



Legacy Amateur Radio Club

RCA AMATEUR RADIO CLUB



AFFILIATED CLUB

INDIANAPOLIS, INDIANA

FEBRUARY 2018

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, FEBRUARY 13th, 6:30 PM AT

[SQUEALERS](#), 5899 E. 86th STREET, INDIANAPOLIS, IN
The meeting room in the back has been reserved for us.

RCA ARC NEWS

SUMMARY OF THE JANUARY MEETING – Thanks to all who attended the January meeting. The February meeting will meet at Squealers and we have reserved the meeting room. At the January meeting, Jim, K9RU, brought up the Indy Hamfest in July. We are looking for donations of parts we can sell. Our inventory is pretty much depleted. Jim, AF9A, commented that a rather nice antenna analyzer which was written up as a home brew project in QEX last year is now available as a kit for \$130 including shipping from Germany. All surface mount parts are already populated on the PC board. Past and upcoming contests including Straight Key Night, International Grid Square, RTTY, and Jan. VHF were discussed. HF band conditions have been generally good recently, especially if you're operating FT8. Our west side repeater receiver was off for awhile but is now operational now. The upcoming Bouvet DXpedition was discussed [See story below]. Those present at the meeting shared information on some of the current suppliers of electronic parts for homebrew projects.

AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, Feb. 10, 2018, 12:00 pm (Walk-ins allowed)

Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd, Indianapolis, IN

Contact: Jim Rinehart, k9ru@arri.net, 317 721-1458

TO ALL INTERESTED IN AMATEUR RADIO AND RELATED AREAS: Don't miss the next meeting of the Indianapolis Radio Club, this coming Friday, February 9, at 7:30 pm. There will be an informal social time prior to the meeting, starting around 7:00.

The meeting is in IVY Tech Building NMC, room 438. This is the fourth floor auditorium in the building at 50 W. Fall Creek Parkway, North Dr. (See map at <https://www.ivytech.edu/files/downtownindympdf>) Dave Arland of Arland Communications will be back with his annual recap of the Consumer Electronics Show. Be sure to come early to get a good seat for the latest in electronics and gadgets.

SPECIAL TRAFFIC NOTICE: Remember that Meridian street is closed at 28thstreet.

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Feb 9 Indianapolis Radio Club meeting, IVY Tech, Building NMC, Rm 348
Feb 12-16 School Club Roundup <http://www.arrl.org/school-club-roundup>
Feb 17-18 ARRL DX CW Contest <http://www.arrl.org/arrl-dx>
Mar 3-24 ARRL DX Phone Contest <http://www.arrl.org/arrl-dx>

For More Contests Information: <http://www.contestcalendar.com/>
Opportunities for public service: <http://indyhams.org/event>

BOUVET ISLAND IS OFF

[Editor's note: Interesting commentary and pictures on the following web site. Check it out.]

The following is posted on the Bouvet Dxpediton website at <http://www.bouvetdx.org/news-and-updates/> : 2000UTC 3 February 2018... During the last 72 hours we continued to experience the high winds, low clouds, fog, and rough seas that have prevented helicopter operations since our arrival at Bouvet. No improvement was predicted in the weather forecast for the next four days. Then, last night an issue developed in one of the ship's engines. This morning the captain of the vessel declared it unsafe to continue without project and aborted the expedition. We are now on our long voyage back to Punta Arenas, As you might imagine the team is deeply disappointed, but safe. There is already talk about rescheduling the DXpedition, Bob – K4UEE, Ralph – KOIR, Erling – LA6VM

ARRL SUGGESTS FCC MAY NEED TO INTERVENE TO ENSURE EFFECTIVE ANTENNA RIGHTS

Commenting in response to an FCC *Public Notice* (DA 17-1180) released last month, ARRL addressed the extent of Amateur Radio's response to recent hurricane disasters and efforts needed to expand the use of Amateur Radio services when it comes to planning, testing, and providing emergency communication. The comments point out that Amateur Radio not only has been "far more than a hobby;" it is a ubiquitous, infrastructure-independent communication resource that's always ready to deploy effectively whenever and wherever needed. The League cited the remarks of former FEMA Administrator Craig Fugate, KK4INZ, that Amateur Radio "oftentimes is our last line of defense." ARRL raised three areas where action by the FCC could ensure and enhance the ability of radio amateurs to provide emergency communication, including the current Amateur Radio Parity Act of 2017 (S. 1534), now in the US Senate.

