

# RCA AMATEUR RADIO CLUB

APRIL, 2015

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, APRIL 14th, 6:30 PM AT [G.T. SOUTH'S](#),  
5711 E. 71<sup>st</sup> STREET, INDIANAPOLIS, IN

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## RCA ARC NEWS

**SUMMARY OF THE MARCH MEETING** – Thanks to all who attended the March meeting. Meeting room change: For the remainder of 2015 our meetings will be in the dining room at the east end of GT South's. Another larger group has reserved the room just to the right of the main entrance. The current status of the '88 repeater and Echolink were discussed. Another computer for Echolink, provided by Bob W9KVK, will be installed to improve performance. Field Day this year for RCA and Indy Radio Club will be split with a group in Indy (Camp Belzer) and another in New Mexico. Rufus, NE9T, will coordinate the Indy group. Dave, N9KZJ, and Bob, W9KVK, reported on a visit to the Grover Museum radio exhibit in Shelbyville. Jim, K9RU, discussed the ARRL DX Contest. The purchase of a Yaesu Fusion repeater for the Club was discussed. The special price of \$500 is good until the end of March (now extended until the end of June). Those present voted unanimously to approve the purchase. This will replace some of the present homebrew hardware of the repeater system. Jim, AF9A, will place the order. Delivery times are running one to two months.

### **NEXT TEST AMATEUR RADIO LICENSE TEST SESSION --**

**Time:** Saturday, April 11<sup>th</sup>, 12:00 PM (Walk-ins allowed)  
**Location:** Salvation Army EDS Training Facility  
4020 Georgetown Rd., Indianapolis, IN  
**Contact:** James K. Rinehart, (317) 495-1933, Email: [k9ru@arrl.net](mailto:k9ru@arrl.net)

**MINI MARATHON IS MAY 2<sup>nd</sup>** – Seven ham operators are still needed for the Indianapolis Mini-Marathon on May 2<sup>nd</sup>. Please pass this word around. The ham radio volunteer meeting(s) are at the Salvation Army EDS Training Center, 4020 Georgetown Rd. this year and NOT the Red Cross HQs. You should plan to attend ONE of TWO sessions, unless previously arranged. Thursday, April 23rd from 5pm to 7pm is the first session and Saturday, April 25th from 10am to 12N is the second.

Mini Marathon documents will be emailed in separate emails to individuals.

Contact: Michael Palmer, N9FEB, Marion County Events Coordinator for Ham Radio, (317) 849-3602, [www.IndyHams.org](http://www.IndyHams.org)

**INDIANA QSO PARTY MAY 2<sup>nd</sup> - Noon to Midnight EDT** – Although it's barely spring, it's not too early to start planning for the Indiana QSO Party on May 2.

Perhaps your club can mount a full blown effort to put your county on the air and compete for the TOP CLUB plaque. Your members can participate as individuals, and then combine their scores for a club score. You can also organize a multi-op, mobile or portable operation. Check out the rules and operating categories on the INQP website: [www.hdxcc.org/inqp](http://www.hdxcc.org/inqp)

N1MM Plus is great free logging software for the INQP. The list of county abbreviations used during the INQP is available at [www.hdxcc.org/inqp](http://www.hdxcc.org/inqp)

There are 4 QSO parties going on that weekend, with N1MM you can log all of them and the HDXCC log checking software can sort it out.

With the Mini-Marathon and other events going on that weekend there is still time in the evening to work the INQP. 20 meters and 40 meters are the best bands during the day and in the evening 75 and 40 meters are the best.

Whatever your operating choice, please get on the air May 2 to put Indiana (and your county) out there for others to work. Once you have made a plan, please let us know what counties and call signs you will activate on May 2. – Mel KJ9C [kj9c@arrl.net](mailto:kj9c@arrl.net), Mark WB9CIF [markmusick@sbcglobal.net](mailto:markmusick@sbcglobal.net)

**RCA ARC PLANS FOR THE DAYTON HAMVENTION** -- Now is a good time to order your advance tickets online for the Dayton Hamvention (May 15-17). Plan to join us for dinner after the Hamvention on Friday at the Barnsider Restaurant (Same place as last year). We will need to get a head count for the reservation for the restaurant. More details will be in the May newsletter.

