

RCA AMATEUR RADIO CLUB



Legacy Amateur Radio Club

INDIANAPOLIS, INDIANA

SEPTEMBER 2019

MONTHLY NEWSLETTER



AFFILIATED CLUB

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE

TUESDAY, SEPTEMBER 10th, 6:30 PM AT

KNIGHTS OF COLUMBUS, 2100 E. 71st STREET, INDIANAPOLIS

RCA ARC NEWS

SEPTEMBER MEETING: The September meeting will be back at the [Knights of Columbus, 2100 E. 71st Street](#). As far as we know, the meetings will be at this location the rest of this year.

SUMMARY OF THE AUGUST MEETING – Thanks to those who attended the August meeting at MCL in Carmel. A nice meeting room was provided, unfortunately for some, traffic was a problem getting to that location. The current repeater problems were discussed, primarily the current intermod problem with persons operating on the 146.70 repeater. Two things have contributed to this problem recently. First, we replaced a broken antenna on our west side receive, then apparently the 146.70 repeater increased their transmitter power. Intermod on the west side site resulted. Field Day was discussed... The Indy United FD Club, in which our Club participated, will likely come in second this year although official results won't be available until November QST. One of the areas of improvement needs to be in the satellite operations. Our Club did pretty well at the Indy Hamfest again this year. Enough income to keep us going another year! A possible change in our Club liability insurance was discussed. No decision was made. Those present approved a motion to join the Kroger Community Rewards program.

AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, September 14, 2019, 12:00 pm (Walk-ins allowed)

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

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

New General Class Element 3 Exams took effect Monday July 1, 2019 for all exam sessions. The newly revised pool, released by the Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC), must be in use starting July 1.

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Sept 13-14 [W9DXCC 2019](#), St. Charles, Illinois

Sept 14-15 WAE DX SSB Contest

<https://www.contestcalendar.com/contestdetails.php?ref=111>

Sept 14-16 ARRL September VHF Contest <http://www.arrl.org/september-vhf>

Sept 27-28 [Central Division Convention](#), Milwaukee, Wisconsin
Oct 05 [Indianapolis Half Marathon in Lawrence](#)
Nov 09 [Indianapolis Monumental Marathon](#)
Nov 16 -17 Fort Wayne Hamfest, <http://acarts.com/hfmain.htm>

FCC GRANTS TEMPORARY WAIVER PERMITTING USE OF PACTOR 4 FOR HURRICANE RESPONSE AND RELIEF

The FCC has granted ARRL's emergency request for a temporary waiver to **permit only those radio amateurs active and involved in Hurricane Dorian response and relief efforts** to use the PACTOR 4 digital protocol on HF. The waiver is valid through 2100 UTC on Friday, September 6. The waiver request was necessary because Section 97.307(f) of the FCC's Amateur Radio Service rules limits digital data emissions of Amateur stations operating below 28 MHz to a symbol rate not to exceed 300 bauds, and in the 10-meter band (28.0 – 28.3 MHz) to a symbol rate not to exceed 1200 bauds, which precludes PACTOR 4 emissions.

"PACTOR 4 is a data protocol that permits relatively high-speed data transmission in the HF bands, and many amateur stations active in emergency communications preparedness are capable of using this protocol," ARRL told the FCC. The FCC granted a waiver for the use of PACTOR 4 during the 2017 Hurricane Maria relief effort, and more recently in preparing for typhoon relief communications in Hawaii. ARRL told the FCC that the higher-data rates offered by PACTOR 4 are "critical to sending hurricane relief communications, including lists of needed and distributed supplies."

ARRL pointed out that stations involved in Hurricane Dorian response and relief efforts must be able to communicate with one another as well as with federal stations on the five-channels on the 5 MHz band involved with the SHARES network and other interoperability partners on those frequencies, ARRL told the FCC.

FEMA has announced Channel 2 (5348 kHz channel center) of the 60 meter band will be made available, as necessary for digital interoperability between federal government stations and US Amateur Radio stations involved in Hurricane Dorian emergency communications. (Channel 1 will be available for SSB interoperability.)

ARRL noted that its PACTOR 4 waiver request to the FCC was "without prejudice to the resolution of Docket 16-239 which is presently pending and addresses the rule section discussed herein."

