RCA AMATEUR RADIO CLUB

Legacy Amateur Radio Club

AFFILIATED CLUB

INDIANAPOLIS, INDIANA

RCA ARC Indianapolis 60th Anniversary 1956 - 2016

AUGUST, 2016 MONTHLY NEWSLETTER

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, AUGUST 9th, 6:30 PM AT G.T. SOUTH'S,
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE JULY MEETING – Thanks to all who attended the July meeting. Jim K9RU reported the Club did well at the Indy Hamfest selling junk even though some of the parts were damaged by water while in storage over the winter and had to be discarded. Stuff from Dave Brown's and Fred Tenner's estates sold well. Rosie Brown still has a rotor and antenna switch as well as aluminum towers and various antennas if someone is interested. Overall, the hamfest attendance was down a hundred or so from last year. The trend continues. The turnout for Field Day was relatively light. The GOTA station did well. 6 meters never did open. The number of QSO was approx 2200. All available bonus points were gotten. The repeater problems of last month were fixed by replacing a UPS battery. The air conditioner, donated by Jon Powell, KC9GUM, is working great keeping the repeater shack in the mid 70s all day. Thanks, Jon! The 6m beacon continues to operate properly. Some reports of key clicks have been reported. Remember the Indy Radio Club Hilltop event is in Sept.

NEXT RCA / IRC AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, Aug. 13, 2016. Exams start at 12:00 noon. Walk ins allowed.
Location: **Salvation Army EDS Training Facility,**
4020 Georgetown Rd,
Indianapolis, IN 46254
Contact: Rhonda S. Curtis, (317) 363-7457, e-mail: ws9h@arrl.net

Help Needed for Upcoming Events: Ham Radio volunteers are needed in all the public service events that we support. These are:

Sept. 10 Multiple Sclerosis Bike Ride
Oct. 1 Indianapolis Marathon in Lawrence
Nov. 7 Indianapolis Monumental Marathon

Contact Mike Palmer, N9FEB, N9FEB@comcast.net www.IndyHams.org

Indiana Bicentennial Certificate – Work and confirm by QSL card Clark, Dearborn, Franklin, Gibson, Harrison, Jackson, Knox, Orange, Perry, Posey, Switzerland, Warrick, Washington and Wayne Counties anytime in 2016. These are the 15 counties that made up Indiana in 1816 when it became a state. Submit a formal written application with GCR list (see rules for details) to the award manager. QSL cards must be in your possession but you should not submit your cards to the award manager. The awards fees is $15. All of the rules can be found on the

website: http://www.hdxcc.org/bicentennial/index.html

Indianapolis Radio Club Four Grid Award – Indianapolis Radio Club offers an award for working stations on 2 meter FM working the four grid squares in the Indianapolis area, EM69, EM79, EN61 and EN71. Contact K9RU or go to the IRC website, operating page for details. http://www.indyradioclub.org/Operating.html

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Aug 13	HCRCSG Tailgate Hamfest, Danville, IN http://hcrcsg.org/tailgate.html
Aug 21	TARA Hamfest, Lafayette, IN **:** http://w9reg.org/
Aug 27	Owen County Hamfest, Spencer, IN http://www.owencountyara.org
Sep 16-17	W9DXCC Converence, Shaumburg, IL http://w9dxcc.com
Sep 24	Indianapolis Radio Club Hilltop Contest
Sep 24	Bloomington Hamfest, Bloomington, IN http://www.bloomingtonradio.org
Oct 22	Shelbyville Tailgate 2016, Shelbyville, IN http://www.brvars.com
Nov 12	Fort Wayne Hamfest, Fort Wayne, IN http://www.fortwaynehamfest.com

W9I – Indiana Bicentennial Special Event Station
August 5 -21 Indiana State Fair (W9ISF)
Opportunities for public service: http://indyhams.org/events

GOOD-BYE, HARA ARENA! HAMVENTION TO RELOCATE IN 2017!

Hamvention® has announced that Hara Arena, the home of Hamvention since 1964, is closing, but Hamvention will continue. Hamvention 2016, the event's 65th running, was also the last held in the six-building Hara complex. Greene County (OH) officials announced the Hamvention will relocate to the Green County Fairgrounds and Expo Center in Xenia, OH for the 2017 event.

