



AFFILIATED CLUB

RCA AMATEUR RADIO CLUB

INDIANAPOLIS, INDIANA



SEPTEMBER, 2015

MONTHLY NEWSLETTER

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

RCA ARC NEWS

SUMMARY OF THE AUGUST MEETING – Thanks to all who attended the August meeting. We the usual updates on the repeater as well as results from the Indy Hamfest and the final results of Field Day. Thanks to everyone who helped with these events! Reminder, an upcoming test session Saturday, also, the Ind. State Fair special event station operation. Greg, KC9TNR, reported on his newest acquisition, an FT-847. Dave, N9KZJ, reported a recent article in *Spectrum Monitoring* about the dos and don'ts of using generators, inverters, and UPSs in Field Day operations.

NEXT TEST AMATEUR RADIO LICENSE TEST SESSION

Time: Saturday, Sept. 12th Exams start at noon.

Location: Integrated Public Safety Commission, 8468 E 21st, Indianapolis, IN

Contact: Rhonda S. Curtis, (317) 363-7457, Email: ws9h@arrl.net

THE 2015 INDIANAPOLIS RADIO CLUB HILLTOP OPERATING EVENT IS COMING UP ON SEPTEMBER 26, 2015 – The Hilltop is an opportunity for amateur radio operators, primarily in Central Indiana, to contact as many stations as possible from hilltop locations using temporary stations. It's a mini-Field Day with an emphasis on Central Indiana.

The Hilltop rules have been constructed to make it fair for small and large stations alike. Whether you have the radios and antennas to compete on all the available bands and modes or just want to limit your operation to a few bands/modes, you will find yourself competing with similar stations. And, the bands and modes have been chosen so that all it takes to participate is a Technician-class license.

But, wait, Indiana doesn't have hills. Well, yes, Indiana doesn't have hills like Colorado, but there are several hilltop locations within an hour or two drive from Indianapolis that you could operate from. In past Hilltop events, stations have operated from Weed Patch Hill in Brown County State Park, Crown Hill in Crown Hill Cemetery, and that big pile of rock you can see from I-465 on the south side of Indianapolis. Though, keep in mind that if you are operating from private property, you should get permission from the property owner.

You can find the complete rules on the Indianapolis Radio Club web site at: <http://indyradioclub.org/irchilltop.html>

Don't forget that you need to register your hilltop station before the event. Registration instructions are in the rules.

We hope to hear you on the air during the event! -- W9BU

INDIANA BICENTENNIAL AMATEUR RADIO OPERATING EVENT PLANS – As most of you know the past few months as ARRL Affiliated Club Coordinator, I have been urging each Indiana Amateur Club to participate next year in Indiana Bicentennial by having a special event station at a special location in or around your community / county.

I'm working on organizing a list for events around Indiana for the Bi-Centennial celebration. We are working alongside the Indiana Bicentennial Legacy Project Committee. This list will appear in an upcoming Indiana Section newsletter and on the website in the near future.

We are also working to secure a special event call sign that can be used by the Indiana clubs around the state that are hosting the Indiana Bicentennial Special Event Stations.

In order to get all this organized, the time is now for each club to choose a date and location for their special event station during 2016.

So I am setting a date of September 5, 2015 as a deadline (Or shortly thereafter) to submit a site, location, time for your club.

I would also like a descriptive narrative about why your club picked a site or location for your event and the importance. (1st state capitol. 1st state park, historical site, special event, etc.).

Get your information to me as soon as possible so we can begin work on requesting the special event call sign and make arrangement with the ARRL and the IN Bicentennial Legacy Project Committee so they will know when and where the special event stations will operate.

Each club will also be requested to keep a log for contacts during their event for the Bi-centennial, and hopefully send QSL cards to the contacts.

