



Legacy Amateur Radio Club

RCA AMATEUR RADIO CLUB



AFFILIATED CLUB

INDIANAPOLIS, INDIANA

NOVEMBER 2018

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, NOVEMBER 13th, 6:30 PM AT
[SQUEALERS](#), 5899 E. 86th STREET, Indianapolis

RCA ARC NEWS

SUMMARY OF THE OCTOBER MEETING – Thanks to all who attended the October meeting. AF9A and K9RU did install the 100 watt amp on the 88 repeater and it is now running at full power. We left the 2M antenna for John, KF9UH, to install on the west side receive site. We still plan to move the Fusion repeater into the existing repeater rack, consolidating everything into one rack. KU9V asked to use the repeater for the Diabetes Run and we need to turn off the Echo Link during the run. N9KZJ talked about the work going on at the War Memorial and that several people are operating from other locations as WW2IND/A and will receive a special QSL card. Ron, WB9DKL is operating from W9IVY on CW.

JOE CLAYTON 1949 – 2018

<https://www.legacy.com/obituaries/louisville/obituary.aspx?n=joseph-p-clayton&pid=190663357&fhid=13413>

<https://www.bellarmine.edu/news/archives/2018/11/04/in-loving-memory-of-joseph-p-clayton-'71-'16h/>

AMATEUR RADIO LICENSE TEST SESSION –

Date & Time: Saturday, November 10, 2018, Noon (Walk-ins allowed)

Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd
Indianapolis, IN 46254-2407

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

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

- Nov 17-19 ARRL SS Phone <http://www.arrl.org/sweepstakes>
- Nov 17-18 Ft Wayne Hamfest <http://www.acarts.com/cdivconvention.htm>
- Nov 24-25 CQ WW Phone DX Contest <https://www.cqww.com/rules.htm>
- Nov 30-Dec 2 ARRL 160M CW Contest <http://www.arrl.org/160-meter>
- Dec 8-9 ARRL 10M Contest <http://www.arrl.org/10-meter>
- Jan 5-6 ARRL RTTY Roundup <http://www.arrl.org/rtty-roundup>

For More Contests Information: <http://www.contestcalendar.com/>

Opportunities for public service: <http://indyhams.org/event>

NEW CEO WANTS ARRL TO SERVE ALL AGES AND AMATEUR RADIO INTERESTS

Newly elected ARRL CEO Howard Michel, WB2ITX, is still on the uphill side of the learning curve as he acquaints himself with ARRL Headquarters and the nearly 90 staffers who work there. The New Jersey native arrived at HQ on October 15 and has spent much of his time since meeting with department managers and others to get his bearings, with an eye toward building consensus and aligning people, programs, and services in the same direction.

"I'm still trying to understand what is working and where the challenges are," Michel said. "Once I understand where the challenges are, I need to understand *why*. Before I make any changes in what we're doing, I need to make sure the change is a step in the right direction and for the right reasons, and not kind of a random process."

Michel would like to see ARRL focus on the future of Amateur Radio and not become the redoubt of a particular generation of radio amateur or interest group. He said, "Ham radio shouldn't abandon the old guardians of the hobby, but at the same time, it needs to have new things that appeal to people who have different interests and different passions."

Ham radio appears currently entrenched with opposition often expressed to FT8 and other digital modes and protocols that bend Amateur Radio traditions and conventions, Michel observed. However, as he sees it, technology for the whole of Amateur Radio has been changing, and detractors to advances have always been present. He'd like ARRL to encourage more technological diversity without creating controversy.

"My kick is seeing the technology advance," the former IEEE president and CEO said. "I want to see hams embrace the new technology -- as long as we do that in a way that those who *don't* adopt the new technology won't feel abandoned." In his view, the real reason behind the continued enthusiasm for CW "is not the technology; it's the legacy."

At the same time, resources should reflect usage and interest, with respect to the spectrum and with respect to how many pages *QST* devotes to a particular interest area. "Everything should reflect the growth and change, without abandoning the legacy interests."

Acknowledging the incessant push to get more young people into Amateur Radio, Michel wants to explore ways "to morph some of the League's processes and services and products into something that would appeal to the newer generation of hams."

"Young people in general don't join organizations, but they join causes," he said. "With that kind of attitude, how do we develop the same kind of ability for people interested in Amateur Radio to self-organize around causes? And if we can design the infrastructure around that, maybe they'll see value in ARRL and become a new type of member -- not one who necessarily comes to ham club meetings once a month but finds the League can facilitate what they want to do."

