



# RCA Amateur Radio Club Indianapolis, IN

[www.w9rca.org](http://www.w9rca.org)



NOVEMBER 2019

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, NOVEMBER 12th 6:30 PM AT  
KNIGHTS OF COLUMBUS, 2100 EAST 71<sup>st</sup> STREET, INDIANAPOLIS, IN

## RCA ARC NEWS

**October Meeting** – At the Oct. meeting, the problems, a form of intermod, in the repeater was discussed. The west side receiver site is the culprit and we think the problem has been fixed using a crystal filter on the receiver input. This filter is from the days when we operated two repeaters at the Sherman Drive plant. 146.88 and 145.15 MHz. No further information was available for 2020 Field Day. The cost of the site used the last two years has dramatically increased. The ARRL VHF contest was discussed. There is still lots of HF DX to be worked using FT8. We've have looked at the Club insurance plans used by come other clubs and decided to keep the same insurance we presently have. Remember the Ft. Wayne Hamfest Nov. 16-17.

**The legendary Radio Corporation of America (RCA) incorporated on October 17, in 1919.** RCA negotiated patent cross-licensing agreements with other industry leaders, paving the way for the explosive development of American radio in the early 1920s. In 1921, WCC in Chatham, Massachusetts, became the first RCA coastal station equipped with tube sets offering 2 kW on 600 and 2200 meters. The WCC Amateur Radio Association ([WCCARA](http://www.wccara.org)) continues its year-long celebration of the RCA centennial as WA1WCC/100RCA. -- *Thanks to Ed Moxon, K1GGI, trustee, WCC commemorative station WA1WCC*

## AMATEUR RADIO LICENSE TEST SESSION

**Time:** Saturday, November 9, 2019, 12:00 pm (Walk-ins allowed)  
**Location:** Salvation Army EDS Training Facility, 4020 Georgetown Rd  
Indianapolis, IN 46254-2407  
**Contact:** Jim Rinehart, [k9ru@arrl.net](mailto:k9ru@arrl.net), 317 721-1458

## HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Nov 09 [Indianapolis Monumental Marathon](#)  
Nov 16 -17 Fort Wayne Hamfest, <http://acarts.com/hfmain.htm>  
Nov 16-18 ARRL SS Phone <http://www.arrl.org/sweepstakes>  
Dec 06-10 ARRL 180M CW <http://www.arrl.org/160-meter>

## THE AMERICAN LEGION AMATEUR RADIO CLUB TO OPERATE SPECIAL EVENT STATION N9V ON VETERANS DAY, NOVEMBER 11

The American Legion Amateur Radio Club (TALARC) headquarters station, K9TAL, will anchor Veterans Day operations for special event N9V on Monday, November 11.

K9TAL will be joined by several TALARC stations around the US for its annual national salute to veterans. The American Legion is celebrating its 100th anniversary this year. Operation will be from 1800 to 0000 UTC on or about 7.285, 14.285, and 21.285 MHz.

Certificates will be available to all sending a QSL card. More information is on the N9V profile page on QRZ.com. — *Thanks to Jim Harris, W0EM, and The National Legion Amateur Radio Club*

## ARRL TO LAUNCH NEW ON THE AIR MAGAZINE IN JANUARY

ARRL is launching a new magazine, *On the Air*, in January 2020. To be published on a bimonthly basis, *On the Air* will offer new and beginner-to-intermediate-level radio amateurs a fresh approach to exploring radio communication. Each issue will include advice and insights on topics from the variety of Amateur Radio interests and activities: radio technology, operating, equipment, project building, and emergency communication. The goal of this new magazine is to be a vital resource in helping new and newer radio amateurs get active and involved in radio communications.

"*On the Air* responds to the brand new and not-so-brand-new radio amateur seeking ideas and answers," said QST Managing Editor Becky Schoenfeld, W1BXY. Schoenfeld is part of the ARRL staff team that developed the new magazine. The planning included an extensive national-level study of new Amateur Radio licensees, identifying their motivations for getting licensed and their experiences of getting started. A focus group responded positively to a trial sample edition of the magazine.

"Too many new licensees never take the next step," says Schoenfeld. "We're excited to introduce a new Amateur Radio magazine for this audience, aimed at getting them active, getting them involved, and getting them on the air."

