



RCA Amateur Radio Club

Indianapolis, IN

www.w9rca.org



JANUARY 2021

MONTHLY NEWSLETTER

A VIRTUAL ZOOM MEETING WILL BE SCHEDULED FOR
TUESDAY JANUARY 12th AT 7:00 EST
INVITATIONS TO JOIN WILL BE EMAILED BY JANUARY 11th

RCA ARC NEWS

THE JANUARY 12 MEETING – For the January 12th meeting, we shall again use a Zoom virtual meeting. The meeting will start at 7:00 pm and is being hosted on the Indiana ARRL Section Zoom courtesy of the Indiana SCM Jimmy Merry, KC9RPX.

You will receive an email message with a link, meeting ID and password by January 11th. If you can access your emails by your smart phone, then you can join using it. If you join using your desktop or laptop and do not have a video camera, then it will join you with audio only assuming you have some type of microphone connected to the computer. If not, then you will be logged as listen only. You can also use your phone and call in using the numbers listed in the email for the session.

DECEMBER MEETING SUMMARY – The December meeting got off to a slow start as the Zoom account, made available to us by the Indiana ARRL Section, was apparently in use for another meeting. Another meeting was created with ID and password distributed by the email list. Thanks to all who stuck with us for the delayed start. The meeting was a round table discussion of a variety of subjects including, but not limited to, testing, antennas, antenna rotors, digital modes like FT8 and related. Wishing everyone a great Holiday Season!

AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, January 9, 2021, Starting at 12:00 pm **by appointment only.**
(Required: FRN and completed form NCV-EC 605. A mask is required)
Location: Salvation Army EDS Training Facility, 4020 Georgetown Rd
Indianapolis, IN 46254-2407
Contact: Jim Rinehart, k9ru@arrl.net, 317 721-1458

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Jan 9	Ohio ARES Simplex Contest 50 MHz & above 10 AM to 4 PM
Jan 16	NAQP SSB Contest & North American Collegiate Championship
Jan 16-18	ARRL January VHF Contest
Jan 30-31	Winter Field Day Contest - Winter Field Association (WFDA)

FCC REDUCES PROPOSED AMATEUR RADIO APPLICATION FEE TO \$35

The FCC has agreed with ARRL and other commenters that its proposed \$50 fee for certain amateur radio applications was “too high to account for the minimal staff involvement in these applications.” In a *Report and Order (R&O)*, released on December 29, the FCC scaled back to \$35 the fee for a new license application, a special temporary authority (STA) request, a rule waiver request, a license renewal application, and a vanity call sign application. All fees are per application. There will be no fee for administrative updates, such as a change of mailing or email address.

This fall, ARRL filed comments in firm opposition to the FCC proposal to impose a \$50 fee on amateur radio license and application fees and [urged its members](#) to follow suit.

As the FCC noted in its *R&O*, although some commenters supported the proposed \$50 fee as reasonable and fair, “ARRL and many individual commenters argued that there was no cost-based justification for application fees in the Amateur Radio Service.” The fee proposal was contained in a *Notice of Proposed Rulemaking (NPRM)* in MD Docket 20-270, which was adopted to implement portions of the “Repack Airwaves Yielding Better Access for Users of Modern Services Act” of 2018 — the so-called “Ray Baum’s Act.”

“After reviewing the record, including the extensive comments filed by amateur radio licensees and based on our revised analysis of the cost of processing mostly automated processes discussed in our methodology section, we adopt a \$35 application fee, a lower application fee than the Commission proposed in the *NPRM* for personal licenses, in recognition of the fact that the application process is mostly automated,” the FCC said in the *R&O*.

“We adopt the proposal from the *NPRM* to assess no additional application fee for minor modifications or administrative updates, which also are highly automated.”

The FCC said it received more than 197,000 personal license applications in 2019, which includes not only ham radio license applications but commercial radio operator licenses and General Mobile Radio Service (GMRS) licenses.

The FCC turned away the arguments of some commenters that the FCC should exempt amateur radio licensees. The FCC stated that it has no authority to create an exemption “where none presently exists.”