ARRL had requested a 30-day waiver, but the FCC said it would entertain requests for an extension of the waiver on an as-needed basis. --ARRL Letter

FRANCE STANDS ITS GROUND ON AERONAUTICAL MOBILE SHARING 144-146 MHZ WITH AMATEUR RADIO PROPOSAL

Heading into the recent European Conference of Telecommunications and Postal Administrations (CEPT) Conference Preparatory Group (CPG) meeting in Turkey, France was holding firm on its proposal to have the Aeronautical Mobile Service (AMS) share 144 - 146 with Amateur Radio. An "annex" submitted for the CPG doubles down on that country's determination to secure AMS access to that spectrum, although no longer on a primary basis. The CPG meeting will consider CEPT ECC positions for World Radiocommunication Conference 2019 this fall. In the annex, France counters contrary

assertions from International Amateur Radio Union (IARU) and continues to insist that spectrum sharing is possible.

"France recognizes the wide range of amateur applications hosted by the 144 - 146 MHz band," the French annex document said. "The band will remain available for all these applications after WRC-23. However, a clear vision of the band segmentation per application and associated occupancy rates will be necessary for the sharing and compatibility studies carried on during the WRC-23 preparation cycle. Such studies are essential for assessing the possibilities of frequency sharing and establishing, where appropriate, the conditions that will ensure the continuity of operation and the protection of existing services."

If the French proposal gets a thumbs up from at least 10 CEPT countries at the CPG meeting -- with not more than 6 opposing -- the proposal could appear on the agendas of WRC-19 and WRC-23, where a final decision will be made.

In its own CPG meeting submission, the International Amateur Radio Union (IARU) called the French proposal "unsound" and contended that sharing of the current amateur allocation with AMS radio systems "is not possible without a significant likelihood of mutual interference." Read [more](#)

ARRL HF BAND PLANNING COMMITTEE REACTIVATED TO ADDRESS SPECTRUM ISSUES

In an effort to more effectively address HF digital technology issues, ARRL President Rick Roderick, K5UR, has reactivated the ARRL Board of Directors' HF Band Planning Committee. The six-member panel, chaired by First Vice President Greg Widin, K0GW, will primarily focus on spectrum allocation issues that have gained increased visibility with discussions on accommodating automatically controlled digital stations (ACDS) -- many employing [Winlink](#) email. The committee will also discuss operating frequencies for FT4, FT8, and other digital modes. Widin says the committee will meet next week to chart its course. Reactivation of the HF Band Planning Committee came out of discussions during the July 2019 ARRL Board meeting.

"ARRL is not trying to shut down digital communication or shut down Winlink in particular," Widin said, adding that ARRL recognizes Winlink's proven track record in emergency communication. His committee also will consider Winlink supporters' calls for the expansion of the ACDS segments spelled out in §97.221(b) of the amateur rules.

"This is not an easy task by any means," Widin allowed. "They're not making more bandwidth."

"We're well aware that Winlink is the *de facto* standard supporting emergency communications in many parts of the country, but we have to figure out how it can operate with other modes, so that everybody can communicate, without having one mode overrun any other mode," Widin said. The committee will not address data encryption questions at this point, however.

In response to ARRL's 2013 petition to delete the so-called "symbol rate" limit and replace it with a maximum bandwidth for data emissions of 2.8 kHz below 29.7 MHz, the FCC [proposed](#) to eliminate symbol rate (baud rate) limitations for data transmissions but declined to propose a bandwidth limitation.

At its July meeting, the ARRL Board of Directors called for ARRL's Washington Counsel to obtain FCC approval for several Part 97 rule changes. The Board asked for a rulemaking petition to remove the current 300 baud rate limitation; authorize all ACDS below 30 MHz, regardless of bandwidth, to operate only within the ACDS bands designated in §97.221(b); require digital stations operating with a bandwidth greater than 500 Hz to operate within the ACDS bands, whether or not automatically controlled, and limit the maximum bandwidth of digital signals below 29 MHz to 2.8 kHz.