Jimmy Merry Jr, KC9RPX - INARRL Affiliated Club Coordinator

[812-391-2661](tel:812-391-2661) k9rpx@gmail.com

INDIANA RADIO CLUB COUNCIL 2015 TECHNICAL EXCELLENCE AWARD – The IRCC Technical Excellence Award provides the amateur radio community with a way of recognizing Indiana Amateur's for their Innovation and for Advancing the State of the Art for Amateur Radio. Indiana's Amateurs have a history of innovation and sharing their technical expertise to the benefit of the amateur radio community.

This year we have seen a lot of our work with amateur projects using the Arduino and the Raspberry PI and a lot of interest and work with reverse beacon networks, remote station operation, new digital repeaters using DMR and the Yaesu Fusion systems.

So, there are a lot of good candidates out there, so look around at the hams you know and consider submitting a nomination.

NOMINATION REQUIREMENTS: Any licensed amateur in Indiana may submit a nomination. Nominee must hold an amateur radio license and be a resident of Indiana, but they are not required to be a member of any club or organization.

We need as much information about your nominee as possible. Please explain in some details what your nominee has done with their technical skills, achievements, mentoring, projects and how the amateur radio community benefits from those efforts.

Nomination must include the nominees: name, call, email and/or home address, and home and/or cell phone number. We also need the nominating person: name, call, email and/or home address, and home and/or cell phone number.

We may need to contact you for additional information or confirmation. All nominations must be received by September 30, 2015.

The IRCC Technical Excellence Award is to be presented at the Ft Wayne Hamfest on Saturday, November 14, 2015 at the IRCC forum.

SUBMIT NOMINATIONS TO: Jim Rinehart, K9RU, 1455 Shannon Ave., Indianapolis, IN 46201 or e-mail: k9ru.indy@gmail.com.

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Sep. 19 [Greenfield Hamfest](#)
Oct. 03 [Hoosier Hills Hamfest](#)
Nov. 14-15 [Ft. Wayne Hamfest](#)

ARRL PRESIDENT EXPECTS PARITY ACT HOUSE BILL COSPONSORSHIPS TO TOP 100 SOON

ARRL President Kay Craigie, N3KN, expects to see the list of cosponsors for the US House version of the [Amateur Radio Parity Act of 2015](#) -- H.R. 1301 -- top 100 soon after Congress reconvenes following its August recess. As of August 27, the measure had attracted 94 cosponsors. A US Senate version of the bill -- S. 1685 -- also has been introduced. President Craigie again encouraged ARRL members to urge their congressional delegations to cosponsor the bills. Summertime ARRL conventions have also been affording more members a chance to make their voices heard.

"Success doesn't happen by magic," President Craigie said this week. "Offices on Capitol Hill have told us that without constituent expressions of support, cosponsorship -- and, eventually, votes -- will not happen."

The identically worded Amateur Radio Parity Act of 2015 measures would direct the FCC to extend its rules relating to reasonable accommodation of Amateur Service communications to private land-use restrictions. It would require the FCC to amend its Part 97 Amateur Service rules to apply the three-part test of the [PRB-1](#) federal pre-emption policy to include homeowners association regulations and deed restrictions, often referred to as "covenants, conditions, and restrictions" (CC&Rs). At present, PRB-1 only applies to state and local zoning laws and ordinances, and the FCC has been reluctant to extend the same legal protections to private land-use agreements without direction from Congress.

President Craigie said ARRL staff members and officials have helped members to generate well over 4000 letters to Senators and Representatives at ARRL conventions this summer. Local radio clubs have held letter-signing events at their meetings as well. This week, the ARRL forwarded more than 1000 such letters for hand delivery to Capitol Hill.

"But we need a lot more member action now, to push our bills ahead," she added. "We need letters, phone calls, e-mails from every ARRL member to our Senators and Representatives. We need every ARRL member to urge our friends in our clubs, on our nets, and on our social media, to take 5 minutes today to do something critically important for the future of Amateur Radio."

AMSAT is also encouraging its members to urge lawmakers to cosponsor the two bills. The satellite organization has pointed out that reaching orbiting spacecraft via an appropriate ground station is something that may be denied to satellite enthusiasts living in neighborhoods where outside antennas are restricted or prohibited.