**INDIANAPOLIS RADIO CLUB BUS TO THE DAYTON HAMVENTION** – Again this year, the Indianapolis Radio Club has made arrangements to have a chartered bus to the Dayton Hamvention. The day trip to Dayton will be on Saturday, May 16. The bus will have two pick up points: 6:30 am at Southern Plaza, and pick up around 7:00 am at Peddler's Mall on the east side. It will leave from Dayton around 4:00 pm. As in the past, there will be a short stop at McDonald's in Richmond on the way to Dayton for breakfast, and a dinner stop at MCL in Richmond on the way back. The cost for the round trip is \$30 per person, and does not include admission to the Hamvention. The bus will drop off at the front door of Hara Arena, and be parked in close proximity of the facility so items can be stored on the bus for your convenience.

Contact: Rhonda Curtis, WS9H for tickets. (317) 363-7475, Email: [ws9h@arrl.net](mailto:ws9h@arrl.net)

**INDIANA SKYWARN FREQUENCIES** – [http://www.w9nws.org/repeater\\_map](http://www.w9nws.org/repeater_map)

County nets:		Central Indiana linked:	
Boone	147.105	Indianapolis	146.970 (77.0)
Hamilton	145.170 (77.0)		442.650 (77.0)
	443.550 (77.0)	Terre Haute	443.250
Hancock	145.330	Frankfort	147.045 (173.8)
Hendricks	147.165	Seymour	147.435 (77.0)
Johnson	146.835 (151.4)	Vincennes	146.925 (107.2)
Marion	146.760 (151.4)		443.925 (107.2)
Madison	145.820		
Morgan	147.060		
Shelby	145.480		

## HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

- Apr 18 [Carmel Marathon \(Hamilton County\) KF9ZA@kremer.com](#)
- May 2 Indy Mini-Marathon, Mike Palmer, N9FEB, [\(317\) 849-3602](tel:3178493602), [www.IndyHams.org](http://www.IndyHams.org)
- May 15-17 Dayton Hamvention, Hara Arena, Dayton, OH <http://hamvention.org>
- Jun 27-28 Field Day
- July 11 Indy Hamfest, Marion Co. Fairgrounds, <http://indyhamfest.com>

## THE FCC'S "HAM GUY," BILL CROSS, W3TN, TO RETIRE ON APRIL 3

Amateur Radio's point man at the FCC is retiring. Bill Cross, W3TN, officially a "program analyst" in the Commission's Wireless Telecommunications Bureau (WTB), is stepping down on April 3, after nearly 4 decades at the FCC. Many radio amateurs have had the opportunity to meet Cross when he conducted the once popular Dayton Hamvention Amateur Radio forum, which has since fallen victim to FCC budget trimming.

"Most people [at the Bureau] know me as 'The Ham Guy,'" Cross quipped in an interview with ARRL, "and they send anything relating to Amateur Radio to me -- as quick as they can." Cross said he did consider making April 1 his retirement date but, "I didn't want to take any chances."

Cross started with the Amateur Radio Group in what was then the Private Radio Bureau. That morphed into the WTB when other services were added in 1989. Prior to that, he worked in the Common Carrier Bureau -- now the Wireline Competition Bureau -- and his academic background in engineering and economics came in handy.

A ham since 1968, the married father of two said he's still active on the air, strictly on HF SSB and CW, and he hopes to expand his time for ham radio once away from the daily grind. He has achieved DXCC Honor Roll and actively participates in the Islands on the Air program (IOTA).