Michel said he's always enjoyed tinkering with ham gear, building it, modifying it, and repairing it, and then making it do something new or different. He concedes that while he has not had an opportunity to do much hamming as he's moved around with the military and for academic and business pursuits, he'd like to become more active, and he is presently exploring his options as an apartment dweller. As for FT8, he'd like to try it, if for no other reason than the novelty.

Michel said he definitely wants to encourage partnerships with other organizations with which ARRL might share some common ground, including IEEE.

"We can't do everything ourselves. We have to find partnerships," he said. Some IEEE operating units would be applicable to Amateur Radio, and he's already heard from two unit heads that are both hams.

Michel also feels that radio amateurs need to extend their gaze beyond the everyday nuts and bolts of Amateur Radio operating. "What we need to do is protect the spectrum from competition, develop interest in the various facets of Amateur Radio, and not try to pick fights 'in house,'" he said. "Spectrum is the gold of the 21st century."

ARRL EXECUTIVE COMMITTEE UPDATED ON REGULATORY, GOVERNANCE ISSUES

The ARRL Executive Committee (EC) met on October 20 in Bloomington, Minnesota. During his opening comments, ARRL President Rick Roderick, K5UR, who chaired the session, said his membership contacts have indicated that strong support exists for the Entry-Level License Enhancement petition to the FCC, as well as for the Volunteer Monitor Program that would supplant the current Official Observers program.

General Counsel Chris Imlay, W3KD, told the EC that the Amateur Radio Parity Act remains alive in Congress as part of the House-passed version of the Financial Services and General Government authorization Act ([FSGG](#)). The measure is now before a House-Senate conference committee to resolve differences between the versions passed by each house. Imlay indicated that administrative implementation of the bill's provisions remains on the table should the act not be included in the FSGG authorization bill.

Imlay said that ARRL is awaiting final approval from the FCC of a new *Memorandum of Understanding* for the Amateur Auxiliary. Discussions are under way with key players planning the rollout and implementation of the Volunteer Monitor program.

The EC was also told that the FCC has yet to reply to ARRL's concerns regarding a recent [FCC Enforcement Advisory](#) that addressed the importation and use of non-certified radios, which have been marketed to the general public. ARRL officials recently conferred with FCC officials about the Advisory, expressing concerns about a portion of the notice that called on radio amateurs possessing such radios not to use them. ARRL officials believe there was no valid legal basis for that assertion in the notice. The EC directed Imlay to prepare a "white paper" explaining ARRL's position on the issue to inform members in response to inquiries.

In another FCC matter, ARRL officials met with the chief and staff members of the FCC Wireless Telecommunications Bureau to urge more rapid FCC resolution of a series of long-pending rulemaking proceedings now before the Bureau. Most urgent are the long-delayed "symbol rate" petition (WT Docket 16-239) and the ARRL's Entry-Level License Enhancement petition. The FCC has not yet put the latter petition on public notice for comment.

In other action, the Committee directed the Board's National Broadband Plan Committee to continue monitoring potential threats to the 5.850 - 5.925 GHz, 10 GHz, and 24 GHz bands. Amateur allocations within the so-called "mid-band" spectrum (3.7 - 7.125 GHz) are now under consideration for fixed and mobile broadband allocation.

On the subject of the *ARRL Policy on Board Governance and Conduct of Members of the Board of Directors and Vice Directors*, the EC considered and extensively discussed two proposed restatements of that policy. The EC adopted a motion to recommend a draft proposal prepared by the committee appointed by the President to the full Board, with a draft prepared by Imlay also presented as an alternative. The Board holds its next regular meeting in January.

The EC also received a status report on the review of Ethics and Elections Guidelines to be presented to the Board in January. The ad hoc committee formed for the purpose will circulate its proposal 60 days in advance of the January Board meeting.

[Minutes](#) of the October 20 EC meeting have been posted. --ARRL

FT8 TO BE PERMITTED IN 2019 ARRL RTTY ROUNDUP JANUARY 4 -5, 2019

The ARRL Contest Branch has announced that participants in the 2019 [ARRL RTTY Roundup](#) will be permitted to use the new FT8 protocol, which is part of the [WSJT-X](#) software suite. The RTTY Roundup takes place January 5 - 6, 2019.

