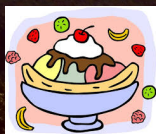


*BIARC to get  
its just  
desserts ...  
details follow*



## July 2018 Newsletter

Big Island Amateur Radio Club



## Field Day at Reeds Bay





**Field Day 2018 was made possible by the cooperation of many individuals, including chair Gary Schwiter, at right, and Darrell Asuka, who coordinated our use of the wonderful facilities at Hilo Reeds Bay Hotel on Banyan Drive with our genial host, hotel owner Don Inouye. Pictured on previous page: Asuka with Elisabeth Green and visiting ham and Red Cross volunteer Marianna Bacilla, K6ANA, of California; Gary and Angelina Schwiter, and, on the roof with antenna: Phil and Linda Vasquez and John Bush and Jim Tatar.**

**And a good time was had ...**



**BIARC photos for this edition by Gary Schwiter, Lopaka Lee, Gary Miller and Linda Quarberg**

## **July main meeting agenda item: Ice Cream!**

Richard Darling is celebrating his 65th anniversary of getting on the air as a ham radio operator.

"Richard was first licensed 65 years ago and I think we should celebrate," said wife Barbara, as ham friends nearby nodded.

"So, we'll bring ice cream to the July meeting," she said, "since it's Richard's favorite food."

"Awesome," said Richard. "I'm an equal opportunity ice cream eater, it doesn't matter what brand..."

And, so, we will celebrate this momentous milestone in Richard's amateur radio career when BIARC meets at 2 p.m. Saturday, July 14, at the Puna Covenant Church in Keaau. The Darlings will provide the ice cream, bowls and utensils. Others are invited to bring along their favorite ice cream condiments: toppings, fruits, syrups, etc., and accompaniments: cookies and the like.

Hip, hip, hooray. Contratulations, AH7G!

*(Just one minor wrinkle: Turns out that's the same afternoon youngest granddaughter, Kendra Robbins of Texas, marries Andrew Welsh, son of Pastor Brian Welsh and wife Karen Welsh, at Haili Church in downtown Hilo. So, Haili Street is where Richard and Barbara will be while we are eating their ice cream and toasting Richard in Keaau, because Barbara doesn't want to reschedule: "Of course, we want to treat our friends to an ice cream party," she says. "And don't worry about us. We always keep ice cream in the fridge at home.")*

She deputized Bob Schneider as the substitute ice cream handler.





***At the June meeting: President Pascal Nelson, at left, and other club members listen as past-President Bill Hanson, at right, of the Hawaii County Civil Defense Agency, discusses topics related to disaster communications.***

## President's Paragraphs

Aloha from Oregon. Debbie and I have been travelling in BC and Oregon for the last 3 weeks. We are returning to Hawaii today (Sunday, July 1) as I write this. We were sorry to miss Field Day. We have received good reports on the FD experience, but understand that the propagation wasn't great. Ham Radio is about doing the best with what you have to work with, so I'm sure it was a good test of your ingenuity and persistence. We hope those who took part in FD had a good time.

I know that life on the Big Island - at least on the east side - has continued to be challenging while we were absent. We have been checking the news and the volcano reports the whole time., but we have missed the daily check-ins on the air with our friends around the islands.

Even while on the road I have continued talking with key people about the goals and tasks that we have before us as a club and as a ham community.



There are lots of good ideas, encouragements, cautions, and plans being discussed.

Remember that each of you are key people when it comes to the BIARC family. Let's keep up the conversation. We have lots of possibilities ahead of us. We will be making progress and seeing things happen - with your input and participation.

For the July BIARC meeting on July 14, the club will again be at

the Puna Covenant Church. We are working on returning to the Keaau Community Center as soon as possible.

The July meeting will feature a FD report. We have several other items which we are still working on. It will be interesting, as usual.

There is lots of energy in the ham community. it can only get better as we share it.

Aloha,  
**Pascal AC7N**



# Hawaiian Islands Grid Madness

***Help get the word out:  
It's almost time for the fifth  
annual running of the  
popular event open to all  
hams!***

"We are happy to announce the Fifth Annual Hawaiian Islands Grid Madness. This event has grown from twelve participants in 2014 to fifty-seven stations last year," says event manager Stan Froseth, AH6KO. "Our islands, mountains, valleys and the ocean make it a challenging and unique event in the ham radio world!