"We are painfully aware of the loss this announcement will generate, which is why we have fought so long and hard to prevent it," Hara Arena Marketing Director Karen Wampler said in a news release.

DARA and Hamvention have been working on a contingency plan in the event that the deteriorating Hara Arena ever should become unavailable. "We have spent many hours over the last few years evaluating possible locations and have found one in the area we believe will be a great new home!"

"We all believe this new venue will be a spectacular place to hold our beloved event," Hamvention General Chair Ron Cramer, KD8ENJ, said. "Please rest assured we will have the event on the same weekend and, since it will be in the region, the current accommodations and outside events already planned for Hamvention 2017 should not be affected."

"We look forward to your continued support as we move to a new future with The Dayton Hamvention."

A hockey team's cancellation of its upcoming season earlier this month had raised questions about the future availability of Hara Arena for Hamvention®. Hara Arena has been facing long-standing financial problems — including unpaid property taxes. Renovations promised for the 2016 Hamvention never materialized.

Hamvention attracted more than 25,000 visitors this spring and is worth millions of dollars to the Dayton area economy.

The Wampler family has owned and operated Hara Arena since its humble origins in the 1950s, when Wampler Ballarena — then a dance hall and now an exhibit hall familiar to Hamvention visitors — was built in what had been a family-owned orchard. –ARRL

ATTENDANCE AT DAYTON HAMVENTION® TOPS 25,000 FOR SECOND YEAR IN A ROW

Given the level of enthusiasm at the 2016 running of Dayton Hamvention® in mid-May, attendance may have seemed up, but for all intents and purposes, it held steady at 25,364 visitors. That figure was down only slightly from the 25,621 attendees reported for 2015, but above the 25,000 mark for the second year in a row. For those keeping track, in 2014 the official count was 24,873 visitors, and attendance in 2013 was 24,542.

Hamvention attendance peaked in 1993 at 33,669, before the 1996 change in date from April to May. While attendance has fluctuated over the years, Hamvention has grown to international proportions, attracting members of the worldwide Amateur Radio community each spring.

The Dayton Amateur Radio Association (DARA) has sponsored Hamvention since 1952. Originally called the Southwestern Ohio Ham-vention, the inaugural event, held in March in downtown Dayton, attracted 600 attendees -- twice as many as had been predicted. Today it is the world's largest Amateur Radio gathering. --ARRL

FUTURE FAA RULES COULD AFFECT SOME AMATEUR RADIO ANTENNA SUPPORT STRUCTURES

Yet-to-be-developed Federal Aviation Administration (FAA) rules stemming from the recent passage in Congress of H.R. 636, the FAA Reauthorization Act, could pose additional marking requirements for a small number of Amateur Radio towers. The bill instructs the FAA to enact rules similar to state-level statutes now in place that are aimed at improving aircraft safety in the vicinity of meteorological evaluation towers (METs) set up in rural areas. In the wake of fatal crop dusting aircraft collisions with METs, often erected on short notice, the National Transportation Safety Board (NTSB) recommended in 2013 that states enact laws -- sometimes called "crop duster" statutes -- requiring marking and registration of METs. While some state crop duster laws exempt ham radio towers, the federal legislation does not. ARRL General Counsel Chris Imlay, W3KD, said, however, that the list of exemptions in the federal legislation restricts application of the new rules to a very small subset of Amateur Radio towers.

"The FAA Reauthorization Act has very little application to Amateur Radio antennas. We will have a good opportunity to address the final FAA rules through the normal rulemaking process," Imlay said. "We'll be meeting soon with FAA officials to learn their intentions as well as to advance our own concerns to the agency. Uniform federal regulation is beneficial to hams, because it eliminates a patchwork of state statutes that can impose significant constraints on ham antennas in rural and agricultural areas."

The FAA Reauthorization Act gives the FAA 1 year to issue regulations requiring the marking of towers covered by the new legislation. Marking of towers covered by the legislation will be in the form of painting and lighting in accordance with current FAA guidelines.