"Even though digital modes other than RTTY have been permitted in the RTTY Roundup for 30 years, FT8 was excluded in 2018, because it could not manage the required exchanges," ARRL Contest Branch Manager Bart Jahnke, W9JJ, said. "Through the work of the *WSJT-X* development team, the latest version of FT8 can handle the necessary exchanges that earlier versions were unable to do."

Some limitations will apply to FT8 entrants. Participants must use [WSJT-X version 2.0](#) or later to ensure they are able to transmit and receive the exchange messages the event requires. No unattended operation, including QSO/macro automations, will be allowed. Neither is FT8's Fox and Hounds mode; each contact must be carried out in a one-to-one mode, manually accepting/logging each contact.

Because ARRL contest rules regarding spotting assistance prohibit the use of "automated, multi-channel decoders" by Single-Operator entrants, stations using software that decodes *more than one* FT8 signal at a time will have to enter as Single-Operator Unlimited or as Multioperator, just as PSK participants have had to do in the past when using *fldigi* or *DigiPan* software.

The Contest Branch is encouraging participants to spread out to help increase decoding and contact success.

"This is a great opportunity for beginners interested in digital mode contesting," Jahnke said. [Complete rules](#) are on the ARRL website. Read [more](#).

ARRL, FCC DISCUSSING ISSUE OF UNCERTIFIED IMPORTED VHF/UHF TRANSCEIVERS

ARRL has taken a minor exception to the wording of a September 24 [FCC Enforcement Advisory](#) pertaining to the importation, marketing, and sale of VHF and UHF transceivers and is in discussion with FCC personnel to resolve the matter. The *Enforcement Advisory* was in response to the importation into the US of certain radio products that are not FCC certified for use in any radio service, but identified as Amateur Radio equipment.

"While much of this equipment is actually usable on amateur bands, the radios are also capable of operation on non-amateur frequencies allocated to radio services that require the use of equipment that has been FCC certified," ARRL said. "Such equipment is being marketed principally to the general public via mass e-marketers and not to Amateur Radio licensees."

ARRL said the upshot is that the general public has been purchasing these radios in large quantities, and they are being used on the air by unlicensed individuals.

"Radio amateurs have complained of increased, unlicensed use of amateur allocations by people who are clearly unlicensed and unfamiliar with Amateur Radio operating protocols," ARRL said. But while it supports the general tenor and intent of the *Enforcement Advisory*, ARRL said it disagrees with the FCC on one point.

"In several places, the *Enforcement Advisory* makes the point that 'anyone importing, advertising, or selling such noncompliant devices should stop immediately, and anyone owning such devices should not use them,'" ARRL pointed out. "The *Advisory* broadly prohibits the 'use' of such radios, but our view is that there is no such prohibition relative to licensed Amateur Radio use -- entirely within amateur allocations -- of a radio that may be capable of operation in non-amateur spectrum, as long as it is not actually used to *transmit* in non-amateur spectrum.

ARRL has had extensive discussions about this issue with FCC Wireless Bureau and Enforcement Bureau staff, and those discussions are ongoing.

"It is important to protect the flexibility of the Amateur Service as essentially an experimental radio service, but it is also very important to stop the unlawful importation and marketing of illegal radios in the United States and the use of those radios by unlicensed persons," ARRL maintained. "We will keep our members informed as our discussions with FCC on this subject continue." --ARRL Letter

FAA REAUTHORIZATION ACT OF 2018 OVERHAULS MARKING REQUIREMENTS FOR SHORT RURAL TOWERS

Thanks to ARRL efforts on Capitol Hill, language in the [2018 Federal Aviation Administration \(FAA\) Reauthorization Act](#), just signed by President Donald Trump, resolves the issue of problematic or preclusive rules affecting some rural Amateur Radio towers. The previous FAA Reauthorization Act of 2016 had instructed the FAA to enact tower-marking requirements, similar to those in some state statutes, aimed at improving aircraft safety in the vicinity of meteorological evaluation towers (METs). These towers are typically between 50 and 200 feet and set up in rural areas, often on short notice. In the wake of fatal crop-dusting aircraft collisions with METs, the National Transportation Safety Board (NTSB) had recommended that states institute laws, sometimes called "crop-duster" statutes, requiring marking and registration of METs. While some state crop-duster laws exempted ham radio towers, federal regulations dating to the 1996 FAA Reauthorization Act did not, and ARRL had expressed its concerns since.