"HOAs can preclude amateur antennas in common areas. HOAs can enact reasonable written rules governing height, location, size and aesthetic impact of, and installation requirements for, outdoor antennas and support structures for amateur communications, but the effective outdoor antenna requirement is paramount," ARRL noted in its comments. "The bill is currently before the Senate Commerce Committee. If, however, Congress is unable, as has been rumored, to pass *any* telecommunications legislation this term, it will be incumbent on the Commission to take the action on its own initiative that would be called for by this legislation. The future of Amateur Radio emergency communications is dependent on it."

ARRL asserted that it "is critical to have stations located at one's residence in order to regularly participate in disaster preparedness training exercises and drills."

Another "noteworthy and urgent need" that might call for some regulatory involvement by the FCC, ARRL said, "relates to an outdated regulation that limits data rates in HF Amateur communications, precluding certain digital emissions that have recently proven extremely important in Amateur Radio hurricane relief efforts." ARRL noted that the FCC has yet to act on

the League's *Petition for Rule Making*(RM-11708), filed in November of 2013, proposing to amend the Amateur Service rules to eliminate the symbol rate limit relative to data emissions in allocations below 29.7 MHz.

That *Petition* also called for establishing a 2.8-kHz maximum occupied bandwidth for data emissions in those bands. ARRL has argued that this deregulatory action is necessary to allow the use of PACTOR 4, an effective and efficient digital communication mode that has proven valuable in disaster-relief efforts. In July of 2016, the Commission released a *Notice of Proposed Rule Making* in WT Docket 16-239, proposing only to remove limitations on the symbol rate applicable to data emissions.

"Equipment dispatched with the 'Force of 50' [volunteers] to Puerto Rico included data transmission equipment capable of PACTOR 4 operation, but it could not be legally used in the Hurricane Maria disaster relief effort," ARRL noted. The League prevailed upon the FCC to grant a temporary waiver to permit use of PACTOR 4 by radio amateurs involved in the emergency response. "However, it should not have been necessary to wait more than 4 years for the underlying rulemaking proceeding to have been resolved, and it should not have been necessary to ask for a temporary waiver of a hopelessly outdated rule that limits data speeds for no useful reason," ARRL added in its comments.

The League also called on the FCC to "take the action requested in ARRL's January 2017 *Petition for Rule Making* (RM-11785), proposing to allocate the band 5351.5 to 5366.5 kHz to the Amateur Radio Service on a secondary basis, in accordance with the Final Acts of World Radiocommunication Conference 2015.

"A contiguous band in the vicinity of 5 MHz will assist in conducting emergency and disaster relief communications in the United States; with the Caribbean basin; with Alaska and with other parts of North, Central and South America," ARRL told the FCC. ARRL has asked the FCC to permit 100 W, as it does on the five existing 60-meter channels, and to retain the four channels that are not part of the requested contiguous frequency band.

ARRL HUDSON DIVISION DIRECTOR PROMOTES AMATEUR RADIO PARITY ACT BEFORE SENATE COMMITTEE

ARRL Hudson Division Director Mike Lisenco, N2YBB, [testified](#) on January 25 before a session of the Senate Committee on Commerce, Science, and Transportation regarding Amateur Radio's readiness to respond in an emergency. The session, "This is not a Drill: An Examination of Emergency Alert Systems," was called in the wake of an incoming missile warning erroneously released in Hawaii in January. Lisenco said Amateur Radio played a role not only in responding to the warning but in disseminating word that the missile alert had been issued by mistake.

Lisenco said the Hawaii Radio Amateur Civil Emergency Service (RACES) activated on UHF and via a VHF inter-island repeater network, and amateur stations monitored the alert and cancellation activity, which came less than 1 day after RACES had completed an Amateur Radio communication exercise at the State Emergency Operations Center (EOC). In his written testimony, Lisenco recounted that the situation after the missile warning in Hawaii was chaotic.

"The phone lines into the State EOC were soon overwhelmed and congested, and the website was overwhelmed with public inquiries," he said. Lisenco said that in such situations, Amateur Radio volunteers are typically present at state or county EOCs and at the State Warning Point, the Hawaii Emergency Management Agency. He pointed out that the cancellation of the false warning circulated on various information outlets 13 minutes after the missile warning went out.