"This early notice is for leaders in the ham community. If you can, please help to promote this event -- spread the word via radio nets, meetings, newsletters, web sites, or just tell another ham! On the radio, you can provide the URL below, or just say "Google Grid Madness".

Here is the key info, with lots more available from [gridmadness.blogspot.com](http://gridmadness.blogspot.com).

***Put Hawaiian Islands Grid Madness 2018  
on your calendar!***

**Still  
standing**  
*Elisabeth Green  
snapped this shot  
recently near the  
Puna lava flow.  
She calls it "Tower  
Still Standing at  
PGV (Puna  
Geothermal  
Venture)".*



## A VHF/UHF Simplex Event

**Sunday, September 16th from 1300 to 1700 HST**

Aulani Hui Amateur Repeater Club sponsors Hawaiian Islands Grid Madness, an event for all hams in the State of Hawaii. This event is designed for FUN, and to test your equipment, coverage and operating skills using simplex FM on 2 meters and 70 cm. Contact as many stations as you can in as many Grid Squares as you can, using SIMPLEX ONLY.

ALL Hawaii Radio Amateurs are invited:

\* "Get on the air" for new hams

- \* Emergency communications practice for responder groups
- \* Fun activity for everyone -- see who you can contact in your area or across the water

## ***New for 2018:***

Simplified paper logging --  
No need to worry about points, or computing your score.

Or, use the updated Grid Madness Logger with your computer.

No need to enter the exact frequency for each contact, just 2m or 70cm.

Public Info Flier to print and hand out to the curious.

Certificate Endorsements -- challenge yourself!

Log submission -- within two weeks.

***Comments and questions to AH6KO@arrl.net***

## **Next Technician exam prep class starts Nov. 1 in Keaau**

Free classes for the Technician license will start Nov. 1, with classes to run for five sessions at 6:30 p.m. on Thursdays (skipping Thanksgiving Day) at the Keaau Community Center.

Testing will be at the same time and place on Thursday, Dec. 13. For more info, contact Doug Wilson, KH7DQ, at [DOUSCELLE@aol.com](mailto:DOUSCELLE@aol.com) or 985-9362.



## HamTV on Space Station kaput, for now

The Space Station's Digital Amateur Radio TV (DATV) system transmitter is defective, and onboard repair is not possible, said coordinators.

The Amateur Radio on the International Space Station (ARISS) "Ham Video" DATV, also known as HamTV, stopped working in mid-April, and a subsequent test on June 1 using a second L/S band patch antenna on the Columbus module failed.

ARISS-EU Mentor Gaston Bertels, ON4WF, said ARISS plans to return the transmitter to Earth to repair, pending space agency approvals and availability of ARISS funds. Bertels said ARISS would do its best to restart the service as soon as possible. -- **Thanks to ARISS**

## ARES continues move toward enhanced training, paperless reporting

As part of upgrades to the ARES® program, ARRL will phase out traditional hard-copy



report forms later this year in favor of an online system, ARES® Connect -- a new volunteer management, communication, and reporting system. The system (in beta testing since March in four ARRL sections with large ARES organizations) will allow ARES members to log information for ARRL Field Organization handling but does not change how ARES serves partner organizations. ARES training also is due for enhancement.

At the Hamvention® ARRL Membership Forum in May, Great Lakes Division Director Dale Williams, WA8EFK, who chairs the ARRL Public Service Enhancement Working Group, discussed dramatic changes occurring among agencies in the emergency/disaster response sector and the transition to ARES Connect. In his presentation, "ARES

Advances into the 21st Century -- a New Program, a New Mission," Williams outlined the vision for an ARES comprised of organized, trained, qualified, and credentialed Amateur Radio operators who can provide public service partners with radio communication expertise, capability, and capacity.

Goals include aligning the ARES organizational structure with the National Incident Management System (NIMS) and Incident Command System (ICS).

Emergency Coordinators (ECs) will continue to lead local ARES teams during an incident, with support from District and Section Emergency Coordinators.

Changes would encompass additional mandatory training to include ARRL Emergency Communications courses and the now-standard FEMA NIMS/ICS courses IS-100, 200, 700, 800, with IS-300 and 400 for higher levels. Training levels attained would dovetail with three new levels of ARES participation.

