



Legacy Amateur Radio Club

RCA AMATEUR RADIO CLUB



AFFILIATED CLUB

INDIANAPOLIS, INDIANA

MARCH 2018

MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, MARCH 13th, 6:30 PM AT
[SQUEALERS](#), 5899 E. 86th STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE FEBRUARY MEETING – Thanks to all who attended the February meeting. Jim, AF9A, reported the '88 repeater continues to work well with no known problems. Jim K9RU, reported on Field Day which will again be at Camp Belzer. Because of power line noise last year, there has been an effort to try and locate the source before the next field day. So far, all has been quiet there. Jim, K9RU, noted the Feb. ARES meeting Feb. 17 will feature a presentation on MESH networking. Tickets for the Hamvention are now available on line. The new building at the Green County Fairgrounds now will not be ready for this years' Hamvention. Jim, AF9A, showed his new [vector antenna analyzer](#) designed by DG5MK.

AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, Mar. 10, 2018, 12:00 pm (Walk-ins allowed)

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

Contact: Jim Rinehart, k9ru@arrl.net, 317 721-1458

SKYWARN SPOTTER TRAINING – Meteorologist Dave Tucek from the National Weather Service in conjunction with Marion County Amateur Radio Emergency Service will present SKYWARN® training on Saturday, March 10 starting at 9:00 am at the Salvation Army Emergency Disaster Services building located at 4020 Georgetown Road in Indianapolis. The general public is welcome to this training.

Training will include basics of thunderstorm development, fundamentals of storm structures, identifying potential severe weather features, information that should be reported, how to report information as well as basic severe weather safety.

SKYWARN® storm spotters form the first line of defense against severe weather by providing timely and accurate reports of severe weather to the National Weather Service. Anyone with an interest in public service and who have access to communications, such as Amateur Radio, is encouraged to join the SKYWARN® program.

Spotter training in Marion County will also be held

March 22th at 3:00pm at the IUPUI Campus Center, Room 405

March 27th at 6:30pm at the IUPUI Campus Center, Room 309

Other Spotter training can be found at <https://www.weather.gov/ind/spotter>

If you have questions free to send us an email at mcinares@gmail.com

KERMIT CARLSON W9XA, ARRL CENTRAL DIVISION DIRECTOR WILL BE THE SPEAKER AT THE INDY RADIO CLUB MARCH, 9TH MEETING – Kermit Carlson W9XA, ARRL Central Division Director will give a report on the happenings at the ARRL and address the issues.

The ARRL board of conduct rules with its secrecy has caused quite a bit of controversy last year. The ARRL Board did change the rules at the last board meeting, but the ARRL board of conduct rules last year left a lot of people unhappy with the ARRL.

Many hams are unhappy with the group on 7200 KHz SSB and want to know when something can be done about it.

This is a chance to meet Kermit learn what is going on and ask questions about these issues and any other you might have.

The meeting is at IVY Tech, 50 W. Fall Creek pkwy, 4th floor auditorium, with a social hour starting at 6:30 PM and the formal meeting starting at 7:30 PM.

MINI MARATHON HAM RADIO VOLUNTEERS – It's that time of year again to sign up for of the 2018 Mini Marathon ham radio volunteers. The Mini is Saturday May 5th, starting at 6AM and usually you done by noon. The 500 Festival offers some great benefits, tickets to the first day of Qualification, Parking, Garage Passes and a Volunteer's Dinner with prizes.

If you're a new volunteer, there will be a training session before the event.

Contact:

Michael R. Palmer, N9FEB

Marion County IN Events Coordinator for Ham Radio

Cell Phone: (317) 753-8691 email: n9feb@comcast.net

More info: <http://indyhams.org/event/500-festival-mini-marathon>

THE INDIANAPOLIS HAMFEST, JULY 13TH AND 14TH WILL HOST THE 2018 ARRL INDIANA STATE CONVENTION – I am pleased to announce that the the Indianapolis Hamfest will host the 2018 ARRL Indiana State Convention. The Indianapolis Hamfest is on Friday July 13th and Saturday July 14th at the Marion County Fairgrounds located at 7300 E Troy Avenue in Indianapolis.

You can learn more about the hamfest by visiting www.indyhamfest.com .

