

July 2019

(www.k7id.org)

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

## REGULAR CLUB MEETINGS:

Monday, July 8, 7:00 p.m.  
Search & Rescue Bldg  
10865 N Ramsey Rd.  
Hayden, Idaho  
Topic: ??  
Presenter: ??  
Refreshments: ???

VE Testing  
Monday, July 8, 5:30 p.m.  
10865 N Ramsey Rd.  
Hayden, Idaho

Monday, August 12, 7:00 p.m.  
Search & Rescue Bldg  
10865 N Ramsey Rd.  
Hayden, Idaho  
Topic: ??  
Presenters: ??  
Refreshments: ??

VE Testing  
Monday, August 12, 5:30 p.m.  
Search & Rescue Bldg  
10865 N Ramsey Rd.  
Hayden, Idaho

### Upcoming Events

KARS Hamfest  
July 20, 2019  
Prairie View Elementary  
Greensferry & Poleline,  
Post Falls, Idaho

### Presidential Thoughts

#### *Reflections on Field Day 2019*

As I sit here... groggy, recovering and nursing my coffee, trying to clearly sort out the events of the last few days leading up to and including Field Day this past weekend, I am so reminded of WHY we do this.

We get our vehicles loaded with radio gear and antennas, power strips and seat cushions, snacks, adapters and endless coils of antenna wire and coax, all for the purpose of making contacts and enjoying friendship and "*Fellowship of the Wire*". It is a community effort. No "*Lone Rangers*" here...it's "one-for-all" as we help run wires, get the antennas flying high and set up our treasures.

It not "JUST" about radio...it is about people, sharing common interests and fascination! It's seeing how others do what we enjoy and possibly learning a new or better way. The contacts are both exciting and challenging as the bands are over-crowded beyond belief. Signals so close to each other it is difficult to discern the call signs or signal reports, but we do it. The excitement within our own space is so loud it complicates the ability to hear the radio clearly...even with headsets up full volume! More coffee! Hams having fun, enjoying associating the faces to the voices we have come to know so well on the airwaves. Neil, K2AMF and Tom, KJ7ESD ... voices I knew but I lacked facial recognition. Many others too but not anymore! Budding friendships with a common interest...and smiles everywhere! It's also about sitting up ALL NIGHT, enjoying both strong coffee and stimulating discussions about not only radio. Making memories! Dave Boss, KF7YWR won the "Gold Star Award" with his endless supply of "I have that...need it?" as well as helping every one of us with whatever we forgot to bring or how to hook it all up. What a guy! Thank you Dave...from ALL of us at Field Day 2019!

I am so thankful for our volunteers who made this Field Day event such a grand success! Mike, AI7MG greeted visitors and put many on the air with his beautiful HF station. Even the reporter for the CDA Press was blown away with not only the technology which was assembled in the room, but the excitement of our club as we demonstrated the fun and delight of radio! Look for her article in the paper! Our club is PEOPLE who share an interest which becomes a passion...and it is contagious! I am also thankful for the KARS Executive Board who exhibit, encourage and anticipate excellence in what we pursue ... THANK YOU!!!

Our KARS club is on the move and gaining momentum! Hamfest 2019 is just around the corner on Saturday, July 20<sup>th</sup>, with details on K7ID.ORG. Won't you join us and have some fun with radio? Bring your excess treasures and swap for a treasure you "need"... and have fun in the process! Come hungry too...superb nourishment will be available! Come support your local KARS Radio Club, a tradition in our community since 1952!

I invite your comments. Please write me at [president@k7id.org](mailto:president@k7id.org).

73,

Frank, KD7FK  
2019 KARS President

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Kootenai Amateur Radio Society (KARS)  
June 2019 Meeting Minutes

The June 10, 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 7:02 pm by Club President Frank Krug (KD7FK). The Pledge of Allegiance was led by Frank Krug (KD7FK).

Attendance: Thirty-two (32) members and six (6) visitors were in attendance.

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

|                   |   |
|-------------------|---|
| Passed Technician | 1 |
| Passed General    | 3 |

Rod Anderson (K7ZBE) read aloud a list of new KARS members.

Frank Krug (KD7FK) introduced the KARS Executive Board members.

