



Legacy Amateur Radio Club



RCA AMATEUR RADIO CLUB

INDIANAPOLIS, INDIANA

JUNE 2019

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, JUNE 11th 6:30 PM AT
KNIGHTS OF COLUMBUS, 2100 EAST 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

JUNE MEETING: This month we'll be meeting again at the north side **Knights of Columbus, 2100 East 71st St.** This is just west of Keystone Ave. on the north side of 71st. We have the "Red Room" reserved for June 11th. Meetings for the upcoming months are scheduled for the Game Room. That is, all EXCEPT for the August meeting when there are **no rooms** available. Suggestions for a location?

Check at the bar, near the front door, when you come in for the Red Room location. Also you can order your food at the bar and it will be delivered to the meeting room.

SUMMARY OF THE MAY MEETING – Thanks to those who attended the May meeting. There was a little confusion but got things worked out with the meeting room. The '88 repeater needs some attention. A few things need to be fixed. Jim R. will attempt to schedule a work day with John, KF9UH. The Indy Hamfest (July 12-13) was discussed. Some were unhappy with opening the Hamfest on Friday afternoon as was done last year and will be the same this year. Field Day this year will be under the name of a newly formed club, the Indy United (sounds like it could be a soccer team) ARC. Most of the same players, new name. Operating from the Victor Conservation Club, same as last year. The Indy Radio Club, IRC, will operate Field Day from the "Coke Lot" near IMS. Our Club needs more stuff to sell at the Indy Hamfest this year. Jim, K9RU, pointed out there 5 new hams from IVY Tech which are now licensed. They were given new HTs, mag mount antennas, and programming cables to make sure they could get on the air. The cost was split between the IRC and the Indy Hamfest.

AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, June 8, 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, 317 721-1458

FIELD DAY 2019 UPDATE, JUNE 22-23 – Here is information on the United Indy ARC Field Day Operation at the Victor Conservation Club, 6675 Red Day Road, Martinsville [FD 2019 map](#). Although the post office address is Martinsville, IN, the actual location is north of Martinsville, just a bit south of the Goethe Link Observatory. Face book: [Indy United ARC FD](#)

Need more information? Contact Brian Smith, W9IND, bdsmith@indy.net

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

June 8-10 ARRL VHF Contest <http://www.arrl.org/june-vhf>

June 15 SMIRK <http://www.smirk.org/contestrules.html>

June 22-23 Field Day with United Indy ARC, Victor Conservation Club

July 12-13 Indianapolis Hamfest, Marion County Fairgrounds, <http://Indyhamfest.com/>

ARRL FIELD DAY SITE LOCATOR IS LIVE, PROMOTIONAL MATERIAL AND FD GEAR NOW AVAILABLE

Amateur Radio's most popular operating event, [ARRL Field Day](#) is June 22 - 23. See the May issue of *QST*, page 85, for the official Field Day announcement. The complete [2019 ARRL Field Day](#) packet is online.

The [Field Day site locator](#) is now up and running, and by mid-week, 475 sites already were in the database. To find a Field Day site near you, enter your town and state in the "Location or Call Sign" box at the upper left. Listings also are available by state or Canadian province. To add a site, visit the [Add Field Day Station](#) page. [Information](#) on promoting Field Day is available. Also, [visit](#) the Field Day social media page for information on promoting your Field Day operation via Facebook, Twitter, Instagram, LinkedIn, and YouTube.

The ARRL Public Relations Committee will host a series of live video/audio conference calls every Thursday starting on May 9 to help ARRL PIOs with their Field Day publicity efforts. Field Day public service announcements (PSAs) are set to be posted to the ARRL Field Day web page this week.

