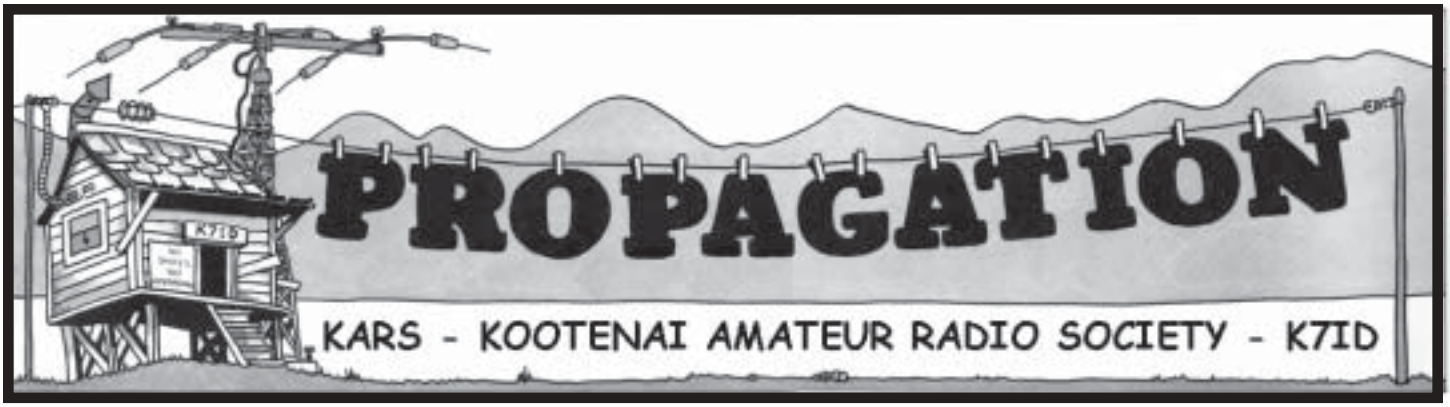

July 2016 (www.k7id.org) P.O. Box 1765 Hayden, ID 83835-1765

REGULAR CLUB MEETINGS:

Monday, July 11, 7:00 p.m.
Search & Rescue Bldg.
10865 N Ramsey Rd.
Hayden, Idaho
Topic: ???
Presenter: ???
Refreshments: ???

VE Testing
Monday, July 11, 5:30 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

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

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

Upcoming Events

K.A.R.S. Hamfest 7am-2pm
June 11, 2016
Shriner Event Center
1250 W Lancaster Rd
Hayden, Idaho

The President's Column has not been received as of 10 July.

There are no minutes from the June Potluck.

Decades of Satellite Contacts Net Satellite WAS for Ohio Radio Amateur

It took Bob Liddy, K8BL, of Mentor, Ohio, nearly 4 decades to achieve Worked All States via satellite and earn WAS Satellite Award #341, although he wasn't really gunning for the award for all that time. His contacts spanned 38 years, and he submitted QSL cards to claim the award. His oldest satellite QSL card was from W7LSV in Oregon, for an Oscar 8 Mode A CW contact in 1978.

Liddy did not realize until he started going through his QSL cards to submit for awards at Dayton Hamvention® that he might have completed WAS on satellite. An AMSAT member since 1979, Liddy said he was "not in the hunt very seriously," but he determined that he had, indeed, worked all 50 states and was only lacking a card from Vermont.

"Happily, it was Nick, KB1RVT, who I *knew* was always good for a confirmation, which he quickly returned, confirming our contact via SO-50 FM on January 4, 2016," he said. - (AMSAT News Service)

FCC Says "No" to Lifetime Amateur Radio Licenses

The FCC has denied the petition of an Arizona radio amateur, who had petitioned for lifetime Amateur Radio licenses. Mark F. Krotz, N7MK, of Mesa, had filed his *Petition for Rule Making* (RM 11760) with the FCC last November, and the FCC invited public comments in February. Krotz wanted the FCC to revise § 97.25 of its rules to indicate that Amateur Radio licenses are granted for the holder's lifetime, instead of for the current 10-year term. Hundreds of radio amateurs commented on the petition, but the FCC was not swayed by those favoring the idea.