"There is no evidence whatsoever that even one Amateur Radio antenna below 200 feet has ever been involved in an aviation accident," ARRL General Counsel Chris Imlay, W3KD, said. "To impose painting and lighting requirements on Amateur Radio antennas between 50 and 200 feet tall would preclude many, if not most, of the exurban, rural, and, in some cases, suburban Amateur Radio antennas that are and will be sited outside incorporated towns and cities. This would ironically defeat the entire reason such antenna facilities are sited in those environments: because rural and exurban areas are where such antennas are permitted and the few areas where antennas are not precluded entirely by private land use regulations."

Prior to 2017, per long-established FAA regulations, unless such short radio towers were located within the glide slope of airports or heliports, they were not required to be painted or lighted.

After attempting to address the issue through the FAA, ARRL's legislative team met with staff members of Senator Jim Inhofe (R-OK) and other lawmakers and their staffs associated with the congressional committees of jurisdiction. Senator Inhofe -- himself a pilot -- was of the view that the 2016 legislation was excessive and that exemptions should exist for both broadcast

and Amateur Radio antennas and support structures. "We worked with our close allies at the National Association of Broadcasters (NAB), [who were] afraid that this legislation would have a large adverse effect on short broadcast towers," Imlay recounted. "We also worked with the Association of American Railroads, which has hundreds of short towers along rail lines in rural areas that would have been affected."

Imlay said Section 576 of the large 2018 FAA reauthorization now requires that the only towers less than 200 feet tall that have to be painted and lighted are meteorological aids and those within the glide slope of an airport or heliport. The remainder of such towers in rural or agricultural areas lower than 200 feet need to only be included in an FAA-maintained database, which will be updated by the owners of such towers.

Imlay credited members of the ARRL Legislative Advocacy team, as well as Senator Inhofe and ARRL's broadcast and land mobile association partners for getting the language revised in the new, 5-year Reauthorization Act. "We consider this a big success for Amateur Radio," Imlay said, "and it would not have been possible but for the visibility that has been achieved for ARRL through our active Capitol Hill advocacy for the Amateur Radio Parity Act." --ARRL Letter

INTERNATIONAL SPACE STATION CREW MEMBER FIRES UP NA1SS TO SEEK RANDOM CONTACTS

"Hello, America. This is the International Space Station. Who's out there?" And with that "CQ" of sorts on 145.800 MHz, NASA astronaut Serena Auñón-Chancellor, KG5TMT, M.D., spent some time at the helm of NA1SS on October 6 making casual, random contacts -- something that's fairly rare these days. The ISS was on a pass that took the spacecraft up along the east coast of the US at the time. In response to a question, Auñón-Chancellor, who has been on station since June, told one caller that she's been floating the entire time she's been in space.

"We float every day. Float to work, float back to sleep. It is awesome," she said.

Scott Chapman, K4KDR, of Montpelier, Virginia, edited a [clip of downlink chatter](#) by the 42-year-old flight surgeon and flight engineer.

"During most passes of the ISS where I'm working with the packet digipeater on 145.825, I also monitor 145.800 just in case there is any activity on that frequency," Chapman said in a post to AMSAT-BB. "For the first time in my personal experience, today one of the astronauts was randomly calling to see if anybody was listening. Of course I tried to reply on 145.800 simplex, but there are a number of possible uplinks, and none of them were programmed into my radio. They are now! It was a real thrill and, like so much of this hobby, a learning opportunity."

Auñón-Chancellor is aboard the ISS as part of the Expedition 56/57 crew and is scheduled to return to Earth in December.

The Amateur Radio FM voice frequencies for stations in ITU Regions 2 and 3 are 145.800 MHz down and 144.490 MHz up. For stations in Region 1, the uplink frequency is 145.200 MHz.

IARU REGION 1 VOLUNTEERS AND PARTNERS GETTING BEHIND WRC-19 50 MHZ AGENDA ITEM

International Amateur Radio Union ([IARU](#)) volunteers are continuing their work toward a favorable outcome for World Radio Conference 2019 (WRC-19) Agenda Item 1.1, which seeks a 6-meter allocation for the Amateur Radio Service in Region 1 in the International Telecommunication Union (ITU) *Radio Regulations* Table of Frequency Allocations. The effort is

aimed at aligning the band with the 50 MHz allocations in ITU Regions 2 and 3. In a news release, IARU Region 1 ([IARU R1](#)) President Don Beattie, G3BJ, [described](#) extensive work in various forums and the ITU aimed at gaining support for a 6-meter band in Region 1, rather than the current country-by-country allocations.