DAYTON HAMVENTION ATTRACTS A HAPPY CROWD

[Dayton Hamvention](#)[®], hosting the 2019 ARRL National Convention, chalked up its third year at its new venue, the Greene County Fairgrounds and Expo Center in Xenia, Ohio. Amateur Radio's largest annual gathering took place May 17 - 19. Hamvention officials have not yet released a 2019 attendance figure, but last year's show drew 28,417 -- the third largest attendance ever. For many hams, Hamvention offers an opportunity each spring to renew old acquaintances and make new ones, and for manufacturers to debut their latest and greatest gear.

"These were some of the biggest crowds I've seen since Dayton Hamvention relocated to Xenia," ARRL Product Development Manager Bob Inderbitzen, NQ1R, said.

Hamvention visitors enjoyed largely comfortable weather, with some drizzle on opening day. By all accounts, the crowd was animated and amiable. This year marked the first that Hamvention offered free Sunday admission.

"Dayton Hamvention 2019 was a fantastic event and was a great setting for the ARRL National Convention," said ARRL President Rick Roderick, K5UR. "Thank you to everyone for stopping by the ARRL exhibit area to visit with ARRL officials, staff, and volunteers. It's always a pleasure to be able to have a face-to-face QSO with everyone. Isn't ham radio great? The greatest hobby in the world!"

A free ARRL/Dayton Hamvention mobile event app helped visitors navigate the landscape of exhibitors and forums. Attendees also used the app to follow the hourly prize drawings, connect with other visitors, and view maps of the sprawling fairgrounds. The new app got a positive reception.

The Nashua (New Hampshire) Area Radio Society (NARS) -- the 2019 Dayton Hamvention Club of the Year -- led the "ARRL Spotlight on Radio Clubs and Mentoring" forum. NARS members described the ways the club builds and maintains a strong and active membership through its website, licensing classes, and programs that fit members' schedules. The success rate for licensing classes is 93%, and the club retains 70% of active members. Instructors from the ARRL Education & Technology Program shared resources available for introducing radio science and wireless technology.

In step with the shared ARRL Convention-Hamvention theme, "Mentoring the Next Generation," the 2019 Youth Forum moderated by Carole Perry, WB2MGP, drew attendees of all ages.

It was standing room only at Saturday's ARRL Member Forum, which featured a panel of ARRL Board members with ARRL Great Lakes Division Director Dale Williams, WA8EJK, moderating. Pacific Division Director Jim Tiemstra, K6JAT, who chairs the Legislative Advocacy Committee, addressed the Board's decision to hit the pause button on the Amateur Radio Parity Act. He said the Board intends to renew efforts to get a bill passed and will craft a new strategy to make that happen.

President Roderick and CEO Howard Michel, WB2ITX, stressed the need to attract more Technician licensees into ARRL. Roderick challenged forum attendees to make sure their clubs are welcoming newcomers and helping them to get active and engaged as radio amateurs. At Michel's "Engaging Today's Radio Amateur" presentation, audience members expressed support for the new directions Michel is taking ARRL in terms of delivering more value to members.

Riley Hollingsworth, K4ZDH, headed up a Sunday forum on ARRL's new [Volunteer Monitor Program](#). Hollingsworth explained how the program evolved out of an FCC request. Hollingsworth explained that he polled FCC District Directors to see which areas of the US needed the most attention. He said that's where most Volunteer Monitors will be deployed.

ARRL's Public Service Communications Panel Discussion drew a large crowd of Amateur Radio Emergency Service (ARES) members and other active volunteers.

Audience members expressed constructive concerns over the new ARES Plan and with reinforcing Amateur Radio recognition nationwide.

"ARRL's big team included 118 members supporting exhibits, activities, and presentations to help all radio amateurs become more active, involved, and engaged," Inderbitzen said. "Together we helped represent the very best of our Amateur Radio Service and ARRL."