The Indiana ARRL State Convention provides an opportunity to learn about the Indiana ARRL organization and meet many of our ARRL volunteer leaders from around the state. The ARRL Emergency Preparedness Manager, Mike Corey K11U, will be in attendance for the convention and speaking at one of the forums. Mike is a native Hoosier from the Kokomo area. The ARRL Central Division Director, Kermit Carlson W9XA, will also be on hand to answer questions.

I hope you are able to attend the convention this year and look forward to speaking with many of you. 73, Brent N9BA

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

March 10 -11 Stew Perry Topband Challenge <http://www.kkn.net/stew/>

March 17 – 19 BARTG HF RTTY Contest <http://www.bartg.org.uk/>

March 24 – 25 CQ WW WPX Contest, SSB <http://www.cqwp.com/rules.htm>

May 5 Indianaolis Mini-Marathon <http://indyhams.org/event/500-festival-mini-marathon>

For More Contests Information: <http://www.contestcalendar.com/>

Opportunities for public service: <http://indyhams.org/event>

ARRL REQUESTS EXPANDED HF PRIVILEGES FOR TECHNICIAN LICENSEES

ARRL has asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The FCC has not yet invited public comment on the proposals, which stem from recommendations put forth by the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

"This action will enhance the available license operating privileges in what has become the principal entry-level license class in the Amateur Service," ARRL said in its [Petition](#). "It will attract more newcomers to Amateur Radio, it will result in increased retention of licensees who hold Technician Class licenses, and it will provide an improved incentive for entry-level licensees to increase technical self-training and pursue higher license class achievement and development of communications skills."

Specifically, ARRL proposes to provide Technician licensees, present and future, with phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz, plus RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters. The ARRL petition points out the explosion in popularity of various digital modes over the past 2 decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under the League's proposal.

ARRL's petition points to the need for compelling incentives not only to become a radio amateur in the first place, but then to upgrade and further develop skills. Demographic and technological changes call for a "periodic rebalancing" between those two objectives, the League maintains.

"There has not been such a rebalancing in many years," ARRL said in its petition. "It is time to do that now." The FCC has not assessed entry-level operating privileges since 2005.

The Entry-Level License Committee offered very specific data- and survey-supported findings about growth in Amateur Radio and its place in the advanced technological demographic that includes individuals younger than 30. It received significant input from ARRL members via more than 8,000 survey responses.

"The Committee's analysis noted that today, Amateur Radio exists among many more modes of communication than it did half a century ago, or even 20 years ago," ARRL said in its petition.

Now numbering some 378,000, Technician licensees comprise more than one-half of the US Amateur Radio population. ARRL said that after 17 years' experience with the current Technician license as the gateway to Amateur Radio, it's urgent to make it more attractive to newcomers, in part to improve upon science, technology, engineering, and mathematics (STEM) education "that inescapably accompanies a healthy, growing Amateur Radio Service," ARRL asserted.

ARRL said its proposal is critical to developing improved operating skills, increasing emergency communication participation, improving technical self-training, and boosting overall growth in the Amateur Service, which has remained nearly inert at about 1% per year.

The Entry-Level License Committee determined that the current Technician class question pool already covers far more material than necessary for an entry-level exam to validate expanded privileges. ARRL told the FCC that it would continue to refine examination preparation and training materials aimed at STEM topics, increase outreach and recruitment, work with Amateur Radio clubs, and encourage educational institutions to utilize Amateur Radio in STEM and other experiential learning programs.

"ARRL requests that the Commission become a partner in this effort to promote Amateur Radio as a public benefit by making the very nominal changes proposed herein in the Technician Class license operating privileges," the petition concluded. --ARRL Letter

HAMVENTION ONLINE FLEA MARKET AND INSIDE EXHIBIT RESERVATIONS OPEN

Online reservations for [Hamvention](#)[®] 2018 [flea market](#) and [inside exhibit](#) spaces are now available. Vendors who had spaces last year are being encouraged to log into their accounts to reserve them for this year's event. Online sales were delayed after it became apparent that an additional building would not be built before Hamvention, prompting scheduling and planning adjustments. The addition of Building 4 -- the former furniture store, which was not available last year, has made room for more indoor exhibits, however. Hamvention organizers said this week that both the flea market and inside exhibits committees have been responding to vendors as promptly as possible. Hamvention General Chairman Ron Cramer, KD8ENJ, asked vendors to be patient, once they have entered their information for 2018.

