



# RCA Amateur Radio Club Indianapolis, IN



[www.w9rca.org](http://www.w9rca.org)

FEBRUARY 2020

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, FEBRUARY 11<sup>th</sup>, 6:30 PM AT  
KNIGHTS OF COLUMBUS, GAME ROOM, 2100 EAST 71<sup>st</sup>, INDIANAPOLIS, IN

## RCA ARC NEWS

**SUMMARY OF THE JANUARY MEETING** – Thanks to all who attended the Jan. meeting. K9RU and AF9A reported the '88 repeater has everything now working as expected. The only unfinished item on the “to do” list is to incorporate the Yaesu Fusion repeater hardware in the rack with the existing repeater hardware. The Yaesu repeater was installed in a separate rack initially so it would be easy to switch to the old analog repeater if there were problems with the new hardware. The RCA ARC will again be operating Field Day with the Indy United Field Day Club as we did last year. The first organizational meeting for 2020 will be in February. Winter Field Day is coming up. Our Club will join the IRC at the Salvation Army Training Facility on Georgetown Rd. The 50<sup>th</sup> Indy Hamfest is July 10 – 11. The meeting concluded with a discussion of ATSC 3.

### AMATEUR RADIO LICENSE TEST SESSION

**Time:** Saturday, February 8th, 2020, 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](mailto:k9ru@arrl.net), 317 721-1458

### HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Feb 07	Indianapolis Radio Club meeting, <a href="http://www.indyradioclub.org/">http://www.indyradioclub.org/</a>
Feb 08	Hendrick County Hamfest, Danville, IN <a href="http://www.hcars.org">www.hcars.org</a>
Feb 15-16	ARRL DX CW <a href="http://www.arrl.org/arrl-dx">http://www.arrl.org/arrl-dx</a>
Mar 7-8	ARRL DX SSB <a href="http://www.arrl.org/arrl-dx">http://www.arrl.org/arrl-dx</a>
Mar 28-29	CQ WPX SSB <a href="https://www.cqwpix.com/">https://www.cqwpix.com/</a>
Mar 28	Sam Costa Run (Hamilton County)
Apr 04	Columbus Hamfest, <a href="#">37th Annual Columbus Hamfest</a>
Apr 04	Carmel Marathon (Hamilton County)
May 02	500 Festival Mini Marathon
May 15-17	Dayton Hamvention, <a href="http://www.hamvention.org/">http://www.hamvention.org/</a>
June 27 -28	ARRL Field Day
July 10-11	Indianapolis Hamfest & ARRL State Convention, <a href="http://indyhamfest.com/">http://indyhamfest.com/</a> For more information: <a href="http://www.indyhams.org/events">http://www.indyhams.org/events</a>

**INDIANA HB 1070 ADDRESSES THE USE OF A "TELECOMMUNICATIONS DEVICE" WHICH IS DEFINED IN IC 9-13-2-177.3 THUSLY:**

(a) "Telecommunications device", for purposes of IC 9-21-8, IC 9-25-4-7, IC 9-24-11-3.3 (before its repeal), and IC 9-24-11-3.7, means an electronic or digital telecommunications device. The term includes:

- (1) wireless telephone;
- (2) personal digital assistant;
- (3) pager; or
- (4) text messaging device.

(b) The term does not include:

- (1) amateur radio equipment that is being operated by a person licensed as an amateur radio operator by the Federal Communications Commission under 47 CFR Part 97; or
- (2) a communications system installed in a commercial motor vehicle weighing more than ten thousand (10,000) pounds.

--Courtesy of Bob Burns, W9BU

**ARRL BOARD OF DIRECTORS DID NOT ELECT HOWARD MICHEL, WB2ITX, AS THE ARRL CHIEF EXECUTIVE OFFICER**

ARRL Central Division Member, Please note the following special announcement from the ARRL Website:

"At its meeting this weekend, the ARRL Board of Directors did not elect Howard Michel, WB2ITX, as the ARRL Chief Executive Officer. Beginning Monday, January 20, Barry Shelley, N1VXY, will become interim CEO. Mr. Shelley was ARRL's Chief Financial Officer for 28 years and CEO during 2018 before his retirement. The board has created a search committee to select the next CEO. More details on this and other matters which took place at the board meeting will be released shortly."