At a Thursday Donors' Reception, President Roderick presented the National Convention recognition award to Hamvention Chairman Jack Gerbs, WB8SCT, and Dayton Amateur Radio Association (DARA) President (and past Hamvention General Chair) Ron Cramer, KD8ENJ – ARRL Letter

OHIO ARES ACTIVE IN WAKE OF TORNADOES THAT BADLY DAMAGED HARA ARENA

Hara Arena, in Trotwood, Ohio, which served as the home for Dayton Hamvention® for more than six decades, was among the structures damaged when tornadoes swept through the Dayton area on Memorial Day. According to a report from WHIO TV, Hara Arena suffered extensive damage. Drone video showed that the roof and side of the structure had been blown off in several places. <https://www.youtube.com/watch?v=1ZQqCH97J4k&feature=youtube> Hamvention relocated to the Greene County Fairgrounds and Exhibition Center in 2017, after Hara Arena shut down the previous year.

The Hara Arena damage apparently resulted from what CBS News called “a large and dangerous tornado” that struck Trotwood. Ohio Section Emergency Coordinator Stan Broadway, N8BHL, said ARES counties and districts activated last evening after nearly 40 tornado warnings were issued across the state.

“Our state EOC Auxcomm station has been on the air since early last evening,” Broadway told ARRL. “We are still active, and it looks like ARES will be active for several days during the recovery. The situation is rapidly changing.” As of Tuesday morning, state and local emergency management agencies are handling damage issues. “Because of lack of power, the entire Montgomery County (Dayton area) water system faces depressurization,” Broadway said. “Dayton Children’s Hospital is on complete generator power.”

Ohio ARES remains active on HF (SSB and digital modes), as well as on DMR and VHF repeaters.

“This appears to be a long-term activation while different areas begin the recovery process,” Broadway said. “Counties and districts involved are urged to maintain liaison with the state through one of these nets.”

The severe weather caused widespread damage in and around Dayton and elsewhere in the Miami Valley. The National Weather Service (NWS) has said it will take several days to survey the damage. The tornadoes struck after dark, and damage assessment is still under way. Multiple injuries and one fatality have been reported.

It appears that at least two tornadoes were responsible for most of the devastation, which has been termed “catastrophic.” Some residents were trapped under debris. Residents of the City of Dayton are being advised to conserve water and to boil it before consuming. Electrical power is out in several areas, and water pumping stations are relying on emergency generators. The NWS office in Wilmington, Ohio, estimated that at one point, storms and tornadoes left some 5 million people without electrical power.

Snow plows were being repurposed to remove debris from Interstate Route 75, and the American Red Cross has set up shelters to accommodate displaced residents. --ARRL

EMERGENCY MESSAGING DEMONSTRATION FOR RED CROSS, FEMA IS A SUCCESS

With Red Cross and Federal Emergency Management Agency (FEMA) officials monitoring, dozens of radio amateurs along the US east coast on May 23 demonstrated Amateur Radio's ability to deliver messages without commercial power, infrastructure, or permanently established stations. The event took place in coordination with ARRL. The demonstration was a mock response to a simulated disaster scenario — a major hurricane with mass casualties. During the event, radio amateurs at portable stations from New England to the Carolinas delivered message traffic to W1AW, which coordinated and delivered the information to officials attending a joint Red Cross-FEMA meeting in Baltimore.

"About a dozen stations participated in the demonstration, including operators in Maine, Rhode Island, Massachusetts, New York, northern New Jersey, western Pennsylvania, Delaware, and South Carolina," ARRL Communications Manager Dave Isgur, N1RSN, said. "Red Cross officials were on-site at W1AW and at the receiving station in Baltimore. At both sites, they indicated that were impressed with Amateur Radio's ability to deliver messages digitally so that could be displayed on a computer screen and in a format that matched the format for messages that the Red Cross uses." Isgur said ABC, CBS, and Fox TV affiliates sent reporting teams to W1AW.

A few stations, including W1AW and stations in Baltimore, generated local media coverage of their participation, much of it tied into the notion of "Amateur Radio operators and the partner agencies they serve are getting ready for 2018 Hurricane season." Hurricane Season begins on June 1 and continues through November 30.