The FCC also disagreed with those who argued that amateur radio licensees should be exempt from fees because of their public service contribution during emergencies and disasters.

“[W]e are very much aware of these laudable and important services amateur radio licensees provide to the American public,” the FCC said, but noted that specific exemptions provided under Section 8 of the so-called “Ray Baum’s Act” requiring the FCC to assess the fees do not apply to amateur radio personal licenses. “Emergency communications, for example, are voluntary and are not required by our rules,” the FCC noted. “As we have noted previously, [w]hile the value of the amateur service to the public as a voluntary noncommercial communications service, particularly with respect to providing emergency communications, is one of the underlying principles of the amateur service, the amateur service is not an emergency radio service.”

The Act requires that the FCC switch from a Congressionally-mandated fee structure to a cost-based system of assessment. The FCC proposed application fees for a broad range of services that use the FCC’s Universal Licensing System (ULS), including the Amateur Radio Service, which had been excluded previously. The 2018 statute excludes the Amateur Service from annual *regulatory* fees, but not from *application* fees. --ARRL

"While the Ray Baum's Act amended Section 9 and retained the regulatory fee exemption for amateur radio station licensees, Congress did not include a comparable exemption among the amendments it made to Section 8 of the Act," the FCC R&O explained.

The effective date of the fee schedule has not been established, but it will be announced at least 30 days in advance. The FCC has directed the Office of Managing Director, in consultation with relevant offices and bureaus, to draft a notice for publication in the *Federal Register* announcing when rule change(s) will become effective, "once the relevant databases, guides, and internal procedures have been updated." --ARRL

FCC TO REQUIRE EMAIL ADDRESS ON APPLICATIONS STARTING ON JUNE 29, 2021

Effective on June 29, 2021, amateur radio licensees and candidates must provide the FCC with an email address on all applications. If no email address is included, the FCC may dismiss the application as "defective."

On September 16, the FCC adopted a *Report and Order (R&O)* in WT Docket 19-212 on "Completing the Transition to Electronic Filing, Licenses and Authorizations, and Correspondence in the Wireless Radio Services." The R&O was **published** on December 29 in the *Federal Register*. The FCC has already begun strongly encouraging applicants to provide an email address. Once an email address is provided, the FCC will email a link to an official electronic copy of the license grant. An official copy will also be available at any time by accessing the licensee's password-protected Universal Licensing System (ULS) account.

Licensees can log into the ULS License Manager System with their FRN and password at any time and update anything in their FCC license record, including adding an email address. For questions or password issues, call the CORES/FRN Help Line, (877) 480-3201 (Monday – Friday, 1300 – 2300 UTC) or [reset the password](#) on the FCC website.

FIRST SOLAR IMAGE FROM HAWAII OBSERVATORY SHOWS SUNSPOT CLOSE-UP

The world's largest solar observatory, National Science Foundation (NSF) Daniel K. Inouye Solar Telescope in Hawaii, [has released](#) its first image of a sunspot, capturing the phenomenon in striking detail. The image, taken last January, is among the first solar images of the new Solar Cycle 25. The telescope's 4-meter primary mirror will give the best views of the sun from Earth throughout Solar Cycle 25. The image was released along with the first of a series of Inouye-related articles featured in the *Solar Physics* journal. As radio amateurs know, sunspots and other solar activity can affect HF radio

propagation, among other things, and they are where coronal mass ejections (CMEs) and solar flares originate. The Inouye telescope is in its final stages of construction.

"While the start of telescope operations has been slightly delayed due to the impacts of the COVID-19 global pandemic, this image represents an early preview of the unprecedented capabilities that the facility will bring to bear on our understanding of the sun," said David Boboltz, NSF Inouye Solar Telescope Program Director. Solar Cycle 25 is predicted to peak in mid-2025.

"With this solar cycle just beginning, we also enter the era of the Inouye Solar Telescope," said Matt Mountain, President of the Association of Universities for Research in Astronomy (AURA), the organization that manages the National Solar Observatory and the Inouye Solar Telescope.