The ARRL Headquarters staff is undergoing training in ARES Connect administration, with group registration under way and IDs assigned. ARES-related publications also are being updated, along with an ARES strategic plan and introductory

announcement. An article on ARES enhancements -- once they have been approved by the ARRL Board of Directors -- is set to appear in the September 2018 issue of QST. --

***Thanks to Rick Palm, K1CE/ARES  
E-Letter***



## **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.

On June 18, Bloomberg 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, which also sported a microwave dish apparently aimed at 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 [low] latency."

ARRL reached out to the point of contact listed on the WH2XVO application but has not heard back.

## **13 Colonies Special Event under way**

The annual Original 13 Colonies Special Event marks its 10th anniversary from July 1 through July 8.

Special event stations with 1 × 1 call signs are representing the original 13 US colonies, plus bonus stations WM3PEN in Philadelphia and GB13COL in Durham, England. Each special event station has its own QRZ.com profile page.





*Tim Henning, KE7WMZ, aboard Victory Cat near Greece.*

## 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 Henning 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."

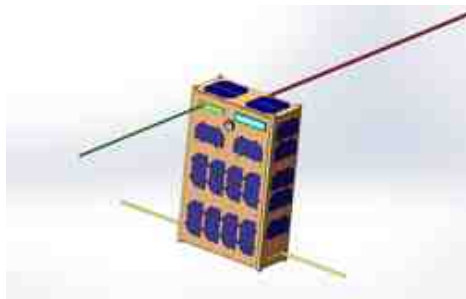
The Maritime Mobile Service Net operates daily on 14.300 MHz from 1700 UTC to 0200 UTC. It is celebrating its 50th anniversary this year.

## Reverse Beacon Network beta testing separate spot stream for FT8

The popular Reverse Beacon Network (RBN) has announced that it's now offering -- as a beta test -- a separate telnet feed for FT8 spots (telnet.reverse beacon.net port 7001), in addition to the current spot feed (telnet.reverse beacon.net port 7000), which will be repurposed to handle only CW and RTTY spots.

In addition, a beta version of Aggregator Version 5 that can handle FT8 spots received from WSJT-X will be available on the RBN website, with instructions on how RBN node operators can configure their nodes to spot FT8 call signs on one or more bands; this will not interfere with the ability to spot CW and RTTY call signs, the RBN team assured, explaining its reasoning for the move.

The beta test follows a limited alpha test aimed at getting a feel for the spot load and other implications of carrying FT8 spots on the RBN.



**Artist's rendering of the CAS-5A satellite. [Image courtesy of CAMSAT]**

## **CAMSAT offers more details on new satellites, one carrying HF transponders**

CAMSAT, China's Amateur Radio Satellite organization, has offered additional details about the three Amateur Radio satellites it plans to launch later this year. Two of the satellites, designated CAS-5A and CAS-6, will carry transponders, and one of them will offer HF capability.

CAMSAT's Alan Kung, BA1DU, told ARRL that the 6U CAS-5A will carry two HF transponders and two V/UHF transponders. The plentiful equipment package includes an H/T (21/29 MHz) mode linear transponder, an H/U (21/435 MHz) mode linear transponder, an HF CW telemetry beacon, a V/U linear transponder, a V/U FM transponder, a UHF CW telemetry beacon, and UHF AX.25 4.8k/9.6k baud GMSK telemetry.

- The H/T mode linear transponder will have a 30 kHz wide uplink centered on 21.400 MHz, and a downlink centered on 29.490 MHz. RF output is 0.5 W.

- An HF CW telemetry beacon will transmit on 29.465 MHz with

0.1 W.

- The H/U mode linear transponder will have a 15 kHz wide uplink centered on 21.435 MHz, and a downlink centered on 435.505 MHz. The RF output is 0.5 W.

- The V/U mode linear transponder will have a 30 kHz wide uplink at 145.820 MHz, and a downlink at 435.540 MHz. The RF output is 0.5 W

- The V/U mode FM transponder will uplink at 145.925 MHz, and downlink at 435.600 MHz. The transponder passband is 15 kHz, and the RF output is 0.5 W.

- The UHF CW telemetry beacon will transmit on 435.570 MHz, with an RF output of 0.1 W.

- UHF AX.25 4.8k/9.6k baud GMSK telemetry will transmit on 435.650 MHz at 0.5 W.

Kung told ARRL that the HF, VHF, and UHF antennas are quarter-wave monopoles. A satellite within a satellite, the tiny CAS-5B, weighing 0.5 kilogram, will be deployed from CAS-5A in orbit. It will carry a UHF CW beacon on an Amateur Radio frequency. CAS-5A will launch from the Jiuquan Satellite Launch Center in late September.

