



RCA Amateur Radio Club

Indianapolis, IN

ARRL Affiliated Club

www.w9rca.org



FEBRUARY 2023

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, FEBRUARY 14th, 6:30 PM AT NORTH SIDE EVENTS, FORMERLY THE KNIGHTS OF COLUMBUS, 2100 EAST 71st, INDIANAPOLIS, IN

RCA ARC NEWS

JANUARY MEETING SUMMARY – We had a good turn out with most of the regulars for the January meeting. General group discussion with updates on new rigs, antennas, DX and FT8 along with info on the new WSJT-X release. AF9A and K9RU have been working with Don Rogers, N9JJD to get him up and running on FT8. There is a bit of a learning curve for anyone new to FT8 and no matter how long you have been using it there are always new operating hints you can pickup. We paid the club liability insurance and got a conformation and will pay the membership dues for the Indiana Repeater Council for 2023. Indianapolis Radio Club will operate Winter Field Day with the N9EDS group at the Salvation Army Disaster Training Center, Saturday, January 28th from 2PM to 4:30PM. This is an informal operation, with Bert, KC9TQA making chili and Bob Burns AK9R will be there with his test setup available to check radios. The January ARRL VHF contest is January 21-22, W9ZB and K9RU plan to be on.

AMATEUR RADIO LICENSE TEST SESSION

Date: Saturday, February 11, 2023

Time: Starting at Noon **by appointment only.**

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

Contact: James Kajder Ph:(505) 228-3704

Email: jkajder@gmail.com

Required: FCC FRN and a completed NVEC 605 license application form.

Laurel VEC test sessions: <https://www.laurelvec.com/?pg=exams>

Online amateur radio license tests sessions:

ARRL online test sessions: <http://www.arrl.org/findonlineexam>

Additional online examination dates and teams : <https://hamstudy.org/sessions>

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Salvation Army Open Net, Thursday, 7PM, W9RCA repeater, 146.88 MHz, tone 88.5 HZ

Feb 11 Hendricks County Hamfest, Hendricks County 4H Fairgrounds, Danville, IN, <http://n9hc.org>, Public Contact: Bill Pfaffenberger, AE9R, Phone: 317-407-1988, Email: hamfest@n9hc.net

- Feb 11-12 CQ WW RTTY WPX Contest <http://www.cqwxrtty.com/rules.htm>
- Feb 13-17 ARRL School Club Roundup <http://www.arrl.org/school-club-roundup>
- Feb 18-19 ARRL DX CW Contest <http://www.arrl.org/arrl-dx>
- Feb 24-26 CQ 160-Meter SSB Contest <http://www.cq160.com/rules.htm>
- Feb 25 Dugger Hamfest, Dugger Community Building, Dugger IN, Public Contact: Jonathan Olvey KD9AMN, Phone: 812-691-1653, Email: Jonolvey@gmail.com
- Feb 25 La Porte Cabin Fever Hamfest, La Porte Civic Auditorium, La Porte IN, Public Contact: Brian Salzer KB9HMR, Phone: 219-851-2133, Email: kb9hmr@gmail.com
- March 4-5 ARRL DX SSB Contest <http://www.arrl.org/arrl-dx>
- March 11 Wabash Valley ARA Hamfest, Clay County 4H Fairgrounds, Brazil IN, <http://w9uuu.org/>, Public Contact: Chuck Procarione W9COD, Phone: 812-239-8061, Email: hamfest@w9uuu.org

WA7BNM expanded contest calendar, <https://www.contestcalendar.com/contestcal.htm>

TECHNICIAN CLASSES COMING IN FEBRUARY – Bruce Enz, W9ENZ, will be hosting Technician classes on Saturday February 18th and 25th at the Chapel next to the Church of Jesus Christ of Latter-day Saints Temple in Carmel. The Chapel address is 11257 Temple Drive, Carmel, Indiana 46032. Bruce asks that on February 18th, please arrive at 8:45, with the class starting at 9 AM and running to 4 PM, with a 1-hour lunch break. On Saturday February 25th, please arrive at 8:45. Class will run 9 AM to noon, followed by a 1-hour lunch break, with testing starting at 1 PM until done. Bruce says testing normally concludes around 2:30 or 3 PM. Testing for General Class and Extra Class will also be available. The registration link for the test will be emailed to class members the week of the test.