"IARU has represented the global voice of Amateur Radio in these meetings, arguing that new applications in Amateur Radio require significant bandwidth at 50 MHz and has set out a proposed utilization of the band which supports its claim," Beattie said. He added that the IARU has also engaged in extensive work on sharing studies using propagation models recognized by the ITU and the European Conference of Postal and Telecommunications Administrations (CEPT).

"The Amateur Service has met strong opposition from a few nation states who argue that the 50 MHz band is already allocated to other services in their countries -- following the closure of many broadcasting stations in recent years which operated in this band -- and believe that sharing the band presents problems," Beattie said.

CEPT Project Team D has prepared two Agenda 1.1 options. The majority of CEPT administrations actively participating in discussions preferred one proposal for a 2 MHz secondary allocation. The second option, the result of a major compromise and preferred by IARU and the European Radio Amateurs' Organization ([EURAO](#)), would see a 500 kHz primary allocation of 50.0 - 50.5 MHz, paired with a secondary allocation of 50.5 - 52.0 MHz. Beattie said either option would be an improvement over the status quo.

Additional meetings lie ahead, including a CEPT Conference Preparatory Group (CPG) meeting in November, and the ITU Conference Preparatory Meeting (CPM) in February.

"It is hoped that the cooperation between IARU and EURAO will continue in future CEPT activities, which are relevant to Amateur Radio," Beattie said.

DWINGELOO RADIO TELESCOPE RECEIVES DARK-SIDE LUNAR IMAGES FROM CHINESE AMATEUR SATELLITE

The 25-meter Dwingeloo Radio Telescope in the Netherlands has received photos of the dark side of the moon, transmitted by the Chinese [Longjiang-2](#) lunar satellite (DSLWP-B), Lunar-OSCAR 94 (LO-94). One especially dramatic image shows the far side of the moon with Earth in the background, taken by the [Longjiang-2](#) satellite and transmitted by an onboard Amateur Radio transceiver. The Dwingeloo Radio Telescope had been restored by the C.A. Muller Radio Astronomy Station PI9CAM group ([CAMRAS](#)).

"This image represents the culmination of several observing sessions spread over the past few months where we used the Dwingeloo telescope in collaboration with the Chinese team from Harbin University of Technology, who built the radio transceiver on board [Longjiang-2](#), and with radio amateurs spread across the globe," a CAMRAS report said. "During these sessions, we tested receiving telemetry through low-bit rate and error-resistant digitally modulated transmissions, as well as the JT4G modulation scheme designed by radio amateur and Nobel prize winning astrophysicist Joe Taylor, K1JT, for weak-signal moonbounce experiments." [Other images](#) are of the lunar surface, lens flares, and the starry sky as seen from lunar orbit.

The [Longjiang-2](#) transceiver was designed to allow radio amateurs to downlink telemetry and relay messages through a satellite in lunar orbit, as well as to command it to take and downlink images. Some Earth-bound radio amateurs and sky watchers have already received images from the moon-orbiting satellite.

Longjiang-2 was launched last May into a lunar transfer orbit (a companion *Longjiang-1* microsat ended up in Earth orbit), deployed as a secondary payload with the *Queqiao* relay satellite as part of the Chang'e 4 mission. The satellite will test low-frequency radio astronomy and space-based interferometry; no transponder is aboard.

In preparation for the mission and discussion of the possibilities of the antennas and receivers in the radio telescope, MingChuan Wei, BG2BHC, and Hu Chaoran, BG2CRY, both of the Harbin Institute of Technology, visited Harry Keizer, PE1CHQ, and Jan van Muijlwijk, PA3FXB, of CAMRAS.

The Chang'e 4 mission will mark the first-ever attempt at a soft landing on the far side of the moon. The Chang'e-4 lander and rover are scheduled to launch in December.

The spacecraft transmits on 70 centimeters (435.400/436.400 MHz) with 250/500 bps GMSK using 10 kHz wide FM single-channel data, with concatenated codes or JT4G.

Cees Bassa and Tammo Jan Dijkema have written a slightly more detailed blog post, "[Imaging the Earth from Lunar Orbit](#)," in *The Planetary Society*.