"The staff is working to confirm requests as quickly as possible," Cramer said. "Additional e-mails or information requests will only slow the process."

Inside exhibits Chairman Brian Markland, N8UDQ, said that any exhibitor who completes an online order for the same spaces by April 15 will be guaranteed those spaces. Vendors who were in tents during Hamvention 2017 will have the option of keeping tent space or entering the pool for the additional spots in Building 4.

"Since we expect more people to want to move to the building than there are spaces, we determined that a lottery was the only fair way to assign those spaces," Markland said. Vendors staying in tents during 2018 will be moved inside in 2019, when the new building is available, he added.

Because some vendors will be moving inside, and to address some issues that arose last year, layouts inside tents may change slightly; affected tent vendors will be contacted by the exhibits committee.

Both Cramer and Markland urged vendors to read the 2018 inside exhibits and flea market rules and instructions before registering. Incomplete or incorrect applications only slow the process. Contact the [flea market](#), [exhibits](#) or [tickets](#) committee, as appropriate. Sending e-mails elsewhere will only cause delays, Hamvention said.

This will mark Hamvention's second year at its new location, the Greene County Fairgrounds and Expo Center in Xenia, Ohio. --ARRL Letter

NTIA TARGETS PORTION OF 3.4 GHZ BAND FOR POTENTIAL WIRELESS BROADBAND USE

The National Telecommunications and Information Administration ([NTIA](#)) has identified 3450 to 3550 MHz for potential wireless broadband use. Amateur Radio has a secondary allocation of 3300 to 3500 MHz, sharing the spectrum with government radars; the popular "weak-signal" frequency is 3456.1 MHz. The NTIA oversees the use of spectrum by federal government agencies.

"America is the world's leader in Wi-Fi and 4G LTE, and we have claimed an early lead in bringing 5G to reality," NTIA Administrator David J. Redl said in making the [announcement](#). "It's essential to American competitiveness that we maintain our leadership in all of these areas."

The NTIA announcement is "great news," according to FCC Chairman Ajit Pai. "The Commission, working together with NTIA, has already made the 3.5 GHz band available for wireless services, and we recently initiated a process to consider whether all or parts of the adjacent satellite spectrum can also be made available" Pai said. "Altogether, this could unleash a contiguous block of hundreds of megahertz of valuable spectrum for new

technologies and services, including 5G."

Redl said that the NTIA, in coordination with the Department of Defense and other federal agencies, has identified 100 megahertz of spectrum "for potential repurposing to spur commercial wireless innovation." He said the 3450 - 3550 MHz band "could be a key asset in our nation's broadband spectrum inventory." In the US, military radar systems operate in the 3450 - 3550 MHz band, and Amateur Radio compatibly shares the lower half of that band with the military on a secondary basis. Redl said the Defense Department plans to submit a proposal under the Spectrum Pipeline Act to carry out a comprehensive RF engineering study "to determine the potential for introducing advanced wireless services in this band without harming critical government operations." ARRL intends to contribute to NTIA's study.

The FCC, in coordination with NTIA and the Defense Department, has already approved rules for its planned Citizens Broadband Radio Service (CBRS) in the adjacent 3550 - 3700 MHz band.

In 2014, UK telecommunications regulator Ofcom announced that it was ending Amateur Radio access to significant portions of the 2.3 and 3.4 GHz bands following a year-long [consultation](#) -- a rulemaking proceeding -- that involved the release by the Ministry of Defence of 150 MHz of spectrum at 3.4 GHz to prepare for the roll out of future 5G services. Amateur Radio in the UK was secondary on both bands. Ofcom said it expected the spectrum to go on auction later this month. --ARRL Letter

"AWESOME" ACTIVITY FOR THE 2018 ARRL INTERNATIONAL GRID CHASE

"On-the-air activity for the 2018 ARRL International Grid Chase (IGC) has been awesome!" ARRL Contest Branch Manager Bart Jahnke, W9JJ, said this week. "The year also began with DXpeditions, as well as several contests at both HF and VHF, to boost numbers. Facebook and social media (Facebook, Twitter #ICG) are abuzz with chatter about the event, the excitement, the grids worked."