Bruce says that the class is free, and testing is free. **Those testing will need to obtain an FRN (FCC Registration Number) prior to testing.** Emails will be sent to class members explaining how to obtain an FRN. The 10-year license costs \$35 to the FCC. Bruce will send those registered for class websites where they can self-study and take practice tests for free.

If you know of someone who wants to get licensed, have them contact Bruce at bruceenz@gmail.com or (317) 201-8299 to get registered. IRC Newsletter – Ken Bandy , KJ9B

THE DITS AND DASHES OF MORSE CODE IN THE DIGITAL AGE

Hams in the Fort Wayne area worked with the news staff at WANE TV to produce a very good story with interviews with Ken Rogner, K8KR, with Jerry Farlow and Joshua Long about ham radio in general and Morse code in particular. Take a look:

<https://www.wane.com/news/the-dits-and-dahs-of-morse-code-in-the-digital-age/>



YAESU RADIOS DONATED TO ARRL TO INSPIRE VISITORS AND YOUNG HAMS

There are two new [Yaesu](#) transceivers in use at [ARRL](#) Headquarters in Newington, Connecticut. They arrived via a generous donation from Yaesu USA.

The company has donated an FTDX101MP and FTDX10, both HF/50 MHz transceivers. In arranging the donation, Yaesu Vice President, Sales and Credit Gary Doshay, KN6APR, urged that the radios be used by ARRL "to educate and assist your visitors and especially young enthusiasts for ham radio."



"We appreciate the value that having this equipment available for members and visitors to see and explore will provide," said ARRL Director of Operations Bob Naumann, W5OV. "These are two of the top three performing transceivers on the Sherwood list," he added.

The FTDX101MP was named for Yaesu Founder Sako Hasegawa, JA1MP. The model holds a place of honor, in service in the first operating studio of the Hiram Percy Maxim Memorial Station, W1AW. ARRL members and visitors come year-round to tour the station and operate the equipment, most of which has been donated by generous manufacturers over the years. "The radio is already receiving a lot of attention from visitors," said W1AW Station Manager Joe Carcia, NJ1Q. "Some of our recent guests have included students and scouting groups who have enjoyed trying the new radio -- adding to the overall 'wow' factor of the station. We're grateful to Yaesu for this new addition to W1AW."

The FTDX10 has been installed in the new ARRL Radio Lab, W1HQ, where it will contribute to the station's ongoing role in the development of innovative amateur radio station design and function. "The Radio Lab is an extension of ARRL's equipment testing program, which supports [Product Review' in] QST magazine," said Naumann. "Putting the latest in modern radio technology through its paces is the intent of the Lab. It represents what is possible if the modern ham were to go with cutting-edge technology and integration. The Yaesu FTDX10 fits perfectly in that environment."

Naumann says the ARRL stations will benefit significantly from the donations of Yaesu's highly capable rigs. "It demonstrates the important partnership ARRL has with amateur radio manufacturers to educate and inspire our community." -ARRL

ARRL FOUNDATION ACCEPTING APPLICATIONS FOR GRANTS IN FEBRUARY

The ARRL Foundation is now accepting applications for grants to amateur radio organizations. The grants program awards limited funding to organizations for eligible amateur radio-related projects and initiatives, particularly those with a focus in educating, licensing, and supporting amateur radio activities. Youth-based projects and initiatives are especially encouraged. The ARRL Foundation grants program accepts proposals on a cyclical model three times a year, in February, June, and October. Proposals for the February grant period are being accepted through February 28. Awardees will be notified approximately 1 month after the closing of each cycle.