There will be a more comprehensive report to the Central Division ARRL Membership once the minutes of the meeting are approved. 73, Kermit Carlson W9XA

**DAYTON HAMVENTION 2020 WEB PORTAL OPENS FOR TICKETS, EXHIBIT SPACE**

Online orders for [Dayton Hamvention](#)® 2020 tickets, inside exhibit spaces, and flea market spots can now be placed online. Those who ordered online in 2019 should have their user IDs and passwords available when placing orders. Hamvention's all-volunteer staff will work as quickly as possible to respond to orders. If you encounter difficulties, email the appropriate committee: [Tickets](#), [Inside Exhibits](#), or [Flea Market](#). Hamvention announced in December that it would be increasing the cost of admission and its booth fees. General admission is now \$26 in advance or \$31 at the gate for all 3 days. The cost of flea market spots has risen by \$5 per space, and inside exhibitors will pay \$30. Hamvention 2020 takes place May 15 - 17 at the Greene County Fairgrounds and Exhibition Center, 210 Fairground Road, Xenia, Ohio.

**VOLUNTEER MONITOR PROGRAM COORDINATOR LOOKS FORWARD TO A POSITIVE 2020**

In a holiday season message to ARRL leadership and to members of the new ARRL Volunteer Monitor (VM) program, its coordinator, Riley Hollingsworth, K4ZDH, expressed his gratitude to all involved for their contributions to getting the program off to a solid start in January.

"It will be a good year," Hollingsworth said. "We will have fun, you will enjoy it more than you probably think, and -- thanks to the talent and generosity of one of our VMs -- a computer program will make your reporting *much* easier (there will be no need for bi-monthly reports!)," he wrote. "This is our opportunity to help amateur radio last another hundred years and to pay forward this wonderful avocation that joyfully occupies our lives. This could be our legacy if we do it with all the energy and devotion that characterized the Official Observer (OO) program for decades."

Hollingsworth said the success of the OO program convinced the FCC to trust ARRL with the responsibilities now to be taken up by the Volunteer Monitor program. "Those of you who are former OOs have an extra reason to be proud, and amateur radio is grateful to you more than you will ever know," Hollingsworth concluded. "Thank you. It will be a privilege to work with you this new year."

Approved by the ARRL Board of Directors in 2018, the Volunteer Monitor program supplants the venerable OO program. The VM program represents a formal agreement between the FCC and ARRL in which volunteers trained and vetted by ARRL will monitor the airwaves and collect evidence that can be used to correct misconduct. The program also will recognize exemplary on-air operation, something not done during the OO program. Cases of flagrant violations will be referred to the FCC by ARRL for action in accordance with FCC guidelines.

The FCC proposed the new program in the wake of several FCC regional office closures and a reduction in field staff. It will give enforcement priority to cases developed by the Volunteer Monitor program without ARRL's having to refer cases through the FCC online complaint process. --ARRL Letter

## QRZ.COM ENDS IDENTITY VERIFIED PROGRAM

The popular QRZ.com amateur radio website has dropped its verified member program, which the site instituted last year in an effort to combat fraud and password phishers. Termination of the program was due to "a number of factors," the site's founder and president Fred Lloyd, AA7BQ, explained in a post. Lloyd said the change will "transition our online swapmeet rules to reflect more open policies." The site had offered the option of establishing two-factor authentication (2FA) for its registered users, which would secure a user's password on the site. The site introduced two-factor authentication last June and later the verified member program.

"While two-factor authentication has worked very well, the identity verified program hasn't worked as well as we'd hoped. There has been a net decrease in swapmeet traffic, primarily due to members not wishing to take the extra steps to get verified. The swapmeet did seem to get safer, but also notably quieter. The forum has lost some of the excitement that it used to be known for."

Lloyd said the identity verified program was designed to provide an extra level of confidence to swapmeet participants, but "in practical terms, its validation methods were not sustainable." Not only was it an administrative burden, Lloyd explained, but the majority of its participants were only complying reluctantly. "The bottom line is that it's been unpopular," he said.

Lloyd said that by dropping the identity verified requirement, QRZ expects to see an increase in equipment listings and greater participation.