Jahnke said the statistics show the highest overall activity on 40 and 20 meters -- not surprising in the winter -- and especially strong digital activity. He expects phone and CW activity to perk up this month and next, with the ARRL International DX Contest CW weekend February 17 - 18, and the phone weekend March 3 - 4. He also anticipates that February's statistics will come on strong as participants re-work January grid squares to boost their February scores. As of the January activity upload deadline of February 10 at 2359 UTC, some 23,300 station sites were active in the IGC.

"The leader board reporting system continues to evolve, with much helpful participant feedback," Jahnke said. That user input is improving how ARRL reports participation.

"From the statistics, it's clear that during this period of low sunspots and low winter E-skip and F2, most of the activity on the mid-to-lower bands is digital modes," Jahnke said. "As we get into the summer E-skip season, we expect to see activity above 15 meters begin its ascent in the totals."

Jahnke said it's apparent that participants are taking advantage of CW (and FT8 and other digital modes) on HF to overcome some of the weakened propagation on the low- to medium-frequency bands, and of FT8, JT65, and FSK144/MSK144 on 6 meters and above to rack up impressive totals. "Not to be outdone, in comparison to overall band totals, phone contacts on 80, 40, 20, and 17 meters are strong, and 2-meter and 70-centimeter contacts were strong in January as well," Jahnke added. Several contests in January, including the ARRL RTTY Roundup and ARRL January VHF Contest contributed to these strong phone and digital numbers.

During January, IGC-eligible contacts matched in Logbook of The World (LoTW) topped 22,000 on 40 meters and 23,000 on 20 meters -- the two bands with the greatest activity -- with nearly

half the contacts being made on digital modes in both bands. On the new 630-meter band, 31 IGC-eligible contacts turned up in LoTW. --ARRL Letter

DX

3Y0I Bouvet DXpedition Invites 3Y0Z Team to Join Forces – This week, the [3Y0I Bouvet Island DXpedition](#) team publicly invited the members of the ill-fated 3Y0Z team to join forces as part of "rebooted preparations" for the venture, but 3Y0Z team co-leader Bob Allphin, K4UEE, told ARRL that his group has other plans. Dates for the 3Y0I DXpedition, meanwhile, remain up in the air at this point, but the team said it would announce its expected dates of operation soon.

"Our preparations...are taking place in extraordinary times and under unusual conditions," the 3Y0I team said on its website over the weekend, noting that it had suspended its initial plans to activate Bouvet Island late last year at the request of the 3Y0Z DXpedition, which subsequently was forced to abort its landing and head home.

The 3Y0I team is headed by Polish radio amateur Dom Grzyb, 3Z9DX, perhaps best known for his surprise, and brief, [operation from North Korea](#) in December 2015.

The 3Y0I DXpedition team also announced that it has contracted for a larger transportation vessel that would permit more passengers. "The vessel's crew is experienced in troop landing at Bouvet and other subantarctic islands," The 3Y0I announcement said. "Our cruise plan doesn't change; we'll depart from and sail back to Cape Town..."

"The landing procedure will be supervised by landing troops and will utilize special boats that will allow the team to transport our gear, and to land at the island safely," the announcement asserted.

The 3Y0Z DXpedition team had planned to transport personnel and equipment between its vessel, *Betanzos*, and the island via helicopter. High winds and rough seas, as well as problems with one engine, prompted the *Betanzos*' captain to abort any attempted landings in the interest of safety and head back.

Bouvet Island, a dependency of Norway, is currently the second most-wanted DXCC entity. -- Thanks to [OPDX](#) and [The Daily DX](#) for some information

Ducie Island 2018 DXpedition Plans Coming Together for this Fall – The Perseverance DX Group ([PDXG](#)) reports that its plans to activate the protected marine area of Ducie Island from October 20 to November 3, 2018 are starting to jell. The last Ducie Island DXpedition was VP6DX in 2008. Ducie is currently the 21st most-wanted DXCC entity, according to Club Log. The 2018 DXpedition would operate as [VP6D](#). A team of 15 operators will be on the island for up to 14 days, departing from Mangareva, French Polynesia, aboard the expedition ship *Braveheart*. Seven operating positions are planned for 160 through 10 meters, SSB, CW, and digital, including FT8. VP6D has added 6-meter Earth-Moon-Earth to the mix and hopes to make the first-ever 6-meter moonbounce contacts from Ducie Island.

"The logistics plan is coming together," the team announced on February 8. "Our equipment will be consolidated in Fremont, California, for testing, packaging, and shipment to the *Braveheart* in New Zealand."