W1AW Station Manager Joe Garcia, NJ1Q, said the exercise went well overall. "Conditions were a bit tepid at best, but we were able to establish voice contact first, and then proceed with the digital traffic (MT63-1KS) during the roll call," Garcia said. "Digital signals were good. I needed just one retransmit. We used *fldigi* with *fmsg*. This made life so much easier." --ARRL

SPECIAL EVENT STATION CHAIN TO MARK 75TH ANNIVERSARY OF D-DAY

[Updated 2019-06-02 @ 1854 UTC to reflect additional frequencies] June 6 will mark the 75th anniversary of Operation Overlord during World War II and the D-Day landings in Normandy. To commemorate those who took part, a small team from the Torbay Amateur Radio Society (TARS) in England is organizing a chain of five special event stations along the UK's southern coastline. Each will be based in the geographical area of a beach-landing force point of departure and will use a relevant call sign.

TARS will activate a site above Brixham Harbour in Devon — a departure point for many US soldiers who later landed on Utah Beach and will use the call sign GB75UF.

Other clubs activating similar relevant locations will use these call signs: GB75OF — Omaha Beach, South Dorset Radio Society; GB75GF — Gold Beach, Southampton ARC and Soton University Wireless Society; GB75JF — Juno Beach, Itchen Valley ARC and Waterside New Forest ARC, and GB75SF — Sword Beach, Fort Purbrook ARC.

In addition, TARS hopes to have two club stations from the Normandy area of France activating sites on the beaches. Logging is being coordinated centrally, and stations who contact two or more of the stations within the chain will be able to download a suitable certificate to commemorate their achievement. Details on logging, certificates, and

operating frequencies will be available on the TARS website. Contact the organizing team via email.

SSB frequencies will include 3.644, 7.144, 14.144, 18.144, 21.244, 24.944, and 28.244 MHz (data only on 10.144 MHz). Stations operating on CW or data will attempt to use similar frequencies ending in 44. Also, 5405 kHz (5403.5 kHz dial frequency).

The Special Event sponsors announced additional General class subband frequencies:

7.175 MHz and listening 5-10 kHz up; 14.275 MHz; 21.275 MHz; 24.975 MHz, and 28.275 or 28.444 MHz. --ARRL

CHINA SET TO LAUNCH NEW AMATEUR SATELLITE WITH “SAIL BALL” STABILIZATION

Chinese Amateur Satellite Group (CAMSAT) has announced the impending launch of the CAS-7B satellite, also designated as BP-1B, a short-lived spacecraft that will carry an Amateur Radio payload. An unusual feature of the spacecraft is its “sail ball” passive stabilization system. The 1.5-U CubeSat is attached to a 500-millimeter flexible film ball — or sail — that will offer passive “pneumatic resistance” stabilization. CAS-7B is expected to remain in orbit for up to 1 month.

The spacecraft will carry an Amateur Radio transponder and educational mission. CAMSAT is working with Beijing Institute of Technology (BIT), a top aerospace school, which is providing launch support in launch of the satellite. BIT faculty and students are participating in the development and testing of the satellite, and, with CAMSAT’s help, the university has established an Amateur Radio club (call sign BI1LG). CAMSAT said many students are now members, “learning Amateur Radio satellite communication and experience[ing] endless fun.”

The VHF and UHF antennas are quarter-wave monopoles. CAS-7B will transmit a CW telemetry beacon on 435.715 MHz. The V/U FM voice transponder downlink will be 435.690 MHz, and the transponder uplink will be 145.900 MHz (16-kHz passband).

The 3-kilogram satellite will have an apogee of 300 kilometers.

“Because of the orbital apogee and the size and mass of the satellite, the orbital life is expected to be only 1 week, up to a maximum of 1 month, which will also provide an opportunity for hams to track and monitor satellite entering the atmosphere,” CAMSAT said in announcing the new satellite, scheduled for launch in late June.