"We still want to change the symbol rate limitation into a bandwidth limitation, which makes a lot more sense in terms of current and future modes," Widin said. The panel also hopes to work with the WSJT-X Development Group to establish FT4 frequencies compatible with existing band plans. Read [more](#).

160 YEARS SINCE THE CARRINGTON EVENT

September 1 marks the 160th anniversary of the Carrington Event, the strongest geomagnetic storm known to have hit Earth since at least the 14th century. The event was named for British astronomer Richard Carrington, who first viewed and sketched the huge sunspot complex on the sun from which a gigantic solar flare -- a coronal mass ejection -- erupted, as he watched. Within hours, Earth was virtually enveloped by an aurora borealis that was visible even at lower latitudes and into the tropics. It was a truly spectacular light show that in some places, turned night into day. When the flare interacted with Earth's magnetosphere, however, it was another story.

This was the Victorian age, when practical wireless was still a few decades off, but the "auroral phenomena," as it was called then, had "a remarkable manifestation of magnetic influence" on telegraph wires -- the internet of the day, as it were. So considerable was the effect that *The New York Times* [reported](#) telegraph operators were able to disconnect the batteries that normally operated the system and were "working by the atmospheric current entirely!" Although the operators subsequently were able to reconnect their batteries, the storm continued to affect the lines. A telegraph manager in Pittsburgh reported "streams of fire" emitted from the circuits. In Washington, DC, telegraph operator Frederick W. Royce was severely shocked as his forehead grazed a ground wire. A witness said an arc of fire jumped from Royce's head to the telegraphic equipment.

The *Times* account quoted an operator in Worcester, Massachusetts, who said, "During ten years' experience in telegraphing, I have frequently observed the effect of the Aurora Borealis on the wires, but never before have I seen it so grand and appalling."

Operators said that at times the polarity of the battery power supply would become reversed. "One moment the batteries would begin to boil over, and we would have so strong a circuit that the armature would not come away from the magnet; the next moment, there would be no current at all," a report from Quebec recounted.

Based on examinations of ice samples, scientists believe that geomagnetic storms two and three times stronger occurred prior to the 14th century.

After the Carrington Event, scientists began paying a lot more attention to solar phenomena and sunspots. -- *Thanks to Frank Donovan, W3LPL*

FCC DISMISSES ARRL, AMSAT REQUESTS IN SMALL SATELLITE PROCEEDING

An FCC *Report and Order* ([R&O](#)) released August 2 in the so-called "small satellite" rulemaking proceeding, IB Docket 18-86, failed to address concerns expressed by ARRL and AMSAT. Both organizations filed comments on the FCC *Notice of Proposed Rulemaking* ([NPRM](#)) in the proceeding last year, seeking changes in the FCCs interpretations and procedures affecting satellites operating on Amateur Satellite Service frequencies.

"These comments address topics outside the scope of this proceeding, and we decline to adopt any of the requested rule modifications or updates at this time," the FCC said in the *R&O*. The FCC did mention amateur satellites in its 2018 *NPRM*, explaining what they are and describing the documentation and authorization process, but it did not solicit comments."The Commission did not seek comment in the *NPRM* on any modifications or updates to the rules governing Experimental or amateur satellite licensing. The streamlined Part 25 small satellite process adopted in the *Order* is an alternative to existing license processes and does not replace or modify the authorization procedures for satellites currently contained in Parts 5, 25, or 97 of the Commission's rules," the FCC explained. "Nevertheless, we received a number of comments in response to the *NPRM*, particularly regarding the rules applicable to amateur satellite operations, suggesting that aspects of those rules be improved or clarified."

In its 2018 *NPRM*, the FCC had said, "Because the type of operations that qualify as amateur [is] narrowly defined, an amateur satellite authorization will not be appropriate for many small satellite operations."

In its 2018 [comments](#), ARRL said it wanted the FCC to preclude exploitation of amateur spectrum by commercial small-satellite users authorized under Part 5 Experimental rules and suggested that the FCC adopt a "a bright line test" to define and distinguish satellites that should be permitted to operate under Amateur Satellite rules.