Minutes: Larry Angel (KI4ZPE) moved to accept the May 2019 minutes as written; Frank Ten Thy (KG7CUI) seconded; the motion passed by member vote.

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

|            |            |
|------------|------------|
| May 2019   |            |
| Checking   | \$ 392.27  |
| Savings    | \$1,302.67 |
| Petty Cash | \$ 76.15   |
| TOTAL      | \$1,771.09 |

Income: Savings interest (\$0.04), 50/50 Raffle (\$8.00), Memberships (\$161.00), Repeater Fund (\$15.00). Total \$184.04.

Expenses: None.

Mike Slothower (KG7KSJ) moved to accept the Treasurer's report; Jerry Hart (W7KR) seconded; the motion passed by member vote.

## OLD BUSINESS

\*Field Day: Jerry Hart (W7KR) gave a report on plans for Field Day. Each of the operators will have a list of band/modes they will work. Michael Glauser (AI7MG) will be in charge of the GOTA (get-on-the-air) station. Martin Waller (KG7LRV) will serve as the safety officer. Terri O'Rourke (KI7VAZ) is in charge of refreshments for Sunday June 23. Some of our club members will be going out the Wednesday before Field Day to survey the area at Majestic Park in Rathdrum for antenna placement. The Club will set up in the large pavilion at the park.

Members who signed up to operate with their personal equipment are:

Frank Krug, KD7FK  
Jerry Hart, W7KR  
Dave Boss, KF7YWR  
Mark Avakian, N7MA  
Larry Telles, K6SPP  
Kathy Kent, KI7OVA

Members who signed up to operate with KARS Club equipment or to help with setup are:

Eric Hallgren, AG7UB  
Jim Petersen, AD0AZ  
Adam Crippen, N7ISP  
Frank Ten Thy, KG7CUI  
Tom Macy, W7UAT

Field Day will be held June 22-23 starting at 11:00 AM on June 22 and ending at 2:00 PM on June 23.

\*Hamfest: Frank Krug (KD7FK) announced this year's Hamfest will be held in the Prairie View Elementary School gym on July 20th.

\*Suggestion box: A suggestion box is available at Club meetings for ideas on programs or equipment for sale.

## NEW BUSINESS

\*Frank Krug (KD7FK) discussed the K7ID.org website

as some members have had trouble with access. Members were encouraged to contact Frank if they are having trouble logging in to the website.

\*KARS Club Facebook page: Mike Slothower (KG7KSJ) is in charge of the Club Facebook page under the supervision of Tom Macy (W7UAT). There is a plan in place to send out a Facebook blast regarding Field Day.

\*Evening Presentation: A K7ID Canned Ham video was shown. The video showed pictures and video from the SEAPAC Ham Radio Convention, in Seaside, Oregon that were taken by Mike Slothower (KG7KSJ) and Jerry Hart (W7KR). The presentation also included pictures that were taken by Bob Kesson (K7CGA) at the Hamvention in Dayton, Ohio.

\*Raffle Results: 50/50, \$3.00, Mark Avakian N7MA (claimed)  
Membership, \$55.00, Dennis Fuller KC6QHH (not claimed)

Mike Slothower (KG7KSJ) moved to adjourn; Gary Roth (KE7IAT) seconded. The motion passed by member vote and the meeting was adjourned at 8:25 pm.

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13 Colonies Special Event to Mark 11th Anniversary this Year

The annual [Original 13 Colonies Special Event](#) will mark its 11th anniversary this year. The event gets under way on July 1 at 1300 UTC and runs through July 7 at 0400 UTC. Special event stations with 1 × 1 call signs will represent the original 13 US colonies, plus bonus stations K2Z, WM3PEN in Philadelphia and GB13COL in Durham, England.

Each special event station will have its own QRZ.com profile page. Participating stations try to contact all 13 Colony Stations plus the two bonus stations. Call signs and their respective states are K2A, New York; K2B, Virginia; K2C, Rhode Island; K2D, Connecticut; K2E, Delaware; K2F, Maryland; K2G, Georgia; K2H, Massachusetts; K2I, New Jersey; K2J, North Carolina; K2K, New Hampshire; K2L, South Carolina, and K2M, Pennsylvania.