When he arrived at the FCC in 1976, Cross didn't anticipate making it a career. But in time, his hobby became his work, and over the years he witnessed considerable change in Amateur Radio. The Commission's 2007 decision to drop Morse code as a requirement for obtaining an Amateur Radio license was one example. "We heard that fabric of the universe had become unglued," he said, "but it didn't." CW seems to be used much more than it was before 2007, he said, and some DX or IOTA stations are CW only.

Cross acknowledged that Amateur Radio rule making proceedings at the FCC move with seeming glacial torpor but pointed out that the Amateur Service competes with an incoming barrage from other services and bureaus. "Amateurs have a view that the Commission has three bureaus -- the Bureau of Ham Radio, the Bureau of All Other, and the Bureau of Administration," he said. "I understand why they wish it was that way, but it's not."

Looking ahead, Cross said he can see a day when there may be only one Amateur Radio license class. "Do we really need three license classes anymore?" he asked. "I can see in the future the number of license classes decreasing again -- to two or maybe one -- because the differences really are not that much."

Among the disappointments for Cross has been the rise in questionable on-the-air behavior, including intentional interference with DXpeditions, which he believes reflects such less-desirable societal trends as road rage. "People lose perspective," he said. "No one lives or dies, if they don't work Navassa Island." FCC budget cutbacks will lead to less enforcement, he said, and with stretched resources, "something's gotta give."

That applies in Cross's own Bureau. When he steps down on April 3, no new "Ham Guy" is standing in the wings to replace him. "The plan is to divide up my work among other staff members, based on topic," he said.

Waxing philosophical, Cross said people choose to get into ham radio as something enjoyable and fun. "When the joy and the fun go out of it, and it becomes a frustration, it might be time to take a step back," he advised. "Find a new aspect of the hobby. If it doesn't make you happy, there's something wrong. There's something for everyone. Just have fun." And, Bill Cross plans to do just that. --ARRL Letter

## UTAH GROUP PUTS BROADBAND-HAMNET TO WORK FOR FOOD PROJECT

A small band of Amateur Radio volunteers in Utah's Salt Lake Valley successfully used a broadband Wi-Fi network set up on the 2.4 GHz amateur band to help coordinate the Boy Scouts of America's (BSA) "Scouting for Food" project on March 21. Scouting for Food is the Boy Scouts' annual community service event, in which Scouts collect items for donation to a food bank. Local radio amateurs provide both voice and digital mode communication.

This year for the first time they used a [Broadband-Hamnet™](#) (BBHN) system that coupled modified wireless router gear operating on amateur frequencies to create a peer-to-peer Wi-Fi network to share audio and video over a generous patch of real estate. BBHN is a descendent of the former ARRL High Speed Multimedia (HSMM) Working Group [efforts](#), earlier known as the "Hinternet" and pioneered by John Champa, K8OCL (SK), and others

in the early 2000s.

"[W]e would call it Wi-Fi on steroids!" said David Bauman, KF7MCF. The Utah hams linked 13 nodes across the valley to form a network "that is like a mini private Internet," Bauman explained. They then used this network to send live video and audio back to the BSA Headquarters, showing them what was happening at food drop-off sites and at the [truck dispatch] headquarters. Bauman called it "a huge step forward in technology from the old days of Morse code." Retired clergyman Robert Jelf, KG7OHV, of Magna, headed up the team.

Just outside BSA Headquarters near the University of Utah, Brandon Bauman, KG7RWO, was able to watch via his laptop as volunteers miles away dropped off canned food items and as YRC freight dispatched trucks to pickup sites around the valley. Brandon was part of an Amateur Radio group that assists the Boy Scouts in the Scouting for Food Project each year by providing communications. This marked the first time BBHN technology was used to support the project in the Salt Lake Valley. Their Wi-Fi network, known as a wireless mesh network, was able to cover a large portion of the valley.

