



Legacy Amateur Radio Club

RCA AMATEUR RADIO CLUB



AFFILIATED CLUB

INDIANAPOLIS, INDIANA

NOVEMBER 2017

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, NOVEMBER 14th, 6:30 PM AT
[SQUEALERS](#), 5899 E. 86th STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE OCTOBER MEETING – Thanks to all who attended the October meeting! Jim, K9RU, reported he has sold the second tower which belonged to Dave Brown. Dave's trailer may also be sold. About the only things left of interest are two 30 ft. masts which may be useful for Field Day. Jim also reported he is hoping to get additional stuff from his previous employer to sell at the next Indy Hamfest. The status of the repeater and the 6 meter beacon were discussed. Also, K9RU will be giving a presentation of FT8 at the next IRC meeting (Fri, 10/13). Dick, W9ZB, reminded everyone about ARRL Frequency Measuring Test coming up the first Thurs. in November.

NOVEMBER MEETING – G.T. South's has closed. The November meeting will be at Squealers Barbeque in Castleton, 5899 E. 86th St. This is on the north side of the Castleton Mall, on the south side of 86th St. directly across 86th from Bravo.

AMATEUR RADIO LICENSE TEST SESSION

THERE WILL BE NO IRC – RCA ARC TEST SESSION IN NOVEMBER

Time: Saturday, Dec. 16, 2017, 12:00 pm (Walk-ins allowed)

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

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

MARION COUNTY ARES NETS TEMPORARILY MOVING --The Marion County ARES Wednesday night net is temporarily moving to the W9FBZ 147.210MHz repeater starting October 25. Come join us at 7:30 this Wednesday for our regular net! With Newline preceding at 7:00. We appreciate the work and efforts put forth into all the surrounding repeaters by the repeater owners and clubs. I want to specifically thank the Indianapolis Repeater Association for the use of the 146.700, and 147.120 repeaters. as well as the Naval Avionics Center Amateur Radio Club for borrowing the 147.210 repeater. We hope to hear you on the net this week and in the future! -- W9SOX

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

- Nov 4-5 ARRL EME Contest, <http://www.arrl.org/eme-contest>
- Nov 18-20 ARRL SS Phone <http://www.arrl.org/sweepstakes>
- Nov 18 Fort Wayne Hamfest and Computer Expo, <http://www.fortwaynehamfest.com>
- Nov 25 TurkeyFest 2017, Brazil, IN <http://w9uuu.org/turkeyfest.html>
- Dec 1-3 ARRL 160M Contest <http://www.arrl.org/160-meter>

Dec 9-10 ARRL 10M Contest <http://www.arrl.org/10-meter>
Opportunities for public service: <http://indyhams.org/events>

FCC CHAIRMAN RECOGNIZES AMATEUR RADIO IN PRAISING THOSE ASSISTING PUERTO RICO

Wrapping up a 2-day visit to Puerto Rico on Monday, FCC Chairman Ajit Pai, recognized Amateur Radio volunteers in praising those who turned out to help the stricken Commonwealth in the wake of Hurricane Maria.

"[T]he worst of tragedies can also bring out the best in people. I saw that firsthand during my 2 days in Puerto Rico," Pai said. "Everyone is pitching in: The people of Puerto Rico helping their neighbors, hardworking Federal Emergency Management Agency staff — including communications personnel in Emergency Support Function #2 — the dedicated regulators of the Puerto Rico Telecommunications Regulatory Board, and the FCC's own Roberto Mussenden, who has spent the past month away from his family on the mainland in order to help the island where he grew up."

"Additionally, Amateur Radio operators, broadcasters, cable operators, fixed wireless companies, wireline carriers, and mobile providers have stepped up to the plate, working overtime to connect the disconnected," Pai continued. "All of this work reflects the ethos I saw on many signs and t-shirts during my time on the island: 'Puerto Rico Se Levanta' [Puerto Rico is Rising]."

