

KARS Propagation for July 2018

July Meeting – July 9, 7:00 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

July Testing – July 9, 5:30 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

August Meeting – August 13, 7:00 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

August Testing – August 13, 5:30 p.m.
10865 N. Ramsey Rd.
Hayden, Idaho

Tailgate Hamfest – July 7, 2018 7:00 a.m. - ???
St. John Paschal Church parking lot
N. 2325 Park Rd.
Spokane Valley

Spokane Hamfest – September 22, 2018 9:00 a.m. to ???
University HS
32d and Pines, Spokane Valley
Two Grand Prizes - \$500 gift card from HRO and DX Engineering
Two Second Prizes - \$250 gift card from HRO and DX Engineering
Third Prize – Raspberry Pi

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QRM FROM THE PRESIDENT

Larry Telles, K6SPP

I think you probably have heard by now that the July Hamfest has been canceled. It was not a difficult decision for the board to make. Last year, the venue was \$275 for Saturday from about 6 a.m. till 2 p.m. This year, the same cost for that facility had gone up to \$675. However, it may have been possible to save the day if we would have had more than a few volunteers. You can't put on a function such as that with as many volunteers as you can count on one hand. Maybe next year? This year, the board decided to move the event forward one month. This would reduce the frantic running around due to both a Hamfest and field day in a two week period.

Speaking of Field Day! Our Vice-President Jim, AD0AZ worked real hard to make sure our Field Day was a success. That appeared to be an uphill battle. We had about 10 members in Majestic Park over the 24 hour period. Thank you to those of you who participated. They made over 100 contacts, both SSB and CW. We did get an article in the Sunday Coeur d'Alene Press which we hoped would bring out some curious people. With this year's attendance being down

just as the Hamfest, it appears this KARS event will be put to rest. A pity for those new hams that are eager to learn what Ham Radio is all about.

When I joined KARS a long time ago, I was told that we were a social club. The club participated in Field Day, put on a Hamfest, had an Ice Cream Social during the summer, a picnic in the fall, and a Christmas Party at the end of the year. I guess with each decade, change comes with it. In our case, it isn't for the better. I still keep asking myself, why do people want to be amateur radio operators?

If you are not doing anything on Thursday mornings between 8 and 10 a.m., the KARS club has an informal coffee and doughnuts get-together in a vacant store front across from Jo Ann's Fabric Store in the Silverlake Mall. A bottomless cup and a pastry are only a dollar, and the conversations are free. The subjects we discuss go from soup to nuts.

Hope to see you on Thursday and at the next meeting.

73, Larry Telles, K6SPP
p.s. 73 is singular, not plural

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Kootenai Amateur Radio Society (KARS)
June 2018 Meeting Minutes

The June 11, 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 7:02 pm by Club President Larry Telles (K6SPP). The Pledge of Allegiance was led by Kathryn Kent (KI7OVA).

Attendance: Twenty-seven members and three visitors were in attendance.

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

Passed Technician 4
Attempted Technician 1

Minutes: Lenny Gemar (N7MOT) moved to accept the May 2018 minutes as printed; Bob Kesson (K7CGA) seconded; the motion carried by member vote.

Treasurer's Report:

April 2018

Checking	\$1,930.38
Savings	\$2,502.25
Petty Cash	\$ 96.63
Repeater Fund	<u>\$ 90.00</u>
TOTAL	\$4,619.26

Income: Savings interest (\$0.06), 50/50 Raffle (\$5.50), Memberships (\$15.00), Equipment Sales-Repeater Fund (\$50.00)

Expenses: Isolator (\$263.50), Field Day-Majestic Park use (\$25.00)

Mark Avakian (N7MA) moved to accept the Treasurer's report; Todd Silk (AD7VB) seconded; the motion passed by member vote.

Repeater Committee Report: Adam Crippen (N7ISP) reported that an analog Kenwood repeater is available in Washington but is the last one in stock. Also, Kenwood is moving to manufacturing digital equipment. Mark Avakian (N7MA) moved to authorize the repeater committee to spend up to \$2,500 for a repeater and to make it operational before winter. Lenny Gemar (N7MOT) seconded. The motion passed by member vote.

Upcoming Events:

June 23-24: Field Day. Jim Peterson (AD0AZ) reported that the club has reserved the picnic area pavilion at Majestic Park for this year's Field Day event. Power is available at the site. There are 4-6 tables at the pavilion. The event will run from 11 AM on Saturday, June 23 to 2 PM on Sunday, June 24. There was discussion on who would be there and equipment. Members were encouraged to bring their own equipment or otherwise to show up and sign in.

July 14: Hamfest. Jim Peterson (AD0AZ) passed around a sign-up sheet for Hamfest volunteers. The event will be from 8 AM to 2 PM on Saturday, July 14. A club meeting may be held Friday July 13 during the set-up time (to be announced). Last year, \$650 was spent on door prizes. At this time it is unknown what DX Engineering may contribute. Todd Silk (AD7VB) moved to spend the same amount on door prizes as at last year's Hamfest (\$650). Lenny Gemar (N7MOT) seconded. The motion passed by member vote.