The team reported that the antennas planned include 2-element vertical dipole arrays on the high bands backed up by a couple of horizontal beams; 4-squares on 30 and 40 meters, and verticals on 80 and 160. Top Band receive antennas are still under development.

A grant from the Northern California DX Foundation ([NCDXF](#)) as well as [contributions](#) from other DX organizations, are helping to fund the adventure.

It's believed that this would be the fourth DXpedition to Ducie Island. An uninhabited atoll, Ducie Island is a British Overseas Territory in the Pitcairn Islands in the South Pacific. -

Direct questions to [Team Ducie](#). --ARRL

Z60A Operation has Moved Kosovo Down the Most-Wanted List --The ongoing Z60A special operation to celebrate the addition of Kosovo to the DXCC List and Kosovo's 10th anniversary of independence appears to have put a big dent in demand for the new entity, which briefly stood at the top of the heap.

With two stations on the air, Z60A participated in the ARRL International DX CW and Phone Contest in February and March. Z60A continues to attract huge pileups.

"The departing German/Slovenian team of DJ5IW, DM5TI, DD2ML, and S57AW did a fantastic job while introducing the data modes, RTTY and FT8," said Martti Laine, OH2BH, a longtime supporter of Amateur Radio in Kosovo. "They made up to 10,000 digital QSOs, with the Z60A total now reaching 70,000." The Z60A location at the headquarters of Kosovo's IARU Member Society SHRAK was in SSB mode, helmed by local Z6 operators; the call sign also was active during the CQ World-Wide WPX RTTY event this past weekend.

Laine said the celebratory Z60A operation has served to bring in operators from as many other countries as possible, helping hams in Kosovo to "expand their network of friends."

Amateur Radio has been nearly nonexistent for more than 25 years and all radio equipment was confiscated. This has created a current need for affordable used gear. "Please consider donating one of your spare radios that is only catching dust in your garage," he said.

More Z6 have been on the: Z68M, Z68BG, Z68AA Z61DX and Z68RBJ. --ARRL Letter

Postponed DXpedition to Disputed Spratlys Reset for March - An international Amateur Radio team that postponed a December 2017 DXpedition to the disputed Spratly Islands now plans, according to its website, to be on the air in early March from Layang Layang Island -- also known as Swallow Reef -- under Malaysian call sign 9M0W, with CW, SSB, and digital operation on 160 through 6 meters. The team, headed by Hrane Milosevic, YT1AD, had to change its plans because the resort on Layang Layang Island, from which the DXpedition will operate, was closed from December until February. In addition to its call sign, the 9M0W team has a landing permit from the Malaysian government. While the Royal Malaysian Navy maintains a presence on the reef, ownership of the Spratlys has been asserted by the People's Republic of China (PRC), Taiwan, Vietnam, and the Philippines -- in addition to Malaysia. The Spratlys are #56 on Club Log's DXCC Most-Wanted List.

The most recent DXpedition from the Spratlys took place in 2015, when the DX0P DXpedition operated in the spring of that year from Pag-asa Island, using a license issued by the Philippines.

ARRL has announced a Mobile DXCC Operating Award, available to radio amateurs who have contacted at least 100 DXCC entities from a working vehicle, with antennas and power source capable of operating while in motion. ARRL Radiosport Manager Norm Fusaro, W3IZ, advised those pursuing the award to put safety first.

"Distracted driving is a serious concern, so we hope all mobile operators exercise care when operating from a moving vehicle," he said.

Full, official details are on the Mobile DXCC Operating Award page.

The Mobile DXCC is a one-time award and is non-endorsable. Contacts made any time in the

past do count toward the award. QSLs are required, but you do not need to submit them.

Mobile stations may use any power that is legal in the entity from which they are operating. This award specifically excludes contacts made by aeronautical or maritime mobile stations.

You do not have to be an ARRL member to qualify for this award.

Because this award is similar to the QRP DXCC Operating Award, ARRL has redesigned the QRP DXCC Certificate so that the two awards complement one another. Operators who hold the QRP DXCC award may apply for the new-style certificate with the original date of issue printed on the certificate, but you do not have to re-submit QSL cards or a log. All certificates are \$16.