"That was picked up and relayed through the Amateur Radio networks," he told the Committee in written testimony. "The cell phone alert system could not be used for the cancellation notice

until prior FEMA approval was obtained. Once that was obtained, the cancellation alert went out to the cell phone network after 38 minutes from the initial alert."

"Many people had received the warning first on their cell phones through the Wireless Emergency Alert (WEA) system, but a cancellation on that same system was substantially delayed," Lisenco said. "The result was that Amateur Radio networks disseminated validated cancellation information long before the cellular networks were able to do so."

Lisenco took the opportunity to address how private land-use regulations can preclude Amateur Radio disaster response capabilities.

"There is no substitute for the ready availability of a residential Amateur Radio station in daily operation from a licensee's residence," he said. "The licensee cannot be expected to have the ability to communicate into or from a disaster site unless he or she has a station with an effective outdoor antenna capable of operation on multiple frequency bands at once, which is ready to be pressed into service from the licensee's residence at a moment's notice."

Lisenco reminded the panel members that the Amateur Radio Parity Act of 2017 is now pending before the Committee. "We are in desperate need of this legislation, and without it, the volunteer emergency communications services provided by Amateur Radio will be precluded. We urge the Committee in the strongest terms to please approve and send this legislation forward without delay," Lisenco said.

Mississippi Senator Roger Wicker, a cosponsor with Connecticut Senator Richard Blumenthal, of the Amateur Radio Parity Act, attended the hearing. Responding to a question from Wicker at the hearing, Lisenco pointed out that an early US Coast Guard warning cancellation notice was relayed to Amateur Radio networks and disseminated quickly, while the State Warning Point waited to obtain FEMA authorization to rescind the warning via cellular phones. As a result, Amateur Radio networks were able to disseminate validated cancellation information long before the cellular networks could. Wicker issued a [statement](#) noting Lisenco's testimony and posted a video clip of his exchange with Lisenco. Read [more](#). --ARRL Letter

ARRL COMMENTS ON TECHNOLOGICAL ADVISORY COUNCIL SPECTRUM POLICY RECOMMENDATIONS

In [comments](#) to the FCC on a series of Technological Advisory Council (TAC) spectrum management policy recommendations, ARRL said that while some of the Council's recommendations are valid, it would be "highly inappropriate" to generalize about applying them broadly in all radio services. The comments, filed on January 31, were in response to a December 1, 2017, *Public Notice* in ET Docket No. 17-340. ARRL took the opportunity to strongly urge the FCC to reinstate a 2016 TAC noise floor study, which, ARRL asserted, was apparently terminated before it even got started.

"Indeed, it is difficult to imagine how the Commission can now...suggest the adoption of specific spectrum management principles, incorporating such concepts as receiver immunity, HCTs [harm claim thresholds], and interference temperature determinations without having...a firm grasp on ambient noise levels in basic RF environments and geographical areas," the League told the FCC.

ARRL reiterated its encouragement for the FCC to incorporate receiver performance specifications into US spectrum policy on a broader basis. "ARRL accepts...that increased spectrum user density is the inevitable result of new wireless services," the League said. "Given that this intensification of the use of the radio spectrum will necessitate new overlays of dissimilar radio services...in increasingly shared spectrum, it is necessary to depart from the traditional regulatory model that the Commission has utilized for spectrum allocations."

That model, ARRL said, has, almost without exception, placed limits only on transmitters, while the inability of some receivers to reject out-of-band signals "constrains new allocations in adjacent bands." This calls for what ARRL called "a 'holistic' approach to transmitter and receiver performance."

"Requiring better performance from receivers or RF-susceptible devices is a valid, reasonable, and long overdue requirement," ARRL said, "but the major goal of doing so should be to prevent instances of interference, not solely to allow the overlay of otherwise incompatible sharing partners in deployed spectrum to the detriment of incumbents."

ARRL argued, however, that the Amateur Service should not be subject to receiver immunity standards, because licensees employ a wide range of propagation, emissions, bandwidths, power levels, receivers, and antennas, making any receiver performance standards arbitrary, and compromising the Service's experimental nature. They are also able to differentiate between interference from nearby spurious or out-of-band signals and that caused by receiver deficiencies.