ARRL's position was to support and encourage college and university Amateur Radio experiments where the sponsor of the experiment is a licensed radio amateur and all operation in amateur spectrum is compliant with Part 97. Part 5 Experimental authorizations for satellites intended to operate in amateur allocations by non-amateur sponsors should be discouraged, absent a compelling show of need, ARRL told the FCC. AMSAT's comments reflected many of the same concerns that ARRL had expressed. Read [more](#). -- *Thanks to Ray Soifer, W2RS, for his assistance*

LIGHTSAIL 2 DEMONSTRATES FLIGHT BY LIGHT

The Planetary Society's crowdfunded *LightSail 2* spacecraft is successfully raising its orbit solely on the power of sunlight. Since unfurling the spacecraft's solar sail on July 23, mission managers have been optimizing the way the spacecraft orients itself during solar sailing. After a few tweaks, *LightSail 2* began raising its orbital apogee, something the mission team said demonstrated the mission's primary goal of "flight by light for CubeSats." Continuing to sail on sunlight in Earth orbit, the spacecraft's orbital apogee hit 729 kilometers (approximately 452 miles) as of August 5, an increase of 3.2 kilometers (nearly 2 miles) since sail deployment.

LightSail 2 launched on June 25, and it deployed on July 2 from Prox-1, a Georgia Tech student-built spacecraft the size of a small washing machine. Using the Experimental License call sign WM9XPA, *LightSail 2* automatically transmits a beacon packet on

437.025 MHz (9,600 bps FSK) every few seconds, which can be decoded into 238 lines of text telemetry describing the spacecraft's health and status -- everything from battery status to solar sail deployment motor state.

Every 45 seconds, the spacecraft transmits "LS2" in CW on 437.025 MHz. [More information](#) is on The Planetary Society website. -- *Thanks to The Planetary Society*

AMSAT AND ARISS DESIGNING AMATEUR RADIO SYSTEM FOR LUNAR GATEWAY

Details are still being fleshed out, but [AMSAT](#) and [ARISS](#) are working on the design of an Amateur Radio system for NASA's Lunar Gateway. As NASA explains, the Gateway "will be a small spaceship in orbit around the moon that will provide access to more of the lunar surface than ever before with living quarters for astronauts, a lab for science and research, ports for visiting spacecraft, and more." For NASA, the Lunar Gateway is "a spaceport for human and robotic exploration to the moon and beyond." For radio amateurs, the Lunar Gateway will represent the next step in moving ham radio away from low-Earth orbit and into deep space. Under the current [timeline](#), initial sections of the Gateway are scheduled to launch in 2022, with the Gateway in lunar orbit by 2026.

"To make this happen, we are leveraging the work and expertise of the worldwide AMSAT organizations and the international ARISS community," ARISS-International Chair and AMSAT Vice President for Human Spaceflight Programs Frank Bauer, KA3HDO, said. "We have an international team working on this and are meeting twice a month to mature the concept." The ARISS concept was presented to NASA in May and got positive feedback, and was favorably received a few weeks later at the ARISS-International meeting in Montreal from the Canadian Space Agency's Gateway Program Manager.

"The Amateur Radio Exploration (AREx) team has done some really good work," Bauer continued. "The challenge for amateurs will be on the order of a 30 dB signal path loss as compared to LEO."

The Lunar Gateway will serve as a solar-powered communication hub, science lab, short-term habitation module, and a holding area for rovers and other robots that may be bound for the moon or for other planets. NASA is leading the project in collaboration with commercial and international partners, including all of the International Space Station partners.

"We need to develop a block diagram of a system and subsystems and find team members who want to work on each," Bauer said when the ARISS-International team met in Montreal. "We must set up requirements and interface documentation. We need to solidify the frequencies to use, working with the International Space Frequency Coordination Group."

ARISS ARRL Representative Rosalie White, K1STO, said that ARISS is working to spread the word about the new initiative. She also hopes the new project may inspire the [generosity](#) of the Amateur Radio community. Read [more](#).

ARRL CONTEST AND DXCC RULES NOW PROHIBIT AUTOMATED CONTACTS

ARRL has incorporated changes to the rules for all ARRL-sponsored contests and DXCC, prohibiting automated contacts and requiring that an actual operator is initiating and carrying out a contact. These changes also apply to Worked All States (including Triple Play and 5-Band WAS), Fred Fish W5FF Memorial, and VUCC awards. The changes are effective immediately and affect the rules for both HF contests, and VHF/UHF contests as well as DXCC.