"We can now point the world's most advanced solar telescope at the sun to capture and share incredibly detailed images and add to our scientific insights about the sun's activity."

During the peak of Solar Cycle 24, 120 sunspots were tracked. Some 115 sunspots are predicted for the peak of Solar Cycle 25.

The new image encompasses an area on the sun's surface of some 10,000 miles across -- just a tiny part of the sun, but large enough to fit Earth inside, the Inouye Solar Telescope said in its statement. Read [more](#). -- *Thanks to the National Solar Observatory and news media reports – ARRL*

TEXAS' BIGGEST HAM RADIO SHOW — HAM-COM — IS CLOSING

After 41 years, [Ham-Com](#) has decided to close its doors due to the difficulties caused by the COVID-19 pandemic and the rising costs of putting on a show.

"The decision was not made lightly, but the safety and wellness of our volunteers, vendors, clubs, presenters, and attendees is our paramount concern," Ham-Com President Bill Nelson, AB5QZ, said in an announcement on the Ham-Com website. Ham-Com has been held each June at the Plano Event Center in Plano, Texas.

"We sincerely thank each and every person for their support over the past years," Nelson said. "This starts with clubs who have participated in offering forums, transmitter sessions, VE sessions, talk-ins, and many more things through the years." Nelson also expressed appreciation for the vendors, volunteers, and visitors. "Ham-Com is proud to contribute to bringing people together to enjoy this passion. We will definitely miss this gathering of the broader community," Nelson concluded. "Our thoughts and best wishes to you and your families."

FINLAND RADIO AMATEURS SEEK REPLACEMENT SPECTRUM FOR 1240 – 1300 MHZ

Finnish International Amateur Radio Union (IARU) member-society [SRAL](#) is asking for amateur radio privileges on 220 – 225 MHz as a replacement for the 1240 – 1300 MHz band, which was deleted last April 24, except for use by special permit. SRAL's initial request for 902 – 928 MHz was turned down.

The request is to provide spectrum for Amateur Television (ATV) operation. The special permits for the 1.2 GHz band will expire when the Galileo GNSS (GPS) constellation becomes fully operational. Concerns have arisen in Europe regarding the potential of amateur radio interference to one Galileo frequency.

The European Conference and Telecommunications Administrations (CEPT) Working Group SE 40 (Space Service compatibility issues) met in early December to discuss the 1240 – 1300 MHz frequency band. 1240 – 1260 MHz is used by the Global Navigation Satellite System (GLONASS) of the Russian Federation, and 1260 – 1300 MHz is used by Europe's Galileo system, China's BeiDou system, and Japan's QZSS, and is planned to be used by Korea's KPS. — Southgate Amateur Radio News

NEW ZEALAND ADDS WIRELESS POWER TRANSFER (WPT) AS UNLICENSED SYSTEMS

New Zealand is putting wireless power transfer (WPT) systems using 148.5 kHz to 30 MHz into the General User Radio Licence for Short Range Devices (GURL-SRD) category. The GURL-SRD notice has been updated to include several amendments.

These include new provisions to permit the use of the frequency range 0.1485 – 30 MHz for WPT and induction loop systems used to detect foreign objects; to permit the use of the frequency range 1785 – 1805 MHz for wireless microphone, in-ear monitors, or wireless audio transmitters; to implement WRC-19 Resolution 229 regarding the 5150 – 5350 MHz band to permit wireless local area network (LAN) outdoor use and a power level up to 0 dBW, and to permit the use of the frequency range 13.553 – 13.567 MHz for radio frequency identification (RFID) transmitters.

A General User Radio Licence permits transmitting without the need to get a license or paying licensing fees.

NATHAN SIMINGTON CONFIRMED AS NEWEST FCC MEMBER

Nathan Simington, President Donald Trump's nominee to replace outgoing Commissioner Michael O'Rielly on the FCC, has been confirmed by the Senate in a 49-46 vote. Simington will serve a five-year term that will be back-dated to begin from July 1, 2019.