Set to be launched at sea, the 50-kilogram CAS-6 microsat will include a VHF CW telemetry beacon, a U/V mode 20 kHz linear Amateur Radio transponder, and AX.25 4.8k baud GMSK telemetry. It will also carry an atmospheric wind detector and other systems that will operate on non-amateur frequencies.



**Waveform of an Iranian radar on 10 meters. [Wolf Hadel, DK2OM]**

## **Iranian radars showing up on 10 Meters**

While 10 meters has not been the hottest band in the Amateur Radio toolkit of late, Iran apparently has found it an ideal spot to operate various radars. The interference was audible in International Amateur Radio Union Region 1 (IARU R1) and perhaps elsewhere in the world.

"Iranian radars were very active on our 10-meter band every day [in May]," reported IARU Monitoring System (IARUMS) Coordinator for Region 1 Wolf Hadel, DK2OM, in the IARUMS newsletter. "On 28.860 MHz, we could daily receive the strong and long-lasting signals. Other frequencies were used in [frequency hopping] mode."

The list of additional Amateur Radio intruders on 10 meters included -- or in some cases, no longer included -- some of the usual suspects. Hadel reported that FM signals from Russian taxi dispatchers, driftnet fishery buoys, and Citizens Band "abusers" in Brazil have been operating on various 10-meter frequencies, "as usual."

Meanwhile, some chronic intruding signals have



disappeared. Among the missing is the 14,295 kHz harmonic from Radio Tajik on 4,765 kHz. Radio Hargeysa in Somaliland on 7,120 kHz is said to have been off the air for several weeks due to a transmitter failure.

"We did not miss the transmissions," quipped Hadel, who also expressed the hope that the broadcast battle between Radio Eritrea and Radio Ethiopia on 40 meters may now be at an end. For some time now, Radio Eritrea contended with Ethiopian "white noise" interference on 7,140 and 7,180 kHz. In June, Ethiopia announced that it would accept a peace deal with Eritrea to end a bloody 20-year-old dispute.



*Jamie  
Dupree,  
NS3T.*

## **Attendance dips at Friedrichshafen's HAM RADIO 2018**

Organizers of HAM RADIO 2018 June 1-3 in Friedrichshafen, Germany, report that attendance at this year's show was down slightly from 2017. The official count of radio amateurs, Scouts, and Maker Faire attendees was 15,460. That's down by 1,650 from last year.

"HAM RADIO has confirmed its position as the leading Amateur Radio exhibition," organizers said. "It once again proved to be the Mecca for Amateur Radio operators from around the world, the place where the ham spirit is alive."

"Radio Scouting -- The Adventure of Youth Amateur Radio" was the theme for the 43rd edition of the international Amateur Radio exhibition. Deutscher Amateur Radio Club (DARC) Chair Steffen Schöppe, DL7ATE, said Friedrichshafen is a social occasion and the emphasis on Scouting was a plus. "For years, we

had been talking about how the Scouts could really present themselves on a big scale here, and this year it actually happened. Visitors were very interested in this topic, especially the young ones," he said. DARC is a HAM RADIO sponsor.

One commercial exhibitor reported that, despite fewer visitors, their new products sold out on the first day of the 3-day event.

ARRL fielded a contingent of representatives to HAM RADIO 2018, headed by President Rick Roderick, K5UR.

Show organizers conceded that the date for this year's show was "not ideal" because of conflicting events, and the drop in attendance was not unexpected. Next year, HAM RADIO will return to its traditional late-June position on the calendar. It will take place June 21 - 23, 2019.

## **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 in June 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**



**Shozo  
Hara,  
JA1AN,  
SK.**

## **Former Japan Amateur Radio League President Shozo Hara, JA1AN, SK**

Past Japan Amateur Radio League (JARL) President Shozo Hara, JA1AN, died on June 9. He was 91. A native of Nagasaki prefecture, he graduated from Waseda University in 1954 with a degree in electrical engineering and joined Eastern Japan Heavy Industries (now Mitsubishi Heavy Industries).

Working extremely long hours, Hara once wrote that he'd return home and tinker with Amateur Radio, not getting to sleep until 2 or 3 AM. Hara became a JARL Director in 1972 and went on to serve as JARL President for 41 years. He also was the first president of the Japan Amateur Radio Development Association.