“The launch will use a new launch vehicle from a small commercial rocket company,” CAMSAT explained. “This is the first launch of this launch vehicle, and there is a large possibility of failure; if the launch fails, we will have another launch later this year.” --ARRL

FCC RE-CHARTERS TECHNOLOGICAL ADVISORY COUNCIL FOR NEW TERM

The FCC has re-chartered its Technological Advisory Council (TAC) for a 2-year term. Comprised of a diverse group of leading technology experts, the TAC provides technical expertise to the FCC to identify important areas of innovation and develop informed technology policies.

Greg Lapin, N9GL, will continue to represent ARRL on the TAC.

"The TAC will consider and advise the Commission on a variety of topics such as the deployment of 5G technology, the evolution of broadband networks and devices and their implications, the spectrum needs of unmanned aircraft systems, new developments in antenna technology, and the applications of artificial intelligence to telecommunications networks," the FCC said in announcing the re-charter.

Dennis Roberson, Executive Chairman of entigenlogicTM, chairs the Council. Michael Ha, Deputy Chief of the FCC Policy and Rules Division, is the Designated Federal Officer. The TAC will next meet on June 21. The public is welcome.

The FCC Public Notice includes the names of all TAC members, some of whom are radio amateurs. — *FCC Public Notice*

FCC IS NOT REINSTATING A VANITY CALL SIGN FEE

An erroneous report this week suggested that the FCC planned to again impose an Amateur Radio vanity call sign application (regulatory) fee of \$70 for the 10-year term. This incorrect conclusion resulted from an incomplete reading of the May 7 FCC *Notice of Proposed Rulemaking (NPRM)* in the matter of the assessment and collection of regulatory fees for fiscal year 2019.

Although the Schedule of Regulatory Fees does show a \$7 annual fee for Amateur Radio vanity call signs, a boldface heading in that section of the *NPRM* states, "**REGULATORY FEES. This section is no longer in effect as it has been amended by RAY BAUM'S Act of 2018..**" Section 9(e)(2) of RAY BAUM'S Act gives the Commission discretion to exempt a party from paying regulatory fees when the FCC determines that the cost of collection exceeds the amount collected. A new section 9(e) (1) incorporated the Amateur Radio vanity fee exemption from FCC rules into the statute.

The *NPRM* makes clear in several other places that regulatory fees no longer apply to Amateur Radio licenses. The FCC eliminated the regulatory fee for Amateur Radio vanity call signs in 2015. --ARRL Letter

FORMER ARRL HEADQUARTERS STAFFER ELLEN WHITE, W1YL, IS KRENKEL MEDALIST

ARRL Headquarters staff alumna and Life Member Ellen White, W1YL, has been awarded the Russian [E.T. Krenkel Medal](#), a prestigious award granted to individuals and organizations for outstanding global contributions to Amateur Radio.

First licensed in 1946, White had already learned Morse code in high school, and even today, she only rarely operates any other mode. She served for more than 25 years (1952 - 1978) on the Headquarters staff, at one point heading up ARRL contesting activities. She retired as Deputy Communications Manager and became *QST* "How's DX?" editor. On her own time, she recorded *QST* on tape for the vision impaired through the US Library of Congress talking book program.

Her husband Bob White, W1CW (SK), was ARRL DXCC manager. Their son Jim White, K4OJ (SK), also once served on the ARRL HQ staff and was president of the Florida Contest Group, which now holds his call sign.

For several years now, Ellen White has been operating via the W7RN remote contest station in Nevada to stay active on CW as W1YL/7, usually on 40 meters at around 1000 UTC. She is on the roster of the A-1 Operators Club and has served as a West Central Florida Assistant Section Manager. The article "[A Conversation with Ellen White, W1YL](#)," by Rosalie White, K1STO (no relation), appeared in the May/June 2015 edition of NCJ.

"It has been quite a ride and one I could not have made without ham radio," White told ARRL. "I am proud and delighted to be a chosen recipient of 'The Krenkel.'"

