Ham Radio Hawaii Newsletter

#3, Issue 1003 KH6OWL October 2020

Welcome to the only newsletter for Amateur radio across all the Hawaiian Islands. Please send in any events or topics and be a contributor for your islands.

Upcoming Events:

ARRL 2020 Simulated Emergency Test (SET) Scheduled for October 3 – 4 Weekend. The 2020 ARRL Simulated Emergency Test (SET) will take place October 3 - 4. The annual, nationwide exercise provides ARES volunteers the chance to test personal emergency-operating skills and communication readiness in a simulated emergency deployment. ARRL is asking participants to adhere to Centers for Disease Control (CDC) and local health department COVID-19 guidelines by staying home, maintaining safe distances when around people, and following recommended cleaning and disinfecting practices.
Hawaii ARES information can be found here and will be from 9AM to noon on Saturday, October 3rd.

Aloha Hawaii ARES members,
a communication exercise for ARES and the American Red Cross (ARC) is planned for Saturday, October 3rd. Much like the last exercise in May, we will focus on digital radio communications with Winlink. More information about the exercise will follow in a separate email.

Please let me know if interested, or not, in participating using Winlink, even if you have never used Winlink before. If you have never used Winlink and/or need assistance, include the equipment you have so I can determine your needs. Winlink is a Windows application and does require a computer with the Windows OS. A connection between your radio and the computer is not required for the exercise, but preferred.

For more information about Winlink,
visit https://winlink.org/
-Van, NH7IT, Assistant Section Emergency Coordinator
Pacific Section

Hawaiian Islands Grid Madness 2020:
Sunday Sept 20th from 1300 to 1700 W.

Upcoming Amateur Radio Classes:

Oahu: Each Monday starting September 28th going through November 9th. This is a EARC Honolulu class and the POC is Steve, KH6WG.
http://www.earchi.org/education/
In the 7th Session class that Steve teaches it is all about New Hams. Topics covered are ARRL,
ARES, RACES, Distracted Driving, Vanity Call Signs, Printing official copy of licenses, Programming, What is a Net, and How to use a handheld.

The **Big Island** will hold a Virtual Tech License class starting October 20th. Contact Doug Wilson, KH7DQ, at douscelle@aol.com. Classes will be twice a week over a 6-week period starting at 6:30 PM via Zoom.

Are you looking to take the FCC Amateur Radio exam? You can register at this website.
http://hameducation.org/register/

Beginners Corner

SWR is sometimes called VSWR, for voltage standing wave ratio, by the technical folks. Okay, but what does it really mean? The best way to easily understand SWR is by example. In the typical ham station setup, a transmitter is connected to a feed line, which is then connected to the antenna. When you key the transmitter, it develops a radio frequency (RF) voltage on the transmission line input. The voltage travels down the feed line to the antenna at the other end and is called the forward wave. In some cases, part of the voltage is reflected at the antenna and propagates back down the line in the reverse direction toward the transmitter, much like a voice echoing off a distant cliff. SWR is a measure of what is happening to the forward and reverse voltage waveforms and how they compare in size. Click here to read more.

Ham Radio Crash Course: https://hrcc.stream/
Young Amateurs Radio Club: https://yarc.world/
Illinois Young Ham Club: https://ilyh.org/

Around the Islands

Oahu: The Emergency Amateur Radio Club website can be found by clicking here.

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Stay up to date and get alerts from the City & County of Honolulu by clicking **here.** HNL Info is FREE. Your mobile carrier and data rates may apply.

Maui: Repeaters on Maui
The Maui Amateur Radio Club website can be found by clicking here.
To stay up to date and get alerts from Maui we recommend that subscribers download and install the Everbridge Mobile App, available for Android and Apple devices. The App will provide an alternative method for receiving alerts and information from Maui County.

Big Island: Repeaters on the Big Island
From the Big Island Amateur Radio Club, K0BAD reports on a BBC episode that discusses the invention of Morse Code. Les found it quite interesting, and recommends it to others: BBC CW

To receive Hawaii County Alerts & Notifications sign up here.