Simington will join current FCC commissioners Jessica Rosenworcel, Brendan Carr and Geoffrey Starks. FCC Chairman Ajit Pai will continue to serve in that role until Jan. 20, 2021, at which point he will leave the commission.

Pai congratulated Simington in a statement:

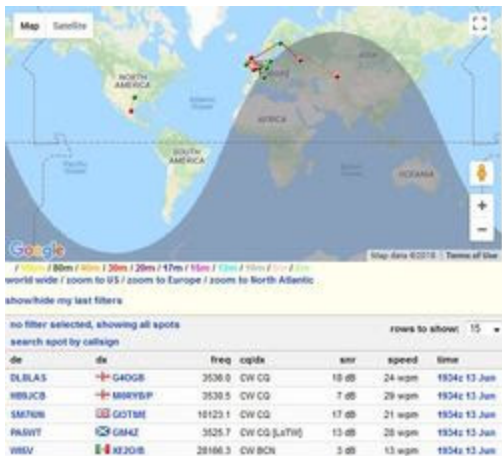
"I congratulate Nathan on his confirmation by the U.S. Senate and look forward to welcoming him to the commission. It has been the greatest honor of my professional life to serve at the FCC, and I am confident that Nathan too will enjoy the challenges and rewards of the job."

Simington's nomination to the FCC came after President Trump rescinded the nomination of another five-year term for Commissioner O'Rielly after O'Rielly publicly questioned the FCC's ability to review Sec. 230 of the Communications Decency Act, which President Trump has pushed for and to potentially remove protections of social media companies. --ARRL

REVERSE BEACON NETWORK LEVERAGING YASME FOUNDATION GRANT FOR EXPANSION

The [Reverse Beacon Network](#) (RBN) is taking advantage of a grant from the [Yasme Foundation](#), in cooperation with Amateur Radio Digital Communications ([ARDC](#)), to add 15 more nodes. RBN is a global system of software-defined radio receivers that monitor amateur radio bands and report CW, RTTY, and FT4/FT8 signals to a central, searchable database. In October, a Yasme-funded node was successfully installed in Tunisia, bolstering RBN representation in northern Africa. Additional nodes are planned for Algeria and Libya. The success of this small program led to the global 15-node project to expand the RBN into such under-represented areas as the Caribbean, the South Pacific, Central Asia, the Middle East, and South America. Selections were guided by the research community at [HamSCI](#), whose website provides a forum for researchers and amateurs to interact and conduct studies and experiments.

"By adding stations in these areas, the network's data quality and coverage are improved to allow better analysis of events and openings beyond what was previously available," Yasma Foundation President Ward Silver, N0AX, said. "This large and growing database of records supports scientific research and allows hams to be more effective on the air and in planning operations and station design."



Silver said researchers are particularly interested in the RBN data because it covers such a wide area with so many stations, a capability unusual in research. Silver also noted that the RBN project has resulted in many volunteers working together around the globe. "The RBN team deserves a lot of credit for creating an important asset that combines amateur radio and science in the best traditions of both," he said. "We look forward to helping keep that spirit alive and well."
 -- Thanks to Ward Silver, N0AX, and DX

Engineering –ARRL Contest Letter

AUSTRALIAN RADIO AMATEURS DENIED ACCESS TO 60 METERS

After considering several options for a 5 MHz amateur allocation, the Australian Communications and Media Authority (ACMA) has come down in favor of national government interests. Following a [consultation](#), ACMA decided not to permit ham operation on the 5351.5 - 5366.5 kHz band. The 15 kHz-wide band was allocated to the amateur service on a secondary basis in 2017, ACMA says, "unresolved sharing issues" have prevented ham radio use of the band, used by more than 500 other licensed services as well as by the Australian military."

"The ACMA recognizes the high level of interest shown by the amateur community in adding this band and understands there will be disappointment," the agency said.

Australia's International Amateur Radio Union (IARU) member-society, the Wireless Institute of Australia (WIA), argued for amateur access to 5351.5 - 5365 kHz as a compromise. The WIA pointed out that more than 80 countries have been granted access to the band.

