



AFFILIATED CLUB

RCA AMATEUR RADIO CLUB



INDIANAPOLIS, INDIANA

DECEMBER, 2015

MONTHLY NEWSLETTER

Merry Christmas and Happy Holidays

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, DECEMBER 8th, 6:30 PM AT [G.T. SOUTH'S](#),
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE NOVEMBER MEETING – At the November meeting, Jim K9RU, reported on several Club business items... He has received the insurance bill. Field Day results are out. The W9JP/W9RCA operation placed 7th nationally in the 3A class with 2907 QSOs for 9404 total points. Good work everyone! The crystal for the 6 meter beacon transmitter has been ordered from International Crystal. We also need to contact Dave Brown's wife about some more of Dave's things to sell at next summer's hamfest. Dave, N9KZJ, reported on the WW2IND activities for Veterans Day and Scouts on the Air. Reminder that the November IRC meeting will feature a tour of Channel 20. Several contests are upcoming as well as the Ft Wayne Hamfest, the R&L customer appreciation day, and the ARRL FMT.

TOM DONALDSON N9LFU SK – I learned from the ARRL Indiana Section Newsletter that Tom Donaldson, N9LFU, has become a Silent Key. Tom was very active with the RCA ARC VE testing team back in the 90s. – Jim K9RU

NEXT TEST AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, Dec. 12, 2015 Exams start at noon.
Location: Salvation Army EDS Training Facility,
4020 Georgetown Rd., Indianapolis, IN
Contact: [James K. Rinehart, \(317\) 495-1933, Email: k9ru@arrl.net](mailto:James.K.Rinehart@arrl.net)

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Dec 4-6	ARRL 160-Meter Contest, CW http://www.arrl.org/160-meter
Dec 12-13	ARRL 10 Meter Contest http://www.arrl.org/10-meter
Dec 20	Rookie Roundup – CW http://www.arrl.org/rookie-roundup
Jan 1	Straight Key Night http://www.arrl.org/straight-key-night
Jan 30	ARRL January VHF Contest http://www.arrl.org/january-vhf
Feb 13	5 th Annual Brownsburg Hamfest http://www.hcars.org/
Feb 20-21	ARRL DX – CW Contest http://www.arrl.org/arrl-dx
Feb 27	Dugger Hamfest http://www.kc9ak.org/hamfest.html
Mar 5-6	ARRL DX – SSB Contest http://www.arrl.org/arrl-dx
Mar 26	Columbus Hamfest http://www.carcnet.net/?p=12

DECEMBER ARRL CONTESTS OFFER THE LOWS AND THE HIGHS

December offers two of the most popular operating events of the fall “contest season” — The [ARRL 160 Meter Contest](#), December 5-6, and the [ARRL 10 Meter Contest](#) the following weekend, December 12-13. Both contests offer an opportunity to appreciate the diversity and range of the HF bands available.

Often called “Top Band,” 160 meters — actually a medium-wave band — is the lowest frequency band currently available for contest use. While some Top Band stalwarts will operate day and night on contest weekend, operation for this event typically takes place starting at dusk and into the nighttime hours, and it’s an all-CW event. This is mainly a contest where US and Canadian stations work the rest of the world, since no DX-to-DX contacts are permitted under the rules.

At the other end of the HF spectrum 10 meters can be a “counterpoise” to 160. Operation will occur mostly — but not always — during the daylight hours. The object is for amateurs worldwide to exchange contact information with as many stations as possible on 10 meters.

The band is more likely to be open in high-sunspot years, but 10 meters can be surprising. Gain antennas for 10 can be built with fairly easily, since they’re fairly small (a 10 meter dipole is on the order of 16.5 feet). Building a small Yagi for 10 meters is not difficult. If 10 meters is open, signals from around the world can be quite strong, and contest contacts are fast and exciting.

IT'S A WRAP: WRC-15 CONCLUDES IN GENEVA

World Radiocommunication Conference 2015 ([WRC-15](#)) concluded its deliberations on November 27 in Geneva, as heads of delegations sign the *Final Acts* that revise the *Radio Regulations* — the international treaty governing the use of radio frequency spectrum and satellite orbits. Some 3300 participants, representing 162 out of the International Telecommunication Union’s ([ITU](#)) 193 member states, attended the 4 week conference. Another 500 or so participants, representing 130 other entities including industry, also attended as observers. Festus Daudu of Nigeria chaired WRC-15.