"Based on our review of the record, we are not persuaded that the petition discloses sufficient grounds for the requested rule change," the FCC said in a June 21 *Order*. "Krotz's primary argument is that extending the term of amateur licenses to the lifetime of the holder would reduce the Commission's administrative and personnel costs, but it is not clear to us that the proposal actually would enhance administrative efficiency." That's because the vast majority of license renewals are submitted online and processed automatically by the Universal Licensing System (ULS), "with minimal staff involvement," the *Order* said.

The FCC said it had further reduced its overhead by no longer routinely mailing out paper licenses. "[I]f license terms were extended to the holder's lifetime, we likely would receive more cancellations on account of the licensee's death, which are labor-intensive, because staff must carefully verify the deceased's identity and licenses in order to guard against erroneous cancellations," the FCC said in its *Order*, signed by Wireless Telecommunications Bureau Deputy Mobility Division Chief Scot Stone.

Krotz argued that the General Radiotelephone Operator License (GROL) already is issued on a lifetime basis, but the FCC said that's not a comparable situation, because an Amateur Radio license is both an operator's license and a station license, "and there is no Commission precedent for issuing a lifetime station license."

In 2014 the FCC granted lifetime credit for examination elements 3 and 4, but applicants seeking relicensing under that provision still must pass examination element 2. The FCC pointed out in its *Order* that this was done to address the concerns of commenters that a licensee who had not renewed also may not have maintained or expanded his or her knowledge and skills. (ARRL News)

Geostationary Es'hail-2 Satellite Set to Launch this Year

Launch of the geostationary Es'hail-2 satellite into orbit is planned for December 2016. The satellite will be placed in a 25.5° orbit. Coverage of the Amateur Radio narrowband (NB) and wideband (WB) transponders should extend from Brazil to Thailand.

Es'hail 2 will carry two "Phase 4" non-inverting Amateur Radio transponders operating in the 2.4 GHz and 10.45 GHz bands. A 250 kHz bandwidth linear transponder intended for conventional analog operation, and an 8 MHz bandwidth transponder is designed for experimental digital modulation schemes and DVB amateur television.

The NB linear transponder will have an uplink at 2400.050-2400.300 MHz, with a downlink at 10,489.550-10,489.800 MHz. The WB digital transponder will uplink at 2401.500-2409.500 MHz and downlink at 10,491.000-10,499.000 MHz.

For the X band (10 GHz) downlink, receiving stations will need anywhere from a 75 centimeter to an 89 centimeter dish. The narrowband transponder will be vertically polarized, while the digital transponder will be horizontally polarized. For the S band (2.4 GHz) uplink, narrowband modes such as CW and SSB should be able to access the satellite with a nominal power of 5 W into a 22.5 dBi antenna (75 centimeter dish) with right-hand circular polarization. For the WB uplink on S band, using such modes as DVB, a peak EIRP of 53 dBw (2.4 meter dish and 100 W) will be needed, with RHCP.

AMSAT-DL President Peter Guelzow, DB2OS delivered a presentation on Es'Hail at the 2013 AMSAT-UK Colloquium. — *Thanks to AMSAT News Service via AMSAT-UK, and AMSAT-DL*

Nepal Amateur Radio Earthquake Response Presentation Available

The US Geological Survey (USGS) has posted a presentation, "Challenges and Lessons Learned during Gorkha Earthquake of 2015," which focuses on Amateur Radio's role in the 2015 Nepal earthquake response. Sanjeeb Panday, 9N1SP, of Tribhuvan University in Kathmandu, Nepal, spoke on June 2 in Santa Clara, California.

Panjay told the gathering that the Silicon Valley and the Kathmandu Valley share the common geography of multiple, nearby earthquake fault lines. The Santa Clara Fire Department sponsored the presentation, with an eye toward applying the lessons learned in the wake of the Nepal earthquake to better prepare for a similar disaster in the Silicon Valley.