Radio amateurs in New Zealand lost access to 60 meters in late October. Use of this band by radio amateurs there was provisional, allowing hams to use two frequencies in the band -- 5353.0 kHz and 5362.0 kHz -- as part of a trial.

In the US, ARRL proposed amateur access to a new, contiguous secondary band at 5 MHz in a 2017 *Petition for Rule Making*.

ARRL also asked the FCC to retain shared access to four of the current five 60-meter channels (one would be within the new band) as well as current operating rules, including the 100 W PEP effective radiated power (ERP) limit. The federal government is the primary user of the 5 MHz spectrum in the US. Read [more](#). – Thanks to The 5 MHz Newsletter Editor Paul Gaskell, G4MWO, for some information. --ARRL

QSO TODAY VIRTUAL HAM EXPO RETURNING IN MARCH

The QSO Today Virtual Ham Expo will return March 13 – 14 for a full 48 hours, QSO Today host

Eric Guth, 4Z1UG/WA6IGR, announced this week. ARRL is a QSO Today Expo Partner. Guth said the inaugural QSO Today Expo last August attracted more than 16,000 attendees, and he anticipates that the March 2021 event will be even more successful.

The upcoming QSO Today Virtual Ham Expo will feature new speakers and presenters, panel discussions, and kit-building workshops among other activities. Guth pointed out that attendees can log in from anywhere. While he anticipates a good turnout by those who typically attend such ham radio events, the virtual Expo also offers an opportunity for those concerned about pandemic travel restrictions as well as for those who don't typically attend in-person events.

"At our last Expo, we found that 60% of attendees don't go to in-person national conferences, and 40% don't attend state or local events," Guth said, noting that distance and the high cost of travel and lodging were the most oft-cited reasons.

Registration is required, and to help cover the costs of staging this event, there will be a charge to attend. Advance tickets are \$10 (\$12.50 at the "door") and include entry for the live, 2-day show as well to the 30-day on-demand period. At the Expo, visitors can:

Learn from a line-up of such well-known ham radio personalities as Bob Allphin, K4UEE, on "My Favorite DXpeditions to DXCC Top 10 Most Wanted;" Michael Foerster, W0IH, on "Using the Arduino in Your Shack," and Ron Jones, K7RJ, on "3D Printer Basics."

Take part in live virtual kit-building workshops. (Kits will be available for purchase and delivered to attendees in time for the Expo.)

Walk through the virtual exhibit hall to visit an array of amateur radio vendors and see live demonstrations of the latest equipment. This show will leverage newer video technology to provide a better experience for attendees to engage with exhibitors.

Those planning to attend the Expo may take advantage of new speaker calendar technology to create their own calendar of presentations in their time zones, which can be saved to a Google or Outlook calendar.

Registrants may return over the 30 days following the live event to catch speakers and presentations missed during the live period, as well as to explore and re-engage exhibitor offerings.

"The QSO Today Virtual Ham Expo has all of the familiar hallmarks of an in-person hamfest, including opportunities to connect and learn," ARRL Product Development Manager Bob Inderbitzen, NQ1R, said. "Expect to bump into friends and well-known experts and personalities from throughout our worldwide ham radio community!" He explained that attendees visiting an exhibit or virtual lounge will be able to interact with other attendees in those settings.

FlexRadio is the Expo's Platinum Sponsor. Gold sponsors as of this time include Elecraft, RFinder, and CSI. --ARRL

THE JAPAN INTERNATIONAL DX MEETING (JIDXM) COMMITTEE ANNOUNCES AWARDS

The Japan International DX Meeting (JIDXM) committee, in cooperation with CQ magazine, has announced awards to DXpedition teams and individuals who made outstanding contributions to the world's DX community. The 2020 JIDXM award program will recognize the VP8PJ South Orkney DXpedition Team (February 2020), the VP2VB Yasme Memorial Expedition Team (March 2020), and the TO0Z St. Barthelemy Expedition Team (September 2020) as DXpeditions of the year.