"FORCE OF 50" VOLUNTEERS' PUERTO RICO HURRICANE RECOVERY MISSION ENDS

The 22 "Force of 50" radio amateurs who deployed to Puerto Rico earlier this month as American Red Cross volunteers have ended their mission and will be back on the US mainland by week's end. They had been in Puerto Rico for about 3 weeks.

"The Force of 50 volunteers demonstrated an extraordinary range of skills possessed by this accomplished team," said ARRL CEO Tom Gallagher, NY2RF. "There was no task that they wouldn't tackle. It also demonstrated the generosity of these volunteers, who not only performed their roles as communicators, but also engaged the population with their many acts of personal kindness."

Val Hotzfeld, NV9L, who filed situation reports documenting the team's activities, said the volunteers accomplished everything they went to Puerto Rico to do, "and then some." She said that the Red Cross felt they had exceeded all expectations.

"We opened a lot of people's eyes when we started going to the ESF-2 communications task force meetings. They had no idea of our capabilities," Hotzfeld told ARRL. "When they heard what we'd accomplished, we were swarmed; everybody was wanting us."

Hotzfeld said the volunteers' initial mission was to provide a way to gather outbound health and welfare messages and put them into the Red Cross's Safe and Well System using *Winlink*. However, the mission changed once they were on the ground, when they discovered the needs were much greater.

"No one had any communications, so the mission morphed to communications," she said. "But, we did both." She said the Red Cross recognized the value of ensuring communication for hospitals, and other volunteers handled Safe and Well messages.

She said the volunteers possessed a wide range of talents, from medical to mechanical, not just communications. For example, Andy Anderson, KE0AYJ, set up the helicopter landing pad at Guajataca Dam, Hotzfeld said, and provided communication where there was none.

Ten [SHARES](#) (Shared Resources) HF Radio Program operators will replace the Amateur Radio volunteers who had worked on behalf of the Red Cross. These SHARES operators are federal employees who happen to be radio amateurs and volunteered for the duty in Puerto Rico. Hotzfeld said they will be stationed in four different zones, with two operators at headquarters in the San Juan Convention Center. "The hospitals did not want us to leave," Hotzfeld said. "They were begging us to stay." She noted, though, that the hospitals also have access to satellite telephones.

"I was so proud of our guys," Hotzfeld said in summary. "They were rock stars." --ARRL

AMERICAN RED CROSS HAILS "NEW PARTNERSHIP" WITH ARRL FOLLOWING PUERTO RICO DEPLOYMENT

The American Red Cross (ARC) this week thanked ARRL and its "Force of 50" hurricane recovery volunteers who deployed to Puerto Rico earlier this month, and it suggested a new level of partnership now exists between the two organizations. ARC Senior Vice President, Disaster Cycle Services Harvey Johnson this week wrote ARRL President Rick Roderick, K5UR, and ARRL CEO Tom Gallagher, NY2RF, to express his organization's gratitude for "all your amazing volunteers for the unwavering commitment demonstrated during the response to this unprecedented disaster in Puerto Rico." Johnson said the team's actions "made a significant difference" in the lives of those affected.

"This mission marked an exciting new path for our two organizations with it being the first time we deployed ARRL volunteers to a Red Cross relief operation," Johnson wrote. "I continue to hear incredible stories about how the ARRL volunteers supported individuals, communities, and partner organizations during their time in Puerto Rico." ARRL and the American Red Cross have a long-standing memorandum of understanding ([MOU](#)) to cooperate in emergencies and disasters.

"It was a complex cooperation in an austere environment, and the mission certainly had its challenges," Johnson continued. "While we have much to learn from this new experience and areas to improve upon, we remain committed to working with you, ARRL, and your cadre of talented volunteers."

Johnson singled out for special praise ARRL Emergency Response Manager Mike Corey, K11U, "for his leadership in planning and managing the mission."

"Mike was fast acting and thoughtful, constantly working to make the mission effective through transparency and collaboration," Johnson said. "We simply could not have achieved the outcomes without him."