QST was awarded a Krenkel Medal in 2018.

The award's namesake, Ernst Teodorovich Krenkel, was a radio amateur who, over the years, used the call signs RAEM, U3AA, and UA3AA. Krenkel's image appears on postage stamps from the USSR and Russia, and he authored a biography entitled *My Callsign is RAEM*. Read [more](#). -- *Thanks to George Wagner, K5KG*

TECHNICAL

MAGNETIC LOOP ANTENNA DESIGNS MULTIPLY

Magnetic loops have become popular as effective and compact antennas for traveling and stealth applications. An HF magnetic loop design by John Chappell, W3HX, was an honorable mention in the 2018 QST Antenna Design Competition. Chappell's mag loop offers coverage on 80 - 20 meters, and he runs FT8 at 50 W. See his article on page 39 of the June 2019 issue of QST.

Richard Robbins, WA8RR, wanted to build one of his own for 40 and 20 meters, and he [described his efforts](#) in a recent edition of his club's newsletter, *DELARA News*. An [online calculator](#) helped him come up with the basics, and he decided on a 10-foot circumference loop constructed from half-inch copper pipe that would handle 100 W. His prototype, constructed from a piece of pipe "hand bent into an approximate circle," a Dayton Hamvention flea market capacitor, and a coax drive loop, would tune the two bands -- although, as expected, tuning was very sensitive and affected by body capacitance.

He worked up a reduction drive and remote motorized tuning, and was able to make several FT8 contacts, using his antenna analyzer to tune the loop. "The tuning would shift as I was transmitting," Robbins recounted. "This is a result of a very high circulating current and heating of the separate components." Encouraged, he went for a higher-end design constructed around a 5 - 500 pf vacuum variable capacitor, the project's most expensive component (these go for \$150 or more on eBay). "It is big and heavy," Robbins said. He had a metal fabricator bend a new piece of thin-wall copper tubing into a more aesthetically pleasing circle.

"To drive the capacitor, I obtained a stepper motor and driver, an Arduino controller board, and a four-channel remote," Robbins explained. "I used some sample programs to develop the code that would move the capacitor at different speeds depending on how long the remote was pressed. I added markings on the capacitor, so I could quickly move to different bands." -- *Thanks to DELARA News*

NEW BETA VERSION OF FT4 NOW AVAILABLE, MOCK CONTEST SESSION JUST CONCLUDED

The *WSJT-X* Development Group has released yet another new beta version of the FT4 protocol now available for testing in *WSJT-X* 2.1.0-rc7. The FT4 included in this “release candidate 7” version is not compatible with any previous release. Over the weekend, the developers had made *WSJT-X* 2.1.0-rc6 available for downloading and testing but “because of a serious bug,” pulled that version not long afterward.

“We are aware of a serious issue with this [-rc6] release,” Bill Selwood, G4WJS, of the *WSJT-X* Development Group, said on June 2. “Many users are experiencing a crash on attempting to start this version. The issue is not happening for everyone, but it appears to be present on all supported platforms.” Some users of release candidate 6 expressed satisfaction with the new version.

The developers advised FT4 enthusiasts to stop using *WSJT-X* 2.1.0-rc5 and switch to the latest -rc7 beta version to take advantage of other program corrections and enhancements.

A short mock contest session to wring out the contesting features of FT4 took place June 4, 1900 UTC, through June 5, 0100 UTC.