"The farthest point from our hub site was 8.5 miles across the city through a narrow path lined with lots of manmade objects for signals to bounce off," Jelf said. "While the mesh group was used to show video of the dispatch of trucks and of truck trailers at collection points within the hub site path, collection took place throughout the Wasatch Front area and elsewhere in Utah." Read [more](#). --ARRL Letter

## ARRL CENTENNIAL POINTS CHALLENGE, W1AW WAS AWARDS APPLICATION WINDOW OPEN

The [window](#) to apply for ARRL Centennial Points Challenge and W1AW Worked All States [awards](#) is now open. The ARRL Centennial operating events were hugely successful, with participation that exceeded all expectations.

"This was the biggest on-the-air operation in the history of Amateur Radio," ARRL Chief Operating Officer Harold Kramer, WJ1B, said. More than 5.5 million Centennial event contacts were recorded in Logbook of The World ([LoTW](#)) during 2014. That number includes contacts with W1AW portable operations as well as those with individual ARRL members and Field Organization volunteers. W100AW completed about 70,000 contacts.

For most applicants, the process will be simple and largely automated, explained Norm Fusaro, W3IZ, Assistant Manager, Field Services and Radiosport Department.

"The form will auto-populate, if we have your information on file, and the form can be edited to update name and address information only," Fusaro said. "The system will select the awards for which you qualify. Certificates will be printed daily, so fulfillment will be ongoing, while plaques will be shipped directly from the supplier." Fusaro said ARRL Headquarters has hired extra staff to handle the added workload.

Certificates will be available for the Centennial Points Challenge Award, while W1AW WAS Award participants will have the option of a certificate or a plaque. Certificates are \$16, and plaques are \$60.

Fusaro said the task of checking and double-checking electronic logs, entering paper logs into LoTW, and resolving various anomalies put an unexpected burden on staff resources and delayed the opening of the awards window. ARRL Headquarters also had to recalculate all submitted scores to come up with final tallies.

"It's been a very time- and staff-intensive process, researching busted call signs and running down claimed contacts and mode discrepancies for operators," Fusaro said.

Centennial Points Challenge logs must have been submitted through LoTW by January 22, but participants may apply for Centennial operating awards indefinitely. The system automatically looks for points-qualifying QSOs from submitted logs and applies them to each participant's Centennial Points Challenge total. While most Centennial QSO Party participants entered their contact information into LoTW, operators do not have to use

LoTW to apply for Points Challenge certificates or W1AW WAS awards.

Qualifying for the Top Level Award requires 15,000 points. The Third Level Award requires 7500 points, while the Second and First Level awards require 3000 and 1000 points, respectively. Point totals will be printed on certificates.

US stations that worked W1AW/p and W100AW during the Centennial may request QSL cards via the [Incoming QSL Service](#) on the Centennial QSO Party web page. This is a one-time only use of the QSL Bureau for this purpose, and those who want to receive cards via the Bureau should ensure that their accounts are sufficiently funded, because cards will not be held. Cards destined for stations outside the US will be sent via the QSL Bureau. Participants also may request cards directly, providing one SASE for up to six cards per envelope.

W1AW/p and W100AW will not confirm every contact on the traditional paper QSL cards, but will confirm QSOs for each mode and on most bands on a single card for each weekly operation. --ARRL Letter

## AMATEUR RADIO TO HAVE A PRESENCE, SPECIAL EVENT AT PREPAREDNESS SUMMIT 2015

Amateur Radio will be part of the program when [Preparedness Summit 2015](#) convenes April 14-17 in Atlanta. Special event station N4P will also be on the air from the conference location. The theme of this 10th Preparedness Summit is "Global Health Security: Preparing a Nation for Emerging Threats."

"Global health security preparedness issues such as protecting against infectious disease, the health effects of climate change and extreme weather, and cybersecurity threats to critical infrastructure, impact all levels of governmental public health and healthcare agencies," a Preparedness Summit 2015 announcement explained. The National Association of County and City Health Officials ([NACCHO](#)) organizes the event, which attracted 1600 participants in 2014.