ARISS PLAN UNDER CONSIDERATION FOR NASA'S DEEP SPACE GATEWAY PROGRAM

Amateur Radio on the International Space Station ([ARISS](#)) International delegates were pleased to learn last week that an ARISS plan is under consideration by NASA's Deep Space Gateway ([DSG](#)) program. NASA Gateway Utilization Manager John Guidi, ex-KF4YUI, informed those attending the annual ARISS-International in-person meeting, held in College Park, Maryland, that ARISS is the only noncommercial entity whose ideas are under study by the program. The ARISS plan focuses on Amateur Radio communication, including optical communication channels, as well as equipment development, team cooperation, education, and public outreach.

"Naturally, because the NASA Deep Space Gateway program is so new and has yet to be fleshed out, ARISS needs to follow NASA's lead in being open to how the DSG program flows," ARISS-US Delegate for ARRL Rosalie White, K1STO, explained. "ARISS's first moves need to be loose enough that the plan, development, and execution can go in ways that dovetail with what is needed."

The Deep Space Gateway would be a small outpost orbiting the moon that would act as a "spaceport for human and robotic exploration to the moon and beyond," NASA has said. Crewed by four people, it would provide an operational platform for further exploring the lunar surface and a hub to deeper space destinations. NASA hopes to have the completed Gateway in lunar orbit as early as 2024.

The ARISS-International annual meeting on October 17 - 19 ran back to back with the first-ever ARISS Education Summit, held October 15 - 16. At the ARISS-International sessions, delegates and team members from around the world presented and listened to talks on all aspects of ARISS, from operations to education to hardware -- current and upgrades -- to future projects. The team heard the latest news on HamTV, the Interoperable Radio System, the antenna change-out required by the European Space Agency's *Bartolomeo* platform, and proposed [Astrobee](#) activities, HamTV II, and Radio-Pi projects.

Astrobee is a robot that will fly around the ISS with the astronauts to help scientists and engineers develop and test technologies for use in zero-gravity, aid astronauts with routine chores, and offer Houston flight controllers additional eyes and ears on the spacecraft.

Team members enjoyed viewing a live-streamed ARISS contact in Belgium. Team members unable to travel to Maryland were able to teleconference into the sessions.

On hand for the earlier ARISS Education Summit were teachers from the US and elsewhere; ARISS-US Education Committee members; STEM educators from College Park Airport Museum; education leaders from various NASA entities, including the Space Communications and Navigation (SCaN) office, nearby Goddard Space Flight Center (GSFC), and the manager of the ISS US National Laboratory -- Center for the Advancement of Science in Space ([CASIS](#)); a group of SCaN-sponsored mid-Atlantic teachers, and University of Maryland educators and students. Attendees saw a demonstration of ARISS slow-scan television (SSTV) and several ham satellite contacts. ARISS-US Education Committee teacher Melissa Pore, KM4CZN, arrived from Virginia with eight of her students, who talked about their ARISS-related STEM studies. Read [more](#). -- *Thanks to Rosalie White, K1STO*

ARRL SAYS WIRELESS POWER TRANSFER FOR ELECTRIC VEHICLES PETITION IS PREMATURE

ARRL is opposing a *Petition for Rulemaking* ([RM-11815](#)) by several vehicle manufacturers that calls on the FCC to "adopt field strength limits in Section 18.305 that will allow higher-power wireless charging technologies operating in the 79 - 90 kHz range" to accommodate what the petitioners call "next-generation" wireless power transfer for electric vehicles (WPT-EV). [Comments](#) filed on October 29 by ARRL contend that the petition is "woefully incomplete and inadequate" in its analysis of consequent out-of-band emissions from WPT-EV systems in the low- and medium-frequency ranges using upward of 11 kW of power. Given the high power levels, ARRL said harmonic emissions from WPT-EV systems could be appreciable, with the AM Broadcast Band and Amateur Radio as potential interference victims. "Interference potential from intentional radiators requires substantial evaluation," ARRL asserted in its remarks.

The issue of WPT-EV is a World Radiocommunication Conference 2019 (WRC-19) agenda item, for which studies are still under way. The *Petition* "quite obviously prejudices the outcome of WRC-19 Agenda Item 9.1.6," ARRL said, stressing that the *Petition* is simply premature at this point.

"The *Petition* is typical [of those that] tout a new application of old technology," ARRL commented. "So as to establish a sense of urgency, the bulk of the *Petition* is dedicated to establishing a public interest justification for making a rule change now, in order to accommodate the technology."