“A great deal has been achieved in the last 4 weeks, and the results will have a major impact on the future of the telecommunication sector in general and radiocommunications in particular,” ITU Radiocommunication Bureau (ITU-R) Director François Rancy said in a closing [press release](#). “The outcomes of WRC-15 are aimed at maintaining a stable, predictable and universally applied regulatory environment that secures long-term investments for the multi-trillion dollar ICT industry.” WRC-15 addressed more than 40 topics related to frequency allocation and sharing.

The conference reached consensus on a new secondary allocation for Amateur Radio at 5351.5-5366.5 kHz with a power limit of 15 W effective isotropic radiated power (EIRP). Some Region 2 countries, but not the US, will be permitted up to 25 W EIRP. With this action — and despite conditions that are more restrictive than had been hoped at the start of the Conference — the Amateur Service has obtained its first new global HF allocation since 1979.

The 15 kHz band at 60 meters “will maintain stable communications over various distances, especially for use when providing communications in disaster situations and for relief operations,” an ITU news release said. The new band will not become available for use until the FCC addresses the WRC-15 *Final Acts* in a rule making proceeding and establishes operating parameters.

The International Amateur Radio Union ([IARU](#)) team at WRC-15 also focused its efforts on tweaking the agenda for WRC-19. Agenda Item 1.1 will consider 50-54 MHz harmonization in Region 1. A proposed agenda item to align the 160 meter allocation in Region 1 with the rest of the world did not make the cut.

Agenda Item 1.12, addressing the Earth Exploration Satellite Service (10 GHz EESS), was approved at plenary with footnotes relevant to certain Middle East countries and with the Amateur Service allocations untouched.

Threats by the mobile telephone/broadband industry in the vicinity of 10 GHz and 24 GHz have been averted for the time being, but are expected to be raised again at WRC-19 and/or at WRC-23. The band 420-450 MHz was dropped from proposed WRC-19 studies regarding space operations frequencies for short-duration (3 years) small satellites.

Leading up to WRC-19, ITU-R will address an ambitious schedule of studies covering a wide range of

services from Amateur Radio to broadcasting, mobile broadband, mobile satellite, fixed satellite, Earth stations on mobile platforms, and space exploration services.

ITU-R has been invited to study existing allocations to the space operation service below 1 GHz and, if no suitable frequencies can be identified, then possible new allocations, or an upgrade of the existing allocations, to the space operation service within the frequency ranges 150.05-174 MHz and 400.15-420 MHz should be considered.

ARRL Chief Technology Officer Brennan Price, N4QX, and Technical Relations Specialist Jon Siverling, WB3ERA, served on the US delegation to WRC-15.

"I think it's a miracle," Rancy said at a closing press conference. "I'm always amazed that in 4 weeks we can produce 500 pages of very thick, very detailed, very complex regulations...without a single vote." — *Thanks to ITU and RSGB*

AMATEUR RADIO PARITY ACT PASSES SENATE COMMITTEE, GAINS COSPONSORS

The [Amateur Radio Parity Act](#) S. 1685 has been endorsed by the US Senate Committee on Commerce, Science, and Transportation. In the voice vote on November 18, two Senators — Bill Nelson (D-FL) and Brian Schatz (D-HI) — asked to be recorded as voting "no." The Committee held an executive session to consider the various legislative measures and nominations.

"Our work is not finished on the Senate side of Capitol Hill, although this is a huge step forward," said ARRL President Kay Craigie, N3KN. She urged ARRL members to continue to write, call and e-mail their Senators about S. 1685 to build up its support for the future. "We know that members' response to the call for a communications blast last week made all the difference for some Senators on the committee."

S. 1685 picked up another Senate cosponsor on November 18, when Sen Jerry Moran (R-KS), who sits on the Commerce Committee, has signed aboard the bill. "ARRL members in Kansas should contact his office to say thanks," President Craigie said. "Having an additional cosponsor who's on the Committee is especially good news."

On hand to observe the Committee mark-up session were ARRL Hudson Division Director Mike Lisenco, N2YBB, ARRL CEO David Sumner, K1ZZ, and ARRL General Counsel Chris Imlay, W3KD.

President Craigie encouraged ARRL members in Florida and Hawaii to keep contacting Senators Schatz and Nelson, urging them to change their minds about the legislation. "Don't be harsh or angry," she advised. "Keep it factual and courteous, and don't give up."