Individuals listing equipment will still need to provide photos of actual items for sale, and photos must include the seller's call sign. Only ham members — those having a listed call sign page — may sell in the swapmeet. Those perusing the listings will generally be allowed to post comments or questions about any listing, Lloyd said.

"Swapmeet users will be responsible for vetting their own deals and parties," Lloyd added. "There is plenty of online advice for those who are new to online trading. QRZ is not responsible for the success or failure of any transaction between private parties using its public swapmeet forum. When it comes to your deal, you must regard QRZ as a non-participant. In other words, if the deal goes bad, it's not QRZ's fault and in general, we won't be able to help you."

Lloyd said that QRZ did not save documents that were provided for user identification. Two-factor authentication will remain an option, but swapmeet users will not be required to use it.

## CHINA TELECOMS REGULATOR PROPOSING TO DELETE SOME CURRENT AMATEUR ALLOCATIONS

China's telecommunications regulator has proposed amending the *Measures for the Administration of Amateur Radio Stations*, and some amateur bands are in danger of being eliminated. Lide Zhang, B18CKU, told ARRL that the proposal would prohibit amateur operation on the 2200-meter band as well as on 146 - 148 MHz, 1260 - 1300 MHz, 3400 - 3500 MHz, 5650 - 5725 MHz, and all bands above 10 GHz.

Radio communications engineer and Chinese Amateur Satellite Group (CAMSAT) CEO Alan Kung, BA1DU, told ARRL that government efforts to eliminate some amateur bands are nothing new, but proposals that have been aired for a while now are on the regulatory agency's schedule.

Kung said he does not anticipate that all of the bands proposed will be taken away, but he conceded that the climate will "undoubtedly" become increasingly more dangerous for China's amateur radio community.

"The attempt to crowd out the amateur radio bands has a long history throughout the world," he said, "but it may never have become so urgent for the amateur radio community as it is today. We all understand that radio spectrum resources have become a bottleneck for further development." He said today's radio communication industry "is working hard to share spectrum resources."

Kung characterized spectrum as "the soil on which amateur radio depends." –ARRL Letter

## US AIR FORCE SPACE FENCE NEARING OPERATIONAL ACCEPTANCE

According to NASA's most recent *Orbital Debris Quarterly News*, the space agency calculates about 17.6 million pounds of objects are in earth orbit, a number that will grow as launches proliferate -- including thousands of small satellites -- presenting a huge problem. The US Air Force Space Fence -- a second-generation space surveillance system now nearing completion -- is expected to play a crucial role.

Using advanced solid-state S-band radar technology, Space Fence is located on Kwajalein Atoll in the Marshall Islands. Such critical space-based technologies as weather forecasting, banking, global communications, and GPS navigation are under threat from space junk orbiting Earth. Collisions already are frequent, and defunct satellites and rocket boosters have increased the amount of space debris.

The Air Force Space Surveillance Network tracks about 25,000 objects. When Space Fence comes online, the catalog will expand considerably, and when fully operational, it will be the world's largest and most advanced radar system, offering unprecedented space situational awareness. Beyond cataloging objects, Space Fence will detect closely spaced objects, breakups, maneuvers, launches, and more.

Contractor Lockheed Martin reported last spring that Space Fence was able to detect debris from a microsatellite destroyed by India as part of an anti-satellite test. It then was able to determine the orbit of the remnants and predict when the space junk would pass through the fence again.

Space Fence is expected to become fully operational this year. -- *Thanks to AMSAT News Service via Milsat Magazine; Lockheed Martin*

## NEW AMATEUR EXTRA-CLASS QUESTION POOL RELEASED

The new Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the National Conference of Volunteer Coordinators ([NCVEC](#)) website.

The [2020 - 2024 Extra-class pool](#) incorporates significant changes compared to the current 2016 - 2020 question pool, which expires on June 30. The number of questions in the pool was reduced from 712 to 622. The result was 239 modified questions, 49 new questions, and 139 questions removed due to changes in what was felt to be an abundance of outdated questions, while areas of new technology and subjects were added.

In addition, an effort was made to balance the difficulty level, removing or replacing some questions deemed too easy or too difficult compared to the rest of the pool.