"Receiver immunity is not an intra-service issue in the Amateur Service," ARRL said. "The issue...is, rather, protection from spurious and out-of-band emissions from other services."

ARRL said that while the TAC's allocation principles include over-generalizations, the Council is "very much on the right track" with such concepts as receiver immunity standards for certain radio services and, especially, for consumer electronics "and the initiation of necessary and urgent programs, such as interference-hunting teams, to supplement the Commission's meager enforcement resources." ARRL said it looks forward to working with the FCC in developing an interference-tracking corps. ARRL also supported the creation of a public database of past radio-related enforcement activities. What little FCC enforcement *is* necessary in the Amateur Service must be timely and visible, ARRL said.

But, ARRL returned to its assertion that a knowledge database regarding ambient noise levels in certain environments must be in place before adopting any next-generation spectrum management techniques.

"No system of spectrum management incorporating [harm claim thresholds] and receiver immunity levels can be accurately implemented" without the noise study data, ARRL said. Read [more](#) –ARRL Letter

co-LAUNCHED CUBESATS SETTLING INTO ORBITS, MISSIONS

Commissioning and testing continue of the L-Band Downshifter and the University of Iowa's High-Energy CubeSat Radiation Instrument (HERCI) on the new Fox-1D (AO-92) CubeSat. AO-92 could be available for general use by week's end, AMSAT [said](#). The co-launched French [PicSat](#) CubeSat is seeking telemetry reports. Both were carried into space from India on January 12.

AMSAT-NA [reports](#) the University of Iowa tested the HERCI, while AMSAT put the L-Band Downshifter through its paces in the past week. The L-Band Downshifter converts signals received on 1267.350 MHz and injects them into the satellite's 435 MHz receiver. AMSAT-NA Executive Vice President Paul Stoetzer, N8HM, said that testing was promising, as the L-Band Downshifter was turned on for its initial outing on January 20. Stoetzer reports being able to access the transponder with a handheld transceiver running 1 W into a 16-element Yagi.

"Telemetry analysis showed that the Downshifter was functioning normally, and AMSAT announced open testing," Stoetzer said. "Many reported QSOs made with 10 W or less to modest Yagi antennas."

The HERCI experiment was activated for the first time on January 18. "HERCI is intended to provide a mapping of radiation in a low-Earth orbit," explained Don Kirchner, KD0L, Research

Engineer at the University of Iowa. "This is of scientific interest for planning CubeSat test flights for low-energy X-ray detectors."

The Virginia Tech experimental camera payload on AO-92 last week returned some very clear [photos](#) of our planet as seen from low-Earth orbit.

Meanwhile, the French [PicSat CubeSat](#), which launched on the same flight as AO-92, is aimed at observing the transit of the young exoplanet Beta Pictoris b in front of its bright and equally young star Beta Pictoris -- both some 63 light years away -- and at demonstrating an innovative technological concept to use optical fiber for astronomical observations from space.

The CubeSat's embedded Amateur Radio FM transponder will be available when possible during the mission. The uplink is 145.910 MHz (1750 Hz tone in amateur mode), and the downlink is 435.525 MHz, 9.6 kb BPSK AX.25, data and FM voice when in amateur mode. The PicSat website includes a [description](#) of the telemetry and related information.

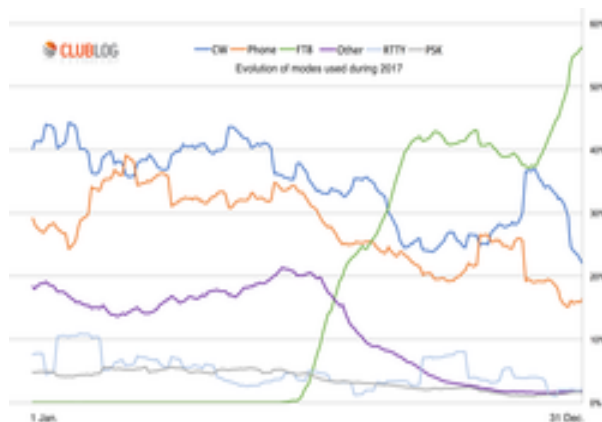
The PicSat team has requested Amateur Radio assistance to [capture and upload telemetry](#) packets from the satellite. "Beacons received from all over the world are especially useful to monitor the status of satellite along its orbit," the PicSat team said. Read [more](#).