On November 5, US Sen Al Franken (D-MN) signed on as the second cosponsor of S. 1685. That legislation and its US House twin, H.R. 1301, call on the FCC to extend the limited pre-emption of PRB-1 to cover private land-use restrictions such as deed covenants, conditions, and restrictions (CC&Rs). If the legislation becomes law, radio amateurs living in antenna-restricted communities would have the opportunity to negotiate with homeowners associations to install an antenna that reasonably accommodates Amateur Radio communication.

H.R. 1301 has 114 cosponsors as of November 18. President Craigie said ARRL members should continue to urge their Representatives to cosponsor H.R. 1301 and to thank those who already have signed on.

The Amateur Radio Parity Act of 2015 [page](#) on the ARRL website has more information on how you can become involved. --ARRL

FCC CITES HOMEOWNER FOR UNINTENTIONAL INTERFERENCE TO TELECOMS PROVIDER

The FCC has issued a [Citation and Order](#) to an Illinois man to notify him of his obligation to stop operating devices that cause interference to licensed radio operations and to comply with federal rules and regulations related to RF devices. The FCC Enforcement Bureau's Northeast Region office issued the *Citation* on November 24 to Edward Kozol of Lemont, Illinois, warning him that he could face fines of up to \$16,000 a day unless he resolves the interference, which was reported last spring by AT&T.

"This includes consumer and industrial devices such as lighting ballasts that utilize radio frequencies in their operation," the FCC noted. Kozol was cited for operating incidental radiators that are causing harmful interference in violation of Section 15.5(b) of the Commission's rules.

The *Citation* stemmed from an April 22, 2015, complaint from AT&T concerning interference to its cellular communications system operating in the 700 MHz band. Agents from the Enforcement Bureau's Chicago Office used direction-finding techniques to determine that the radio emissions in the 700 MHz band were emanating from Kozol's residence. The 700 MHz signal was injecting noise into AT&T's network and degrading or blocking service to AT&T's customers, the *Citation* said. The agents also left a written warning.

FCC agents returned on May 20 and September 16 and found the same signal originating from Kozol's residence and requested Kozol's permission to look for any possible RF sources within his residence. "Mr Kozol ignored numerous requests to allow agents to locate and identify the offending transmitter," the FCC said. Agents also mailed additional warnings to Kozol.

The FCC directed Kozol to confirm in writing that he has taken necessary steps to ensure that he is no longer violating the Commission's Part 15 rules, including discontinuing the use of and replacing any "offending" devices. The FCC also asked for a written report on steps taken and to advise the FCC Enforcement Bureau's Chicago Office if he is unable to resolve the issue. --ARRL

ARRL REITERATES CALL FOR FCC TO MAKE HISTORICAL LICENSEE DATA AVAILABLE

At the request of the FCC, the ARRL on November 13 filed supplemental comments urging the Commission to continue to make available via the Universal Licensing System ([ULS](#)) historical Amateur Radio license information not associated with a current licensee or a pending application. The League filed its initial [comments](#) in the proceeding, WT Docket 15-81, last June. In its earlier comments, the

ARRL argued that historical license data not associated with a current license is a primary means for volunteer examiner coordinators (VECs) to research the validity of exam credit on the basis of a license once held by the candidate. ARRL General Counsel Chris Imlay, W3KD, who filed the supplemental comments on November 13, said the Commission now wanted to know how many applicants were taking advantage of lifetime examination credit, which went into effect in the summer of 2014.

ARRL told the FCC that its VEC currently transmits an average of five applications with expired license credits each week, and has handled some 300 such applications since July 2014. The W5YI VEC told ARRL that it relies heavily on historical license information too. ARRL argued that the number could grow, as word of the expanded opportunity for exam element credit continues to spread.

"The Commission, having obligated VECs to validate claims of former licensee status and the data associated therewith cannot fairly take away a key resource for objectively evaluating the validity of applicants' claims and documentation," the League said in its supplemental comments. "To do so decreases substantially the ability of VECs to maintain the historically high degree of integrity of the Amateur Radio licensing process. Since the Commission clearly has no intention of assuming any of the burden of the validation process -- and is ill equipped to do so in any case -- the proposal is both unfair and illogical."

ARRL said that researching expired license credit is just one of several instances in which VECs might need to access historical license data. Other possibilities, the League said, could include using historical data to validate a candidate's identification, and to research exam credit for pre-1987 Technician licenses.

The League concluded by again asking the FCC to continue to make available historical license data at least to VECs, if not the general public. --ARRL Letter

AO-85 COMMISSIONED AND TURNED OVER TO AMSAT-NA OPERATIONS

Fox-1A (AO-85) has been formally commissioned and turned over to AMSAT Operations, which is now responsible for the scheduling and modes. Fox-1A is AMSAT-NA's first CubeSat.