The 2020 pool has 10 diagrams, which have been renumbered because the new question pool has two fewer than the 2016 question pool. --ARRL Letter

## NOMINATIONS SOLICITED FOR SIX ARRL AWARDS

ARRL is inviting nominations for awards that recognize educational and technological pursuits in amateur radio. Nominations are also open for ARRL's premier award to honor a young licensee.

- The Hiram Percy Maxim Award** recognizes a radio amateur and ARRL member younger than age 21, whose accomplishments and contributions are of the most exemplary nature within the framework of amateur radio activities. Nominations for this award are made through ARRL Section Managers, who will forward nominations to ARRL Headquarters. The deadline is March 31, 2020.

- The ARRL Herb S. Brier Instructor of the Year Award** honors an ARRL volunteer amateur radio instructor or ARRL professional classroom teacher who uses creative instructional approaches and reflects the highest values of the amateur radio community. The award highlights quality of and commitment to licensing instruction. Nominations are due by March 16, 2020.

- The ARRL Microwave Development Award** pays tribute to a radio amateur or group of radio amateurs who contribute to the development of the amateur radio microwave bands. The nomination deadline is March 31, 2020.

- The ARRL Technical Service Award** recognizes an individual radio amateur or group of radio amateurs who provide amateur radio technical assistance or training. The nomination deadline is March 31, 2020.

- The ARRL Technical Innovation Award** is conferred on an individual radio amateur or group of radio amateurs who develop and apply new technical ideas or techniques in amateur radio. The nomination deadline is March 31, 2020.

•**The Knight Distinguished Service Award** recognizes exceptional contributions by a Section Manager to the health and vitality of ARRL. The nomination deadline is April 30, 2020.

The ARRL Board of Directors selects award recipients, and winners are typically announced following the Board's July meeting. [More information](#) about these awards on the ARRL website, or contact [Steve Ewald, WV1X](#), telephone (860) 594-0265.

Non-ARRL Members and new hams may obtain a sample copy of the NEW ARRL On-The-Air Magazine by completing the request form at <http://www.arrl.org/ota-sample>. Information on access to the free On the Air blog and podcast can be found at <http://www.arrl.org/ota>

## STATE QSO PARTY CHALLENGE

The [StateQSOParty.com](#) Team has announced the 2020 State QSO Party Challenge. This annual program will recognize all radio amateurs' participation in the U.S. State and Canadian Province QSO parties. It will be open to any radio amateur who participates in any of our approved State QSO Party (SQPs) contests. Participants must simply submit their scores to [3830Scores.com](#) to be included in the Challenge.

Participants will be recognized for reaching five levels of achievement – Bronze, Silver, Gold, Platinum and Diamond. Using the submissions to [3830Scores.com](#), each radio amateur's cumulative score will be calculated by totaling up his/her number of reported contacts and multiplying by the number of SQPs entered year-to-date. Using the number of SQPs entered as a multiplier is expected to encourage radio amateurs to enter more state/province QSO parties. The use of the number of contacts as a metric is to encourage participants to operate longer in each SQP, increase the effectiveness of their station and improve their contesting skills. To qualify for an award level, the participant must have participated in at least two State QSO Parties. Each State QSO Party entry must have at least two QSOs.

It is also expected that this program will positively benefit all SCPs, especially those that currently have lower participation levels.

The first SQPs in 2020 are the Vermont, Minnesota and British Columbia QSO Parties on the first weekend of February. Therefore, the first monthly report of the State QSO Party Challenge is scheduled to be available in early March 2020. The cumulative year-to-date Challenge scores will be published on the QSOParty.io forum and on the State QSO Party website ([www.StateQSOParty.com](http://www.StateQSOParty.com)). The full rules and other details of the Challenge are available on [www.StateQSOParty.com](http://www.StateQSOParty.com).

If you have any questions regarding the State QSO Party Challenge, please contact Dave Edmonds, WN4AFP at [daveedmo@gmail.com](mailto:daveedmo@gmail.com)

## ITU DEVELOPMENT SECTOR PUBLICATION HIGHLIGHTS AMATEUR RADIO'S ROLE IN EMERGENCY COMMUNICATION

Amateur radio is featured in the publication [ITU Guidelines for national emergency telecommunication plans](#), published by the International Telecommunication Union (ITU) Development Sector (ITU-D). The publication notes that radio amateurs have supported communication in emergency situations on a voluntary basis since the dawn of radio.