Larry Telles (K6SPP) announced that a letter was received from KE7EHB with information on equipment that he has for sale. The letter was passed around.

Raffle Results: 50/50 \$6.00 Rod Anderson, K7ZBE (claimed)
Membership \$44.00 Gabby Perry, KE7ADN (not claimed)

Evening Presentation: A DVD presentation was shown: DXpedition 2014 Amsterdam Island, FT5ZM.

Adam Crippen (N7ISP) moved to adjourn; Jim Peterson (AD0AZ) seconded. The motion passed by member vote and the meeting was adjourned at 8:59 pm.

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A Fresh Voice for Broadcast Reporter Jamie Dupree, NS3T

A Washington, DC-based broadcast journalist and radio amateur, whose ability to speak was severely impaired a couple of years ago by a rare disorder, is adopting a technological solution to return his voice to the airwaves. ARRL member Jamie Dupree, NS3T, suffers from tongue protrusion dystonia, and he has limited speaking ability - he uses the barrel of a pen in his mouth to help better control his tongue. He had to drop off the broadcast airwaves and turn to print and online journalism to continue covering politics for Cox Media Group's capitol bureau. But now, Dupree plans to leverage technology that will give him a fresh voice.

Dupree, 54, a contester and Potomac Valley Radio Club member, said in a [blog post](#) this week that his plight attracted the attention of his colleagues at Cox Media Group, who mounted an effort at the company's Atlanta headquarters to find a high-tech solution to get him back on the broadcast airwaves.

"What they found was a Scottish company named CereProc, which agreed to sift through years of my archived audio and build a voice," Dupree said. "The big news today is that it looks like that is going to work, and allow me to 'talk' on the radio again." He's calling it "Jamie Dupree 2.0."

"Does the voice sound perfect? No. But it does sound like me," Dupree continued. "When I type out some words, the text-to-speech program that I use spits them out in my new Jamie Dupree 2.0 voice." Dupree concedes that the voice will sound robotic to some of his listeners, but "for the first time in 2 years, I will be back on the radio."

Dupree said the plan is for him to once again feed news stories to Cox Media Group's news-talk radio stations, putting him back on the air in hourly newscasts, reporting the news from Capitol Hill and Washington, DC.

"Jamie Dupree 2.0 is here - and I couldn't be more excited about it!" he said. - *Thanks to [The Daily DX](#) via Eric Rosenberg, W3DQ, PVRC (ARRL News)*

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Death of a Navajo Code Talker

JIM/ANCHOR: We mark the death of one of the last surviving Navajo Code Talkers. Samuel Tom Holiday died in the Southern Utah Veterans Home on June 11 at age 94. He was one of hundreds of Navajos to utilize an unbreakable code during World War II - a code based on the Navajo language which the Japanese were never able to crack. According to various news reports, there are fewer than 10 Code Talkers remaining from that era.

Samuel Tom Holiday, a native of Utah, served with the United States Marine Corps. Arizona Gov. Doug Ducey called him a "true American patriot and hero" for his service to the allied forces. He had been the recipient of a Congressional Silver Medal and the Purple Heart.

He was to be buried on the Navajo Reservation, in Kayenta, Arizona beside his wife. His honor lives on in the library and media center of the Kayenta Middle School which was dedicated in his name last November. Thank you for your service Samuel Tom Holiday. (FOX 10 PHOENIX, NATIVE NEWS ONLINE)

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Experiments Look to Leverage Low-Latency HF to Shave Microseconds off Trade Times

Experimental operations now under way on HF appear aimed at leveraging low-latency HF propagation to shave microseconds from futures market trades and gain a competitive edge in a field where millionths of a second can mean winning or losing. *Bloomberg* on June 18 [reported](#) on a secretive antenna facility near Maple Park, in Kane County, Illinois, and speculated that futures traders might be looking to take advantage of lower-latency HF propagation over state-

of-the-art microwave links and undersea cables, where even the slightest path delay could compromise a transaction. The facility is not far from a major futures data center. As the Bloomberg article explained, “Rapidly sending data from there to other important market centers can help the speediest traders profit from price differences for related assets. Those money-making opportunities often last only tiny fractions of a second.”

Radio amateur Bob Van Valzah, KE9YQ, said in a May [blog post](#) that he recently stumbled onto the first evidence of HF radio futures trading at a site in West Chicago, Illinois. There, he spotted HF log-period dipole arrays on a pole, and a microwave dish he determined was aimed at a Chicago Mercantile Exchange (CME) data center. Additional research led him to the antenna facility in Maple Park, Illinois, which also sported a microwave dish that appeared aimed in the direction of the CME data center. Two approximately 170-foot towers on the site support a directional wire array for HF. Van Valzah is a performance engineer on leave from the high-frequency - no pun intended - trading field.

Bloomberg said the company behind the Kane County project is New Line Networks, LLC, a joint venture of Chicago-based Jump Trading, LLC, and New York-based Virtu Financial, Inc. While no FCC Part 5 Experimental license appears to have been assigned to New Line Networks, WH2XVO is assigned to partner Virtu Financial, which assumed the license from Services Development Company LLC.