The first issue of *On the Air* will be published in January 2020 (January/February issue) and will be introduced as a new ARRL membership benefit.

Effective November 1, when eligible US radio amateurs join ARRL or renew their memberships, they will be prompted to select the print magazine of their choice — *On the Air* or *QST*.

Current members receiving the print edition of *QST*, upon renewal, may choose to continue receiving the monthly print edition of *QST* or the print edition of the bimonthly *On the Air*.

All ARRL members, including international members, will be able to access digital editions of both *QST* and *On the Air*. Members who already access *QST* on the web or from the mobile app will be able to access *QST* and *On the Air* starting in January. --ARRL Letter

## REPORT CAUSES CONCERN AND CONFUSION IN CALIFORNIA'S AMATEUR RADIO RANKS

By all credible and reliable accounts, the State of California has *not* turned its back on Amateur Radio as an emergency communication resource, nor have established repeater owners been

asked to remove their equipment from state-owned sites unless they pay sizable fees. The California controversy, inflamed by a viral YouTube video, stemmed from a California Department of Forestry and Fire Protection (CAL FIRE) communication telling a repeater owner or group that Amateur Radio equipment would have to be removed from a state-owned site or "vault" if the owner(s) determined the cost was too great to proceed with a formal application to keep it there.

"I do understand and appreciate all of the service you have provided in the past," CAL FIRE's Lorina Pisi, told the unknown repeater owner(s) or group(s) last month. "However, with constantly changing technological advances, there is no longer the same benefit to State as previously provided. Therefore, the Department no longer financially supports HAM operators [sic] radios or tenancy. If you desire to enter into a formal agreement to operate and maintain said equipment, you must complete and submit attached collocation application along with fee as outlined on page one of application. There is cost associated with getting an agreement in place."

It's not clear to whom Pisi's memo was addressed, because any name or names were redacted from the version of the memo that is being circulated. ARRL reached out to Pisi but has not heard back.

ARRL officials who have also looked into the situation agree that it's been blown out of proportion by parties with their own agendas.

"The State of California has not made any determination we can find 'that Ham Radio [is] no longer a benefit,'" Pacific Division Director Jim Tiemstra, K6JAT, is quoted on the [Sacramento Valley Section website](#). "What happened is that CAL FIRE has transferred responsibility for its communications sites to its property management department. That department has the task of evaluating each site, its condition, use, and tenants. If a repeater not known to be associated with the emergency management function of a local jurisdiction is found in a CAL FIRE vault, the default action is to move it out or subject it to commercial rental rates."

ARRL Southwestern Division Director Dick Norton, N6AA, has been responding to inquiries with the same message. Read [more](#). --ARRL Letter

## ARRL CREATES NEW ONLINE GROUPS FOR MEMBERS TO COMMUNICATE WITH LEADERSHIP

ARRL's Committee on Communication with ARRL Members has opened new online forums where all radio amateurs -- ARRL members and non-members alike -- can discuss issues and topics in two-way conversation with ARRL leadership. The new groups are aimed at enhancing communication among ARRL leadership, staff, members, and prospective members, in a manner that enables timely updates and collegial discussion.

This project was based on the success over the past several years of the ARRL-LoTW (Logbook of The World) Group in responding to Amateur Radio operators' questions and generating discussion on ways to improve that program. "The LoTW initiative has clearly demonstrated the effectiveness of online Groups as a means of achieving the desired interaction," ARRL said in announcing the new groups.

ARRL has added three online groups:

- [ARRL-Contesting](#) -- Moderated by ARRL Contest Advisory Committee Chairman Dennis Egan, W1UE.
- [ARRL-Awards](#) -- Moderated by ARRL Radiosport and Field Services Manager Bart Jahnke, W9JJ.

- [ARRL-IARU](#) -- Moderated by IARU Secretary Dave Sumner, K1ZZ.

The existing [ARRL-LOTW](#) group, which has about 4,750 members, remains hosted by Groups.io but has moved.

Everyone who subscribes to an ARRL Group is also automatically subscribed to the "ARRL Groups" group. This administrative feature will allow ARRL to convey routine announcements relevant to subscribers of all ARRL groups.