"They are experts in radio communications and have the equipment, skills, and necessary frequencies allocated by ITU to deploy networks in emergency events quickly and efficiently," the publication says. ITU-D said amateur radio support offers "great coverage due to the large number of amateur radio stations available;" training programs and exercises that have been developed for emergency communication; "qualified temporary volunteers who provide skills and experience essential for emergency telecommunications;" problem-solving skills for working with "often very limited resources," and the ability to work with alternative power sources.

Past ARRL President and IARU Secretary Rod Stafford, W6ROD, represents the International Amateur Radio Union at ITU-D meetings. -- *Thanks to Southgate Amateur Radio News; IARU*

## UNDERSEA EXPEDITION PLANNED TO RETRIEVE TITANIC'S RADIO GEAR

The company with sole rights to salvage artifacts from the RMS *Titanic* has gone to court to gain permission to carry out a "surgical removal and retrieval" of the Marconi radio equipment on the ship, a *Washington Post* article reports. The *Titanic* sank in 1912 on its maiden voyage after striking an iceberg in the North Atlantic. As the radio room filled with water, radio operator Jack Phillips transmitted, "Come at once. We have struck a berg. It's a CQD, old man," and other frantic messages for help, using the spark transmitter on board. CQD was ultimately replaced with SOS — which Phillips also used — as the universal distress call. The passenger liner RMS *Carpathia* responded and rescued 705 of the passengers.

As might be expected, the deteriorating Marconi equipment is in poor shape after more than a century under water. The undersea retrieval would mark the first time an artifact was collected from within the *Titanic*, which many believe should remain undisturbed as the final resting place of some 1,500 victims of the maritime disaster, including Phillips. The wreck sits on the ocean floor some 2 1/2 miles beneath the surface, remaining undiscovered until 1985.

A just-signed treaty between the UK and the US grants both countries authority to allow or deny access to the wreck and to remove items found outside the vessel. "This momentous agreement with the United States to preserve the wreck means it will be treated with the sensitivity and respect owed to the final resting place of more than 1,500 lives," British Transport and Maritime Minister Nusrat Ghani said in a statement.

The request to enter the rapidly disintegrating wreck was filed in US District Court in Eastern Virginia by RMS *Titanic*, Inc. of Atlanta, which said that it hopes to restore the *Titanic* radio transmitter to operating condition, if it is allowed to go forward.

The company plans to use a manned submarine to reach the wreck and then deploy a remotely controlled sub that would perforate the hull and retrieve the radio equipment. --ARRL

## AMSAT: GOLF-TEE INITIATIVE MEETS MAJOR MILESTONE

AMSAT reports that an array of [GOLF-TEE](#) (Greater Orbit Larger Footprint - Technology Evaluation Environment) satellite prototype boards transmitted telemetry for the first time on January 14.

"The boards are laid out on a bench as a 'flat-sat,' with interconnecting wires, bench power supplies, and a dummy load on the transmitter," AMSAT said. The interconnected boards include an early radiation-tolerant internal housekeeping unit (IHU, i.e., computer) prototype; a control interface prototype, and a set of spare boards from HuskySat-1 that act as prototypes for the legacy IHU and legacy VHF/UHF RF components.

"Now that the development team has reached this point, it has RF to use as a basis for developing a GOLF-TEE decoder for *FoxTelem*, the ground telemetry receiver software," AMSAT said. "Thousands of hours of work by many AMSAT volunteers have gone into the hardware and software that got GOLF-TEE this far, with much work yet to be done before flight units are ready."

GOLF-TEE is designed as a low-Earth orbit testbed for technologies necessary for successful CubeSat missions to a wide variety of orbits, including medium- and high-Earth orbits. "Higher is clearly better when it comes to amateur radio satellites," AMSAT says on its website explanation of the GOLF program. "The larger footprint, which brings more DX opportunities and more good passes per day, also provides for a longer orbital lifetime, and slower motion across the sky. This results in longer pass durations and easier tracking." Higher orbits introduce a new set of engineering challenges, AMSAT concedes, including higher power and antennas with greater gain.