Hara's other life interest was horseback riding, which he took up as a youngster. He engaged in and judged competitive events, rode in the Imperial Palace Riding Club, and served as president of the Japan Equestrian Federation. Hara stepped down as JARL president in 2011. He was inducted into the CQ Amateur Radio Hall of Fame in 2003.



**John G.  
"Jack" Curtis,  
K6KU (ex-  
W3NSJ), SK.**

## **Curtis Keyer Chip developer Jack Curtis, K6KU, SK**

The developer of the groundbreaking Curtis Morse keyer chip, John G. "Jack" Curtis, K6KU (ex-W3NSJ), of Granite Bay, California, died on June 4 after a long illness. An ARRL member, he was 87.

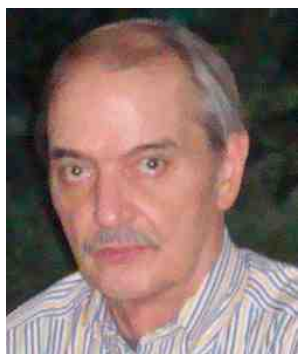
Growing up in Bradford, Penn., Curtis became fascinated with the "magic" of Amateur Radio as a youngster, and it would eventually become his career. After receiving a Bachelor's degree in electrical engineering from Penn State in 1952, he was employed by Sperry Rand, served in the US Navy in Japan, and worked for Corning Glass -- earning three patents -- and for Signetics.

Curtis started Curtis Electro Devices on the side in 1968 and marketed his prototype electronic Morse iambic keyer -- the EK-38 -- which had "dit" memory. The follow-on EK-39 had "dah" memory and weight control, and later models offered a small scratch memory.

Putting the electronics on a chip revolutionized CW keying. In their heyday, Curtis chips were at the heart of an array of commercial memory CW keyers, were incorporated into amateur transceivers, and were favorites of homebrewers. -- **Some info from "A History of Curtis Keyers," by Brad Mitchell, N8YG**



**Kip Edwards,  
W6SZN, SK.**



## **Yasme Foundation director, secretary Kip Edwards, W6SZN, SK**

Yasme Foundation director and secretary G. Kip Edwards, W6SZN, of Indianola, Washington, died on June 6. An ARRL Life Member, he was 71. Yasme Foundation President Ward Silver, N0AX, said Edwards' death will leave a big hole in the organization.

"His organizational skills were invaluable to several major Amateur Radio organizations," Silver said. "He was one of those rare birds who could organize, build, and participate with equal skill."

First licensed in Kansas at the age of 11, Edwards' interest in Amateur Radio lapsed as he became involved in school and later a career in the law.

He later re-licensed and became W6SZN, joined the Northern California Contest Club (NCCC) and served as its president and newsletter editor. He also was a member of the Northern California DX Club (NCDXC) and served as its president

A prolific and successful DXpeditioner and DX contester, Edwards was on the DXCC Honor Roll. He retired in 2013 and moved back to Washington.

Edwards was a director of the Northern California DX Foundation (NCDXF) editor of its newsletter. "Kip made many great contributions to the Foundation over the years, helping to

move it forward in numerous ways," NCDXF President John Miller, K6MM, said. "He was caring, creative and had a wonderful sense of humor. His work will not soon be forgotten."

Edwards was a member of the ARRL Maxim Society.

## **ARRL drone transmitters complaint spurs proposed \$2.8 million FCC penalty**

In the wake of an investigation resulting from a 2017 ARRL complaint, the FCC has proposed fining HobbyKing and associated entities \$2.8 million for apparently marketing noncompliant RF devices and failing to comply with Commission orders. According to a June 5 FCC Notice of Apparent Liability (NAL), HobbyKing appears to have sold audio/video (A/V) transmitters intended for use with unmanned aircraft, such as drones, in some instances marketing them as Amateur Radio equipment.

"The Enforcement Bureau previously issued a citation notifying HobbyKing of its legal and regulatory obligations and ordering it to cease and desist from marketing noncompliant equipment," the FCC said in the NAL. "Additionally, the Bureau issued a citation against HobbyKing for failing to fully respond to a Letter of Inquiry. Despite these Citations, HobbyKing has continued its apparently unlawful practices."