The law covers towers that are "self-standing or supported by guy wires and ground anchors;" are 10 feet or less in diameter at the above-ground base, excluding concrete footings; are between 50 feet above ground level at the highest point and not more than 200 feet above ground level; have accessory facilities on which an antenna, sensor, camera, meteorological instrument, or other equipment is mounted, and are located outside the boundaries of an incorporated city or town or on land that is undeveloped or used for agricultural purposes.

Imlay said the law excludes towers erected adjacent to a house, barn, electric utility station, or other building, or within the curtilage (enclosed area occupied by a dwelling, grounds, and outbuildings) of a farmstead, among other exclusions.

"We do not anticipate that a significant number of Amateur Radio antennas will be subject to these rules," Imlay said, "but we need to monitor the FAA rulemaking process carefully to head off requirements that could put the cost of installing and maintaining affected structures out of

any reasonable reach." Read more. --ARRL Letter

ARRL CENTRAL DIVISION DIRECTOR DICK ISELY, W9GIG, STEPS DOWN

Saying it was time that the ARRL Central Division had younger leadership, Central Division Director Dick Isely, W9GIG, of Saint Charles, Illinois, has resigned from the League's Board of Directors. He has been succeeded by Vice Director Kermit Carlson, W9XA, of Batavia, Illinois.

"I'm 77 years old, and I still have pretty good health, despite my slow recovery from a shingles attack that hit me last December," Isely said in a public announcement. "However, it's time that you have a younger Central Division Director." Isely and Carlson were re-elected last year without opposition, and Isely expressed confidence that Carlson would "do a better job" in the Director's chair Isely tendered his resignation during the July 2016 ARRL Board of Directors meeting over the weekend in Windsor, Connecticut, and, acting on Carlson's nomination, Isely's Board colleagues elected him as an ARRL Honorary Vice President.

"I have thoroughly enjoyed meeting and talking with many of you over these many years, and, from time to time, there will be future opportunities for this activity," Isely's announcement concluded.

During his time on the Board, Isely served as a member of the ARRL Executive Committee as well as on the Board's Administration and Finance and Membership Services committees. He chaired the CEO Search Committee after former ARRL CEO David Sumner, K1ZZ, announced his retirement in 2015. Isely also has been among the ARRL Board members active in promoting the Amateur Radio Parity Act on Capitol Hill.

Isley became the ARRL Central Division Director in 2001, succeeding Ed Metzger, W9PRN, and he was an ARRL Foundation director from 2007 until his resignation from the Board. He had served as ARRL Foundation Vice President since 2008. ARRL Great Lakes Director Dale Williams, WA8EFK, has been named to replace Isely on the ARRL Foundation Board.

Isely is a graduate of the University of Missouri and a retired US Navy and American Airlines pilot. He's an ARRL and an AMSAT Life Member and has been a radio amateur since 1977. Isely helped organize the National Frequency Coordinators' Council and served 4 years as a director. --ARRL Letter

CARL LUETZELSCHWAB, K9LA, APPOINTED CENTRAL DIVISION VICE DIRECTOR

ARRL President Rick Roderick, K5UR, has appointed Carl Luetzelschwab, K9LA, of Fort Wayne, Indiana, as Central Division Vice Director. He succeeds Kermit Carlson, W9XA, who became the Division's Director upon the resignation of Dick Isely, W9GIG, on July 16. Luetzelschwab said he plans to bring lots of energy to the job and to be visible to Central Division members.

"It is an honor to serve and give back to the Amateur Radio service for all that it has given me over the years," Luetzelschwab said. "I am looking forward to working with Director Carlson, whom I have known for a number of years, and I would like to give a big 'thank you' to retired director Dick Isely for his friendship and many years of service. I hope to emulate his visibility and approachability."

Luetzelschwab has been a radio amateur since 1961. His interests include propagation, DXing, antennas, vintage equipment, and contesting. He served as *National Contest Journal* (NCJ) editor from 2002 until 2007 and, until 2015, contributed the "Propagation" column to *NCJ* and articles to other Amateur Radio publications. Luetzelschwab received The Bill Orr, W6SAI, Technical Writing Award for 2013 for his article "The Sun and the Ionosphere," which appeared in the March 2013 issue of *QST* and won the March QST Cover Plaque Award for the same article. His website offers considerable information on propagation and related subjects. He's been on several DXpeditions and is at the top of the DXCC Honor Roll.