ARRL IT Manager Michael Keane, K1MK, worked with Groups.io to set up the new groups. Since these new groups are hosted on a Groups.io platform, those wishing to subscribe must use a Groups.io username and password, if they have one, or create a Groups.io account if they don't.

In the months ahead, the Committee envisions creating more online groups to support two-way communication focusing on areas of additional interest to radio amateurs, including ARRL activities, services, initiatives, and policies.

ARRL currently hosts members-only online forums that include Awards and Contesting. While these forums will continue to operate, participants will be encouraged to post new threads in the appropriate new groups.

Participants will be expected to adhere to some basic ground rules:

- All questions are welcome, no matter how many times they have already been asked and answered, or how obvious the answers might be in the documentation.
- Neither personal attacks nor foul language will be tolerated. Violators will immediately be placed on "moderated" status, meaning their subsequent posts will require Moderator approval until the Moderator's trust has been regained.
- Individuals posting are reminded that these forums are open to everyone, including prospective hams and operators who are not ARRL members but may be thinking about joining. Civility and courtesy are expected, even when you may take issue with a post or thread topic. Read [more](#).

## AMSAT GOAL: "AMATEUR RADIO IN EVERY CUBESAT"

AMSAT wants to see Amateur Radio in every CubeSat, and it's partnering with non-Amateur Radio partners to make that happen. In the "Apogee View" editorial for the September/October issue of *The AMSAT Journal*, Executive Vice President Paul Stoetzer, N8HM, wrote, "[W]e continue to support a stream of LEO satellites. RadFxSat-2/Fox-1E is ready for launch no earlier than December 1, 2019, on the ELaNa XX mission. The linear transponder and telemetry system carried aboard Fox-1E was designed for use in different CubeSats by merely adding an interface adapter for connection to the host bus."

Stoetzer said CubeSat programs interested in launching an Amateur Radio payload may partner with AMSAT to carry a Fox-1E module on their spacecraft. "By providing Amateur Radio capability, the CubeSat program gets a worldwide ground station network to receive their telemetry and experiment data while the Amateur Radio community gets a transponder to use in orbit," he pointed out.

Stoetzer said the first such partnership will be with the Husky Satellite Lab at the University of Washington. Its 3U CubeSat -- HuskySat-1 -- is set to launch on the ELaNa XXV mission from Wallops Island, Virginia, no sooner than November 2. A Northrop Grumman *Cygnus* spacecraft will carry HuskySat-1 to the International Space Station, and after completing its mission

there, *Cygnus* will continue to an orbit of approximately 500 kilometers (310 miles) to deploy HuskySat-1.

"After a 30-day mission to complete tests of its experimental payloads -- a pulsed plasma thruster, and a K-band (24 GHz) communications system -- the satellite will be turned over to AMSAT, and the linear transponder will be made available to the Amateur Radio community," Stoetzer said.

AMSAT will celebrate its 50th anniversary at its 2019 Board of Directors meeting and AMSAT Space Symposium October 18 - 20 in Arlington, Virginia. -- *Thanks to AMSAT News Service*

## FCC ASKED TO CLARIFY AMATEUR RULES GOVERNING ENCRYPTED OR ENCODED MESSAGES

The FCC's Wireless Telecommunications Bureau is soliciting comments on a Petition for Declaratory Ruling filed on behalf of New York University (NYU) seeking to clarify that Section 97.113(a)(4) of the Amateur Service rules prohibits the transmission of "effectively encrypted or encoded messages, including messages that cannot be readily decoded over-the-air for true meaning." Comments are due by December 2, with reply comments (comments on comments already filed) due on December 17. The FCC has requested that all filings refer to WT Docket No. 16-239, which grew out of an ARRL *Petition for Rule Making* seeking elimination of symbol rate limitations on the amateur bands and is unrelated to the wider encryption issue.

"For years, certain amateur licensees have violated Section 97.113(a)(4) by relying on an interpretation that contravenes the two bedrock principles — openness and transparency — that have enabled amateur radio licensees to self-regulate the Amateur Radio Service bands effectively," the NYU *Petition* asserts. "This interpretation has restricted Amateur Radio Service licensees' efforts to effectively self-police the amateur bands, thus enabling the continued violation of many other amateur rules. Accordingly, the Commission should eliminate the lingering uncertainty regarding Section 97.113(a)(4)'s meaning and clarify that the rule prohibits the transmission of effectively encrypted or encoded messages, including messages that cannot be readily decoded over-the-air for true meaning."