"GOLF is designed to continue the growth of AMSAT's CubeSat abilities, incorporating new systems such as software-defined radios and deployable solar panels into a 3U spaceframe." AMSAT explained. "GOLF will also continue AMSAT's educational partnership outreach that takes advantage of the synergies that amateur radio satellites and education have to offer the public."

AMSAT has invited [donations](#) to further the project. It's also seeking [additional volunteers](#). --  
*Thanks to AMSAT News Servic3*

## ARISS OPENS WINDOW FOR ISS HAM RADIO CONTACT PROPOSALS ON FEBRUARY 1

Amateur Radio on the International Space Station ([ARISS](#)) is once again seeking formal and informal education institutions and organizations -- individually or working together -- interested in hosting an amateur radio contact with an International Space Station (ISS) crew member. A window to accept proposals will open on February 1 for contacts that would be scheduled between January and June 2021. The majority of ARISS contacts involve schools and educational institutions. ARISS is looking for organizations able to attract a large number of participants that can integrate the contact opportunity into a well-developed education plan.

"ARISS contacts afford education audiences the opportunity to learn firsthand from astronauts what it is like to live and work in space and to learn about space research conducted on the ISS," ARISS said in announcing the proposal period. "Students will also have an opportunity to learn about satellite communication, wireless technology, and radio science."

Proposal information and documents are available on the ARISS website. Two identical ARISS introductory webinars have been set for January 23 at 9 PM EST (0200 UTC on January 24) and for January 27 at 6 PM EST (2300 UTC). [Registration](#) is required.

Contacts with ISS crew members run approximately 10 minutes in length and allow students to interact with the astronauts through a question-and-answer session. ARISS contacts are voice-only amateur radio communication opportunities. Schools and organizations typically work with a local amateur radio club to assist in handling the technical aspects of carrying out a successful contact with the ISS.

ARISS stresses that because of the nature of human spaceflight and the complexity of scheduling activities aboard the ISS, schools and organizations must be flexible in accommodating changes in radio contact dates and times.

"Amateur radio organizations around the world with the support of NASA and space agencies in Russia, Canada, Japan, and Europe present educational organizations with this opportunity,"



ARISS said. "The ham radio organizations' volunteer efforts provide the equipment and operational support to enable communication between crew on the ISS and students around the world using amateur radio."

Proposal information and more details are available on the [ARISS website](#). [Contact](#) ARISS with any questions.

## MASSACHUSETTS CLUB OFFERS SUPPORT TO ARECIBO OBSERVATORY FOLLOWING EARTHQUAKES

Although not in the hardest-hit earthquake zone, Puerto Rico's Arecibo Observatory nonetheless has been affected by the recent spate of earthquakes and aftershocks. The landmark Arecibo radio telescope and ionospheric radar facility was a victim of the devastation wrought by Hurricane Maria in 2017.

Members of the Nashoba Valley Amateur Radio Club ([NVARC](#)) have stepped up to assist in support and recovery efforts for the Arecibo Observatory radio telescope and ionospheric radar facility. NVARC members Phil Erickson, W1PJE; Rod Hersh, WA1TAC, and Jim Wilber, AB1WQ, participated in daily scheduled radio contacts with Arecibo's lead telescope operator and spectrum manager, Angel Vazquez, WP3R. Other NVARC members volunteered to serve as back-up stations.

"All AO staff members are safe, and our technical teams have completed preliminary visual analysis of the primary structure and have found no immediate damage/issues, however a more detailed inspection needs to be completed once the aftershocks subside," said Francisco Córdova, Arecibo Observatory's director, at the University of Central Florida.

Over several days, when commercial power and water were not available near Arecibo, club members inquired about potential assistance. Although conditions are slowly improving on the northern portion of the island where the observatory is located, Vazquez noted that thousands of people displaced from their homes in the hard-hit southern part of the island had to camp outside, due to extensive structural damage and ongoing aftershocks.