HobbyKing had denied that it



*In its 2017 complaint, ARRL cited the Lawmate transmitter and its companion 6 W amplifier as examples of problematic devices being marketed in the US.*

was marketing its drone transmitters to US customers, but ARRL's January 2017 complaint pointed out that ARRL Laboratory Manager Ed Hare, W1RFI, was able to purchase two drone transmitters from HobbyKing and have them shipped to a US address for testing in the Lab.

In his 2017 letter to the FCC Spectrum Enforcement Division, ARRL General Counsel Chris Imlay, W3KD, described the transmitters as "blatantly illegal at multiple levels," and noted that they used frequencies intended for navigational aids, air traffic control radar, air route surveillance radars, and global positioning systems and not Amateur Radio frequencies, as the marketer had purported.

ARRL told the Enforcement Bureau in 2017 that the devices "represent a real and dangerous threat to the safety of flight, especially when operated from a drone platform that can be hundreds of feet in the air." Hare and ARRL Lab staffers Mike

Gruber, W1MG and Bob Allison, WB1GCM, tested the units. Imlay credited ARRL Central Division Director Kermit Carlson, W9XA, and the Electromagnetic Compatibility Committee he chairs, for calling attention to the issue and prompting ARRL's action.

In a related news release in mid June, the FCC said that while HobbyKing represented that its transmitters operated in designated Amateur Radio bands, the Commission's investigation uncovered that 65 models could also apparently operate outside of the ham bands. The FCC noted that Amateur Radio equipment used to telecommand model craft are limited to 1 W (1,000 mW), but three transmitters included in the NAL "apparently operate at significantly higher power levels of 1,500 mW and 2,000 mW."

"The Commission generally has not required amateur equipment to be certified, but such equipment must be designed to operate only in frequency bands allocated for amateur use," the NAL said. "If such equipment can operate in amateur and non-amateur frequencies, it must be certified prior to marketing and operation." The FCC also said in its NAL that consumers who own such HobbyKing devices "should cease using them immediately or risk enforcement action."

Later in June, the FCC also issued an Enforcement Advisory cautioning that drone transmitters must comply with FCC rules in order to be marketed to customers in the US, and that operators must comply with FCC rules.

"However, many A/V transmitters

that purport to operate on amateur frequencies also operate on frequencies that extend beyond the designated amateur frequency bands," the advisory said. "If an A/V transmitter is capable of operating outside of the amateur frequency bands, it cannot be advertised, sold, or operated within the United States without an FCC equipment certification. Individuals without an amateur license may not use such radio equipment, if it is designed solely for use by amateur licensees."

Imlay said the FCC action addressed "another of many instances in which unscrupulous importers import and market products in the US touted as Amateur Radio equipment but actually marketed to the general public, and which, in this case, have a high potential for abuse and interference to other radio services and to radio amateurs." Imlay characterized the FCC NAL as an important "line in the sand" aimed at keeping companies from encouraging the general public to use the amateur bands without a license.

## **Young US radio amateur will be sole IARU Region 2 attendee at YOTA Camp**

Thirteen-year-old Faith Hannah Lea, AE4FH, of Palm Coast, Florida, will be the only representative of International Amateur Radio Union Region 2 (IARU R2) at the Youngsters on the Air (YOTA) camp Aug. 8-15 in South Africa. She has mounted a GoFundMe campaign to help



***Faith  
Hannah  
Lea,  
AE4FH.***

cover her trip expenses.

"When I was chosen to go to South Africa for the YOTA summer event, I was thrilled that the committee thought I was one of the best choices to represent the United States," Faith Hannah said. "With the help and generosity of other hams, I will be able to go to South Africa for the summer event and learn more about Amateur Radio and other cultures. I am extremely thankful for any and all donations. To everyone who donates, thank you."

Licensed at age 10 and now holding an Amateur Extra-class license, Faith Hannah is very active on the airwaves and in promoting Amateur Radio via YouTube and elsewhere. She has been a presenter at the Hamvention Youth Forum. Faith Hannah comes from an all-ham family. Her dad, James, is WX4TV; her mother, Michelle, is N8ZQZ; her brother, Zechariah, is WX4TVJ; one sister, Hope, is KM4IPF, and her other sister, Grace, is KM4TXT. Faith will be traveling to South Africa in early August with her father.

The South African Radio League (SARL) will host 80 young hams between the ages of 16 and 26 at the 2018 YOTA camp, where it's expected they will spend some time at the helm of the camp's station, ZS9YOTA.