NYU explained its rationale for involvement in an amateur radio regulatory matter in a July 2019 *ex parte* filing from the university's legal counsel. "As a major center of radio engineering research and scholarship and on whose faculty sat telegraph and Morse code pioneer Samuel Morse, NYU is committed to fostering innovation in, and attracting new entrants to, the fields of Science, Technology, Engineering, and Math (STEM)," the letter to FCC Secretary Marlene Dortch, signed by Ari Q. Fitzgerald of Hogan Lovells US LLP, said. "We can think of no better way for the FCC to promote these goals than to stand up for transparency and openness in amateur radio."

NYU Electrical Engineering Professor Ted Rappaport, N9NB, filed the petition on the university's behalf along with Michael J. Marcus, N3JMM. The petition reflects Rappaport's view that Winlink amateur radio email software is "an example of a system that has contravened the Commission's requirements." He included PACTOR 2, PACTOR 3, PACTOR 4, WINMOR, ARDOP, and VARA in this category as well.

"For years, certain amateur licensees have skirted these requirements, sending and receiving communications over amateur bands using communications modes that incorporate dynamic compression techniques and, by extension, effectively encrypt or encode the communications," the *Petition* contends. "These amateur licensees combine dynamic compression with automatic repeat request (ARQ), which allows only two linked stations to complete a transmission without error."

A footnote in the *Petition* says the efficacy and availability of recently announced software to decode Winlink communications when sent using different PACTOR modes is “unclear” as it applies to existing PACTOR-capable modems. “If any bits or letters are missed or corrupted during the reception — as would be expected under HF propagation — the message cannot be realistically decoded,” the footnote asserts. SCS, the company that created PACTOR, recently unveiled its PMON software that it says offers the ability to monitor the content of PACTOR 1, 2, and 3 transmissions over the air.

## THE FCC HAS DISMISSED OR DENIED FOUR PETITIONS FOR RULE MAKING

All of the petitions were put on public notice earlier this year and comments invited. Edward C. Borghi, KB2E, of Farmington, New York, and Jeffrey Bail, NT1K, of West Springfield, Massachusetts, submitted very similar petitions seeking changes in how the FCC grants Amateur Radio vanity call sign applications. Borghi's *Petition* ([RM-11834](#)), would have prohibited vanity applicants from requesting call signs not designated for the applicant's geographical region, with some exceptions. He complained that applicants had to compete with “out-of-area people for the few 1 × 2 or 2 × 1 or catchy 2 × 3 call signs available in their area of residence.”

Bail's *Petition* ([RM-11835](#)) asked the FCC to give residential preference in competing applications to applicants whose listed FCC address is within the same district/region as the applied call sign. He cited limited availability and increased demand for 1 × 2 and 2 × 1 call signs. The FCC dismissed both petitions in [a single letter](#).

“When the Commission established the vanity call sign system in 1995, it rejected a proposal to restrict vanity call sign applicants to call signs designated for the region in which the applicant resides,” the FCC wrote, because it would restrict a given applicant's choice of vanity call signs to 10% or less of those otherwise assignable.

The FCC concluded that no need exists to require vanity call signs to correspond to a licensee's mailing address, “given that call signs do not automatically change when a licensee moves, and a licensee's mailing address is not necessarily the location from which he or she is transmitting.” The FCC said it rejected similar proposals in the past for the same reasons.

The FCC also [turned away](#) a *Petition* ([RM-11833](#)) from Jerry Oxendine, K4KWH, of Gastonia, North Carolina, who asked the FCC to clarify that states and localities should have no authority to regulate Amateur Radio with respect to enacting “distracted driving” statutes. Oxendine argued that such statutes violate FCC rules on scope and operation of equipment by licensees; violate the intent of the FCC and Congress with respect to Amateur Radio's role in disasters, and hinder emergency operations using mobile equipment.

In denying the request, the FCC took issue with Oxendine's assertion that the strong federal interest in promoting Amateur Radio communication should preempt distracted driving laws.