MODE USAGE EVALUATION: 2017 WAS "THE YEAR WHEN DIGITAL MODES CHANGED FOREVER"

[Club Log](#) author and UK radio amateur [Michael Wells](#), G7VJR, has [reported](#) that data compiled from 8,000 Club Log users indicates the proportion of FT8 usage relative to other modes has risen dramatically since FT8's introduction last year. Every few years, Wells has posted charts depicting mode usage on the amateur bands, based on log data uploaded to Club Log. Graphs he posted last week show the proportion of contacts on each mode for the last 20 years and then for the last 12 months.

"2017 was, of course, the year when digital modes changed forever with the advent of FT8," said Wells. "It is a remarkable technical achievement, which has breathed life and enthusiasm into DXing for a whole new audience."

FT8 -- included in [WSJT-X](#) version 1.8.0 -- continues to capture the imagination of the Amateur Radio community, luring away many of those who had been using the popular JT65 "weak-signal" mode. FT8 is included in [WSJT-X](#) version 1.8.0, with several refinements from the original beta releases. Among FT8's biggest advantages is a shorter transmit-receive cycle, with contacts four times faster than with JT65 or JT9; an entire FT8 contact can take place in about a minute. Many DXpeditions now routinely include FT8 operation.



Club Log graph showing modes used by radio amateurs in 2017, and the emergence of FT8 (green trace). Lines on the graph are based on 28-day moving averages. Data were smoothed to reduce the prominence of peaks related to mode-specific contests.

Wells reported that 8,000 Club Log users uploaded FT8 contacts last year, logging 46,000 discrete call signs in that mode. "For reference, in 2017 the total number of QSOs uploaded to Club Log (all modes) was 32 million," Wells said. "Of that total, the number of QSOs made with FT8 was 4.8 million." That works out to 15% of all contacts posted to Club Log, which may or may not be representative of Amateur Radio activity at large. Wells' graph for 2017 shows a dramatic increase in mid-2017 in the percentage of FT8 contact relative to other modes, by year's end overtaking CW and SSB usage, already trending downward except for a significant bump in CW usage toward the end of the year. RTTY and

PSK31 usage remained comparatively stable over the course of 2017. The usage of "other" undefined modes declined dramatically after the introduction of FT8. Wells explained that the graph does not show absolute levels of activity, just relative levels of activity.

Wells pointed out that the data is smoothed, and the values are for a 28-day moving average. "Therefore, a weekend of only CW and no FT8 has little effect -- the trend is gradually adjusted by ongoing activity, and not by shocks."

Last fall, Taylor expressed some surprise about the "rapid uptake" in the use of FT8 on HF, calling FT8 and the other WSJT-X offerings "special-purpose modes" designed for making reliable, error-free contacts using very weak signals. Taylor pointed out that the level of information exchanged in most FT8 -- and other similar digital modes -- isn't much more than the bare minimum for a valid contact. Read [more](#). --ARRL

FOXES AND HOUNDS — FT8 DXPEDITION MODE IS IN THE WORKS FOR WSJT-X

Speaking on behalf of the [WSJT-X](#) Development Team, Joe Taylor, K1JT, has issued a progress report on the team's efforts to develop FT8 DXpedition Mode. The new digital mode will include new and innovative features, which are detailed in a draft ***FT8 DXpedition Mode User Guide***, released on February 2. Taylor said the basic goal of FT8 DXpedition Mode is to enable DXpeditions to make FT8 QSOs at the highest possible rates, and the *WSJT-X* Development Team has been working with members of the Baker Island KH1/KH7Z DXpedition team, ahead of its mid-summer operation, to work out the wrinkles.

"Like most major DXpeditions, this one will almost certainly make a majority of its QSOs using SSB and CW," Taylor said. "However, the group is well aware of the rapid rise of FT8 popularity, and they plan to use FT8 as well. Making FT8 QSOs with KH1/KH7Z will require the DXpedition and everyone trying to work them to use a new, yet-to-be-released version of *WSJT-X*. We have tested the new program features on the air several times, and found them to work well."

In FT8 DXpedition Mode, a DXpedition stations is the Fox, and calling stations are Hounds. The new mode permits contacts to be completed with as little as one Fox transmission per contact. The Fox also can transmit up to five signals simultaneously, upping the potential contact rate to 600/hour. "With expected signal levels and likely levels of QRM, sustained rates of several hundred QSOs/hour are expected to be possible," the *User Guide* asserts. The *User Guide* points out that FT8 DXpedition Mode is suitable for use *only* by legitimate DXpedition stations and by those attempting to work them and should not be used for day-to-day FT8 operation.