Johnson said the ARC looks forward to working together with ARRL to "serve those impacted by disasters." --ARRL

ARRL EXECUTIVE COMMITTEE UPDATED ON ENTRY-LEVEL LICENSE

The ARRL Executive Committee reviewed plans to implement recommendations of the Entry Level License Committee, when it met on October 14 in Hartford, Connecticut. At its July meeting, the ARRL Board of Directors called for work to go forward on a plan to pursue additional HF digital and phone privileges for Technician licensees. The Executive Committee was told that New England Director and Entry-Level License Committee Chair Tom Frenaye, K1KI, will work with ARRL General Counsel Chris Imlay, W3KD, and International Affairs Vice President Jay Bellows, K0QB, to develop the specifics of a proposal to the FCC requesting expanded frequency and mode privileges for Technicians. This will be completed in time for review by the full Board of Directors at its January meeting.

Frenaye explained this week that enhancing the Technician license would be "an immediate step that can take place with little FCC impact, since the question pool would not need to be changed." He pointed out, however, that this approach "does not rule out longer-term

consideration of a new entry-level license." The Entry-Level License Committee had recommended both steps in its July report to the Board.

[Minutes](#) of the October 14, 2017 meeting of the ARRL Executive Committee have been posted on the ARRL website. --ARRL Letter

NEW HAM BANDS SPRING TO LIFE; VETERAN LF EXPERIMENTER DENIED ACCESS TO 2200 METERS

Amateur Radio's two newest bands came to life on Friday the 13th. Both 630 meters (472-479 kHz) and 2200 meters (135.7-137.8 kHz) are now available to radio amateurs who have notified the Utilities Technology Council ([UTC](#)) of their intention to operate and did not hear anything back during the ensuing 30 days.

"Many of us filed notices with the Utilities Technology Council on September 15, the day the notification procedure was announced," said Fritz Raab, W1FR, who coordinated the ARRL [WD2XSH 630-Meter Experiment](#). "We did not expect to hear from the UTC, unless they were objecting to amateur operation. Much to our surprise, on Friday, October 13, a number of operators received 'okay' notices. So, the first amateur operations commenced that night."

Denied! UTC e-mails went out to an undetermined number of US radio amateurs who had notified the Council, but not everyone got the thumbs up. One of those thwarted in his hopes of operating under his Amateur Radio license on 2200 meters was John Andrews, W1TAG, of Holden, Massachusetts, a long-wave veteran with thousands of hours on the band over the past 13 years under his FCC Part 5 Experimental license. Andrews, an ARRL 630-Meter Experiment participant, said UTC denied his request because he was within 1 kilometer of a power line using PLC (power line carrier). Another who did not pass UTC muster for 2200 meters was Alabamian Dave Guthrie, KN4OK. UTC encouraged him to apply for permission to operate on 630 meters.

Awash with Signals: Raab said a few operators reported making contacts on 630 meters the first night, although noise levels were high, and a geomagnetic storm was in progress. Saturday night, October 14, "was a bust," he said. The next evening, however, things broke open. "The band was awash with CW and digital signals," Raab reported. "Operating modes included CW, JT9, SSB, and WSPR. Many operators were new to the band and not previously experimental licensees."

On October 17, W7IUV and VK4YB completed a JT9 contact, possibly the first US-to-DX Amateur Radio contact on 630 meters.

The Rules: Section 97.313(g)(2) of the Amateur Service rules requires that, prior to starting operation on either band, radio amateurs must [notify](#) UTC that they intend to operate by submitting their call signs, intended band(s) of operation, and the coordinates of their antenna's fixed location. The new rules do not permit any mobile operation.

"Amateur stations will be permitted to commence operations after a 30-day period, unless UTC notifies the station that its fixed location is located within 1 kilometer of PLC systems operating on the same or overlapping frequencies," the FCC said in announcing approval of the notification system on September 15.

WORLD MAKER FAIRE VISITORS URGED TO BUILD, MAKE, CREATE, COMMUNICATE

Ham radio exhibitors at the 2017 World Maker Faire in New York City over the September 23-24 weekend urged visitors to "build, make, create, communicate." Three Amateur Radio clubs took part in the event, held at the New York Hall of Science in Corona, Queens. World Maker Faire drew upward of 90,000 visitors in 2016.