Luetzelschwab holds both bachelor's and master's degrees in electrical engineering from

Purdue University. He retired in 2013, after 41 years as an RF design engineer. His wife Vicky is AE9YL. --ARRL Letter

FCC FINDS A FIX FOR AMATEUR RADIO APPLICATION BATCH PROCESSING PROBLEM

It's taken a couple of weeks, but the FCC has resolved a computer programming problem that had affected its ability to accept and process batch-filed Amateur Radio applications, resulting in a backlog for the Volunteer Examiner Coordinator (VEC) and others taking advantage of automated processing. The FCC information technology staff had been attempting to fix the glitch that had affected the Universal Licensing System (ULS) Electronic Batch Filing (EBF) system since it first cropped up on June 28. At first the problem had affected the processing of all Amateur Radio and commercial license applications, said ARRL VEC Manager Maria Somma, AB1FM, who alerted the FCC IT Department.

ARRL's IT Department and the ARRL VEC confirmed on July 14 that the problem had been fixed, the backlog of more than 1200 applications and 300 exam sessions cleared, and the flow of automated, batch-filed applications and exam sessions able to resume. --ARRL Letter

HAM RADIO OUTLET TO ACQUIRE SOME AES EMPLOYEES, RE-OPEN MILWAUKEE LOCATION AS HRO BRANCH

Ham Radio Outlet (HRO) has announced plans to hire an unspecified number of Amateur Electronic Supply (AES) employees when AES shuts down its four locations in late July. In addition, the current AES Headquarters store in Milwaukee will become HRO's newest location later this summer, following renovation. On July 1, AES announced that it was going out of business and ending retail operations at its Milwaukee, Las Vegas, Cleveland, and Orlando locations. With the approval of AES management, HRO senior managers visited each AES location to interview staffers in hopes of "acquiring some of the Amateur Radio retail employee talent in each of the current AES locations," an HRO news release said.

"Together with this interview process, HRO examined what it would take to perhaps acquire one or more of the AES store locations. At the time of these interviews, many opportunities were explored with current AES senior management," the release continued. "We are very excited to announce that HRO was successful in providing offers of employment to a number of soon-to-be-former AES employees, and that to some, we have offered positions that involve HRO-sponsored and funded relocation."

HRO announced that once AES shutters its Milwaukee location at 5710 W Good Hope Road on July 28, Ham Radio Outlet will undertake an extensive remodeling project to create a new HRO Milwaukee store at the same site, which will open at the end of August.

"It is with great pleasure that we are able to continue Terry Sterman's and Phil Majerus' legacy of providing a fantastic Amateur Radio store in Milwaukee, Wisconsin," said HRO President Robert Ferrero, W6KR. "It is our immediate goal to have the largest, most well-stocked Amateur Radio retail store in North America and perhaps even the world."

After AES closes on July 28, all former AES locations' direct and toll-free telephone numbers will be redirected to the closest HRO location, and the AES website will be directed to HRO's website.

A family-owned business, HRO is the world's largest Amateur Radio dealership, with locations from New England to the West Coast. --ARRL Letter

WD2XSH ARRL 600 METER EXPERIMENT NO INTERFERENCE COMPLAINTS RECEIVED FROM OPERATING IN THE 465-515 KHZ BAND

The ARRL 600 Meter Experiment being carried out under the WD2XSH Part 5 Experimental license reports that *no* interference complaints have been received from other services operating in the 465-515 kHz band over the course of more than 202,400 hours of operation, nor was interference from other operations an issue for any of the experiment's participants. That statistic was contained in the experiment's March 1 to May 31, 2016, report, prepared by Experiment Coordinator Fritz Raab, W1FR, with participants Rudy Severns, N6LF, and John Langridge KB5NJD, and released on July3. Utilities' expressed fears of interference to their unlicensed PLC systems prompted the FCC to consider regulatory provisions that include a possible notification requirement by some radio amateurs to utilities with systems in the pending 630 meter (472-479 kHz) and 2200 meter (135.7-137.8 kHz) bands, prior to operating. Utilities use unlicensed PLC systems to control parts of the electrical power grid.