"Another test run [of the new mode] will probably be scheduled in a month or so," Taylor continued, adding that others subsequently will be invited to upgrade to a "release candidate" called *WSJT-X* v1.9.0-rc1, "and to join in trying to work one or more specific 'pseudo-DXpedition' stations at a certain time and frequency." *WSJT-X* release candidate versions, identified by an -rcx suffix, are offered temporarily for beta-testing but are not suitable for long-term general use.

Taylor said the Development Team's approach to FT8 DXpedition Mode will continue the process of "shaking bugs out of the program" and generally improve its usability for DXpedition operators and DXers alike. — *Thanks to Joe Taylor, K1JT*

AREDN DONATES MESH NETWORKING EQUIPMENT TO ARRL

The Amateur Radio Emergency Data Network ([AREDN](#) -- pronounced "R-den") project team has donated several pieces of High-Speed Multimedia Mesh (HSMM) hardware to the ARRL Laboratory. HSMM technology has evolved rapidly in recent years, due to the development efforts of the AREDN open-source project.

"This has changed the complexion of mesh implementations from an experimental, hobby-oriented novelty into a viable alternative network suitable for supporting high-speed emergency communication and Internet connectivity," said AREDN's Randy Smith, WU2S. "To further our shared goal of supporting emergency responders, AREDN has donated a substantial kit of mesh networking equipment to ARRL for its familiarization and deployment."

Smith said ARRL and AREDN would work together to provide written guidance on the best practices for using the networking capability to provide such services as voice over internet protocol (VoIP) telephony, streaming video, and e-mail. AREDN [was used](#) to provide connectivity during the 2016 New York City Marathon and in the recent California fires.

ARRL Laboratory Manager Ed Hare, W1RFI, said AREDN's repurposing of 3.3 and 5 GHz Wi-Fi equipment "will allow Amateur Radio to provide alternative modern high-speed digital communication" for both routine and emergency applications. "These capabilities, combined with the proven track record of Amateur Radio to deploy communications systems under a wide range of adverse conditions, showcase the capabilities of Amateur Radio in a technological world," he said.

Hare said the ARRL Lab has deployed a local AREDN network at ARRL Headquarters and plans to expand its scope to include nodes on the W1AW towers, with other equipment installed at local police, fire, and hospital communications centers.

Smith said hams around the country have set up permanent installations that enable VoIP telephony, streaming video cameras, *MeshChat* keyboard messaging, file transfer, and e-mail.

He suggested that AREDN mesh networking is an ideal way to engage hams who are interested in computers, programming and data communications networks. "Our focus is on meeting 21st Century expectations," he said. Those interested in assisting the AREDN team can [contact](#) Smith. Read [more](#). --ARRL

PUERTO RICO, US VIRGIN ISLAND AMATEURS ARE INTERNATIONAL HUMANITARIAN AWARD WINNERS

The ARRL Board of Directors has conferred the 2018 [International Humanitarian Award](#) jointly on the Amateur Radio population of Puerto Rico -- served by ARRL Section Manager Oscar Resto, KP4RF -- and the radio amateurs of the US Virgin Islands, served by ARRL Section Manager Fred Kleber, K9VV. Radio amateurs in Puerto Rico and in the US Virgin Islands aided in the relief and recovery after a punishing hurricane season in the Caribbean.

The Board noted that radio amateurs in Puerto Rico and on the US Virgin Islands were "pressed into immediate service before and during the devastating storms" during the 2017 hurricane season. "The efforts of the local amateur communities continue to support the relief and recovery efforts even now," the Board said, "and the ARRL leadership in each section continues to do extraordinary service to their communities." ARRL established the International Humanitarian Award to recognize "truly outstanding Amateur Radio operators in areas of international humanitarianism and the furtherance of peace."

In a separate motion, the Board recognized the outstanding work and service and commended all involved with the various hurricane relief communication efforts during 2017. The Board cited the Amateur Radio communities of Puerto Rico, US Virgin Islands, the Caribbean islands, and

in south Florida and Texas for "outstanding service during the 2017 Atlantic hurricane season," calling their efforts "a demonstrable exhibition of Amateur Radio public service."