“Laws that prohibit talking on handheld communications devices while driving do not preclude or unreasonably obstruct mobile use of handheld two-way radios,” the FCC said in denying Oxendine's petition. “These laws apply to the use of handheld devices while driving. A driver can comply with these laws by using a hands-free attachment or by parking the vehicle prior to using a handheld device, both of which are contemplated by our rules regarding two-way radios.”

The FCC said, “The record before us does not demonstrate that state and local laws that prohibit talking on handheld devices while driving stand as an obstacle to amateur communications or actually conflict with federal law in any way.”

The FCC has denied a Petition for Rule Making (PRM) to amend Part 97 station identification rules to better accommodate and simplify station identification during emergency nets, drills, or

activations. ARRL member Robert A. Dukish, KK8DX, of Canfield, Ohio, had sought a change to Section 97.119(a) of the rules to allow a single point of transmission for station ID on those occasions. He proposed permitting a net control station or other designated participant to

announce the call signs of every station taking part in the net or exercise, when tactical call signs often are in use, at 10-minute intervals, using automatic CW identification.

In turning down Dukish's petition, Scot Stone, the Deputy Chief of the Wireless Telecommunications Bureau's Mobility Division, said commenters overwhelmingly opposed the proposal.

"They argue that the current rule strikes the appropriate balance between the need to identify the source of transmissions and ease of communication," Stone wrote. "Commenters state that, in their years of experience with amateur emergency communications, the station identification requirement has not proven to be a burden or obstacle, and that the current procedure actually contributes to efficient operations by providing a clear indication that a communication has ended and the channel is available."

Stone said some commenters asserted that Dukish's proposed procedure would be unworkable and cause confusion, while others characterized his proposal as a solution in search of a problem.

"The purpose of the station identification requirement is to make the source of transmissions clearly known to those receiving those transmissions," Stone wrote. "Separating the call sign from each transmission would defeat this purpose." Moreover, he said there's no evidence that the current station ID requirements have hindered amateur radio emergency communications.  
--ARRL Letter

## CONGRESSIONAL CHAMPION OF AMATEUR RADIO GREG WALDEN, W7EQI, ANNOUNCES RETIREMENT

One of amateur radio's strongest supporters in the US House of Representatives, Oregon Republican Greg Walden, W7EQI -- the top Republican on the powerful House Energy and Commerce Committee -- said this week that he will not seek another term in 2020. Walden, 62, who will have served for 22 years in the US House at the end of his current term, championed the Amateur Radio Parity Act as the chair of the Subcommittee on Communications and Technology. He went on to chair the US House Energy and Commerce Committee in the 115th Congress, and has served as the panel's ranking member since the Democratic Party gained control of the House.

"I will close the public service chapter of my life, thankful for the friends I've made and the successful work we've done together," Walden said in a statement.

In 2014, the ARRL Board of Directors voted to confer the first Barry Goldwater, K7UGA, Achievement Award "in recognition of many years of exceptional contributions to the strength and vitality of the Amateur Radio Service in the United States."

In 2002, Walden was an original cosponsor of H.R. 4720, the Amateur Radio Emergency Communications Consistency Act, which aimed to provide relief to amateurs faced with private deed covenants, conditions, and restrictions -- CC&Rs -- in erecting antennas by requiring private land-use regulators, such as homeowners' associations, to "reasonably accommodate" amateur radio communication



In 2003, he cosponsored H.R. 713, the Amateur Radio Spectrum Protection Act, and during a hearing on the bill, Walden called for a halt to the "astonishing" erosion of amateur radio spectrum.

In 2004, Walden wrote the FCC chairman, seeking to have the Commission defer action on the Broadband over Power Lines (BPL) rulemaking until the release of a National Telecommunications and Information Administration (NTIA) study and an opportunity for public comment. That same year, during a hearing on telecom convergence, Walden grilled a BPL industry representative about interference.

In 2010, Walden cosponsored H.R. 2160, the Amateur Radio Emergency Communications Enhancement Act -- a subsequent bill addressing the issue of private land-use constraints on amateur radio antennas.

In 2011, ARRL was invited to testify before Walden's subcommittee on "Creating an Interoperable Public Safety Network," offering an opportunity to defend 420 - 440 MHz against reallocation.