Many new techniques are incorporated, and lessons will be learned, as with any new 'product,'" said

AMSAT Vice President-Engineering Jerry Buxton, N0JY. "We will incorporate changes from what we learn in each launch, to the extent possible, in subsequent Fox-1 CubeSats. To our members, we want to say that the Fox Team is very proud and pleased that our first CubeSat is very successful and hopefully will be for some time."

The Fox-1 Project is a series of CubeSats. A total of five will be built and flown. Launches already have been scheduled for three more, and a new NASA CubeSat Launch Initiative proposal will be submitted for the fifth launch.

The Fox Team noted that an apparent lack of receiver sensitivity and difficulty in turning or holding on the repeater with the 67 Hz CTCSS tone are probably the most notable observations about AO-85.

"We have determined a probable cause for the sensitivity issue, and while that can't be fixed on AO-85, we are taking steps to prevent similar issues on the rest of the Fox-1 CubeSats," Buxton assured. The November/December edition of *AMSAT Journal* will include full details on these technical issues. Read [more](#). -- *Thanks to AMSAT News Service via Jerry Buxton, N0JY*

SKYWARN RECOGNITION DAY IS SATURDAY, DECEMBER 5

The 17th annual SKYWARN Recognition Day ([SRD](#)) on-the-air event is set for Saturday, December 5, from 0000 UTC to 2400 UTC. Cosponsored by ARRL and the National Weather Service, SKYWARN Recognition Day pays tribute to Amateur Radio operators for the vital public service they perform. Registration is now open for stations planning to participate from a National Weather Service (NW) Forecast

Office; a [list](#) of NWS participating offices is on the NWS SKYWARN Recognition Day web page. During the 24 hour event, Amateur Radio operators set up at NWS offices contact other hams across the country. This event is also aimed at strengthening the bond between Amateur Radio operators and local NWS offices.

SKYWARN Recognition Day is not a contest. During SKYWARN Recognition Day amateur stations exchange contact information with as many National Weather Service-based stations as possible on SSB, FM, CW, RTTY, and AM on 80, 40, 20, 15, 10, 6, and 2 meter bands plus 70 centimeters. Repeater contacts are permitted.

Stations exchange call signs, signal reports, location, and a one or two-word description of the weather (eg, sunny, partly cloudy, windy, rainy). [Procedures](#) are detailed on the NOAA SRD web page.

The volunteer SKYWARN program comprises nearly 290,000 trained severe weather spotters -- many of them radio amateurs -- who identify severe storms and provide NWS forecasters with reports of local weather conditions during severe weather events.

To learn [more](#), visit the SKYWARN Recognition Day website. --ARRL Letter

NOMINATIONS SOLICITED FOR SIX ARRL AWARDS

The ARRL is inviting nominations for awards that recognize educational and technological pursuits in Amateur Radio. Nominations are also open for the League's premier award to honor a young licensee.

The Hiram Percy Maxim Award recognizes a radio amateur and ARRL member under age 21, whose accomplishments and contributions are of the most exemplary nature within the framework of Amateur Radio activities. Nominations for this award need to be made through your ARRL Section Manager, who will then forward the nomination to ARRL Headquarters by March 31, 2016.

The ARRL Herb S. Brier Instructor of the Year Award honors an ARRL volunteer Amateur Radio instructor or an 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 15, 2016.

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, 2016.

The ARRL Technical Service Award recognizes a licensed radio amateur or group of radio amateurs who provide Amateur Radio technical assistance or training to others. The nomination deadline is March 31, 2016.

The ARRL Technical Innovation Award is granted to a 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, 2016

The Knight Distinguished Service Award was established to recognize exceptionally notable contributions by a Section Manager to the health and vitality of the ARRL. The nomination deadline is April 30, 2016.

The ARRL Board of Directors selects recipients for these awards. Winners are typically announced following the Board's July meeting. [More information](#) about these awards is on the ARRL website, or contact [Sean Kutzko](#), KX9X, tel (860) 594-0328. --ARRL Letter

SHORTS



Special Event W1Q will Mark QST Centennial -- Special Event station W1Q will be on the air December 1-15 to celebrate QST's 100th anniversary. The first issue of QST was published in December 1915. ARRL COO Harold Kramer, WJ1B, and volunteer operators will be on the air. This is *not* an official ARRL operation, and Kramer will handle all details, QSL cards, and LoTW entries. He will post additional information on his WJ1B [QRZ.com](#) page. -- *Thanks to Harold Kramer, WJ1B*

Revamped FCC Website Expected to Debut on December 10 – “While the transition to the revamped site is expected to be completed almost instantaneously, there will be an ongoing process following this transition that will continue to involve user feedback, fixes by the FCC’s Information Technology team, and content updates by policy bureaus and offices,” the FCC said in a November 24 [Public Notice](#).