The latest WD2XSH update reported another 16 contacts on the pending 630 meter band, for a total of 578. The Amateur Radio community continues to wait for the FCC to release a *Report and Order* spelling out service rules and operational requirements for the two bands -- both of which have become available in more than a dozen other countries, including Canada. The ARRL petitioned the FCC in 2012 to carve out the same band for US hams.

"When the FCC grants amateur access to the band from 472 to 479 kHz, I will restrict operation under the experimental license to 461 to 472 kHz," Raab said in the report. "This will clear the amateur frequencies while allowing the experimenters to run unattended propagation beacons without using the limited bandwidth that will be available to amateurs." Earlier this year he asked that ARRL renew the WD2XSH experimental license while awaiting FCC action on 630 meters and 2200 meters.

In an *ex parte* statement filed onMarch 10 with the FCC, the ARRL asked the Commission not to adopt "an overbroad" requirement for notification of utilities in advance of intended Amateur Radio operation on the pending 2200 and 630 meter bands.

According to the experiment's report, activity on 630 meters continued through the spring, despite increasing noise levels and deteriorating propagation. Band conditions overall were described as "variable." The path to Australia from North America was reported to have been good and "relatively predictable," while the paths to Europe and Japan have been less active.

NEW MICROWAVE, UHF DISTANCE RECORDS SET ON SAME DAY

New distance records were set on 47 GHz and on 902 MHz on June 30 by stations at vastly different points on the globe. On 47 GHz, US and Canadian operators set up on Whiteface Mountain in New York (FN34bi) and on Mont Tremblant in Quebec (FN26rf), respectively, in the effort to set a new US-Canada record on the band. The distance was calculated at 215 kilometers (133.3 miles). On the US side were Mike Seguin, N1JEZ, and Henry Ingwersen, KT1J; on the Canadian side were Rene Barbeau, VE2UG, and Ray Perrin, VE3FN.

"On this band, we usually are working line of sight," Seguin said. "We have a lot of experimentation to do, now that there are some good high-power amps available." He said the June 30 attempt marked the second 47 GHz contact for VE2UG and VE3FN. A week earlier, they had worked both KT1J and N1JEZ over a 99-kilometer (61.4 miles) path, with signals peaking almost 60 dB out of the noise.

Once everything was in place, Seguin was able to hear Barbeu's CW signal almost immediately. "Signals were not strong, with a lot of QSB," Seguin said. After aligning their dishes, each operator worked the others. Following the successful 47 GHz contacts, VE3FN and N1JEZ worked each other "easily" on 24 GHz SSB. The North American distance record on 47 GHz is 344.8 kilometers (213.8 miles), set in 2015.

Meanwhile on the Pacific side of the world, Wayne Overbeck, N6NB, and Greg Campbell, W6IT, set a new world DX record on 902 MHz between California and Hawaii. They took advantage of

a transpacific tropo duct to complete a contact over a path of 4095 kilometers (2544 miles), topping the old record set more than 20 years ago of 4064 kilometers. Last year, Overbeck and Campbell set world distance records on 2.3 and 3.4 GHz over the approximately the same path.

This record contact again underscored the degree to which these record-setting attempts involve good luck as well as planning and preparation," Overbeck said. Not since the tropo duct that allowed Campbell and Overbeck to set their microwave records last year had another occurred, until June 30. "This duct only produced good signals for a matter of a few hours," he recounted. He said he and Campbell both managed to be in the right place at the right time to set the new 902 MHz record. "Three hours later the duct dissipated and transpacific signals faded into the noise," Overbeck said.

N6NB operated from Hawaii using a suitcase portable station in a rented vehicle at 5260 feet elevation; in California, W6IT used one of N6NB's rover stations to operate 75 miles inland at 6200 feet elevation. Read more.