The *Petition* seeks a specific field strength limit of 74.4 dB μ A/meter (at a distance of 10 meters), regardless of the charging system's operating environment. That works out to about 2.07 V per meter (at 10 meters) or 126 dB μ V -- 126 dB above 1 μ V. The *Petition* presumes that the optimum internationally harmonized frequency range for WPT-EV is already known to be 79 - 90 kHz and that the optimum field strength to minimize any impact on radiocommunication services has been established, ARRL commented.

"The problem, however, is that there is nothing in the four corners of the *Petition* that would justify those assumptions," ARRL told the FCC. ARRL said the rollout of WPT-EV "has profound implications in terms of its ubiquity in future years," and called on the Commission to deny the petition without prejudice or dismiss it altogether.

"Quite clearly, the petitioners have 'jumped the gun' by filing this *Petition* now," ARRL concluded. Read [more](#)

INDIA GAINS THREE NEW BANDS, SWEDEN GETS PERMANENT 60-METER ACCESS

Radio amateurs in India now have access to three new bands. India's Ministry of Communications' Department of Telecommunications has published an updated [National Frequency Allocation Plan](#), effective October 25, which lists the new bands at 5 MHz (60 meters), 472 kHz (630 meters), and 136 kHz (2300 meters). All allocations are on a secondary basis.

On 60 meters, hams now have access to 5,351.5 – 5,366.5 kHz at 15 W EIRP; on 630 meters, 472 – 479 kHz at 1 W EIRP, and on 2300 meters, 135.7 – 137.8 kHz at 1 W EIRP.

Sweden's IARU member-society SSA reports that radio amateurs there gained routine secondary access to 5,351.5 – 5,366.5 kHz at 15 W EIRP on November 1. Temporary permission has been available since 2016, by application. SSA recommends following IARU Region 1 guidelines for using the band; a [Swedish version](#) is available. — *Thanks to Paul Gaskell, G4MWO, Editor, The 5 MHz Newsletter; SSA*

FCC FINES AMATEUR RADIO LICENSEE \$25,000 FOR OPERATING UNLICENSED FM STATION

In an FCC Enforcement Bureau case going back to early 2015, a Paterson, New Jersey, Amateur Radio licensee has been penalized in the amount of \$25,000 for allegedly continuing to operate an unlicensed FM radio station. The FCC issued a [Forfeiture Order](#) on October 30 to Winston A. Tulloch, KC2ALN, a General class licensee. The fine followed an April 2018 *Notice of Apparent Liability for Forfeiture* ([NAL](#)) issued to Tulloch for alleged “willful and repeated violation” of Section 301 of the Communications Act of 1934, as amended, by operating an unlicensed FM radio station on 90.9 MHz in Paterson. Tulloch did not respond to the *NAL*, the FCC indicated.

“Commission action in this area is essential because unlicensed radio stations do not broadcast Emergency Alert Service messages and therefore create a public safety hazard for their listener,” the FCC said in the *Forfeiture Order*. “Moreover, unlicensed radio stations create a danger of interference to licensed communications and undermine the Commission’s authority over broadcast radio operations.”

Following up on February 2015 complaints regarding pirate radio operations in Paterson, FCC agents spotted a signal on 90.9 MHz that “appeared to be an unauthorized radio station.” Agents determined the signal was emanating from a multi-family dwelling and noticed an FM antenna on the structure. The measured field strength exceeded the limits allowed for Part 15 unlicensed devices.

Through a solicitation broadcast on the station for advertisers and a vehicle parked outside the building, the FCC agents were able to determine that the telephone number in the announcement belonged to Tulloch, and the car was registered in his name. FCC agents made several visits to Paterson in late 2015 and early 2016. In October of 2016, agents returned to Paterson and determined that the signal source had relocated to another nearby multi-family structure. A *Notice of Unlicensed Operation (NOUO)* was posted on the door of the building and the following month, the FCC mailed an *NOUO* to Tulloch.

Subsequent visits revealed that the station was still in operation, and, at some point, had moved back to its prior location. Additional *NOUOs* were issued. Finally, on September 15, 2017, two agents returned to Paterson and determined that the station no longer was on the air.

In the *Forfeiture Order*, the FCC incorporated by reference the details of the investigation spelled out in the earlier *NAL*.

The Tulloch case is among dozens that the FCC Enforcement Bureau has initiated in the past couple of years in efforts to shut down pirate broadcasters across the US, the vast majority of which are *not* FCC amateur licensees.