[Additional information](#) is on the 13 Colonies website. (<http://www.13colonies.net/>). (ARRL News)

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ARRL Files Interim Report with FCC in “Symbol Rate” Proceeding

ARRL has filed an [interim report](#) with the FCC in order to report on its efforts to find common ground regarding issues surrounding the “symbol” or “baud” rate proceeding, FCC Docket WT 16-239 (the FCC has issued a [Notice of Proposed Rulemaking](#) in WT 16-239, which stemmed from ARRL’s rulemaking petition RM-11708). ARRL highlighted that the public benefits from the FCC’s “fairly flexible” regulation of Amateur Radio. In particular, innovative developments in digital technology, including *WSJT-X*, were cited.

Noting that more than 1,400 comments in total have been filed in this and on a related rulemaking petition ([RM-11831](#)), ARRL pointed out that, as in other Commission-regulated areas, adapting current regulations to rapidly evolving technology presents challenges that may require adjustments to, or clarifications of, the governing regulations. Making such adjustments can be a challenge to ensure that valid regulatory purposes continue to be served without stymieing technological change and innovation in the process.

While a June 11 meeting organized by ARRL had to be reset to accommodate the invited parties, ARRL has re-affirmed its commitment to protecting the interests of all amateurs. ARRL said it will continue to pursue its efforts to address and reconcile differing opinions expressed in the two matters now pending before the FCC. (ARRL News)

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Nature Article Suggest a “Grand Solar Minimum” Lies Ahead

A [juried research paper](#) in *Nature*, “Oscillations of the baseline of solar magnetic field and solar irradiance on a millennial timescale,” suggests that a “grand solar minimum” - similar to the legendary “Maunder Minimum” - is approaching, starting as early as next year and lasting for three solar cycles. That would be bad news for HF enthusiasts, who are already struggling with marginal conditions.



As the paper's abstract explains, "Recently discovered long-term oscillations of the solar background magnetic field associated with double dynamo waves generated in inner and outer layers of the Sun indicate that the solar activity is heading in the next three decades (2019–2055) to a Modern grand minimum similar to Maunder one."

As propagation buff and contester Frank Donovan, W3LPL, observed, "It's very uncertain if this forecast is correct, but as usual the forecasts of the next solar cycle are all over the map. Let's hope these scientists are wrong." (ARRL News)

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Another Article Regarding Sunspot Cycle  
<https://www.sciencealert.com/the-sun-s-11-year-cycle-have-may-have-something-to-do-with-the-gravity-of-the-planets>

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#### Pennsylvania Radio Amateur Dies in Tower Installation Mishap

A 62-year-old Union Dale, Pennsylvania, radio amateur - Leland L. "Lee" Parsons III, N3LPJ - was killed on June 14 during a tower installation project when a tower section he was working on collapsed off State Route 2069 in Gibson Township. Authorities said Parsons was apparently attempting to attach a guy wire to the bottom tower section when it went over. Parsons was an ARRL member and the president of the Susquehanna County Amateur Radio Club.

The online *Wireless Estimator* [called the incident](#) "a stark reminder of the dangers present this weekend during Field Day." The article cited a 2009 Field Day tower collapse that claimed the life of 57-year-old Larry Prelog, KE4PM - an experienced climber - while he was installing an antenna. In that incident, two legs at the base of the tower buckled.

The *Wireless Estimator* article also recalled the death of the Reverend Paul Bittner, W0AIH, 84, a well-known radio amateur, contester, and Field Day participant, who lost his life last October when he fell from one of the towers at his extensive antenna farm in Wisconsin.

Parsons was among the founding members of the Susquehanna County Amateur Radio Club. He also

belonged to the Wayne County Amateur Radio Club. (ARRL News)

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#### Petition for Rulemaking Asks FCC to Create a New 8-Meter Amateur Band

The FCC has put on public notice for comment a *Petition for Rulemaking* (RM-11843) that seeks the creation of a new 8-meter Amateur Radio allocation on a secondary basis. The Petition suggests the new band could be centered on an industrial-scientific-medical (ISM) segment somewhere between 40.51 and 40.70 MHz. The spectrum between 40 and 41 MHz is currently allocated to the Federal Government and, as such, within the purview of the National Telecommunications and Information Administration (NTIA). ARRL member Michelle Bradley, KU3N, of Maryland, filed the petition in May on behalf of REC Networks, which she founded and described in the *Petition* as "a leading advocate for a citizen's access to spectrum," including Amateur Radio spectrum.