Sites listed on the license are Aurora and Chicago, Illinois, in addition to Homer, Alaska, and Secaucus, New Jersey - home to several financial firms and right across the Hudson River from many more in New York City. Part 5 Experimental license WI2XAJ has been assigned to Toggle Communications, which is using the West Chicago site and appears to be experimenting with a similar system from other sites. Other entities may also be conducting similar experiments.

The Experimental licensed systems use a variety of frequency shift-keying modes, including FSK, AFSK, QPSK, and 8-PSK, on frequencies ranging from about 6 MHz to 24 MHz and power levels from 20 kW ERP to nearly 50 kW ERP, depending on the Experimental license in question. Van Valzah pointed out in his blog post that, while HF is low bandwidth, unreliable, and expensive, “you can’t beat it for latency.”

Speculation is that the systems are taking advantage of software-defined radio (SDR) techniques and technology. Transmitter equipment information on the Experimental license application for WH2XVO was redacted from the public filing.

ARRL reached out to the point of contact listed on the WH2XVO application but has not heard back. -- *Thanks to Southgate Amateur Radio News for some information (ARRL News)*

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MARS Urging Members to Use Computers that are Isolated from the Internet

US Army Military Auxiliary Radio System (MARS) headquarters is recommending that MARS members “migrate to standalone computer systems for [MARS] radio operations,” subject to the availability of a dedicated computer.

“These computer systems (or their associated local area networks) should be ‘air-gapped’ from the internet,” Army MARS Headquarters Operations Officer David McGinnis, K7UXO,

said in a message to members. “Although not a requirement for membership at this time, we will continue make this a condition of certain parts of our exercises.”

McGinnis pointed to remarks by Cisco researchers in a recent *Ars Technica* article (<https://arstechnica.com/information-technology/2018/05/hackers-infect-500000-consumer-routers-all-over-the-world-with-malware/?amp=1>) that discussed how hackers “possibly working for an advanced nation” have infected more than a half-million home and small-office computers “with malware that can be used to collect communications, launch attacks on others, and permanently destroy the devices with a single command.”

McGinnis told Army MARS members that MARS Headquarters does not discuss specific cyber threats with MARS members or with the public. “We also cannot confirm or deny information about specific threats,” he said, adding that he had “no specific knowledge” about *VPN Filter* malware and no comment on the Cisco report.

For communication exercises this year, MARS established conditions for a certain portion of the drill that requires use of standalone computer systems “normally not connected to the internet.” He said used or refurbished PCs are widely available at low cost and could be dedicated to serve a standalone function.

“The most effective way to protect against threats that come from the internet is to isolate from the internet,” McGinnis added.

“Despite a standalone environment, we assume that all computer systems in private citizens’ hands are infected with hostile software code of some sort and are not secured,” he said. “No amount of virus and malware scanning software changes that assumption. We can, however, isolate computers by disconnecting them from the international network in which hostile software will report and receive instruction.”

McGinnis said future versions of MARS software will check for an internet connection and will disable the software. “We understand this lockout does not provide security in and of itself; rather, its value is in changing the behavior of members,” he explained.

MARS Program Manager Paul English, WD8DBY, told ARRL that the MARS goal is to isolate MARS members’ computers from the internet as much as possible and that isolating members’ computers used for MARS-related activity is “a goal, but has not been directed.” (ARRL News)

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Sailor Grateful for Maritime Mobile Service Network Assistance

Phoenix sailor and radio amateur Timothy Henning, KE7WMZ, has expressed his gratitude to the Maritime Mobile Service Network ([MMSN](#)) for intercepting and handling his distress call on 14.300 MHz. Net control operator Harry Williams, W0LS, caught Henning’s call requesting assistance with an urgent medical condition on May 23. Henning, some 200 nautical miles south of Ensenada, Mexico, in his sailing vessel *Victory Cat*, reported that a severe vision problem had developed in his right eye, and he was seeking immediate medical attention and advice.

Williams contacted the US Coast Guard in Alameda, California, relaying all information concerning the medical problem and staying on the air with KE7WMZ for several hours. The

Coast Guard, in turn, relayed the information to the on-duty flight surgeon who advised that Henning seek immediate medical attention at the closest port of call.

It was decided that Henning would continue on to Ensenada, and the Coast Guard arranged to have someone meet him there and transport him to the Balboa Naval Hospital in San Diego, while his wife stood by with the vessel at the dock.

Ultimately, it was determined that Henning had a detached retina, and he was transported to Phoenix for surgery.

“I appreciate, beyond words, that the Maritime Net was able to help us get in contact with the USCG and simply be at the other end of the HF radio, helping us through a challenging time,” Henning told the MMSN afterward. “I especially want to thank Harry, W0LS. He was extremely professional and invaluable in linking us effectively with the USCG. We were just completing our 10 years [round-the-world sail](#) voyage.”

The Maritime Mobile Service Net operates daily on 14.300 MHz from 1700 UTC to 0200 UTC. It is celebrating its 50th anniversary this year. (ARRL News)