“Despite the situation caused by the COVID-19 pandemic, these teams overcame all the difficulties and organized DXpeditions successfully with fine teamwork.”

The JIDX contribution Award 2020 went to Joe Taylor, K1JT, for his development of *WSJT-X* software “with cutting-edge digital technology,” and to ARRL Director of Operations Norm Fusaro, W3IZ, “for demonstrating brilliant leadership in managing the DXCC Award program” during the pandemic.

TECHNICAL

SDR Technologies has released a [Jetson Nano](#) distribution with many SDR goodies already installed and ready to go. According to the [GitHub page](#), it's built on Ubuntu 18.04, and includes *GNUradio* 3.8.2, *SoapySDR*, *GQRX* [SigDigger](#), *WSJT-X*, and more. Jetson Nano is a "small, powerful computer that lets you run multiple neural networks in parallel for applications like image classification, object detection, segmentation, and speech processing. All in an easy-to-use platform that runs in as little as 5 watts." 5 watts refers to the power consumption of the computer.

[QRP Labs](#) is now shipping the [QCX Mini](#), a single-band size-reduced CW transceiver kit. It boasts "rotary encoder synthesized tuning, VFO A/B/Split, iambic keyer, CW decoder," and CAT control among its many features. This new kit has "cute" and "gift" written all over it. – ARRL Contest Letter

Bob, KB6NU, discussed a number of [web-hosted technical resources in a recent blog entry](#). Included are an impedance matching network calculator for toroid cores and an interactive introduction to Fourier Transforms. – ARRL Contest Letter

"[Takeoff Angles and HFTA](#)" was presented by Kevan, N4XL, as part of the [Deep Dixie Contest Club's Zoom Learning Series](#). For HF antennas, higher is not always better! – ARRL Contest Letter

Amazon is designing... antennas? For their Kuiper LEO satellite-delivered broadband service that is under development, they found they needed a hardware footprint for the ground terminal that was smaller than was available commercially. So they [developed their own steerable Ka-band phased array antenna with overlaid TX and RX arrays](#).

SHORTS

The **[ARRL January VHF Contest](#) is on tap for the weekend of January 16-18, 2021**. Don't forget that FT4 mode can provide faster contacts than FT8. While using the FT modes, if the indicated dB signal level approaches or exceeds 0 dB, conditions are likely good enough for CW or SSB. Contacts using those modes can be made more quickly under those conditions.

The **[North American Collegiate Championship](#), sponsored by the Society of Midwest Contesters, returns this year starting with the NAQP SSB contest on January 16**. Now in its third year, the NACC is a competition between colleges and university amateur radio stations using the "contest within a contest" format during the NAQP SSB and NAQP RTTY contests. Competing teams must preregister. The contest sponsors are aware that there are delayed starts of the spring term at many institutions due to the pandemic. Craig, K9CT, notes "It may take some twists and turns but we will see. There are already two Event pages on the [ARRL Collegiate Initiative \(Facebook\) page](#). We will be using <https://contestonlinescore.com/>, and there will be a special page for the team competition that everyone can watch." More information on the event is on the [NACC page](#).

Contest University to Host Propagation Summit Several radio propagation experts will share their knowledge during a Propagation Summit via Zoom, sponsored by Contest University ([CTU](#)). The event is scheduled for January 23, 2021. The presentation schedule includes: "Update on the Personal Space Weather Station Project and HamSCI Activities for 2021" with Nathaniel Frissell, W2NAF, at 11 AM EST (1600 UTC); "Solar Cycle 25 Predictions and Progress" with Carl Luetzelschwab, K9LA, at noon (1700 UTC); "Maximizing Performance of HF Antennas with Irregular Terrain" with Jim Breakall, WA3FET, at 1 PM EST (1800 UTC), and "HF Ionospheric Propagation" with Frank Donovan, W3LPL, at 2 PM EST (1900 UTC). [Registration](#) is free. An Icom IC-705 will be raffled off as a door prize. The winner must be present on Zoom to win. – *Thanks to CTU Chair Tim Duffy, K3LR –ARRL Contest Letter*