SHORTS

Two Ham-Astronauts Return Safely to Earth – Two ham-astronauts were among three members of the International Space Station (ISS) Expedition 54 crew returning to Earth on February 27 after about 6 months in space. Astronauts Mark Vande Hei, KG5GNP, and Joe Acaba, KE5DAR, landed in Kazakhstan in a *Soyuz* spacecraft, along with cosmonaut Alexander Misurkin.

Now operating the station are Expedition 55 Commander Anton Shkaplerov and Flight Engineers Scott Tingle, KG5NZA, and Norishige Kanai. Astronauts Ricky Arnold, KE5DAU, and Drew Feustel and cosmonaut Oleg Artemyev head to the ISS on March 21.

Interesting Video with Ham News about the Dayton Hamvention and QRZ.com:
<https://mail.google.com/mail/u/0/#inbox/161d7e208cc4433f?projector=1>

Yaesu FT-818 -- The FT-817ND Replacement Available Soon - Yaesu announced a new FT-817ND replacement is on the way -- the FT-818!

The new Yaesu FT-818 incorporates all of the basic and attractive features of the ever-popular FT-817ND while providing upgrades desired by many existing owners.

A few notable improvements include: Increased power output to 6W, Improved frequency stability, Larger battery capacity.

More information and full specs available at: <https://www.gigaparts.com/yaesu-ft-818-transceiver.html>

Swedish Telecoms Regulator Considering Charging Hams a Fee to Run More Than 200W - Sweden's Post and Telecom Authority (PTS) is considering lowering the transmitter output power for general Amateur Radio stations to 200 W PEP. Under a set of wide-ranging proposed regulatory changes affecting many radio services, radio amateurs who want to run higher power would have to apply for a license and pay an annual fee of about \$33.

Amateur Radio licenses were eliminated in Sweden in 2004, and Amateur Radio in Sweden is "permission free," but prospective radio amateurs still must pass an examination, typically arranged by Sweden's International Amateur Radio Union (IARU) Member-Society in Sweden, SSA.

A certificate and a call sign, valid for life, are issued without any future fees. The maximum permitted power on most HF bands is 1 kW; that power level would not necessarily be guaranteed under an Amateur Radio license, and conditions could apply.

The PTS's rationale is that requiring a license for radio amateurs who want to run more than 200 W will make it easier to trace any interference that those transmitters may cause.

"The matter is widely discussed in Sweden," Henryk Kotowski, SM0JHF, told ARRL, "since there are quite a few opponents to permission-free operation, resulting — in their eyes — in degradation of quality and discipline on the air." SSA is planning to comment on the proposal. The deadline is March 30. -- Thanks to Henryk Kotowski, SM0JHF

Attention CW Skimmer 2.0 software users! You'll want to download and update your configuration with a new 'patt3ch.lst' file to be able to recognize the Z6 (Kosovo) prefix. VE3NEA Skimmer Server users are also getting an update - CW Skimmer Server 1.6 and RTTY Skimmer Server 1.3 have been released, both including the capability to spot non-ITU-assigned prefixes. Visit the VE3NEA website for the updates.

Aggregator. A software program written by Dick, W3OA, that accepts DX spots from CW Skimmers or Skimmer Servers and then forwards the spots to the Reverse Beacon Network. For more information about all of the components involved in this aspect of the DX spotting network, see the presentation "CW and RTTY Skimmer and the Reverse Beacon Network" by Bob, N6TV.

Remember our old friend, 10 Meters? The 2017 ARRL 10-Meter Contest preliminary results just published on the contest results website reflect ol' Sol's lack of activity. In 2014, over 2 million QSOs were reported during the contest weekend. In 2017? Just over 98k. So, what's that, a 95% drop in the number of QSOs? Crazy.

N6LF's website is a great reference for radial systems for vertical antennas. "He presents a six chapter study of vertical antenna designs with a strong focus on MF and LF (630 and 2200 meter bands.)"

Arecibo observatory to change hands, continue research - The NSF has announced that the giant radio telescope/dish will continue to do critical research, and has changed management hands to the University of Central Florida (UCF) <https://www.insidehighered.com/quic...ntral-florida-will-manage-arecibo-observatory>

THANKS FOR READING!

THE RCA ARC MONTHLY NEWSLETTER IS COMPILED AND EDITED BY JIM RINEHART, K9RU AND JIM KEETH, AF9A. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO <mailto:WebMaster@w9rca.org>. Check our web site at <http://www.w9rca.org/>