NVARC members were also able to provide messages of support from MIT's Haystack Observatory in Westford, Massachusetts, and from program officers at the National Science Foundation (NSF) Geospace Facilities Division in Washington, DC. NSF funds the observation programs and scientific research at Arecibo Observatory. NVARC said the radio contacts would continue as the recovery proceeds. --ARRL Letter

## SHORTS

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**Some RCA History:** There's an on-going Youtube series about the RCA CED (Capacitance Electronic Disc). Here is a link to the 5<sup>th</sup> and final episode. Hope you find it interesting.

<https://www.youtube.com/watch?v=ASuo4DM6MT0>

Here are links to the first four videos:

<https://www.youtube.com/watch?v=PnpX8d8zRIA>

<https://www.youtube.com/watch?v=mSFwyM2L5h4>

<https://www.youtube.com/watch?v=hpwLDQSadE4>

[https://www.youtube.com/watch?](https://www.youtube.com/watch?v=P1dDKvuFJ0c&list=PLv0jwu7G_DFVP0SGNIBiBtFVkv5LZ7SOU&index=4)

[v=P1dDKvuFJ0c&list=PLv0jwu7G\\_DFVP0SGNIBiBtFVkv5LZ7SOU&index=4](https://www.youtube.com/watch?v=P1dDKvuFJ0c&list=PLv0jwu7G_DFVP0SGNIBiBtFVkv5LZ7SOU&index=4)

**South Orkney Islands DXpedition will Use VP8PJ** – The Perseverance DX Group's DXpedition to South Orkney, set for February 20 until March 5, will use the call sign VP8PJ. The group initially announced that it would use VP8/VP8DXU.

“Alan Armstrong, VK6CQ, a recent addition to the team, holds the call sign VP8PJ that was issued to him for operation from the British Antarctic Territory,” the DXpedition has announced. “After submission of a copy of Alan's license, ARRL has issued us a new LoTW certificate for the use of this call from South Orkney for the duration of our expedition.”

**An international team of 10 operators will be active as W8S from Swains Island from March 10 to March 25.** The DXpedition team will be active on all HF bands on CW, SSB, FT8, and RTTY. Operation will be from two separate camps on the island -- a Red Camp and a Blue Camp -- each with two stations. The four stations will be on the air 24/7. The station equipment complements are identical. Two stations will be dedicated for 160 and 80 meters. A WiFi network will link the Red and Blue camps to network all logging laptops. Hans Griessl, DL6JGN, and Ronald Stuy, PA3EWP, are co-leaders. Swains Island (Olohega) is an atoll in the Tokelau chain. Swains is a US territory and considered part of American Samoa. Swains Island is the 34th most-wanted DXCC entity, according to [Club Log](#).

**Non-ARRL Members and new hams may obtain a sample copy of the NEW ARRL On-The-Air Magazine** by completing the request form at <http://www.arrl.org/ota-sample> Information on access to the free On the Air blog and podcast can be found at <http://www.arrl.org/ota>

**Details of the [curricula and faculty](#) of the 2020 Contest University in Dayton, Ohio next May have been posted to the [Contest University website](#).** Contest University provides a full day, 7 AM to 5 PM, of contesting information.

**The Perseverance DX Group VP8PJ [DXpedition to South Orkney](#) has received permission from the National Science Foundation to land and camp on the Antarctic island.** Receipt of the Antarctic Conservation Act Permit culminates a months-long approval process involving several governmental agencies. VP8PJ is expected to commence operation on February 20 and continue until March 5. The DXpedition's equipment container arrived by sea in Punta Arenas, Chile, on January 13, and the MV *Braveheart* will transport the operating team and the gear from there to the South Orkneys and back. Set-up on the island is expected to take 2 days. [Contact](#) the DXpedition for more information.

**The Alexanderson alternator 2019 Christmas Eve transmission on 17.2 kHz from SAQ in Grimeton, Sweden, was heard by more than 400 listeners.** SAQ [reported](#) conditions were very good, with clear, dry weather, and the vintage transmitter functioned flawlessly. Lars Kålland, SM6NM, was at the key to deliver his last Christmas message before he retired. SAQ said it was "stunned" by the number of reports it received -- a total of 426 from 32 countries, including the US and Canada.

**THANKS FOR READING !**

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