An exhibit hosted by grade 6 to 12 students from the [Garden School Amateur Radio Club](#) (K2GSG) in Jackson Heights was aimed at introducing ham radio to those who stopped by. They also demonstrated electronics experiments, kit construction, and soldering skills. Projects included a Morse code practice oscillator and an LED candle.

The Garden School ARC students are mentored by the Hall of Science Amateur Radio Club (WB2JSM/WB2ZZO), which co-exhibited at the World Maker Faire. Both are ARRL-affiliated clubs.

"The Garden School students, led by their club advisor, science teacher John Hale, KD2LPM, did a great job engaging the public through kit building," said ARRL Marketing Manager Bob Inderbitzen, NQ1R, who was part of the ARRL contingent to the event. "They helped demonstrate the educational benefits of having students engaged in the STEM [science, technology, engineering, and math] disciplines. Garden School ARC was recognized with an Editor's Choice Blue Ribbon. Congratulations!"

Inderbitzen said the Hall of Science ARC worked hard to get people on the air. Their "Get On the Air" (GOTA) station paired attendees with experienced station operators to make VHF and HF radio contacts. Club trustee Steve Greenbaum, WB2KDG, helped to organize the joint exhibit with Garden School.

A third group, [HamHacks](#) -- made up of high school and college students who enjoy hacking for ham radio -- also put in an appearance. Their projects include what they describe as "unconventional and cheap Amateur Radio hacks in Doppler radar, satellite photography, airplane tracking, microwave electronics, software-defined radios, and more."

"HamHacks had a fantastic exhibit and team, showing off a whole lot of innovation," Inderbitzen remarked. "Their demonstrations included a WSPR (Weak Signal Propagation Reporter) software-controlled station, and an RF plasma generator. HamHacks contributed to the 'cool factor' with dynamic exhibits."

ARRL CEO Tom Gallagher, NY2RF, also was on hand at the World Maker Faire to represent ARRL and to support the participating radio clubs.

IARU PRESIDENT: TRADITIONAL ASPECTS OF HAM RADIO MAY NOT BE ATTRACTIVE TO NEWCOMERS

The 24th General Conference of International Amateur Radio Union Region 1 ([IARU-R1](#)) convened September 17-23 in Landshut, Germany, with representatives of 40 member-societies present and another 13 represented by proxy. IARU President Tim Ellam, VE6SH/G4HUA, welcomed the attendees, urging them to reflect upon what will attract the majority of young people into Amateur Radio, "and what our mutual expectations should be." Ellam said his personal observation is that, while some younger people are interested in the more traditional aspects of Amateur Radio, many are only interested in ham radio as an adjunct to other possibly unrelated interests.

"I applaud the excellent work that has been undertaken in this region through the Youngsters on the Air ([YOTA](#)) program." Tim said, crediting the hard work of IARU Region 1 Youth Working Group Chair Lisa Leenders, PA2LS. YOTA's summer Amateur Radio camps have attracted young hams from around the world; this year's was held in the UK.

"Our ambition should be to embrace these individuals in their activities and accept that some of the more traditional aspects of the hobby will hold little interest to them, and, indeed, may no longer be relevant," he continued. "That is not to say that some are not enthused with what we all hold as the core of our hobby, such as contesting or operating generally. I fear, though, that we need to look at what will attract the new generations to Amateur Radio and make sure we promote Amateur Radio as meeting their needs, rather than promoting the historical view of what Amateur Radio has to offer."

Delegates to the plenary adopted a proposal that all IARU bodies and member-societies pressure national regulators to implement all recommendations that protect the amateur bands.

They also approved initiating a simple noise-measuring campaign among Region 1 member-societies, giving IARU the ability to offer an independent opinion on the noise situation in the bands and trends over time.

Region 1's highest recognition, the Roy Stevens, G2BVN, Memorial Trophy, was conferred upon Colin Thomas, G3PSM, for his outstanding contribution to Amateur Radio and the work of the IARU over several decades.