Additional information and a link to the grant application can be found at www.arrl.org/amateur-radio-grants. ARRL

ARDC WELCOMES NEW COMMITTEE MEMBERS

Amateur Radio Digital Communications (ARDC) has announced new 2023 volunteers serving on the Grants Advisory Committee (GAC) and Technical Advisory Committee (TAC).

The GAC reviews and advises the ARDC Board of Directors on eligible proposals and helps identify potential grant-making opportunities, while the TAC advises the board and staff on 44Net technology, architecture, and policy. Volunteers commit to serving at least a year and may serve up to a maximum of 3 years. The term starts in January and runs through December.

The volunteers joining the GAC: Katie Allen, WY7YL, Judi Clark, KK6ZCU, Dennis Derickson, AC0P, Jim Idelson, K1IR, Kristin Paget, KJ6GCG, William Thomas, WT0DX, Randy Wilkinson, W4LKS.

Joining the 2023 TAC are: [Dave Gingrich, K9DC](#), Rich Gopstein, KD2CQ, Randy Neals, VE3RWN/W3RWN, Alvaro Prieto, KC2VVE, Ian Redden, VA3IAN.

"It's always exciting to bring on new members to these committees," says ARDC Executive Director Rosy Schechter, KJ7RYV. "This year, I'm delighted to see more women and a variety of technical skills brought to the table. I'm [looking forward] to seeing what these committees do in 2023."

ARDC provides support for ARRL programs and initiatives including the ARRL Foundation Club Grant Program and Scholarship Program. Read more about the new volunteers, their backgrounds, and their committees at the [ARDC](#) website. -ARRL

SCIENTISTS STEER LIGHTNING WITH HIGH-POWERED LASER

Researchers at Institut Polytechnique de Paris successfully diverted lightning using a high-powered laser in the first demonstration of the technique outside a laboratory. Scientists believe the technology could eventually help control lightning strikes, potentially reducing the thousands of fatalities and \$3 billion in damages each year resulting from the phenomenon.

Traditional metal lightning rods only cover an area as wide as the rod is tall, limiting their application on large sites. To test covering a wider area, the researchers created a virtual lightning rod using a laser pulsing 1,000 times per second near a 400-foot tower in Switzerland. During storms in the summer of 2021, the laser's rapid beams heated a path of charged air near the tower, ultimately steering four lightning strikes through the ionized channel over 6 hours. You can read the full article at [Science News](#). ARRL Contest Letter

WORLD RADIO DAY SPECIAL TRANSMISSION

In honor of World Radio Day, February 13, 2023, radio station SAQ in Grimeton, Sweden, and amateur radio station SK6SAQ, are scheduled to be on the air to send out a peace message to the world, using the unique 1924 200 kW Alexanderson alternator on 17.2 kHz CW.

Test and tuning transmissions will begin approximately at 13:00 CET (12:00 UTC) and SAQ will be on the air for 20 - 30 minutes. Startup and tuning of the Alexanderson alternator will begin at 15:30 CET (14:30 UTC) and transmission of the peace message from SAQ will start at 16:00 CET (15:00 UTC).

SK6SAQ has picked a set of unique frequencies with a "connection" to SAQ's transmission frequency on 17.2 kHz, and will be QRV between 10:00 CET (09:00 UTC) and 17:00 CET (16:00 UTC) on the following frequencies: 3517.2 kHz CW, 7017.2 kHz CW, 14017.2 kHz CW, 3755 kHz SSB & 7140 kHz SSB

QSL cards will be available and there will be live coverage on [YouTube](#).

For more information about the World Radio Day event and SAQ Grimeton visit their [website](#).

HAARP THANKS AMATEUR RADIO OPERATORS FOR HELP WITH LATEST EXPERIMENT

On Tuesday, December 27, 2022, the High-frequency Active Auroral Research Program (HAARP) conducted its latest ionospheric experiment of bouncing radio signals off an asteroid passing near Earth's orbit (see the [ARRL News](#) story from December 23, 2022).