Technical Excellence Award

The Board conferred the 2017 Doug DeMaw, W1FB, Technical Excellence Award on Joe Taylor, K1JT; Steve Franke, K9AN, and Bill Somerville, G4WJS, for their articles, "Work the World with *WSJT-X*" (parts 1 and 2), which appeared in the October and November 2017 issues of *QST*.

SHORTS

Amendment to ARRL DXCC Rules Expands DXCC List The ARRL Board of Directors approved a motion to amend the DXCC Rules, when it met January 19-20. Section II, Subsection 1 of the DXCC Rules now will include a new Subsection (d): The entity has a separate [IARU member society](#) and is included on the US State Department [Independent States in the World](#).

Effective on January 21 at 0000 UTC, the Republic of Kosovo (Z6) was added to the DXCC List of current entities, increasing the total number of current DXCC entities to 340. Nothing is retroactive, Fusaro said. A new Logbook of The World (LoTW) *TQSL* configuration file (v.11.4) has been released to accommodate the addition.

Kosovo's IARU member society [SHRAK](#) Headquarters station Z60A now is [active on several bands](#) with multiple guest operators, marking the 10th anniversary of Kosovo's independence in February 2008.

The DP0GVN WSPR beacon now is in operation from Antarctica's Neumayer III Research Station of the Alfred Wegener Institute for Polar and Marine Research. The installation is part of a scientific project of the Technical University of Munich in cooperation with the University of Bremen and the German Amateur Radio Club (DARC). "The beacon is still under test and will be shut down occasionally for more configuration and optimization of antennas and software, before it can be mounted at the final installation site in a few weeks," said Rainer Englert, DF2NU. The technology consists of a multiband *WSPR* receiver that can simultaneously monitor up to eight bands from 160 to 6 meters and feed several hundred reports per hour to [WSPRnet](#). The 5-W multiband transmitter also had been commissioned and is working into a vertical antenna. Englert said that DP0GVN already has received "several thousand beacons spots." DP0GVN also will be the call sign for Matthias Maasch, DH5CW, starting in February, at Neumayer III Research Station for 1 year, and he plans to be active on HF. QSL DP0GVN via DL5EBE. -- *Thanks to Tom Kamp, DF5JL, IARU Region 1 HF Committee Chairman via Rainer Englert, DF2NU, and [The Daily DX](#)*

D-Star ONE Phoenix, First D-Star Communication Spacecraft, Launched. A *Soyuz* rocket launched [D-Star ONE Phoenix](#) and 10 other satellites into orbit on February 1 from Vostochny Cosmodrome in Russia. Developed by German Orbital Systems in Berlin in cooperation with the Czech company iSky Technology, D-Star ONE Phoenix carries an [Amateur Radio relay payload](#) (call sign DP1GOS). It replaces the D-Star ONE nanosatellite that failed to attain orbit following a November *Soyuz* launch from Vostochny.

Downlink frequencies are 435.700 MHz for telemetry and 435.525 MHz for D-Star. The uplink is 437.325 MHz.

D-Star ONE Phoenix is a 3U CubeSat equipped with four identical radio modules with D-Star capability, operating in half-duplex mode with a power output of 800 mW. The two telemetry and telecommand modules both receive, and both in sequence, so each telemetry frame is repeated. The other two modules are dedicated to Amateur Radio, although only one will operate at a time.

The modules are configured to work as D-Star repeaters, so they retransmit received D-Star frames on the downlink frequency. They also have a D-Star voice beacon. — *Thanks to AMSAT News Service, D-Star ONE*

NOAA Seeks Comments on Discontinuing WWV-WVH North Atlantic and North Pacific Marine Storm Warnings – *NOAA is once again considering ending North Atlantic and North Pacific Marine storm warning announcements at minutes 8, 9, and 10 of each hour on WWV, and minutes 48, 49, 50, and 51 of WVH.*

Submit questions, comments, or concerns about this proposed change with “NIST MARINE WARNING” in the subject line no later than February 23, 2018. NOAA had announced in April 2017 that it was considering this change but held off in the wake of supporting comments.