The full [Conference Report](#) is available on the IARU Region 1 website. Read [more](#). --ARRL

CARIBBEAN TELECOMMUNICATIONS UNION HEAD CALLS FOR "NEW GENERATION" OF HAMS

WTDC-17, which continues through October 20, considers topics, projects, and programs relevant to In remarks made on International Disaster Reduction Day, Friday, October 13, Caribbean Telecommunications Union (CTU) Secretary-General Bernadette Lewis described Amateur Radio as a "bedrock of sustained communications" during emergencies, and strongly suggested cultivating a new and younger generation of radio amateurs to carry this role forward. She spoke as [part of a panel](#) on emergency telecommunications during the International Telecommunication Union (ITU) World Telecommunication Development Conference 2017 ([WTDC-17](#)), now under way in Buenos Aires, Argentina. The CTU, she said, has been considering the role of Amateur Radio in light of this "very, very, violent hurricane season."

"Amateur Radio has been a staple, and it is because of...the Amateur Radio operators in the region that we get a lot of the information that we need," she told her audience. Her presentation defined Amateur Radio as one component in the coordination of preparedness, response, and recovery efforts on the part of national emergency management agencies.

Moderator Vanessa Gray later asked Lewis what "one concrete step" could be taken to make better use of information and communication technologies (ICT) for disaster management.

"We really have to cultivate a new generation of Amateur Radio operators," Lewis replied without hesitation, but added, "We found that they are all on the northern side of 50."

"Amateur Radio has been the bedrock of sustained communications during such emergencies," she continued, "and one of the things we're looking at is actually facilitating this process of having a network of disaster-resistant centers that, in times when you *don't* have a disaster, could be used for training new operators and generating that interest across the region."

Lewis, of Trinidad and Tobago, reiterated her remarks in condensed form during a subsequent [interview](#), in which she called hurricanes "a fact of life" for Caribbean countries, and suggested that hurricane-devastated countries need to think carefully about how to rebuild their infrastructure to make it less prone to storm damage.telecommunication development. The conference theme this year is "ICT for Sustainable Development Goals." ARRL Technical Relations Specialist Jon Siverling, WB3ERA, and International Amateur Radio Union ([IARU](#)) Emergency Communications Special Advisor (and past IARU Secretary) Rod Stafford, W6ROD, are attending. --ARRL

NEW DIGITAL MODES CHANGING COMPLEXION OF BANDS AND PERHAPS OF HAM RADIO

The wave of software-based digital modes over the past several years has altered the atmosphere of the HF bands. Some suggest the popularity of modes that make it possible to contact stations neither operator can even hear has resulted in fewer CW and SSB signals on bands like 6 meters and 160 meters. Traditional modes require far more interaction and effort on the part of the operator; the newer digital modes, not so much. The recent advent of the still-beta "quick" FT8 mode, developed by Steve Franke, K9AN, and Joe Taylor, K1JT -- the "F" and

the "T" in the mode's moniker -- has brought this to a head. Some now wonder if FT8 marks the end of an era and the start of a new, more minimalist age.

"We've been as surprised as anyone about the rapid uptake of FT8 for making QSOs on the HF bands," Taylor told ARRL this week. Rather than viewing FT8 as a total game-changer, he sees a dividing line between such digital modes and more traditional modes.

"SSB and CW are general-purpose modes," Taylor asserted. "They are good for ragchewing, DXing, contesting, emergency communications, or whatever. FT8 and the other modes in [WSJT-X](#) are special-purpose modes. They are designed for making reliable, error-free contacts using very weak signals -- in particular, signals that may be too weak for the more traditional modes to be usable, or even too weak to hear."

Taylor notes that the information exchanged in most FT8, JT65, and other digital-mode contacts "is little more than the bare minimum for what's considered to be a valid contact." In addition to call signs and signal reports, stations may exchange grid squares and acknowledgments.