Amateur radio operators and radio astronomy enthusiasts were invited to monitor the test and send their results to HAARP for analysis. While the results of the experiment will take several weeks, Jessica Matthews, HAARP Program Manager, said the help was greatly appreciated. "So far we have received over 300 reception reports from the amateur radio and radio astronomy communities from six continents who confirmed the HAARP transmission."

HAARP officials say the results of the experiment could aid efforts to defend Earth from larger asteroids that could cause significant damage.

"We will be analyzing the data over the next few weeks and hope to publish the results in the coming months," said Mark Haynes, lead investigator on the project and a radar systems engineer at NASA's Jet Propulsion Laboratory in California. "This experiment was the first time an asteroid observation was attempted at such low frequencies," he said. "This shows the value of HAARP as a potential future research tool for the study of near-Earth objects."

The University of Alaska Fairbanks (UAF) operates [HAARP](#) under an agreement with the Air Force, which developed and owned HAARP but transferred the research instruments to UAF in August 2015. -ARRL

DX

3Y0J is on the air from Bouvet Island – As you no doubt know, 3Y0J has been on the air for a few days albeit a scaled down operation at this point due to the difficult conditions. Steve, N2AJ, the expedition's media spokesman, posts on FaceBook almost every day. The following is an interview with the Team Co-Leader, Ken, LA7GIA, recorded on Tue., Feb. 7, using the Icom Satellite radios. The video is here: <https://www.facebook.com/groups/3093983840726129>

Interview with 3Y0J Team Co-Leader Ken, LA7GIA, 02/07/2023:

"Everything is OK in the camp. The guys are good. We have a few antennas up. Running some pileups and preparing for the storm which will arrive in a few hours and last until Thursday. The boat will pull away from the island a bit. The antennas and camp are being secured. The winds are expected to be 60 knots. Nine members will stay in the camp during the storm. They will try to run two bands this evening and tomorrow. They will take down one antenna. They will run 30m and 17m using the Spider Pole on 17 and the aluminum DX Engineering antenna on 30m.

The operation has proved to be extremely difficult. The most extreme expedition I've been to. Setting up the camp has been a lot of work.

We will focus on CW and phone but there will be FT8. We have just discussed this today. We are running low power, only 100w. We have no amplifiers. We have three antennas set up. We are considering setting up 20m as well. So we will have 30, 20, 17, 15.

The beach landings were accomplished by holding onto a line attached to a buoy and floating 15 meters to the beach in our survival suits. This is quite extreme. We float in all the equipment as well. Then carry the equipment 800 feet up to the camp. We have videos of this. We spent a few days to set up the antennas and tent then prepared for the storm that is coming.

Everybody is in good shape. It's quite hard to stay here. A lot of wind, but today was a quiet, nice, and sunny day. This will change, and there will be a lot of rain. The day we arrived was a lot of wind and rain. Activating Bouvet is not like activating an island in the Caribbean. It is really windy, cold, and exhausting to bring equipment up here. It's a different DXpedition than we thought we should do. It's a challenge, but we hope we can stay on the island for some more days.

Regarding dupes, please only call us if you hear us. We have very good receive here on Bouvet Island. We do not have any facility to upload the log on the island. We are saving on fuel and connection for this. When we get back to the vessel, we will likely upload. We don't know when the first upload will be. Going to Marama is very time consuming project because of the procedure involved. (Ken describes it.) The first upload may be in the weekend. Again, if you don't hear us, don't call us.

Nothing more to report. Hopefully people understand the complexity of this operation. Hopefully

we will be able to stay another 7 to 10 days. We are working on plans for how to continue the operation despite the difficult weather conditions here at Bouvet.”