A resolution at the July ARRL Board of Directors meeting pointed to "growing concern over fully automated contacts being made and claimed" for contest and for DXCC credit. The rules now require that each claimed contact include contemporaneous direct initiation by the operator on both sides of the contact. Initiation of a contact may either be local or remote.

EFFORTS CONTINUE TO ENHANCE ARES PROGRAM, ADD RESOURCES

The ARRL Board of Directors, committees, and Headquarters administrative staff are continuing efforts to enhance the venerable Amateur Radio Emergency Service (ARES®) program. A major [ARES Plan](#) has been adopted, providing new direction going forward. In addition, a standardized training plan has been adopted, and a new [ARES Emergency Communicator Individual Task Book](#) has been approved and published.

At its July meeting, the ARRL Board considered the [report](#) of its Public Service Enhancement Working Group (PSEWG). A "change log" was proposed for the *Task Book* that will highlight changes made as the document is periodically revised and updated. ARES position guidelines were posted to the online *ARES Workbook* and a major revision and update of ARRL's *Introduction to Emergency Communications* course -- now designated as EC-001 -- has been completed.

The course is now available at no cost to any ARES registrant, and a "mentor-less" format has been added as a parallel path for completing the course. Additional mentors were recruited to assist in handling the initial surge of interest. A self-guided version that leads up to the final exam is also being implemented. An update and introduction of EC-016 -- *Public Service and Emergency Communications Management for Radio Amateurs* -- has been completed.

Veteran Ohio Section Manager Scott Yonally, N8SY, has been brought on board to assist in implementing *ARES Connect* and to field questions about the new software package from users. *ARES Connect* is a volunteer management system covering event signup, reporting, and roster management, to simplify managing volunteers and events. Some modest procedural revisions have been made to the [Ham Aid](#) program. Read [more](#). -- Thanks to [The ARES E-Letter](#)

RESULTS POSTED FOR USA, IARU REGION 2 ARDF CHAMPIONSHIPS IN NORTH CAROLINA

The results of the 19th USA ARDF Championships and 10th IARU Region 2 ARDF Championships in Amateur Radio Direction Finding (ARDF), held earlier this month in North Carolina, are now in the record books. Results from these championships will

determine the makeup of ARDF Team USA at the 20th ARDF World Championships, set for September 2020 in Serbia.

Separate youth and adult courses ensured regulation courses for foxhunters of all ages, with 36 US competitors. Visitors from Australia, Germany, and China practiced and competed alongside Team USA hopefuls. Competitors ranged in age from 8 to 73. Adult and youth championships were held simultaneously, with their separate events held on opposite radio bands to avoid interference.

Events began on August 1, with [foxoring](#), a combination of radio direction finding and classic orienteering on 80 meters, followed the next day with the [sprint](#) event. The classic [2-meter](#) and [80-meter](#) adult and youth competitions took place on August 3 and 4.

"Sprint ARDF is a fast-paced event, where quick thinking generally beats fast running," ARRL ARDF Co-Coordinator Charles Scharlau, NZ0I, explained. "The courses are short enough that elite competitors can complete them in 15 minutes.

Because of the large number of young people taking part, awards were presented in youth categories M10, M12, M14, M16, W12, and W14. Parents of younger age-group participants were allowed to follow their sons and daughters but not assist them.

"American youth competitors held their own, despite the stiff competition," Scharlau said. In a crowded field of 10 M14 competitors, Tobias Reed took overall gold in the 80-meter classic, silver in sprint, and bronze in foxoring. Other American youth medalists included M12 competitor Marcus Enochs, who won silver in foxoring; M10 competitor Gavin Burkhead, who picked up the gold in foxoring, and M10 competitor James Harker, who went home with gold in the 2-meter classic.

[Contact](#) the ARRL ARDF Committee for more information on ARDF and on attending, participating in, or hosting ARDF competitions. ARDF participants do not need an Amateur Radio license. For more information on Amateur Radio Direction Finding, visit the [Homing In](#) website of Joe Moell, K0OV.