SHORTS

Home Brewers! Free parts! – If you're building something or repairing something you might check this web site: <http://w7zoi.net/ke6f.html>

Weather has forced an early shutdown of the [VP6D Ducie Island DXpedition](#). – "It's been raining; we're waterlogged," an October 24 update said. "In 24 hours we expect a significant storm to pass through, with heavy rainfall and up to 25-knot winds with potential for stronger gusts. Pileups were energetic and reasonably well behaved.

As the DXpedition got under way, operators reported that signals on their end were loud. The VP6D site consists of a main camp and kitchen, tents for sleeping, and generators, with the SSB camp located at the main camp and a CW camp about a 30-minute walk from the main camp.

The team announced just after 1600 UTC on October 31 that, "due to an expected worsening in landing conditions," it would cease operations. The final contact count was 121,136. Most contacts -- 67,686 -- were on CW, with 28,736 on SSB, and 24,714 on digital modes. "It's been raining all night, with 20+ knot winds," an October 31 news bulletin from the team said. "The ship is about 300 meters off shore, the forecast indicates continuing 20+ knot winds, 2 - 3 meter seas. We want to thank everyone for their support, and hope we met your expectations."
-ARRL Contest Letter

[ARRISS](#) and [AMSAT](#) are supporting a [FundRazr campaign](#) to raise \$150,000 for critical ham radio infrastructure upgrades on the International Space Station (ISS). "ARRISS is in critical need of infrastructure upgrades to ensure that programs such as talking to astronauts in space using Amateur Radio can continue," ARISS International President Frank Bauer, KA3HDO, said. ARISS seeks several upgrades, including new Amateur Radio communication and experiment capabilities, such as an enhanced voice repeater, updated digital Automatic Packet Reporting System (APRS), and slow-scan television (SSTV) with image uplinks and downlinks in both US and Russian segments. They're also looking for next-generation radio systems that will support easier mode and capability transitions, and a multi-voltage power supply to support present and future radio capabilities. Bauer points out that ARISS needs to build 10 next-generation radio systems to support the development of on-orbit operations, training, and longterm maintenance. This includes two units for on-orbit use (one unit each for the US and Russian segments), two flight spares, three units for training, one unit for testing, and two units for ground-based maintenance and troubleshooting. -- *Thanks to AMSAT News Service via Frank Bauer, KA3HDO*

US Ham-Astronaut, Russian Cosmonaut Safe in Wake of Soyuz Launch Failure -- A Russian *Soyuz* spacecraft crew launch to the International Space Station (ISS) suffered a booster failure that resulted in an emergency flight abort shortly after lift-off from Kazakhstan on October 11, but the crew is safe. On board the *Soyuz* MS-10 were US Astronaut Nick Hague, KG5TMV, and Russian Cosmonaut Aleksey Ovchinin. NASA Administrator Jim Bridenstine promised "a thorough investigation."

Shortly after launch, there was an anomaly with the booster and the launch ascent was aborted, resulting in a ballistic landing of the spacecraft. Search-and-rescue teams were deployed to the landing site. Hague and Ovchinin were reported to be in good condition and transported to the Gagarin Cosmonaut Training Center in Star City. This was Hague's first launch and Ovchinin's second.

In the wake of the Soyuz failure, operations to transport ISS crew members have been suspended. The current ISS crew of cosmonaut Sergey Prokopyev and astronauts Serena Auñón-Chancellor, KG5TMT, and Alexander Gerst, KF5ONO, is scheduled to return to Earth in December.

Well-Known Contester, "Antenna Farmer" Paul Bittner, W0AIH, SK - of Fall Creek, Wisconsin, died doing what he loved on October 31, when a tower-climbing mishap claimed his life at his well-known [antenna farm](#). The ARRL Life Member and Maxim Society member was 84. A member of the CQ Contesting Hall of Fame and retired Lutheran pastor, Bittner was a well-known and respected figure within the Amateur Radio community and a prolific contester and DXer. His call sign was nearly always present in most major operating events, and even in a few lesser-known contests, and news of his tragic death and condolences and accolades quickly spread among those who knew him best.

Bittner was licensed in 1949 and held the same call sign ever since. He and his wife, Mary, WB0PXM, moved in 2000 to "The Farm," a 120-acre spread in west-central Wisconsin. The first of the more than 50 towers began sprouting there before their arrival in 1982. As a ham, he enjoyed multi-multi contesting and DXing. His favorite band was 160 meters, and his favorite contest was the CQ World Wide DX CW Contest. Bittner's son-in-law — Paul Husby, W0UC — operated VHF contests from The Farm and was a multi-multi regular as well.

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/>