"REC feels that the time is right for the Commission to open a *Notice of Inquiry* and eventually a *Notice of Proposed Rulemaking*, and in cooperation with the NTIA, this new band opportunity can be realized to spark the next generation of 'makers' in the fields of science, technology, education, and math (STEM), especially women and girls," Bradley told the FCC in the *Petition*. "The more opportunities we give to make things, the more opportunities we have to build a pool of experts in STEM, right here at home."

The *Petition* said the objective of a new band would be "an effort to foster experimentation into the propagation characteristics of this band midway between the 10- and 6-meter bands." An allocation in the 8-meter band is available to radio amateurs in Ireland, where the Irish Radio Transmitters Society has developed a band plan for 40 – 41 MHz.

"REC perceives this spectrum can be used for weak signal experimentation and eventually general amateur use, especially along transatlantic paths using CW, SSB, digital modes such as FT8 and digital voice," the *Petition* said. "As no radios are mass-produced for this band at this

time, this opens up new opportunities for ‘makers’ to construct transmitters, receivers, and antenna systems that can be used in this spectrum.”

REC anticipates “very low” usage of the new band, “with peak usage around sporadic-E episodes, operating events such as ARRL Field Day, and VHF contests, as well as during the peak of sunspot cycles,” Bradley told the Commission. “[W]e feel that the sharing of 40 MHz can be accomplished in a manner that serves the needs of the Amateur Radio Service while meeting the organizational missions of Federal Government agencies that utilize this spectrum.”

Interested parties may file short comments on RM-11843 via the FCC’s [Electronic Comment Filing Service \(Express\)](#). Visit the FCC “[How to Comment on FCC Proceedings](#)” page for information on filing extended comments. (ARRL News)

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#### Radio Amateur to Lose License as Part of Enforcement Case Settlement

A New Jersey radio amateur, David S. Larsen Sr., WS2L, of Highland Park, will surrender his Amateur Extra-class license and pay a \$7,500 civil penalty as part of a *Consent Decree* with the FCC to settle an enforcement action. An FCC Enforcement Bureau [Order](#) released June 18 said Larsen violated the Communications Act of 1934 and Part 90 rules by operating on frequencies licensed to the Borough of Highland Park for public safety communication.

As part of the settlement, Larsen agrees that he will admit making the unauthorized transmissions, not engage in unauthorized use of a radio station, and surrender radios in his possession capable of transmitting on the town’s public safety frequencies. If the Commission finds that Larsen has made unauthorized radio transmissions or otherwise violates the terms of the *Consent Decree*, he’ll be subject to an additional \$32,500 civil penalty. The agreement stipulates that Larsen may not apply for a new Amateur Radio license for 3 years.

The case stems from a May 2018 complaint of unauthorized transmissions on the Highland Park municipal

radio system. FCC agents followed up with several visits to the town.

“Based on information provided by the complainant and direct observations by the Bureau’s agents, the unauthorized transmissions consisted of brief, pre-recorded sounds (such as the sad trombone sound),” the FCC said in the *Consent Decree*. The FCC said individuals the agents interviewed identified Larsen - a former rescue squad volunteer - as the person who was likely responsible.

Responding to an FCC *Letter of Inquiry*, Larsen subsequently contacted the Enforcement Bureau and related that the unauthorized transmissions had ceased. Last fall, Larsen, responded to the inquiry through counsel to deny making the unauthorized transmissions. A short time after that, the unauthorized transmissions resumed, and the FCC resumed its investigation, attempting to trace the source of the transmissions. Last March, agents used direction-finding equipment at a fixed location near the complainant’s residence, while other agents conducted mobile direction finding of Larsen’s vehicle in transit.

“The four agents observed Mr. Larsen pull over to the side of the road on the way to his home,” the *Consent Decree* recounts. “The four Bureau agents observed (a) that during the brief stop, Mr. Larsen remained in his vehicle, (b) while stopped, a brief transmission consisting of the sad trombone sound emanated from the direction of Mr. Larsen’s vehicle on a frequency licensed for use by the Highland Park Radio System, and (c) following the transmission of the sad trombone sound, Mr. Larsen resumed his drive to his residence.”