73,
Steve N2AJ
Media Officer & NA East Coast Pilot
3Y0J Bouvet Island 2023 DXpedition

TECHNICAL

Rabbit Digital Text VHF / UHF Ham Radio tactical communications without additional hardware.
<https://www.youtube.com/watch?v=TGzgjEt9wA>

Here is a video on how OFDM works:
<https://www.youtube.com/watch?v=ubPP48ojJ3E&t=624s>

SHORTS

The WSJT Development Team has announced that WSJT-X 2.6.1 General Availability (GA) release is now available for free download from *SourceForge*. Version 2.6.1 is a bug-fix release, and details can be found in the release notes at https://wsjt.sourceforge.io/wsjt-doc/Release_Notes_2.6.1.txt. **Users should note that the WSJT-X webpage has moved to <https://wsjt.sourceforge.io/wsjt.html>.** Direct links to installation packages for Windows, Linux, and MacOS can be found there. - Thanks to Joe Taylor, K1JT

Radio History: Voice of America Museum Special Here is a well produced video, made a few years ago, about the VOA transmitter in Mason, Ohio.
https://www.youtube.com/watch?v=3w_ZXRJol_4

Get on the air, band condition are great. "There was a 6-meter F2 opening between Ecuador and North America on January 6, 2023, around 1530 UTC, mostly between the southeast United States and Ecuador. Solar flux was 154." (Actually, solar flux was 154.3 on January 5 and 172.4 on January 6).

Viewing Reverse Beacon Network FT4 and FT8 Spots Pete Smith, N4ZR, notes that the [Reverse Beacon Network](#) (RBN) also carries FT4 and FT8 spots, but not on the regular feed or website. Clusters wishing to have access to these spots are invited to connect via Telnet to telnet.reversebeacon.net port 7002. If you would like to see what that feed looks like, feel free to connect with *PuTTY* or another Telnet app, and see for your self.

An article on the RBN website, <https://reversebeacon.net/pages/CW+and+FT4%2F8+on+a+single+Red+Pit+45>, explains how the RBN handles these spots, and has a partial list of DX clusters that carry the RBN's FT4 and FT8 spots.

Amateur Contact Log 7.0.7 Now Available Scott Davis, N3FJP, has announced the release of *Amateur Contact Log 7.0.7*, which includes the following enhancements: the addition of 10 memory fields to the Frequency Change form, the option to silently detect and download AD1C country list updates, upgrades to the behavior of the Watch List alert form, the addition of ADIF satellite tags (SAT_NAME and PROP_MODE) on LoTW download, which will fill in empty fields in *Amateur Contact Log* if they are currently empty and AC Log 7.0.7 and other N3FJP amateur radio software can be downloaded at <http://www.n3fjp.com/index.html>.

Arnaldo de Jesús Coro Antich, CO2KK, passed away January 8, 2023. Coro was born on July 2, 1942. He was a founding member, since 1966, of the Federation of Radio Amateurs of Cuba [Federacion de Radioaficionados de Cuba]. "At the age of 12, [Coro] joined what was then the Radio Club de Cuba, the association that brought together radio amateurs in the capital in the late 1950s," included a [report](#) of his passing from Horacio A. Nigro Geolkiewsky, CX3BZ, and International Amateur Radio Union (IARU) Region 2 Emergency Communications

Coordinator Dr. Carlos Alberto Santamaria Gonzalez, CO2JC, with translation from Tom Kamp, DF5JL. He was a journalist and university professor, teaching at the Raúl Roa García Instituto Superior de Relaciones Internacionales and at the José Martí International Institute of Journalism. "...he was a member of the team of Radio Habana Cuba until his death. His programme 'DXers Unlimited' in English reached all corners of the world ... His radio station was always ready to help in case of emergencies and disasters in our country and region. At the time of his death, he was the Emergency Coordinator for Area C of Region 2 of the International Amateur Radio Union (IARU R2)." He received the National Radio Award in 2017. A [full story](#) has been posted by IARU Region 2.

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.