During a 2016 Capitol Hill hearing, Walden called the Amateur Radio Parity Act (H.R. 1301) "a commonsense bill" and urged his colleagues to support it.

"As a ham radio operator, I'm acutely aware of the passion that amateur radio operators have for their service," Walden told the subcommittee. "Despite [ham radio's] widespread use and importance in times of emergencies, land-use restrictions in some areas have prioritized esthetics over the rights of hams. H.R. 1301 seeks to ensure that amateur radio operators get a fair shake and protection from unnecessary bans on their equipment by instructing the FCC to adopt rules to this end." --ARRL Letter

## FCC PROPOSES FINING NEW YORK RADIO AMATEUR \$17,000 FOR ALLEGED DELIBERATE INTERFERENCE

Harold Guretzky, K6DPZ, of Richmond Hill, New York, is facing a \$17,000 FCC fine for allegedly causing intentional interference on a local repeater and preventing other radio amateurs from using it. The FCC issued a *Notice of Apparent Liability for Forfeiture* ([NAL](#)) on October 3.

"Given his history as a repeat offender, this violation warrants a significant penalty," the FCC said in the *NAL*.

The *NAL* recounted numerous complaints alleging that Guretzky was deliberately interfering with a repeater in Glen Oaks, New York. In June of 2017, the FCC issued a *Warning Letter* to Guretzky, advising him of the nature of the allegations against him and directing him to stop using the repeater going forward. Nonetheless, additional complaints were filed. In April 2018, agents from the FCC New York Enforcement Bureau office drove to Richmond Hill to investigate and to advise him in writing that he was prohibited from using the local repeater.

After the FCC received further complaints, an Enforcement Bureau agent monitored the VHF repeater's input and output frequencies and, after observing deliberate interference to other stations, used direction-finding techniques to identify the source of the transmission as Guretzky's station.

"The agent monitored and recorded the transmissions emanating from Guretzky's station for several hours that afternoon and heard him interfering with the local repeater," the *NAL* said. "Later, the agent heard Guretzky making threatening comments toward other amateur operators." The following month, FCC Regional Director David Dombrowski spoke with Guretzky by telephone, noting the continued complaints and cautioning him against using the repeater.



In the *NAL*, the FCC said Guretzky demonstrated "a deliberate disregard for the Commission's authority and the very spirit of the Amateur Radio Service by continuing to FCC Dismisses Three Petitions for Rule Making Filed by Radio Amateurs interfere with the local repeater" despite having been warned. Read [more](#). --ARRL Letter

## US COAST GUARD AIRS PROPOSAL TO END MF NAVIGATIONAL TELEX (NAVTEX) BROADCASTS

The US Coast Guard is seeking comments on a [proposal](#) that it may stop broadcasting medium-frequency (MF) Navigational Telex ([NAVTEX](#)). The service says it first will ensure that the information contained in NAVTEX broadcasts is available via International Maritime Organization-recognized satellite services. Interested parties may submit comments [online](#) by November 12. The proposal is docket USCG-2019-0702. Comments should include the docket number, specific section of the document to which each comment applies, and a reason for each suggestion or recommendation. Comments may be anonymous.

"Current MF NAVTEX equipment is in dire need of replacement. The equipment is antiquated, and essential replacement parts are difficult to find and expensive, placing overall operation of MF NATEX at risk," the Coast Guard said. "Any approved GMDSS satellite terminal will be able to receive this information."

NAVTEX is an international automated service for radio delivery of navigational and meteorological warnings and forecasts, as well as urgent maritime safety information. It provides a low-cost means of broadcasting this information to ships out to approximately 100 nautical miles offshore. NAVTEX is part of the Global Maritime Distress and Safety System (GMDSS) which has been incorporated into the Safety of Life at Sea (SOLAS) treaty, to which the US is a party. The US Coast Guard operates the system nationwide.

System coverage is reasonably continuous in the east, west, and Gulf coasts of the US, as well as the area around Kodiak, Alaska; Guam, and Puerto Rico. The US has no coverage in the Great Lakes, although coverage of much of the Lakes is provided by the Canadian Coast Guard. The US Coast Guard originally only installed NAVTEX at sites where Morse code messages had been previously transmitted, and some coverage gaps exist.

