Radio license in 1945 and remains active on 40 meters as well as on VHF and UHF repeaters. He is a member of the Maury Amateur Radio Club. In addition to sustaining his interest in ham radio over the decades, Nettles is an enthusiast of "large-scale" steam trains, which he works on in his basement. Look for

him Tuesdays at 1400 UTC on 7.215 MHz on the Steam Railroad Net.

In 2015, the year he turned 100, the ARRL Tennessee Section presented Nettles with its Elder Statesman Award. (ARRL News)

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### FAA Reauthorization Act Language Serves to Exclude Vast Majority of Amateur Radio Towers

Language in the Federal Aviation Administration (FAA) [Reauthorization Act of 2018](#) will exclude all but a small number of Amateur Radio towers from marking requirements. Thanks to action taken in 2017 and 2018 by ARRL, the bill's original language was amended to the extent that amateur towers, as well as residential towers used for over-the-air TV reception, were effectively exempted from marking requirements.

The topic was addressed at the annual "Ham Radio and the Law" forum at the [Dayton Hamvention](#)® this past May. Some key points from that presentation: (1) Towers covered by the rules are structures at least 50 feet tall that support an antenna and are located in a rural area or on farmland or immediately adjacent to such land. (2) According to the Act, the term "covered tower" does *not* include any structure that is adjacent to a house, barn, or other building, and "is within the curtilage of a farmstead or adjacent to another building or visible structure."

ARRL Regulatory Information Manager Dan Henderson, N1ND, explains that, while a few Amateur Radio towers will fall under the Act's marking requirements and will have to be registered, towers in residential yards or within farmland are specifically exempted.

[More information](#) is on the ARRL website. (ARRL News)

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### Award for Top Homebrew Designers in Amateur Radio Announced

The [ICQ Podcast](#) has announced a partnership to establish an annual "[Homebrew Heroes Award](#)" to recognize individuals, groups, or organizations that help to define the frontiers in Amateur Radio technology by

building their own equipment. The new awards program is independent of the ICQ Podcast, but three podcast members comprise the Steering Committee - Frank Howell, K4FMH; Martin Butler, M1MRB/W9ICQ, and Colin Butler, M6BOY. The ICQ Podcast is a promotional partner in this endeavor, and Howell maintains the award website.

"We felt that with all of the technical homebrew activity in Amateur Radio today, that there should be a means by which to identify and highlight those whose technical creativity has made a clear impact on the hobby," Howell said. Martin Butler observed the trio's recent visit to Dayton Hamvention convinced them that homebrewing is alive and well.

Seeing this, Martin's son, Colin, added, "My background in strategic marketing and information technology led me to believe that the time was right for such an award."

Jeremy Kolonay, KF7IJZ, co-host of [Ham Radio Workbench](#) podcast, expressed enthusiasm for the new award. "It's really important to have a way to recognize and promote excellence achieved by the most successful participants," he said.

Howell said corporate sponsors have begun to sign on to donate prizes for future award recipients. The list includes Digilent, which told the award committee that it would contribute an Analog Discovery 2 test device, and Howell said he anticipates that the donor list will grow as more become aware of the new award.

There is no application for the award. The Steering Committee will recognize Homebrew Heroes Award candidates in the broad area of electronic homebrew design and construction "based upon the impact they have made in Amateur Radio," the award website says. The Steering Committee will accept suggestions, however, and will evaluate these for referral to an anonymous Selection Committee. (ARRL News)

## Historic Amateur Radio Contact Reported via Moon-Orbiting Satellite

A contact between radio amateurs in Germany and China took place on July 1 via the moon-orbiting LO-94 satellite, DSLWP-B, launched in May 2018. The two-way exchange between Reinhard Kuehn, DK5LA, in Soerup, Germany, and Harbin Institute of Technology club station BY2HIT (operated by Wei Mingchuan, BG2BHC), in Harbin, China, occurred between 0551 and 0728 UTC, according to reports. The GMSK-to-JT4G repeater onboard DSLWP-B was used to make the contact, the first ever made via a lunar-orbiting repeater.

“Using the GMSK-to-JT4G repeater is not easy, in terms of the signal power needed for the uplink,” [commented](#) radio amateur and engineer Daniel Estévez, EA4GPZ, whose blog includes images of the lunar surface downloaded via DSLWP-B. “There were plans to make a QSO between BY2HIT and Reinhard since many months ago, but previous attempts didn’t work out. My congratulations to the people at both sides of the QSO, who have achieved it a month before [DSLWP-B crashes against the lunar surface.](#)”

As Estévez explained it, the GMSK-to-JT4G repeater works by sending commands to the satellite that embed a 13-character message, using the same frequency and a similar protocol to the one that commands the camera and other satellite functions. He said sending a message in this fashion takes a little longer than 1 minute.

An open telecommand protocol allows radio amateurs to take and download images, and DSLWP-B transmitted images of the moon and Earth during this week’s solar eclipse. DSLWP-B was launched as a secondary payload with the *Queqiao* relay satellite as part of the Chang’e 4 mission to the far side of the moon. Last September, some earthbound radio amateurs and sky watchers received images from the tiny satellite as it orbited the moon.

DSLWP stands for “Discovering the Sky at Longest Wavelengths Pathfinder,” and was designed to test low-frequency radio astronomy and space-based interferometry. The repeater uplink is on 2 meters and the downlink is on 70 centimeters. (ARRL News)

## New Raspberry Pi 4 Problem Reported with Certain USB-C Cables

[TechRepublic reports](#) that the Raspberry Pi Foundation has confirmed that the recently released Raspberry Pi 4 will not work when powered using *certain* USB-C cables. The economical, single-board computer is the first Pi board to use a USB-C power connection. Pi co-creator Eben Upton has confirmed that not every USB-C cable will work. “The Pi 4 doesn’t receive power when used with electronically marked or e-marked USB-C cables - the type used by Apple MacBooks and other laptops,” the article quotes Upton as saying. “A smart charger with an e-marked cable will incorrectly identify the Raspberry Pi 4 as an audio adapter accessory, and refuse to provide power.”

Upton said he anticipates the issue will be fixed in future board revisions, but until then, Raspberry Pi 4 owners will need to use non e-marked USB-C cables - the type many smartphone chargers use - with a power supply that can deliver the 5.1 V at 3A the board needs. Another option is to purchase the official Raspberry Pi 4 power supply, which costs around \$8. Older chargers with A-C cables or micro B-to-C adaptors will also work if they provide enough power.

“The Raspberry Pi 4 marks a significant upgrade for the Pi, introducing a new CPU and GPU, upping the Pi’s memory to 4 GB, introducing USB 3.0 for fast storage, and adding support for dual 4K displays,” the [TechRepublic](#) article noted. (ARRL News)

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**COFFEE & DONUTS  
EVERY THURSDAY MORNING**

9:00 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:

