



# RCA Amateur Radio Club

## Indianapolis, IN



ARRL Affiliated Club  
[www.w9rca.org](http://www.w9rca.org)

JANUARY 2024

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE TUESDAY, JANUARY 9th, 6:30 PM AT NORTH SIDE EVENTS, FORMERLY THE KNIGHTS OF COLUMBUS, 2100 EAST 71<sup>st</sup>, INDIANAPOLIS, IN

### RCA ARC NEWS

**DECEMBER MEETING SUMMARY** – Thanks to everyone who attended the December meeting. The Club liability insurance was discussed again. Those present voted to go with the ARRL insurance which costs about \$200 per year. The ARRL Club Liability Insurance only covers members so starting in January. K9RU will maintain an active member list of those who attend meetings. Those who don't attend a meeting for two years, will be dropped from the list. This will be different from the newsletter email list. The insurance does have liability coverage for the club's repeaters sites. The treasurer, Greg KOGAH, will handle the application and make the payment. For Field Day in 2024, our Club will probably operate the 6m station again. Jim, K9RU, stated we need to schedule operators so as to cover all the operating times. John, KF9UH, has been working on a new computer to run Echolink at the repeater site. The Club will send John a check to cover his expenses to date. Remember Winter Field Day will be January 20<sup>th</sup>. This will be an "inside event" at the Salvation Army EDS Training Facility at 4020 Georgetown Rd. Dave, N9KZJ, reported the Indiana War Memorial Plaza National Historical Site has been named a new Parks on the Air (POTA) site (K-10561). This site encompasses the area from the American Legion Mall to the Indiana War Memorial. The station at the USS Indianapolis Memorial radio station and exhibit is available to activate this site, with prior approval. Jim, K9RU, announced that Northside Events facility has been reserved for the monthly Club meetings in 2024.

### AMATEUR RADIO LICENSE TEST SESSION

**Date:** Saturday, January 9<sup>th</sup>, 2024  
**Time:** Starting at Noon **by appointment only.**  
**Location:** Salvation Army EDS Training Facility, 4020 Georgetown Rd  
Indianapolis, IN 46254-2407  
**Contact:** Jim Rinehart (317) 721-1458  
**Email:** [testing@indyradioclub.org](mailto:testing@indyradioclub.org)  
**Required:** FCC FRN and a completed NCVEC 605 license application form.

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

### HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Salvation Army Open Net, Thursday, 7PM, W9RCA repeater, 146.88 MHz, tone 88.5 Hz  
Jan 6 ARRL Kids Day  
Jan 6-7 ARRL RTTY Roundup  
Jan 27 Winter Field Day, Salvation Army EDS Facility, 4020Georgetown Rd, 2-6 pm

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

Visit the **ARRL Special Event Stations database** at [www.arrl.org/special-event-station](http://www.arrl.org/special-event-station) to find other on-the-air events and commemorations.

**Hamfest or Convention:** [www.arrl.org/hamfests](http://www.arrl.org/hamfests)

**Find a license exam in your area:** [www.arrl.org/exam](http://www.arrl.org/exam)

**ARRL Home:** [www.arrl.org](http://www.arrl.org)

## THE DECEMBER 14<sup>TH</sup> SOLAR FLARE WAS BIGGEST IN YEARS, AN X-RAY EVENT EXCEEDING X1, BUT THE MONSTROUS X5 SOLAR FLARE LAUNCHED ON NEW YEAR'S EVE WAS THE LARGEST OF THE SOLAR CYCLE 25.

Even the sun is not above launching a few New Year's Eve fireworks, it seems. In the final hours of Dec. 31, 2023, satellites near Earth detected a gargantuan X5-class [solar flare](#) erupting from our star — ending the year with the single most powerful solar explosion seen since 2017.

The Dec. 31 X5 flare was the strongest of 2023, soundly beating an [enormous X2.8 flare that launched from the exact same spot](#) on the sun on Dec. 14. At the time, that X2.8 flare was also declared the most powerful flare since Sept. 10, 2017, when a gargantuan X8.2-class flare erupted from the sun, according to NOAA.

The December 14<sup>th</sup> solar flare [biggest solar flare in years](#) made it more difficult to communicate via radio on December 14. According to the [Space Weather Prediction Center](#), an X-ray event exceeding X1 caused "wide-area blackouts of HF radio communication for about an hour" on the sunlit side of Earth.

This event was big enough to get [notice by the national press, with coverage including pictures from NASA](#). Space Woman Weather [Earth-Directed Solar Storm Train and an X-Flare | Informal Live Forecast Briefing 16 December 2023](#)

Solar cycle 25, which began in 2019 and is predicted to peak this year.

## 2024 ARRL NATIONAL CONVENTION TO BE AT HAMVENTION

ARRL and Hamvention® have announced that Hamvention will host the 2024 ARRL National Convention, May 17, 18, and 19 at the Greene County Fairgrounds in Xenia, Ohio. Hamvention is the world's largest annual gathering of radio amateurs and has been sponsored by the Dayton Amateur Radio Association (DARA) since 1952.

"We are pleased to unveil our 2024 logo and theme," announced 2024 Hamvention General Chair Jim Storms, AB8YK, and the Hamvention team. "The theme is 'Expanding our Community'. This is in support of the growth of amateur radio worldwide."

Hamvention Awards Chair Michael Kalter, W8CI, also shared a reminder that the nomination period is open to submit nominations for 2024 Hamvention Awards, including the Amateur of the Year, Technical Achievement, Special Achievement, and Club of the Year awards. More information about the awards can found on the Hamvention website, and nominations will close on February 15, 2024.

ARRL is building a program for its National Convention that will include presentations and forums, more than a dozen exhibits, and activities for young hams. Once finalized, the National Convention program will be published at [www.arrl.org/expo](http://www.arrl.org/expo).

Hamvention urged "everyone to purchase their tickets and make their room reservations early to avoid the rush." Visit the Hamvention website for more information and to order tickets at [www.hamvention.org](http://www.hamvention.org).

## CQ HAS TEMPORARILY SUSPENDED PUBLISHING AT THIS TIME

ARRL has heard from many members concerned about their print subscriptions to CQ magazine.

Quoting Rich Moseson, W2VU, editor of CQ Magazine: "Unfortunately, CQ has temporarily suspended publishing at this time. We are working very hard to secure the necessary funding to continue operations but until we can make those arrangements, everything is on hold."

Many hams have noted not receiving paper copies of CQ magazine since earlier this year, and the last electronically published issue was October.

The CQ contests will continue to be held, uninterrupted, by the WWROF (as they have been for many years now).

I myself - the CQ Contesting Editor for the past several years - am launching a contesting website that will specialize in short turnaround news flashes and gossip from the contesting world. --Tim N3QE

ARRL members enjoy the ability to pursue earning the CQ Worked All Zones (WAZ) and Worked All Prefixes (WPX) awards through Logbook of The World (LoTW).

## ARRL'S YEAR OF THE VOLUNTEERS SUCCESS

2023 has been a remarkable year for amateur radio. There were many noteworthy opportunities for hams to use their license privileges for the greater good. An annular solar eclipse saw radio amateurs engaging in projects of scientific research about our ionosphere, devastating firestorms gutted entire cities and saw Amateur Radio Emergency Service member-volunteers rise to activate, hurricanes threatened life and property, bicycle races spread across the desert necessitating robust communications provided by hams, and high school students [led and executed contacts with the International Space Station](#). Many amateur radio operators stood to serve in ways that made headlines, and all of them were volunteers.

Still, tens of thousands of others did work that never made the pages of *QST*, didn't become the lead story on the local news, and didn't become fodder for online forums. Perhaps it was the ARRL VE who administered tests, welcoming the next generation of hams into the hobby, or the National Traffic System net manager who handled traffic from hams checking in. It could've even been the mentor who took the time to show a learner how to solder. These are the unsung heroes of the Amateur Radio Service -- these are the volunteers.

ARRL has nearly 60,000 volunteers within its membership, without whom it could not function. They are the lifeblood of this hobby. ARRL designated 2023 as the Year of the Volunteers to recognize their efforts, encourage new prospective volunteers to follow their lead, and call existing volunteers to reach one rung higher on the ladder of service. The Volunteers On the Air (VOTA) operating event has been popular among hams, with some operators making nearly 30,000 QSOs throughout the yearlong activation.

A young man from north Texas emerged as a leader. Sam Lovett, KI5RSV, is just a teenager but has been awarded the 2023 Hiram Percy Maxim Memorial Award for his success with developing interest in amateur radio among his peers. He leads a youth net and has been instrumental in building a strong ham culture in his Trail Life USA troop. A video interview with Sam will be featured in the February 2023 digital edition of *QST*.

Lyn Alfman, N8IMW, of Norwich, Ohio, was honored for her volunteer work in the public information space. She received the 2023 ARRL Philip J. McGan Memorial Silver Antenna Award. The proclamation issued by the ARRL Board of Directors says that Lyn "exemplifies the skills and depth of understanding [needed] to convey to media outlets the fascinating world of amateur radio."

ARRL's George Hart Distinguished Service Award honors the work member-volunteers put in to use their license privileges to serve others. Jo Ann Keith, KA5AZK, of Diana, Texas, is the 2023 recipient.

Jo Ann is the net manager of the 7290 Traffic Net, a public service traffic net that has been in operation since 1953. She has a long history of volunteer work, dating back to her youth when she served as a candy striper. Like tens of thousands of others, Jo Ann uses amateur radio in the spirit of service.

These are just a few stories that can be told from the Year of the Volunteers. There are so many other stories out there, and we encourage you to tell your own.

While the Volunteers on the Air event closes on December 31, 2023 at 2359 UTC, the spirit of this year will continue as long as there are hams standing to serve others through amateur radio.

From all of us at ARRL, thank you! --ARRL

## WRC-23 CONCLUDES WITH WINS FOR AMATEUR RADIO AND AGENDA ITEMS DESIGNATED FOR THE NEXT TWO EVENTS

After 4 hectic weeks of the 2023 World Radiocommunication Conference (WRC-23), and a preceding week of Radiocommunication Assembly meetings, WRC-23 concluded on Friday, December 15. Amateur radio fared very well overall, despite the enormous pressures across the radio spectrum from LF to terahertz. This is a tribute to the effort of the International Amateur Radio Union (IARU) team, who at times had to work from 8:00 AM to as late as 2:00 AM the next morning, as well as on the weekends.

At the top of the amateur radio priority list was Agenda Item (AI) 9.1b, regarding the coexistence of the secondary amateur and amateur-satellite allocation with the primary radionavigation satellite service in the 1240 - 1300 MHz band. This had seen 4 years of strenuous effort prior to WRC and resulted in a recommendation being agreed upon at the Radiocommunication Assembly, followed by WRC-23 participants agreeing to mention the recommendation in a new footnote for the allocation. Both the recommendation and the footnote are an excellent outcome for the amateur services.

- Other items were relevant to the amateur service and were prioritized beforehand:
- AI 1.12: 40 - 50 MHz radar sounders. These are now largely limited to the polar area.
- AI 1.14: 231.5 - 252 GHz re-allocations for Earth sensing. Fortunately, our secondary 241 - 248 GHz allocation is unchanged, and the primary allocation of 248 - 250 GHz is unaffected.
- AI 9.1a: Space weather sensors was an item of major interest. A clear definition for such sensors was confirmed, with frequency protection being agreed upon as an agenda item for WRC-27.
- AI 1.2: More broadband in the 3.3 GHz and 10 GHz bands (in Region 2). This is a difficult challenge, as the amateur services are secondary with numerous (mainly South American) countries allocating mobile broadband by way of footnotes. Instead of a region-wide designation for IMT at 10.0 - 10.5 GHz in Region 2, there is a footnote limited to a dozen countries.

Every WRC agreed to an agenda for the next conference under AI 10. This AI had an unprecedented number of proposals for WRC-27 and preliminary ones for WRC-31. Following the relatively quick agreement on AI 9.1b, the IARU team switched most of its efforts to the following future proposals to reduce the impact on the amateur services, as numerous amateur bands were under consideration.

## WRC-27

The WRC-27 agenda will have 19 items. The following are the most relevant to the amateur services:

- 1300 - 1350 MHz: A previous proposal for this band, adjacent to 23 centimeters, was suppressed, providing certainty for our secondary allocation.
- Lunar Communications: This future agenda item initially included 70 centimeters and other bands where Earth-moon-Earth could be restricted. Fortunately, the UHF aspect of this AI was modified to exclude 430 - 440 MHz.
- 10 GHz: We were fortunate that this band was withdrawn from another round of consideration for mobile broadband, especially in Region 1.

## WRC-31

A record number of preliminary item resolutions were agreed on. The following two are especially relevant:

- Wireless Power Transmission (WPT): Both near-field and beamed are being considered as part of the International Telecommunication Union radio regulations, whilst minimizing the impact from interference.
- 275 - 325 GHz Allocations: This will include an opportunity for the amateur and amateur-satellite service.

The IARU team worked effectively to minimize the amateur bands from future studies, which is a great result for amateur radio.

IARU is very pleased with the overall result of WRC-23. The IARU team has already started to discuss and consider how to engage and resource for the next cycle leading up to WRC-27. IARU WRC Coordinator and Vice President Ole Garpestad, LA2RR, expressed his pleasure with the results and complimented the extraordinary effort of the dedicated team of IARU volunteers who worked long hours to achieve the results that will benefit all amateurs.

The IARU team includes ARRL Technical Relations Specialist Jon Siverling, WB3ERA. WRC-23 ran from November 20 – December 15, 2023. --ARRL

## ARRL TEACHERS INSTITUTE GRAD PREPARES STUDENTS FOR HAM RADIO CONTACT WITH ASTRONAUT

[ARRL](#) celebrates the success of an [ARRL Teachers Institute on Wireless Technology](#) graduate. The skills learned in the Teachers Institute (TI) have led to a school having an amazing opportunity using amateur radio.

On Monday, December 11, 2023, students at Harbor Creek Senior High School in Harborcreek, Pennsylvania, will host an [Amateur Radio on the International Space Station \(ARISS\)](#) contact. Assistant Principal Drew Mortensen, AC3DS, completed the ARRL TI-1: Introduction to Wireless Technology program. Mortensen; Allen Lombardozzi, KC3TGY, and Elaine LaFuria, KC3SFY, have led the development of a robust amateur radio program at the school.

After attending the ARRL Teachers Institute, their students prepared and launched their own high-altitude balloon, capturing the interest and passion of other students, teachers, and the community.

Fifteen Harbor Creek students participating in the ARISS contact are licensed amateur radio operators. Since applying for the contact in November 2022, Harbor Creek has seen 16 students earn their amateur radio licenses, with three going on to earn their General-class licenses and three more going on to earn their Amateur Extra-class licenses. Mortensen expressed gratitude for the [ARRL Youth Licensing Grant Program](#), which reimburses the \$35

amateur radio licensing fee to those younger than 18, for helping to lower the barrier of entry for students.

Students at the Harbor Creek School District Advanced Technologies Group, KC3SGV, meet regularly and fill the meeting space to maximum capacity. The students of the group will livestream the event on their YouTube channel at [youtube.com/@advancedtechnologiesgroup](https://youtube.com/@advancedtechnologiesgroup). This livestream will be run and managed by students.

ARRL Education and Learning Manager Steve Goodgame, K5ATA, is excited about the school's success, stating, "The program at Harbor Creek Senior High School is a shining example of the impact the ARRL Teachers Institute on Wireless Technology can have on students."

If you are interested in supporting STEM education through the Teachers Institute on Wireless Technology, visit [www.arrl.org/GiveToSTEM](http://www.arrl.org/GiveToSTEM). --ARRL

## THE [INTREPID-DX GROUP](#) HAS ANNOUNCED THE WINNERS OF THE FOURTH ANNUAL YOUTH "DREAM RIG" ESSAY CONTEST.

The first-place winner is Abigail Matsuyoshi, KK7CFJ; in second place is McKenzie Denton, KO4GLN, and the third-place winner is Cameron Frey, KD9VGV. The recipients' ages range from 11 to 19 years old. Thirty essays were received from young amateurs in Canada and the US, and the judges reported that each essay was unique in thought and very well written. Extra consideration was given to the essays with correct grammar, punctuation, and spelling. The essays gave interesting perspectives on how to reach out and connect with today's youth, and those ideas will be shared in subsequent postings. The Intrepid-DX Group is a US-based nonprofit organization that promotes amateur radio activities around the world. The Youth "Dream Rig" Essay Contest is designed to gather the views and ideas of young people involved in amateur radio.

## 40 YEARS OF AMATEUR RADIO IN SPACE

Melissa Gaskill, a science author from Austin, Texas, has written a comprehensive review about the 40-year history of amateur radio in space. In her article, "[Ham Radio in Space: Engaging with Students Worldwide for 40 Years](#)," Gaskill explores the Shuttle Amateur Radio Experiment (SAREX), which is now known as Amateur Radio on the International Space Station (ARISS).

Gaskill said that while she wrote the article, she is not an expert on the subject but there are many who are including Kenneth Ransom, N5VHO, International Space Station (ISS) Ham Project Coordinator since 2004.

Ransom said that amateur radio in space was a possibility even before 1983, when Astronaut Owen Garriott, W5LFL (SK), made history during the STS-9 Space Shuttle Columbia mission with the first amateur radio contact from space. NASA had been looking for ways to bring amateur radio to Skylab (a space station designed as an orbiting workshop for scientific research) and even the moon.

"Having amateur radio in space has added a heightened level of interest, not only for hams, but for the overall program as well," said Ransom. "Just being able to talk to a crew member on board a spacecraft is an amazing accomplishment."

Garriott's son, Richard Garriott, who operated amateur radio during a short-term mission on the ISS in 2008, will present a special webinar on December 7, 2023, at 1800 UTC to discuss his father's first historic mission. The presentation will be available to watch on [ARISS - YouTube](#). The event is hosted by ARISS International Chair Frank Bauer, KA3HDO.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA's Space



Communications and Navigation (SCaN) program, the ISS National Laboratory -- Space Station Explorers, [ARRL](#), and AMSAT.

## ARDC AND ARRL ANNOUNCE \$2.1 MILLION FOR THE NEXT GENERATION OF AMATEUR RADIO

[Amateur Radio Digital Communications \(ARDC\)](#) and [The ARRL Foundation](#) announced a three-year commitment with over \$2.1 million in combined funding to support scholarships for radio amateurs, radio technology for classroom teachers, and amateur radio club grants. This commitment reinforces a strong shared vision between ARRL The National Association for Amateur Radio® and ARDC to invest in the future of amateur radio through programs supporting the next generation of radio amateurs.

"ARRL and ARDC share a common vision for the future of Amateur Radio," says The ARRL Foundation President David Norris, K5UZ. "The Foundation exists to support the next generation of radio amateurs, and we are so proud to collaborate with ARDC to make these programs possible."

The ARDC Scholarship at The ARRL Foundation has supported nearly 100 amateur radio operators in pursuit of their educational goals since its inception in 2020. The renewed commitment will result in over 200 total scholarships, awarded over the next three years, for radio amateurs pursuing higher education, with scholarships ranging from \$5,000 to \$25,000. This competitive scholarship program is run through The ARRL Foundation Scholarship Program, and recipients who demonstrate academic excellence and financial need can use this funding for tuition, room & board, books, and other fees essential to advance their education. More information on eligibility and application deadlines may be found online at The ARRL Foundation website at [www.arrl.org/scholarship-program](http://www.arrl.org/scholarship-program).

The ARRL Club Grants program was introduced in 2022 with initial funding from ARDC. Thanks to this next round of collaboration, the ARRL Club Grants Program will continue in 2024. Beginning with significant funding from ARDC in 2022, the ARRL Club Grants program is administered by The ARRL Foundation, together with the ARRL Field Organization. These club grants are critical to the future of amateur radio because of the importance of mentoring and helping licensees become active in Amateur Radio. ARRL encourages clubs to revitalize this critical aspect of their role by applying for funding to support programs in one of the available categories, including ham skills development, STEAM learning and education, or club station improvement, among others. This transformational program will launch in the Spring of 2024. More details will be provided through upcoming informational sessions and on The ARRL Foundation website at [www.arrl.org/club-grant-program](http://www.arrl.org/club-grant-program).

Additional funding from ARDC will extend the effectiveness of ARRL outreach programs to teachers and schools, including the ARRL Teachers Institute for Wireless Technology. Monies will be used to purchase equipment to allow students to get hands-on STEM experiences through radio communications and radio technology.

Read more about the exciting announcement on [ARRL News](#).

## THE [US ISLANDS \(USI\) AWARDS PROGRAM](#)

US Islands Award Program is centered around chasing and activating river, lake, and ocean shore islands within the US and its territories and protectorates. USI is offering a special 30th Anniversary Award for hunters and activators from January 1 to December 31, 2024.

As a club or as individuals, hunters can work toward confirming 30 different US islands during 2024. The award will be issued in five island increments.

Activators can work toward activating or qualifying 30 different US islands, any combination of expeditions, or fixed locations. Activators and island expeditions can also work toward operating from 30 different US islands in any combination of activations or qualifications.

A minimum of 15 QSOs must be made for a new island qualification and an island activation to be considered for the award. The award can be issued to a club call sign, multiple members under one call sign, or an individual. There are also bonuses for qualifying new islands. More information and a detailed list of rules are available on the [USI website](#).

## SHORTS

**CONFUSED ABOUT BITS AND BAUD?** – This episode from the ARRL podcast “On the Air,” ties into a feature in the November/December issue called “Bits and Baud,” which discussed important elements of digital communication, namely the quantity of information a transmission delivers -- known as bit rate -- and the rate of speed at which the information is delivered, which is known as baud rate. The article’s author, former QST Editor Steve Ford, WB8IMY, joins us to explain more about the differences between bit rate and baud rate, as well as why hams are concerned with these measurements in the first place. <https://blubr.com/arrlonthear/127825853/>

**ON-LINE AMATEUR RADIO LICENSE CLASSES COMING UP** – An Extra Class will start on January 9<sup>th</sup> and run through April 30<sup>th</sup> (16 weeks). The class meets on Tuesday nights, from 6:30 to 8:30PM. The class will use the ARRL Extra Class License Manual , Twelfth Edition.

The class is free and will be taught virtually, using the Zoom software. Class size is limited to 25 students. This class will also be streamed live and recorded for later viewing on the W4EEY You Tube channel.

A Technician Class will start on January 10<sup>th</sup> and run through March 13<sup>th</sup> (10 weeks). The class meets on Wednesday nights, from 6:30 to 8:30PM. The class will use the ARRL Ham Radio Technician License Manual , Fifth Edition. The class is free. The class will be taught virtually, using the Zoom software. Class size is limited to 25 students. This class will also be streamed live and recorded for later viewing on the W4EEY You Tube channel. Instructors will be Gary W4EEY and Dave KE4EA. To register for one of these free classes or for more information please contact Gary W4EEY by email at: [w4eey@arrl.net](mailto:w4eey@arrl.net)

Also, a General License class will start on January 14 for 6 weeks, running from 1:30 to 4:30 pm on Zoom. The classes are free, and will be taught by K8ZT, W8EZT & N8PLZ. For more information, go to <https://tiny.cc/beahamg>

**== VOTA W1AW/9 INDIANA ==** What a wonderful week of operating VOTA as W1AW/9! Once all of the logs were uploaded, we made over 2,000 contacts. Many thanks to the following operators for donating their time, their stations, and their operating talents to put W1AW/9 on the air from Indiana: AC9HP, AK9R, K9EI, K9EJS, K9LA, K9LV, K9LZJ, K9SG, K9SVL, K9UOK, K9WX, N9TD, KJ9B, KJ9C, N9TTK, NI9Y, NY1V, WA9BD, WA9FDO, and WO9G. --ARRL Indiana Section Newsletter - Bob Burns AK9R ARRL Indiana Section Manager

**QSL CARD CREATOR**-- You can use this web page to create QSL cards. The cards will be created in the form of a PDF document that you can then print on light-weight card stock. The individual cards can then be cut out and the information filled in and mailed to the intended recipient. You have the option of printing a single QSL card or printing up to four cards per page. The cards are printed 5.5 inches wide by 3.5 inches high. This is a standard size for a QSL card. However, this leaves no room for margins when printing over two cards per page on a standard 8.5 by 11 paper size. Fortunately, since these are pdf files you can print them and have the page print with the fit to page option. This will slightly reduce the



size of the cards and allow them to be printed on whatever printer that you have. This will allow you to make better use of any special paper you are using, assuming you don't mind having the cards slightly smaller than is normal. <https://www.radioqth.net/qlscards>

**POTENTIAL SUMMER EMPLOYERS OF COLLEGE-AGE AMATEURS:** Kids these days are using [Handshake](#), [Indeed](#), and [LinkedIn](#) to find their summer jobs and post-school opportunities. At least one radio gear manufacturer includes the "Amateur Radio" key phrase in their job postings on Indeed.

**The Thursday (US) evening NS RTTY Sprint sessions, sponsored by the Northern California Contest Club, have come to an end. According to Ed Radlo, AJ6V, posting to the CQ-Contest email reflector:**

"A few months ago, the team that manages this contest, which has been sponsored by the NCCC (Northern California Contest Club) for many years, conducted an in-depth study at whether this half hour Thursday night contest is still viable, given the low and declining participation experienced over the past couple of years.

Unfortunately, since this study of a few months ago, the participation in the RTTY NS has declined even further. Therefore, the contest management team has come to the painful conclusion that it is time to say farewell to the Thursday night RTTY NS, effective immediately."

**The 10-year amateur radio special event and countdown to the 100th anniversary of the discovery of Pluto will continue on February 11 - 19, 2024 (UTC), and celebrate Clyde Tombaugh's discovery from the Lowell Observatory in Flagstaff, Arizona.** Members of the [Northern Arizona DX Association](#) will operate from Lowell Observatory and their home stations using the special event call sign W7P. The annual QSL cards, the event certificate, and more information about the event can be found at [W7P 2030 \(nadxa.com\)](http://W7P.2030.nadxa.com).

***THANKS FOR READING***

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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.

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