The Big Island Amateur Radio Club website can be found by clicking here.
BIARC is restarting QSL card service, to be facilitated by club members working together to transport cards from the Hawaii QSL Bureau in Honolulu and distribute them to BIARC folks back on the Big Island. For more info, contact Darrell atdasuka001@gmail.com

Kauai Repeaters on Kauai The Kauai Amateur Radio club website can be found by clicking here.

The County of Kauai uses Blackboard Connect to disseminate information to residents. Sign up here.

Lania: Repeaters on Lanai

Molokai: Repeaters on Molokai

YouTube Video: The Coronavirus Special. QRP Ham Radio Communications.
https://www.youtube.com/watch?v=-Cz_Nx_vPvw

YouTube Video Antenna Build: Ultimate Elecraft KX2, KX3, and Xiegu X5105 Antenna - DIY Build Instructions
https://www.youtube.com/watch?v=kSQzUETRMlk

A History of the Ham Radio Shack.
https://www.youtube.com/watch?v=t4SVysToYxQ&feature=emb_logo

How to Power Pole for Young Hams (Its Actually Easy)!!! (Power poles are a common electrical connection that a lot of hams use. It makes it easy to switch out equipment fast).
https://www.youtube.com/watch?v=rA2rWSArpxw&feature=emb_logo

WEB SDR: Software Defined Radio. A WebSDR is a Software-Defined Radio receiver connected to the internet, allowing many listeners to listen and tune it simultaneously. SDR technology makes it possible that all listeners tune independently, and thus listen to *different* signals; this is in contrast to the many classical receivers that are already available via the internet. You can literally tune around the radio spectrum using your own computer (connected to the internet) and a web browser.

One of my favorites is the Map view of KiwiSDR. Click on the KiwiSDR Map button on top left of the page.
http://rx.linkfanel.net

FCC Application Fee Proposal Proceeding is Open for Comments:

Comments are being accepted on the Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270, which proposes application fees for radio amateurs. Formal deadlines for comments and reply comments will be determined once the NPRM appears in the Federal Register. Comments may be filed now by using the FCC's Electronic Comment Filing System (ECFS), located at https://www.fcc.gov/ecfs/filings, and posting to MD Docket No. 20-270. The docket is already open for accepting comments, even though deadlines have not yet been set.

The NPRM can be found online in PDF format at:
https://docs.fcc.gov/public/attachments/FCC-20-116A1.pdf.

A review current of information on this proposal follows:
Amateur radio licensees would pay a $50 fee for each amateur radio license application if the FCC adopts

rules it proposed this week. Included in the FCC's fee proposal are applications for new licenses, renewal and upgrades to existing licenses, and vanity call sign requests.
Excluded are applications for administrative updates, such as changes
of address, and annual regulatory fees.

The FCC proposal is contained in a Notice of Proposed Rulemaking (NPRM) in MD Docket 20-270, which was adopted to implement portions of the "Repack Airwaves Yielding Better Access for Users of Modern Services Act" of 2018 — the so-called "Ray Baum's Act."

The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. In its NPRM, the FCC proposed application fees for a broad range of services that use the FCC's Universal Licensing System (ULS), including the Amateur Radio Service that had been excluded by an earlier statute. The 2018 statute excludes the Amateur Service from annual regulatory fees, but not from application fees.

"Applications for personal licenses are mostly automated and do not have individualized staff costs for data input or review," the FCC said in its NPRM. "For these automated processes — new/major modifications, renewal, and minor modifications — we propose a nominal application fee of $50 due to automating the processes, routine ULS maintenance, and limited instances where staff input is required."

The same $50 fee would apply to all Amateur Service applications, including those for vanity call signs. "Although there is currently no fee for vanity call signs in the Amateur Radio Service, we find that such applications impose similar costs in aggregate on Commission resources as new applications and therefore propose a $50 fee," the FCC
said.

The FCC is not proposing to charge for administrative updates, such as mailing address changes for amateur applications, and amateur radio will remain exempt from annual regulatory fees. "For administrative updates [and] modifications, which also are highly automated, we find that it is in the public interest to encourage licensees to update their [own] information without a charge," the FCC said.

The FCC also proposes to assess a $50 fee for individuals who want a printed copy of their license. "The Commission has proposed to eliminate these services — but to the extent the Commission does not do so, we propose a fee of $50 to cover the costs of these services," the FCC said.