"We believe the transition from terrestrial broadcast to satellite will provide for more reliable delivery of NAVTEX information and allow better, more cost-effective products in the future," the Coast Guard said. --ARRL Letter

## HUSKYSAT-1 SUCCESSFULLY LIFTED INTO SPACE

AMSAT reports that on November 2, a Cygnus cargo spacecraft carrying the University of Washington's student-built HuskySat-1 CubeSat was successfully launched atop a Northrop Grumman Antares rocket. The Cygnus will dock with the International Space Station (ISS) November 4.

Cygnus is then scheduled to depart the ISS on January 13, 2020, and raise its orbit to approximately 500 kilometers (310 miles), where HuskySat-1 and SwampSat will be deployed. After deployment, HuskySat-1's 1,200 bps BPSK beacon on 435.800 MHz should be active and decodable with the latest release of *FoxTelem*. HuskySat-1 is expected to run its primary mission for 30 days — testing a pulsed plasma thruster and experimental 24 GHz data transmitter — before being turned over to AMSAT for amateur radio operation. HuskySat-1 features a 30 kHz wide 145 to 435 MHz linear transponder for SSB/CW.

"Usually people buy most of the satellite and build one part of it," said Paige Northway, a doctoral student who's been involved with the project since inception. "We built all the parts. It was a pretty serious undertaking."

For more information about HuskySat-1's development and its science, read the *UW News* article, "Washington's first student-built satellite preparing for launch." — *Thanks to AMSAT News Service via SpaceNews.com; Paul Stoetzer, N8HM, and UW News*

## SHORTS

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**HamGPS (for Android phones)** Unlike other apps, it actually does bearing and distance using grid squares, and can store a list. Display your current Maidenhead locator with 10 digit precision. It also computes bearing and distance to a set of target locations using locator or latitude. Doesn't appear to send data off to the cloud. Even shows pointing, within accuracy of phone compass (not good enough for a dish)." [https://play.google.com/store/apps/details?id=ea4eoz.HamGPS&hl=en\\_US](https://play.google.com/store/apps/details?id=ea4eoz.HamGPS&hl=en_US)

**Bill, KC1HTT, presented "A Low Power, Single Polarization, 144 MHz Earth-Moon-Earth Amateur Radio Station" at the 2019 Boxboro Hamxposition**, and has also [made his presentation available via YouTube](#). It might be a little late for this weekend's ARRL EME Contest. Bill encourages anyone interested in "charts used in this presentation and a complete technical paper published in the ARRL Proceedings of the 2019 VHF Super Conference on 26 April 2019" [to contact him](#). "The paper has additional details and a comprehensive list of EME references." (via PNWVHFS email reflector)

**Australian Regulator Reinstates US Amateur Radio License Reciprocity** The Wireless Institute of Australia (WIA) [reports](#) Australia's communications regulator, the Australian Communications and Media Authority (ACMA) is reinstating the reciprocal arrangement for US Amateur Radio license holders. "The reinstatement follows a period of suspension of reciprocity precipitated by a complainant objecting to the granting of [Australian] licenses," a WIA statement read. "The WIA believes that irrespective of the motivations of the complainant to raise their objections, the impact of the suspension was only to increase barriers to entry to Amateur Radio in Australia, and was most unhelpful." The WIA expressed its pleasure that the restriction was lifted. A reciprocal license is valid only for 12 months from the date of issue and cannot be renewed or extended unless the holder passes the local regulations examination.

**IARU Region 3 Provides for Satellite Uplinks on 15 Meters** International Amateur Radio Union Region 3 (Asia, Pacific) has approved a modified [interim band plan](#) that provides Amateur Satellite uplink frequencies between 21.125 - 21.450 MHz. The IARU Region 1 and 2 band plans do not provide for Amateur Satellite usage. "In all cases of conflict between a band plan and the national regulations of a country, the latter shall prevail," the band plan states. "However, it is not recommended to use frequencies outside of the band plan for the Amateur Satellite Service, and it should be noted that the IARU cannot coordinate Amateur Satellite usage of frequencies outside of the band plan." The Region 3 directors [met in Tokyo](#) on September 2 - 3. -- *Thanks to AMSAT*

**THANKS FOR READING !**

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