FLEXRADIO TEAMS WITH RAYTHEON TEAM TO DEVELOP AIRBORNE HF RADIO

In a strategic partnership with Raytheon, US Amateur Radio equipment manufacturer Flex Radio® has been selected by the US Air Force to adapt its off-the-shelf *SmartSDR/FLEX-6000* architecture for HF modernization of airborne communications platforms. The new radio will provide beyond line-of-sight, long distance communications for air crews.

"We are excited to convey that our proven modular direct sampling hardware, Open Waveform API, and IP-based architecture provide a ready platform for agile development to meet 21st century communication needs," FlexRadio CEO Gerald Youngblood, K5SDR, commented. "Throughout FlexRadio's history, commercial amateur products have been leveraged into defense products, which in turn, have been leveraged back into commercial products. We are certain that these efforts will cycle back again."

Youngblood said the deal could boost its Amateur Radio and commercial products and services. "While I can't go into all the details, the positive impact to our business processes, infrastructure, intellectual property, and human resources will enhance our amateur/commercial products and services," he said. "So, stay tuned for more amateur

product announcements coming soon.”

Raytheon received a \$36 million Project Agreement through an Other Transaction Agreement (OTA) with Consortium Management Group (CMG) on behalf of Consortium for Command, Control and Communications in Cyberspace, in support of requirements from the US Air Force Life Cycle Management Center, to develop and qualify an HF radio. CMG’s mission “is to speed development of technologies to improve US government capabilities required to sustain US military supremacy in weapon systems information technologies.”

Barbara Boronovi, vice president of Integrated Communication Systems, said, “Raytheon’s partnership with FlexRadio combines commercial innovation with advanced military hardening techniques to rapidly deliver a next generation operational capability that supports strategic and tactical missions.”

The Raytheon-FlexRadio team is one of two recipients for this development program. After the 31-month period of performance, one team will be named to move on to production.

“Worldwide high-frequency communications is what our commercial customers do every day, using virtually every mode of operation and type of propagation,” Youngblood said. “Our partnership brings together the vast resources and experience of Raytheon in airborne tactical communications systems with FlexRadio’s commercial, off-the-shelf high-frequency software-defined radios to deliver a modular, extensible, and flexible communications platform for the warfighter.” --ARRL

SHORTS

Route 66 On the Air Special Event Set Announced --The Citrus Belt Amateur Radio Club of San Bernardino, California (W6JBT), will host the 20th annual Route 66 On the Air Special Event, September 7 – 15. The yearly event commemorates the 1926 construction of the famous Route 66, the country’s first major improved highway linking the US heartland with the west coast. Twenty stations will be on the air along the route, two of them as rover stations on the highway between Santa Monica, California, and Chicago, Illinois. All 20 stations will employ 1 × 1 call signs.

Operating frequencies will be: CW — 3.533, 7.033, 10.110, 14.033, 18.080, 21.033, 24.900, 28.033, and 50.033 MHz; SSB — 3.866, 7.266, 14.266, 18.164, 21.366, 24.966, 28.446, and 50.166 MHz, and digital — 3.573, 7.074, 10.136, 14.074, 18.100, 21.074, 24.915, and 28.074 MHz. Radio amateurs traveling on Route 66 are encouraged to take part. Participating clubs will have their own distinctive commemorative QSLs.

[Visit](#) the Citrus Belt Amateur Radio Club website for more information.

NEW ICOM IC-705 Youtube video <https://www.youtube.com/watch?v=7rQ9vVyS1K8>

The Hiram Percy Maxim event started a few days ago. If you're an *N1MM Logger+* user, you can use it to log contacts for the event: "Les G4OGB developed an *N1MM* User Defined Contest (UDC) module for users who plan to log contacts during the event. Links to the ARRL sponsor page and the *N1MM* Setup instructions are on [N1MM's Supported Contests List](#) at [this link](#)."