When the new site comes online, the familiar current FCC website will no longer be available. The FCC said web pages and files on [transition.fcc.gov](#) that have not already migrated to the new site will remain available, and existing bookmarks will be redirected to the appropriate content on the new site. While the Commission has already upgraded some of its interactive systems, including the Consumer Help Center, and is working toward improvements on similar systems, including the Electronic Comment Filing System (ECFS), these systems will not be directly impacted by the December 10 migration. --ARRL

New UK/EI DX Contest to Launch in December – A new contest to promote activity between stations in the UK and in Ireland (UK/EI) and the rest of the world debuts with an SSB event in December 5-6 and a CW event January 23-24. Both get under way at 1200 on Saturday and end 24 hours later. The United Kingdom and Ireland Contest Club ([UKEICC](#)) is sponsoring the new contest.

"All UK and EI contesters, including those with modest stations and antennas, will experience the fun of being a multiplier in a worldwide contest," the [announcement](#) said. While the eventual goal is to have UK/EI stations work the rest of the world, all entrants may work all other entrants for points and multipliers.

"For the first year or two we have to take into account that UK/EI participation may take time to build up and that there are long periods when DX stations cannot work UK/EI stations, because there is no propagation," the announcement pointed out. "Accordingly, we are initially allowing DX-to-DX contacts, which will make the contest more interesting for DX stations." [Full information](#) is on the UK/EI DX Contest web page. Read [more](#). --ARRL Letter

DX Engineering Acquires InLogis, Exclusive Rights to Make and Market Active Magnetic Loop Antenna – [DX Engineering](#) of Tallmadge, Ohio, has acquired the assets of InLogis and the exclusive right to manufacture and sell the Inlogis (formally Pixel) Active Magnetic Loop Antenna, model [RF-PRO-](#)

1B. All manufacturing operations and equipment for the RF-PRO-1B have been moved from Golden, Colorado, to Tallmadge, Ohio.

DX Engineering says it will serve all existing RF-PRO-1B customers with replacement or service parts and expert advice.

The DX Engineering Active Magnetic Loop Antenna is a receiving antenna for HF with "figure 8" directivity and rotating capability, without occupying the space needed for a typical Beverage system. --ARRL

Ham Radio Accessory Dealer, Publisher Idiom Press Changing Hands – [Idiom Press](#) of Merlin, Oregon, has announced the sale of its assets to [Ham Supply](#) of Elizabeth, Colorado. Owned by Wayne Ordakowski, N0UN, Ham Supply is a new business formed to manufacture and distribute the products previously offered by Idiom Press, as well as other new Amateur Radio products.

Ham Supply will honor warranties for existing Idiom Press products, and once production is resumed, Ham Supply will honor all existing orders placed with Idiom Press after reconfirming them with the customer. Ordakowski has said he intends to have the new business in full operation by the first week of January 2016, although some previously placed orders may ship earlier.

Idiom Press published *The Complete DXer* by Bob Locher, W9KNI, who started the business before turning it over to his son Rob, W7GH, who is returning to the computer programming field. --ARRL Letter

Interesting SDR Project [PortableSDR Kickstarter project combining GPS, Vector Network Analyzer, and QRP SDR Transceiver](#). Having already exceeded the kickstarter funding goal, the hardware may be ready in Q1/Q2 2016. – ARRL Contest Newsletter

Which under-\$10 ARM-based computer do you need for your next project? Here's a [comparison between the Raspberry Pi Zero and the Chip](#). It's great we have such power building blocks to use. – ARRL Contest Newsletter

Many amateurs are interested in weather, and lightning in particular. Here's a [spectacular video of lightning striking a car](#) in Australia, taken with an HD dash camera. What is very curious is that the vehicle is struck even though it's surrounded by much taller electrical lines. – ARRL Contest Newsletter

THANKS FOR READING. HAVE A SAFE AND HAPPY HOLIDAY SEASON!

THE RCA ARC MONTHLY NEWSLETTER IS COMPILED AND EDITED BY JIM RINEHART, AND JIM KEETH. 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/>