Preparedness Summit 2015 will once again offer an Amateur Radio licensing prep session on April 14, with testing the following day. A ham radio demonstration, "When All Else Fails, Amateur Radio Gets Through," will take place on April 14 as well.

Special event station N4P will be on the air from the Preparedness Summit 2015 venue. Listen for N4P on or around 7.265, 14.265, 21.365, and 28.36 MHz. [EchoLink](#) activity using the Georgia Tech Radio Club's W4AQL call sign also will take place. A commemorative QSL card will be available for stations working N4P.

The complete Preparedness Summit [agenda](#) and more information are on the conference's website. --ARRL Letter

## AMATEUR RADIO TELEVISION PIONEER DON MILLER, W9NTP, SK

Amateur Radio television pioneer and past ARRL Central Division Director Don C. Miller, W9NTP, of Waldron, Indiana, died March 22. He was 91. An ARRL Life Member, he was licensed in 1943. In the 1960s, Miller was instrumental in developing slow-scan TV (SSTV) for ham radio, working with Cop MacDonald, VY2CM, and others. Miller wrote several articles on SSTV for *QST*. In 1972, Dayton Hamvention® honored Miller as Amateur of the Year. Miller served as the Central Division Director from 1977 until 1980.

During World War II, Miller served in the US Army Signal Corps before being recruited to work at the Trinity atomic weapons test site in New Mexico as part of the Manhattan Project.

"I went to work one day and finally figured out that we were building a nuclear bomb. But that's all I knew about it," Miller told *The Rushville Republican* newspaper in 2007. Miller said he worked with J. Robert Oppenheimer, who oversaw the Manhattan Project.

Miller also was a collector of Native American and other historical artifacts, and in 2014,



FBI agents raided his Indiana home and confiscated objects alleged to have been collected in violation of federal and state laws and of several treaties. Miller's collection included artifacts from all over the world. He told investigators that he had began collecting as a youngster.

In 1984, Miller and his wife, Sue, W9YL (SK), founded Wyman Research Inc, which developed and marketed Amateur Radio SSTV and ATV equipment. Wyman Research engineered the SSTV gear used onboard the Russian *Mir* space station. -- Thanks to [The Shelbyville News](#); [The Daily DX](#); [ARRL Letter](#)

## LG, GATESAIR, ZENITH TO CONDUCT SIX-MONTH OTA ATSC 3.0 TESTS

The search for the next-generation standard of broadcast television will lead to Cleveland later this month where a team from LG, Zenith and GatesAir will use an abandoned UHF transmitter at Tribune Media station WJW to conduct extensive on-air tests.

WJW has a Special Temporary Authorization from the FCC for six months of operation using a UHF DTV transmitter, switched off in 2009 after the digital transition. The tests will give the Futurecast team the chance to test the modulation scheme at all hours, over a continuous timeframe. In addition, the terrain in the Cleveland area is widely varied, with tall buildings downtown, flat farmland in one direction, hills in another, and a large body of water—Lake Erie—bordering the city. The FCC coordinated the test with Canada, since the signal will almost certainly cross the lake and reaches that country.

Futurecast can be used to deliver 4K/UltraHD content and two robust mobile TV streams in a single 6-MHz channel, while allowing indoor reception that is more reliable than the current ATSC 1.0 standard. The technology can also deliver HD content.

## SHORTS

**THE MARCH INDIANA SECTION NEWSLETTER HAS SEVERAL GOOD ARTICLES TO CHECKOUT** - 100 Years of Radio in Shelby County, W9S Special Event at the Grover Museum and The Indiana ARRL Section will offer an Amateur of the year Award.