Registration now is open for stations to register for Scouting's 2019 Jamboree on the Air (JOTA). --JOTA will take place October 18 - 20. JOTA is Scouting's largest event in the world and always takes place over the third weekend of October. Click on "Sign Up Now" and register using your free Scout.org user id. Use the same site to register for the 2019 Jamboree on the Internet. Bill Stearns, NE4RD, has been named the Boy Scouts of America (BSA) National Jamboree on the Air Task Force Chair. He has activated a number of JOTA and Scout Camp stations from the Montana Scout Council and served on the 2017 National Scout Jamboree K2BSA and 2019 World Scout Jamboree NA1WJ staffs. The NA1WJ Amateur Radio operation at the 2019 World Scout Jamboree in West Virginia [reported](#) that more than 3,000 Scouts took part in the ham radio demonstrations, logging more than 4,000 contacts in 86 DXCC entities.

Sweden's Alexanderson Alternator station SAQ says it received 438 listener reports -- "an incredible amount" -- for its June 30 Alexanderson Day transmissions. – The list included five reports from the US and three from Canada. The historic electro-mechanical transmitter, which dates back to the 1920s, is fired up periodically throughout the year on 17.2 kHz. "We are very thankful for all your enthusiastic and positive feedback, with images, recordings, videos, and even Morse ink writer strips," SAQ said. The station is a World Heritage Site in Grimeton, Sweden. SAQ's June 30 message commemorated the 100th anniversary of the first east-to-west transatlantic voice transmission from the Marconi station in Ireland to Cape Breton Island, Nova Scotia. SAQ has posted an [interactive map](#) showing the locations of all received listener reports from recent transmissions, including the June 30 transmission, and video of the Alexanderson Day transmission event has been [posted to its YouTube channel](#).

LO-94 Lunar-Orbiting Satellite Crashes Into Moon, But Not Before "Photographing" HF Radio Spectrum - Trailblazing amateur radio satellite relayed first-ever lunar repeater contact, transmitted photo of solar eclipse on Earth and photos from the far side of the Moon

Hamvention Attendance Tops 30,000 - Dayton Amateur Radio Association reports 32,472 visitors, an increase of more than 4,000 over 2018

Ulrich L. Rohde, N1UL, has been named as an Honorary Fellow of India's Institution of Electronics and Telecommunication Engineers (IETE). The IETE's Governing Council bestowed the honor on the noted researcher. The IETE is a prominent professional society in the field of electronics, telecommunication computer science/engineering, broadcasting, information technology, and related areas. The Honorary Fellowship is accorded to an eminent individual in the fields of science, technology, education, and industry. A presentation ceremony will be held during the 62nd annual IETE Convention in late September in India

Prop Pitch Rotator - A rotator that was originally a component in a propeller aircraft motor. The original use was to change the orientation of the blades of the propeller to change the amount and direction of thrust. For amateur use as an antenna rotator, they provide an incredible amount of turning torque for very large antennas. Kurt, N7NV, has information on various types of prop pitch assemblies on [his website](#).

[Here is a just-posted and brand new video by K7AGE, showing the K3LR installation.](#) Both W3LPL and K3LR are at the pinnacles of technical achievement, radio sport competition, operating courtesy and gentlemanly conduct. Hats off to Frank, Tim, and their respective teams."

The 2019 ARRL TAPR / DCC (Digital Communications Conference) is in Detroit, Michigan September 20-22. For more information on this technical conference, [see the conference website.](#)

The Mega Morse Tutor by W8BH, inspired by Morse Code Tutor by W8TEE, is another [build-it-yourself project that can help increase your CW proficiency.](#) This one has a slew of features, including the ability to send five letter groups, arbitrary text from a file on an SD Card, and "Follow Me" sending practice. This project started on an STM32 microcontroller, but has since been ported to a MEGA2560.

The [K3NG Keyer](#) project also has a "CW Training Module and Various Training Modes" and can also be used as the keying interface between your logging program and your radio.

GNU Radio is out with version 3.8.0.0. It's the first minor release in 6 years. GNU Radio is a DSP processing framework where "blocks" that perform operations on signals are combined to form larger signal chains by drawing connections between them as a graph. GNU Radio works with a broad range of hardware and other software, and is the foundation of [a number of Amateur Radio oriented projects](#) including [SatNOGS](#). GNU Radio Conference 2019 will be held September 16 - 20, 2019 in Huntsville, Alabama. Presentations from previous GRCons can be found on YouTube

THANKS FOR READING !

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