The FCC said agents returned in April to observe Larsen repeat the earlier behavior, including a similar transmission emanating from Mr. Larsen’s vehicle, according to the *Decree*. (ARRL News)

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## Radio Amateurs in India Support Emergency Communication during Cyclone Vayu

At the request of authorities in India's Gujarat Province, Rajesh Vagadia, VU2EXP, and his niece Shyama Vagadia, VU3WHG, deployed on June 12 to Porbandar to offer emergency communication support in the event the Category 3 Cyclone Vayu struck Gujarat.

On short notice, they installed HF and VHF stations, equipped with digital communication. Rajesh Vagadia said a lot of hams checked in and remained on frequency to assist if needed.

Fortunately, he said the course of the storm changed and did not make landfall on the Gujarat coast. "It remains a great learning experience for us on preparedness, installation, operating, coordination, [and other] aspects," Rajesh Vagadia said. — *Thanks to Southgate Amateur Radio News*

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## Tuning Electrically Short Antennas for Field Operation is Research Topic

An article by two well-known radio amateurs, "Tuning Electrically Short Antennas for Field Operation," appeared in *Microwave Journal*. Authored by *QEX* Editor Kai Siwiak, KE4PT, and award-winning researcher Ulrich Rohde, NIUL, the article points out that both Amateur Radio and military applications exist for 20-W battery-powered radios equipped with whip antennas. "In general, the whip antenna which makes the radio portable is not optimized for signal propagation: A whip antenna has no ground return or proper counterpoise," the article notes. "While some users drag a wire of up to 8 meters behind, this is not an ideal solution."

As the article explains, electrically short antennas - typically 0.1  $\lambda$  or shorter - look like a capacitor, with a typical capacitance of 25 pF per meter of length. "At 2 MHz, where the wavelength is 150 meters, an inductor of 84  $\mu$ H is required for resonance," the article says. But just getting a good VSWR is not all there is to it.

Rohde told ARRL that loading coil placement in a short vertical antenna is critical, and "the greater the elevation of the coil, the better the radiation. He said that "center loading" - he considers the "best compromise" to be more on the order of two-thirds' loading - can dramatically affect both the antenna's transmitting and receiving

performance, as opposed to base loading, as found with popular so-called screwdriver antennas. Radials of some sort also are essential.

As the article points out. "With center loading, both the radiation resistance and integrated surface are larger, which are better for radiation." Inductors are the lossy components of an antenna tuner, while capacitors "are infinitely better." The authors conclude that, for optimal operation, antenna radials should be 0.25  $\lambda$ , with one sufficient for tuning, and up to four producing a symmetrical azimuth. "Connecting the HF radio ground to a large metallic object is a good choice," the article said.

Ulrich told ARRL that optimizing an antenna in the manner the article describes will produce "significantly better" signal reception, although a short antenna will also have a narrower bandwidth. The objective should not be to get a good VSWR but to keep in mind that there's a difference between resonance and radiation.

"These requirements for optimum antenna performance make HF manpack radios somewhat complicated and unattractive," the authors concede. "Nonetheless, the well matched and radiating antenna provides the most success, and some of these highly portable radios provide vital communications in disaster areas - recently in Puerto Rico and South Florida." (ARRL News)

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

8:00 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: \_\_\_\_\_

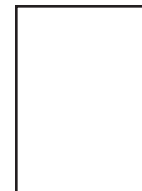
Name: \_\_\_\_\_ Call: \_\_\_\_\_ Class: \_\_\_\_\_

*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:**

**10865 N Ramsey Rd, Hayden, ID**

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.

## **2019 CLUB OFFICERS**

President: Frank Krug, KD7FK  
president@k7id.org

Vice-President: Jerry Hart, W7KR  
vicepresident@k7id.org

Exec. Director: Tom Macy, W7UAT  
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Secretary: Sheila Waller, fa  
KG7SAA  
secretary@k7id.org

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Webmaster: Lenny Gemar, N7MOT  
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Past President: Larry Telles, K6SPP  
pastpresident@k7id.org

## **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 (Post Falls), 146.80 (Little Blacktail), and 443.975 (Canfield Mtn), 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.