Radio amateurs recently commented in response to a Top Band Reflector post, in which Steve Ireland, VK6VZ, averred that because of FT8, "160-meter DXing has changed, perhaps forever" in recent weeks. Ireland said he downloaded FT8 but just couldn't bring himself to use it on the air. "My heart isn't in it," he wrote. "My computer will be talking to someone else's computer, and there will be no sense of either a particular person's way of sending CW or the tone of their voice. The human in radio has somehow been lost."

In his [blog](#), Steve McDonald, VE7SL, compiled not only Ireland's posts, but some responses to it, although not identified by name or call sign. One commenter suggested that the game-changing aspect of FT8 is that those who typically operate CW or SSB will gravitate to FT8. "The amount of activity on the FT8 frequency of any band is phenomenal," the commenter observed. A few complained that no skill is involved in making contacts using computer-based digital modes.

Another suggested that FT8 is already falling victim to its own success, with too many stations crowding around the designated FT8 frequencies. Others were more philosophical, with remarks along the lines of this one: "It is allowing people who have smaller stations the opportunity to get on and use their radios and a computer to make contacts they never would have been able to make. This is great for ham radio!"

Taylor would agree. As he sees it, FT8 won't replace modes such as CW or SSB. "Nevertheless, it's clear that -- at least in the short term -- many hams enjoy making rapid-fire minimal QSOs with other hams, all over the world, using modest ham equipment," he said. "For this purpose, FT8 shines."

According to a tweet by Michael, G7VJR, operator of Club Log, "In September 2017, the number of FT8 QSOs uploaded to Club Log was the same as CW and SSB combined." (Bengt, K7ADD)

Some DXpeditions are now using it to open bands under marginal conditions, or provide contacts to stations that don't typically chase DX. The E6AG DXpedition published 'HOWTO: Working E6AG on FT8' to help inform operators on where to listen, and how to call them for the greatest success. The article contains general pointers on how to work split using WSJT-X, including screen shots.

JOE SPIER, K6WAO, ASCENDS TO AMSAT-NA PRESIDENCY, ANNOUNCES NEXT CUBESAT INITIATIVE

The [AMSAT-NA](#) Board of Directors has elected Joe Spier, K6WAO, of Weimar, California, as the organization's new president. An ARRL and AMSAT Life Member, Spier, 58, succeeds Barry Baines, WD4ASW, who served as AMSAT President for the past 9 years. Spier is a well-known figure in AMSAT and Amateur Radio Satellite circles. He served previously as AMSAT-NA Executive Vice President and Vice President for Educational Relations. The Board's action

came at the AMSAT-NA Annual General Meeting in Reno, Nevada, where Spier announced the next phase of AMSAT's CubeSat program, called "GOLF."

GOLF is an acronym for "Greater Orbit, Larger Footprint." AMSAT considers the new initiative as a crucial step toward fulfilling AMSAT's strategic goals involving high-altitude, wide-access satellite missions.

As an initial step in the GOLF program, AMSAT will be submitting a NASA CubeSat Launch Initiative proposal for the GOLF-T satellite project, which will serve as a rapidly deployable low Earth orbit (LEO) testbed for technologies necessary for successful CubeSat missions in a wide range of orbit, including LEO, medium Earth orbit (MEO), geosynchronous orbit (GEO), and highly elliptical orbit (HEO).

"The GOLF-T project tees off the next phase of our CubeSat program," punned AMSAT-NA Vice-President Engineering, Jerry Buxton, N0JY. "GOLF-T provides AMSAT hardware and knowledge for attitude determination and control (ADAC) capability and the opportunity to develop a 3U spaceframe with deployable solar panels that can be used in LEO or HEO missions -- two of the major systems required in future GOLF and HEO missions."

AMSAT said GOLF-T will provide the opportunity for rapid deployment and on-orbit testing of AMSAT's Advanced Satellite Communications and Exploration of New Technology (ASCENT) program's technology. ASCENT will include radiation-tolerant transponder and Integrated Housekeeping Unit (IHU) technologies that, AMSAT says, "will lead the way for low-cost, commercial, off-the-shelf systems that can function in MEO and HEO radiation environments." GOLF-T will also provide for the development of so-called "Five and Dime" (5 GHz and 10 GHz) field-programmable gate array software-defined radio (FPGA SDR) transponders for use on a variety of missions and orbits. Read [more](#). --ARRL

SHORTS

Like FT8, but expect a QSO, take a look at Olivia. The HF bands are crammed packed with FT8 signals, but there are other digital modes you may want to take a look at.