Check out the Indiana Section Newsletter for other information on amateur radio activities around the state. [http://www.arrl.org/files/media/groups/Indiana\\_sm\\_mar\\_2015%202.PDF](http://www.arrl.org/files/media/groups/Indiana_sm_mar_2015%202.PDF)

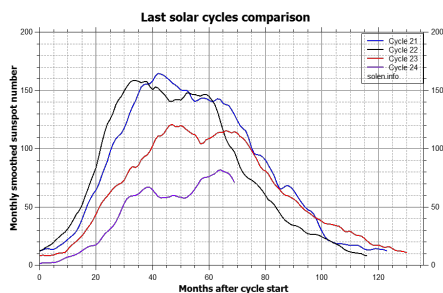
**IMAGE OF THE DAY:** NASA captures two coronal holes on sun's surface, with one being the largest recorded in decades.

Solar Dynamics Observatory releases amazingly clear image of dark patches on sun: [http://www.electronicproducts.com/Aerospace/Discovery/Image\\_of\\_the\\_Day\\_NASA\\_captures\\_two\\_coronal\\_holes\\_on\\_sun\\_s\\_surface\\_with\\_one\\_being\\_the\\_largest\\_recorded\\_in\\_decades.asp](http://www.electronicproducts.com/Aerospace/Discovery/Image_of_the_Day_NASA_captures_two_coronal_holes_on_sun_s_surface_with_one_being_the_largest_recorded_in_decades.asp)

**EVERYTHING YOU EVER WANTED TO KNOW ABOUT K1N:** Co-Team Leader **Glenn Johnson, W0GJ**, has prepared a [detailed article](#), "Mission Impossible or Mission Possible?" regarding all aspects of planning and executing the recent K1N Navassa Island DXpedition. The article appears in the March edition of The Gray Line Report, the newsletter of the Twin Cities DX Association ([TCDXA](#)). As the article explains, DXpeditions on this scale take professional levels of planning, negotiation, and execution every step of the way. -- Thanks to OPDX

**WEB ARTICLE EXPLAINS HOW TO RESEARCH OLD HAM CALL SIGNS:** A web article, "[How to Find Old Amateur Radio Call Signs](#)" provides useful tips on how to research old Amateur Radio call signs. It includes access to old *Call Book Magazine* editions dating back to 1913 as well as privately compiled listings and valuable information on considerable online resources and how to search for call signs using the sometimes

imperfect Google scans of old *Radio Amateur Call Book* editions. Other resources mentioned include the [ARRL Periodicals Archive and Search](#) page and the [National Silent Key Archive](#), which includes both US and Canadian listings. -- Thanks to [The Daily DX](#)



**I'M SURE YOU CAN SPOT THE CURRENT SUNSPOT CYCLE OUT OF THIS ROGUE'S GALLERY** but take a look at the [Solar Activity Report](#) website for a lot more about this and other cycles.

From the latest [ARRL Propagation Bulletin](#), ARLP014, comes this link to a graphic [comparison](#) of the latest four solar cycles. The site has plenty of solar analysis, data, and images to keep the most ardent and solar-philic ham enthralled. Not more than a click away, you can also find this interesting site which maintains a worldwide [digital ionogram database](#). Check the station list for the location of each project or facility.

**CONVERTING PAPER LOGS TO ENTER IN LOTW** If you have old logs on paper or in spreadsheet format and would like to convert them to ADIF for logging programs, including Logbook Of the World, W8TN has written [BasicLog](#) to ease the process using a spreadsheet. (Thanks, Paula K9IR)

**SO - YOU HAVE INTERESTED SOMEONE IN HAM RADIO THROUGH YOUR DESCRIPTION OF TECHNICAL ADVENTURES ON THE AIRWAVES.** There are lots of individual specialty websites - here's a new [tech portal](#) from the ARRL that opens doors to many ARRL technical resources, even for non-members. Its goal is to introduce ham radio from the techie's perspective while not drowning them with a "ham radio firehose" - at least not right away. Send those proto-hams right over!

**IF YOUR MFJ-259B ANTENNA ANALYZER TOOK A HIT OR REQUIRED REPAIR,** Tom W8JI posted this set of [instructions](#) on calibrating these popular units.

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/>