WWV and WVH are services of the National Institute of Standards and Technology (**NIST**). — *Thanks to Matt Deutch, NORT*

Anticipated New Building Won't Be Ready for Hamvention 2018, but Flea Market Could Expand - Due to circumstances beyond their control, [Hamvention](#)[®] 2018 organizers are reluctantly walking back an earlier announcement that a new building would be available for this year's event at the Greene County Fairgrounds and Expo Center in Xenia, Ohio.

"Despite all of the best efforts and intentions by Greene County, the Greene County Agricultural Society, and Hamvention, we have learned the anticipated new building will not be constructed in time for Hamvention 2018." "The prefab sections bid on and architecturally required are currently backlogged. We expect construction to be delayed until after Hamvention and the Greene County Fair." Cramer said construction should be completed this year in time for Hamvention 2019.

On the plus side, Hamvention 2018 will have more room for inside exhibits, with the addition of the vacated Furniture Building, and the Flea Market may gain new space as well.

"After consultation with professionals, we are in the process of solving the mud issue in the Flea Market area," Cramer said. "We anticipate work to start as soon as weather allows. We are rearranging the soccer field parking to eliminate use of the low areas where we had problems last year."

The theme for [Hamvention](#)[®] 2018 is "Amateur Radio...Serving the Community." Ron Cramer, KD8ENJ, Hamvention General Chairman, said the theme acknowledges the role that ham radio operators play in their communities, especially in times of emergencies. "During recent disasters, hurricanes in Florida, Texas, and Puerto Rico and wildfires in the west, Amateur Radio operators were once again called upon to provide emergency communication assistance when regular services failed or were overtaxed," Cramer said. Hamvention is planning to have forums on emergency communication and displays of Amateur Radio emergency communication vehicles. Cramer thanked the many hams who actively volunteer with community groups and thanked the public and organizations for their support of Amateur Radio. Hamvention 2018 will take place May 18-20 for the second year at the Greene County Fairgrounds and Expo Center in Xenia, Ohio

The [26th Annual Dayton Contest Dinner](#) happens on Saturday, May 19, 2018, at the [Crowne Plaza Hotel](#). The festivities start off at 5:30 PM with a cash bar, followed by dinner at 6:30pm. This year's Contest Dinner features Chris, DL1MGB, as Dinner Speaker, and don't forget that the 2018 [CQ Contest Hall of Fame](#) Inductions will be announced at the event. Tickets will NOT be available at the door, and this event tends to sell out.

Tickets are Available for the 33rd DX Dinner in Dayton. The SouthWest Ohio DX Association ([SWODXA](#)) will sponsor the DX Dinner, held in conjunction with Hamvention[®] 2018, on Friday, May 18, at the Dayton Marriott, [1414 S. Patterson Blvd](#). A social

hour will get under way at 5:30 PM, with dinner served at 7 PM. Another social hour will follow the dinner. The event will feature major door prizes and the naming of the DXpedition of the Year®. Tickets are available via the [SWODXA Events](#) website (click on "Purchase Tickets Today.")

The 29th Annual Dayton [Top Band Dinner](#) will be held Friday evening May 18, 2018 at the Crowne Plaza in the Presidential Ballroom in Dayton, Ohio. Social hour is at 6:00 PM followed by dinner at 7:00 PM. This year's event features speaker Jerry Rosalius, WB9Z. "Jerry has worked and confirmed 316 countries and all 40 zones on the Top Band." Jerry is also part of the highly anticipated Bouvet DXpedition starting later this month. Reservations may be made through the [Top Band Dinner website](#). (Tim, K3LR)

Ed, W0YK, [announces](#) that the RTTY Contest Dinner will be held Thursday, May 17, 2018, at 6pm the Spaghetti Warehouse, 36 West 5th Street, Dayton, Ohio. This location is two blocks from the Crowne Plaza hotel in downtown Dayton. This informal dinner is an opportunity to use a voice mode with your RTTY contesting friends. [Contact Ed. W0YK](#) to register.

Gary, ZL2IFB [FT8 Operating Guide](#) is promoting better FT8 operating standards on HF, partly in the hope that more of us will make it into the log at 3Y0Z later this month." ARRL Contest Newsletter.

THANKS FOR READING!

THE RCA ARC MONTHLY NEWSLETTER IS COMPILED AND EDITED BY JIM RINEHART, K9RU AND JIM KEETH, AF9A. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO <mailto:WebMaster@w9rca.org>. Check our web site at <http://www.w9rca.org/>