FT8 is great for making quick contacts, but there is no real "interaction" with the hams on both sides. The computer is doing it all for you. The result is a little more than a grid square and a signal report.

Picture the efficiency similar to that of FT8 with the fun of rag chewing like PSK31.

Meet Olivia, check out this You Tube video to learn more: <https://www.youtube.com/watch?v=ybupVq22dpg>

The First look at the New Ailunce HD1 VHF/UHF, Dual Mode FM/DMR HT, designed for ham radio. Specifications look really promising: Ailunce HD1 GPS Digital 2 Way Radio Dual Band Dual Time Slot 10W 3000 Channels 100000 Contacts 3200mAh Waterproof Ham Radio with FM Function and Programming cable. The HD1's output power is 10W on VHF and 8W on UHF, with 3 power settings in total (High, Medium, Low). There are two versions available. One with **GPS (\$199)** and one **without (\$189)**.

<https://blog.retevis.com/ailunce-hd1-dmr-dual-band/>

https://www.youtube.com/watch?v=rO3M_PGZqdE

Mellish Reef DXpedition Team Has Set Sail --The Mellish Reef [VK9MA](#) DXpedition team has said it plans to concentrate on the lower bands during its November DXpedition. Mellish is the 29th most-wanted DXCC entity. Team member and ARRL Contest Update Editor Brian Moran, N9ADG, said the boat was loaded and set to depart Port Douglas, Australia, October 31.

Data modes, and especially RTTY, will be one focus of the VK9MA DXpedition, and the team may give JT65/JT9 and the popular FT8 a try. During the 13-day stay, VK9MA will run four

complete stations around the clock. — Thanks to [The Daily DX](#)

Chinese CAS-4A and CAS-4B Amateur Radio Satellite Transponders Activated: The Amateur Radio linear (SSB/CW) inverting transponders on the CAS-4A and CAS-4B satellites [were activated](#) on October 18. CAMSAT's Amateur Radio payloads piggybacked on the optical remote-sensing micro-satellites OVS-1A (CAS-4A) and OVS-1B (CAS-4B), launched on June 15. CAS-4A (call sign BJ1SK) has a CW telemetry beacon on 145.855 MHz, and 4.8 kB GMSK telemetry on 145.835 MHz. The uplink is 435.220 MHz, the downlink is 145.870 MHz (20 kHz passband). CAS-4B (call sign BJ1SL) has a CW telemetry beacon on 145.910 MHz, and 4.8 kB GMSK telemetry at 145.890 MHz. The uplink is 435.280 MHz, the downlink is 145.925 MHz (20 kHz passband). -- Thanks to *Southgate Amateur Radio News via AMSAT-UK*

[WRTC 2018 announces the completion of the selection of all 63 teams with the determination of the Youth and Wild Card spots.](#) Youth teams are comprised of operators under the age of 25. Seven Youth teams applied, and the three selected will be led by CE2MVF, YO8TTT, and HA8RT. The Wild Card teams include K1DG and teammate N2NT, along with teams captained by 9A7DX, YV1DIG, ZL3CW, and UN9LW

[KL7L](#), who also holds the Part 5 authorization WE2XPQ, posted [a video](#) that walks through his 630 meter station, talking about the various components that he uses to get a decent signal on this new band. There are some good pointers for some of the equipment one might use, and conditions that could influence operating on this band.

"...by removing audio transformers and low pass filters many 100 watt stereo amps will work at this frequency" -- Quote from an [email by KL7UW](#) on suggestions of amplifiers for use on 630 meters. W1VD's website [describes the work he and W1TAG did getting Hafler audio gear](#) working on LF and MF.

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/>