"The Nepali people have gone through a tremendous ordeal," Panday told his audience. "If our experience can help others in different parts of the world [to] better prepare for disasters, then this can be regarded as a positive outcome." (ARRL News)

"Scanning RF Seismograph" Monitors HF Propagation in Real Time

A "Scanning RF Seismograph," a real-time HF propagation-monitoring tool developed by the MDSR Team and Alex Schwarz, VE7DXW, of the North Shore Amateur Radio Club (NSARC), has been established in Western Canada. The site is in Lynn Valley (CN89li), North Vancouver, British Columbia, at 500 feet ASL.

A Yaesu FT-950 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 the background noise of the band and display the result in six color-differentiated (one color per band), long-duration graphs displaying a total 6 hours of scans. When signals are present on a band, its graph trace starts to resemble a series of vertical bars.

Small, irregular jiggling of the graph traces is caused by changes in noise level and by the reflection of noise off the D Layer of the ionosphere, Schwarz explained.

The web link is updated every 10 minutes.

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

FCC's OET Clarifies Emissions Compliance Testing for RF LED Lighting Devices

The FCC's Office of Engineering and Technology (OET) has clarified that all RF LED lighting devices falling under Part 15 rules as "unintentional radiators" must meet conducted and radiated emissions limits set forth in those rules.

"Operation of Part 15 unintentional radiators is subject to the condition that no harmful interference is caused," the OET reminded, in a knowledge database paper released on June 17. "Manufacturers and users should therefore note that lighting devices are required to cease operation, if harmful interference occurs."

The OET said radiated emissions measurements must be performed at least from 30 MHz to 1000 MHz to adequately demonstrate compliance with Part 15 (§15.109). Its guidance, the OET continued, applies to RF LED lighting devices that, in the past, have been considered to operate on frequencies below 1.705 MHz. Previously, devices operating between 9 kHz and 1705 kHz had to be tested only for radiated emissions up to 30 MHz, where no specified radiated emissions limits exist, and were exempt from testing from 30 MHz to 1000 MHz. The OET said it recognizes that routine radiated emissions measurements are needed under Part 15, based on the highest frequency generated or used in the device.

"[W]e have found that emissions from RF LED lighting devices are non-periodic, broadband in nature, and are produced as a byproduct of the internal driver circuitry within the RF LED lighting device," the OET "knowledge data base" paper said. "These types of emissions have adequate energy and potential to generate radiated emissions well above 30 MHz."

The ARRL Lab's Electromagnetic Compatibility Engineer Mike Gruber, W1MG, said he was pleased to see the FCC's OET clarify the test measurement requirements. He said ARRL is generally hearing more RFI complaints stemming from RF LED bulbs.

"Not only are the emissions limits higher for Part 15 LED bulbs — as opposed to Part 18 fluorescent and CFL bulbs, they seem to be winning out in terms of consumer popularity," Gruber said. "Higher limits and more bulbs probably make for more complaints." Gruber said the Lab has seen LED lighting devices causing problems in the 2 meter band. "Since conducted emissions limits do not apply above 30 MHz, radiated emissions limits can be the first line of defense against RFI at these higher frequencies."

Gruber pointed out that noise generated by street and traffic lighting can be widespread. In such instances, he suggested that Part 15b limits for residential areas should apply. "These limits are lower than Part 15a limits, which are intended only for commercial and industrial environments," he explained. "This is especially critical in cases where a pole transformer connected to the lighting device also feeds a home or residence. The 240 V split-phase secondary system can conduct RF into a residence through the service entrance panel." He suggested that the lower limits may benefit mobile users.

The OET noted that the ANSI Accredited Standards Committee C63® -EMC standards development committee is drafting measurement procedures for lighting devices. "When complete, we expect it will address in greater detail the measurement procedures and configurations to be used in determining compliance," the OET said. (ARRL News)

O CANADA! 150 YEARS OF CANADA!

Hams participating in the events marking Canada's sesquicentennial in 2017 have been given permission to use special call sign prefixes to mark the occasion.

For those Canadian amateurs wishing to change their prefix, VA becomes CF; VE becomes CG; VO becomes CH; and VY, CI.

The announcement was made by Radio Amateurs of Canada during the recent Dayton Hamvention. Radio Amateurs of Canada notes that use of the prefixes is optional — but a nice way to mark 150 years, nonetheless. (RADIO AMATEURS OF CANADA)

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 contributers 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.