SHORTS

ARRL CEO Tom Gallagher, NY2RF, to Keynote W9DXCC DX Convention Banquet: The 64th annual W9DXCC DX Convention and Banquet will be held Friday and Saturday, September 16-17, in Schaumburg, Illinois. ARRL's new CEO Tom Gallagher, NY2RF, will be the Saturday evening banquet speaker. Sponsored by the Northern Illinois DX Association, the W9DXCC DX Convention is an ARRL-sanctioned operating specialty convention. Contest University and DX University programs will be presented on Friday. Day-long sessions on Saturday will include speakers, exhibits, QSL card checking, and a CW pileup contest. On Saturday, there will be presentations on the VP8STI/VP8SGI Sandwich Island/South Georgia Island, VK0EK Heard Island, and K5P Palmyra Island DXpeditions, as well as a Solar Cycle 24 update, "DXing During Declining Conditions," and using the FLEX-6000 for contesting and DXing. Register online. For more information, contact John McCormick, N0FCD. --ARRL Letter

"Triumvirate" to Oversee CQ World Wide DX Contest: CQ World Wide DX Contest Director Doug Zwiebel, KR2Q, has announced that he, Scott Robbins, W4PA, and Bob Naumann, W5OV, will serve as CQ WW DX Contest co-directors. "We will all share the various tasks of 'director,' and we all will provide backup or contingency coverage for each other for most, if not all, aspects of CQ WW Committee leadership," Zwiebel explained. "We are all equals." Robbins and Naumann are veteran contesters and well-known in the Amateur Radio community. Formerly Amateur Radio product manager for TEN-TEC, Robbins now is the proprietor of Vibroplex. Naumann, who previously served on the CQ WW Contest Committee for 20 years, is sales manager of DX Engineering; he worked previously for Array Solutions. --ARRL Letter

Fox-1C and Fox-1D Launch Window Shifted: AMSAT reports that the launch period for Fox-1C (Cliff) and Fox-1D has been moved. The new launch window will be between September 1 and November 30. Fox-1Cliff and Fox-1D will be integrated onto the Spaceflight SHERPA platform for its maiden flight aboard a SpaceX Falcon 9 launching into a sun-synchronous orbit from Vandenberg Air Force Base. Fox-1Cliff and Fox-1D carry university experiments from Pennsylvania State-Erie, Vanderbilt, University of Iowa, cameras provided by Virginia Tech, as well as Amateur Radio voice repeaters capable of U/V or L/V operation. The Nayif-1 CubeSat, developed by Emirati students from the American University of Sharjah, is expected to be put into orbit on the same launch. Nayif-1 carries an inverting 435/145 MHz transponder (FUNcube-5) for SSB/CW. -- *Thanks to AMSAT News Service, Southgate Amateur Radio News*

I**nternational Tribunal Rules Against China's Claims Regarding South China Sea Reefs:** An international tribunal ruling discounting China's claims with respect to Scarborough Reef and the Spratlys could complicate efforts to mount another DXpedition to the rare and remote South China Sea DXCC entities. The Permanent Court of Arbitration in The Hague ruled this week in favor of the Philippines in a dispute with China over Scarborough Reef -- also known as Scarborough Shoal. The last DXpedition to Scarborough was the 2007 BS7H operation. A 2016 DXpedition has been reported to be in the works. --ARRL Letter

The recent zero-sunspot period (June 23-July 4) ended when a single sunspot group (2560) appeared on July 5. Sunspot numbers were 23 and 11, respectively, on July 5 and 6. Compared to the previous week, average daily sunspot number rose from zero to 4.9. Average daily solar flux declined from 75.6 to 73.1. The average planetary A index dropped from 9 to 6.7, and the average mid-latitude A index declined from 9.1 to 8.3. – K7RA

Larry, N6NC, suggests a method for using an antenna analyzer to determine the resonant frequency of an antenna trap. As a parallel L-C circuit, he found inductive coupling to be necessary: "Wind 8 turns of #14 AWG wire at one wire diameter spacing around a 3/8" to 1/2" diameter tube or dowel. Solder the coil to a PL-259 or BNC connector, and cover it with heat shrink tubing. When plugged into an analyzer, and inserted into the trap, the analyzer will act as a grid dip meter using the analyzer's SWR meter." Dave, KG0ZZ, has a YouTube video illustrating how to perform this measurement. ." Dave, KG0ZZ, has a YouTube video illustrating how to perform this measurement.

THANKS FOR READING!

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/