The [Ohio ARES Simplex Contest](#) is January 9, 2021 from 10AM - 4PM EST. "The purpose of this contest is to give operators an opportunity to improve their station and antenna capabilities, and test their coverage areas on simplex frequencies." This contest is for any band 50 MHz and up, using any mode "accepted by NBEMS/ARES® in *Fldigi*. (Default = Mt63 2K)." ([PCARS Radiogram](#), January, 2021)

The *WINTERHEAT* VHF/UHF simplex event will take place during January. The annual contest provides radio operators an opportunity to log as many contacts on VHF/UHF simplex frequencies during January. Last year we conducted this event strictly at the state level (Illinois) however at the request from last year's participants we are expanding the event to a more regional level to not only include Illinois, but the six adjacent states as well (MI, IN, KY, MO, IA, WI). Even with the Illinois-only event last year, we had 140 participants making 6,500 contacts. We hope with the inclusion of the adjacent states those numbers will be much higher. Jess, W9ABS --ARRL Contest Letter

You Shop, Amazon Gives! Thank you for shopping [smile.amazon.com](#). With your help, Amazon has donated more than \$45,870 to ARRL since 2014, helping ARRL to extend its reach in public service, advocacy, education, technology, and membership. With just a few shopping days left, as you shop for those final gifts, we invite you to continue to choose ARRL as your charity of choice. Bookmark [ARRL's link](#) and support amateur radio and ARRL the remainder of this holiday season and every time you shop.

The 11/26 issue of [The Daily DX](#) highlighted the recommendation by Larry, K8YYY, of the [Simon's World Map](#) application for Microsoft Windows which can take a large-screen TV and give you a world view, with various settings to include space weather, terminators, and annotations such as zones, call sign prefixes, and so on. It's freeware. – ARRL Contest Letter

The NAQPC pits contesting clubs against each other in a year-long competition that uses the scores from the six [North American QSO Parties](#) as the basis for the scoring. Since its inception in 2013, each club has won the Challenge at least once and, for 2021, PVRC will try to extend its 2-year winning streak into a three-peat. The three clubs report that the competition inspires their members to "get on the air and stay in the chair" in order to contribute as much as possible to their club's Challenge score. This increased participation also means there are more stations active in the NAQPs, making those contests more exciting for everyone. Contact [Tim, K9WX](#), for more information.

Neutron-1 CubeSat Signals Received Following the 3U [Neutron-1](#) CubeSat's deployment from the ISS on November 5, no signals were initially received, but thanks to SatNOGS and the efforts of the amateur radio community, several beacons were eventually received and decoded, *AMSAT News Service* reports. The Hawaii Space Flight Laboratory (HSFL) team has concluded that the satellite was in a normally charging deep-sleep mode. The team is working to decode the .wav files it's received. The satellite's payload includes a V/U FM repeater during available times and according to the spacecraft's power budget. The Neutron-1 science payload, a small neutron detector developed by Arizona State University, will focus on measurements of low-energy secondary neutrons -- a component of the low-Earth-orbit neutron environment. -- *Thanks to*

AMSAT News Service via the Hawaii Space Flight Laboratory

HamAlert will notify you when a desired station appears on the [DX cluster](#), the [Reverse Beacon Network](#), or [PSK Reporter](#). Alerts are available via email, push notification, text message, or URL GET/POST. [Registration](#) is free.

Jim, K5ND, has a free e-book for you: "[Capture the MAGIC of Six Meters](#)," free for download, or [read it online](#) as "Getting Started on the Magic Band." Make sure you read chapter 9: [Contesting](#)!

[IARU Region 1 personnel have been taking part in Wireless Power Transfer discussions as part of ITU-R Study Group 1](#), continuing to "advocate caution on the permitted levels of spurious emissions from WPT-EV systems."

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 mail to:WebMaster@w9rca.org. Check our web site at <http://www.w9rca.org>