The Ray Baum's Act does not exempt filing fees in the Amateur Radio Service. The FCC dropped assessment of fees for vanity call signs several years ago.

Deadlines for comments and reply comments will be determined once the NPRM appears in the Federal Register. Interested parties may file comments by using the FCC's Electronic Comment Filing System (ECFS), posting to MD Docket No. 20-270. This docket is already open to accept comments, even though deadlines have not yet been set.

[ARRL News for the above information]

First Element of ARISS Next Generation (Next-Gen) Radio System Installed in ISS Columbus Module
September2, 2020—The ARISS team is pleased to announce that installation and set-up of the first element of the InterOperable Radio System (IORS) has been completed and amateur radio operations with it are now underway. This first element, was installed in the International Space Station Columbus module. The IORS replaces the Ericsson radio system and packet module that were originally certified for spaceflight on July 26, 2000.

Initial operation of the new radio system is in FM cross bandrepeater mode using an uplink frequency of 145.99 MHz with an access tone of 67Hz and a downlink frequency of 437.800 MHz. System activation was first observed at 01:02 UTC on September 2. Special operations will continue to be announced.
The IORS was launched from Kennedy Space Center on March 6, 2020 on board the SpaceX CRS-20 resupply mission. It consists of a special, space-modified JVC Kenwood D710GA transceiver, an ARISS developed multi-voltage power supply and interconnecting cables. The design, development, fabrication, testing, and launch of the first IORS was an incredible five-year engineering achievement accomplished by the ARISS

hardware volunteer team. It will enable new and exciting capabilities for ham radio operators, students, and the general public. Capabilities include a higher power radio, voice repeater, digital packet radio (APRS) capabilities and a Kenwood VC-H1 slow scan television (SSTV) system.

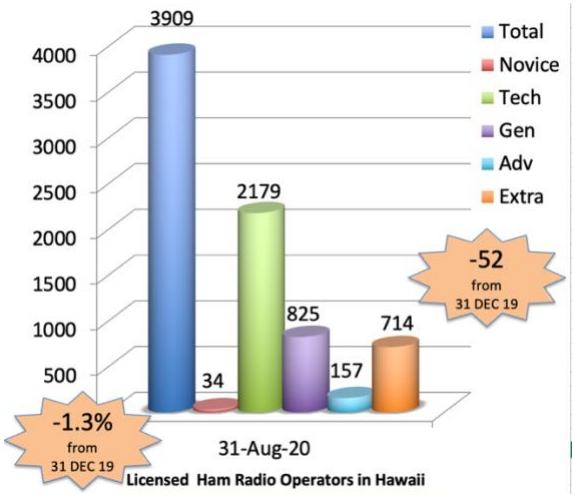
A second IORS undergoes flight certification and will be launched later for installation in the Russian Service module. This second system enables dual, simultaneous operations, (e.g. voice repeater and APRS packet), providing diverse opportunities for radio amateurs. It also provides on-orbit redundancy to ensure continuous operations in the event of an IORS component failure.

Next-gen development efforts continue. For the IORS, parts are being procured and a total of ten systems are being fabricated to support flight, additional flight spares, ground testing and astronaut training. Follow-on next generation radio system elements include an L-band repeater uplink capability, currently in development, and a flight Raspberry-Pi, dubbed "ARISS-Pi, "that is just beginning the design phase. The ARISS-Pi promises operations autonomy and enhanced SSTV operations.

ARISS is run almost entirely by volunteers, and with the help of generous contributions from ARISS sponsors and individuals. Donations to the ARISS program for next generation hardware developments, operations, education, and administration are welcome -- please go to https://www.ariss.org/donate.html to contribute to these efforts.

(ANS thanks Dave Jordan, AA4KN of ARISS PR for the above information)

Amateur Radio Operators in Hawaii



HAMSPEAK

CTCSS

Continuous tone coded squelch system. A sub-audible tone system used on some repeaters. When added to a carrier, a CTCSS tone allows a receiver to accept a signal. Also called PL.

KH6OWL
http://www.hamradiohawaii.com
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