Changes, improvements, and bug fixes that have been made since *WSJT-X* 2.1.0-rc5 include:

- T/R sequence length increased from 6.0 to 7.5 seconds
- Symbol rate decreased from 23.4375 to 20.8333 baud
- Signal bandwidth decreased from 90 Hz to 80 Hz
- Allowable time offsets $-1.0 < DT < +1.0$ second
- TX 4 message with “RRR” now allowed, except in contest messages
- Audio frequency now sent to PSK Reporter
- Third decoding pass added
- Improved sensitivity: Threshold S/N is now -17.5 dB
- Improved S/N calculation
- In FT4 mode, Shift + F11/F12 moves transmit frequency plus or minus 100 Hz

Release candidate *WSJT-X* 2.1.0-rc7 will be available for beta-testing through July 21, 2019. It will not be usable during the ARRL June VHF Contest or during ARRL Field Day, and it will *permanently* cease to function after July 21, 2019. “If all goes according to plan, by that time we will have made a General Availability release of *WSJT-X* 2.1.0,” the announcement said.

Known Issues in *WSJT-X* 2.1.0-rc7

The developers note that they are aware of the following bugs or anomalies in release candidate 7. The 64-bit executable for Windows resets the audio input gain to 100% on program startup, when the input audio device is changed, and when switching to a new configuration. The recommended temporary workaround, if necessary, is to reset the Windows audio input to the desired level.

Download *WSJT-X* 2.1.0-rc7

Downloadable installation packages for *WSJT-X* 2.1.0-rc7 under Windows, Linux, and macOS are available on the *WSJT-X* web page.

SHORTS

N1MM Logger+, representing over 60% of nearly any contest's "market share" for loggers, has a [new website](#). Larry, K8UT, [pointed to a summary of the changes](#), but the most significant are fewer number of pages, better search capabilities, better bug/issue tracking visibility and reporting, and a "single sortable/searchable table listing all supported contests." Other ham radio software projects should take note: the ability for website visitors to easily see the status of issues and reported bugs is a feature that helps the development team by reducing the volume of messages of duplicate reports for a single common issue.

So simple even a computer can do it! Tuning an SSB signal isn't too difficult for a human, but like any task we might perform in a contest, it can take a little time and brain power. Tom, N1MM, [posted a YouTube video of a potential new feature](#) in the [N1MM Logger+ spectrum display window](#) to jump to the next/previous in-use SSB frequency. This looks like a great way to S&P on a different VFO while running without spending any effort on tuning. Conversely, if you want to find an empty frequency to run, [Tom has a solution for that, too](#). Both of these features will be in *N1MM Logger+* shortly, if not already. As an aside, how long before someone just writes an app to use these tuning techniques, pipe the audio into a voice recognition engine to find phrases like "CQ Contest W7XYZ", spot the call sign part, and then move to the next in-use frequency?

The [GNU Radio Conference](#) "celebrates and showcases the substantial and remarkable progress of the world's best open source digital signal processing framework for software-defined radios." 2019's event will occur September 16-20, 2019 in Huntsville, Alabama. They're inviting "... developers and users from the GNU Radio Community to pre-sent ... projects, presentations, papers, posters, and problems." For more details, see the [conference submission website](#). Many presentations from previous years can be found on YouTube.

DX Engineering announced their first antenna rotator they've ever manufactured, the [RT4500HD Heavy-Duty Antenna Mast Rotator](#). It boasts of improved reliability, improved wind load handling, and easier maintenance among its many features.

RF-KIT's new solid-state legal-limit RF2K-S HF+6m amplifier [will be available from DX Engineering in Fall of 2019](#) in both kit and FCC-certified assembled forms. Features include silent PIN diode switching, a 7-inch color touch screen, internal antenna tuner, and CAT/LAN/WiFi connectivity, along with software updates via the Internet. "RF-KIT is widely recognized around the world for its competitively priced, high-performance amplifiers. We're proud to be the company responsible for getting the new RF2K-S into the hands of customers in North America--fast and conveniently" states Tim, K3LR, CEO of DX Engineering

Steve, VE6WZ, has made a [video about the omega match he uses to feed his tower](#), and "how it can transform the resistive component of the complex impedance of a shunt feed." At just about four minutes, it's a worthwhile watch.

Wait, what? The FT4 [Reverse Beacon Network](#) spot infrastructure is [now in testing](#). It seems like we've only had FT8 spots for a few months.

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/>