The Amateur Radio Parity Act of 2015 [page](#) on the ARRL website has complete information on how to become involved.

"Capitol Hill needs to hear from every friend of Amateur Radio by the end of August," President Craigie said. "Every voice, your voice, makes a difference." --ARRL Letter

FCC REGULATORY FEE FOR VANITY CALL SIGNS TO DISAPPEAR SEPTEMBER 3

The FCC regulatory fee associated with Amateur Radio Vanity call signs is no longer required.

Beginning Thursday, September 3, 2015, applicants will be able to file all vanity applications (new and renewal) without having to pay a regulatory fee. FCC decided earlier this year to eliminate the regulatory fee component for Amateur Radio vanity call signs because their costs exceed the amount collected in fees.

However, while the requirement to pay a regulatory fee for vanity call sign applications will end on September 3, prospective vanity applicants now will have to wait until after 8am on September 8 to file an application for an available call sign because of the FCC shut down.

AD HOC SUBCOMMITTEE ON VHF AND ABOVE REVITALIZATION SEEKS AUGUST UHF CONTEST SUGGESTIONS

The ARRL Ad Hoc Subcommittee on VHF and Above Revitalization is exploring ways to expand participation in the [ARRL August UHF Contest](#). This year's event took place August 1-2. The objective of the event is to work as many stations in as many 2×1 grid squares as possible on amateur frequencies above 222 MHz, using any authorized modes. The panel is inviting responses to these questions:

Are you now active on UHF?

How often do you presently operate in the ARRL UHF Contest -- never, occasionally, or always?

If you do not presently participate, why not?

If you do not presently participate, what changes might compel you to participate in the future?

What are your ideas for attracting more amateurs to UHF operation in general?

The subcommittee has requested that participants [submit](#) their comments by October 1. The members of ARRL's Ad Hoc Subcommittee on VHF and Above Revitalization also expressed their gratitude for the many comments they received during the initial round of VHF+ contest rule changes. --ARRL Letter

TALK OF PENDING P5 OPERATIONS SO FAR REMAINS JUST TALKS

Persistent optimism continues to prop up the hopes of several individual radio amateurs and groups to mount a DXpedition to the most-wanted and elusive DXCC entity on the globe -- the Democratic People's Republic of North Korea (P5). To date, no recent efforts have succeeded. The latest to [announce](#) that plans for a P5 operation are on the verge of success are Antonio Gonzalez, EA5RM, and Manuel German, EA7AJR, both DXpedition veterans. On their fourth trip to North Korea since 2013, Gonzalez and German met on August 17 with what they described as "high-level officials" in North Korea's telecommunications ministry. In an August 17 news release, Gonzalez and German said that the officials in Pyongyang -- North Korea's capital -- "were very kind, receptive, and cooperative. They knew everything about ham radio, so it was really easy to talk with them about our ham radio operation project." The pair began efforts to secure permission for a North Korea operation more than 2 years ago.

"If everything goes as it is going up [until] today, I can tell that we are very close to get[ting] permission," the news release concluded.

Gonzalez and German are not alone in attempting to be the next to activate North Korea since Ed Giorgadze of the Republic of Georgia operated as P5/4L4FN in 2001 and 2002, making more than 16,000 contacts before being asked abruptly to cease transmitting and pack up his gear. The ARRL subsequently accredited his SSB and RTTY operation for DXCC. Giorgadze, who was working for the UN World Food Program in Pyongyang at the time, had tried for more than 2 years before obtaining oral permission from North Korean authorities to operate.

Earlier this year, Polish radio amateur Dom Grzyb, 3Z9DX, announced that he had

secured written permission to operate from North Korea in January or February 2016. He is supposed to go to Pyongyang for a final meeting to discuss guidelines for the operation, which would be for 5 days, SSB only, on 20, 15, and 10 meters from a secured location with 24/7 government supervision.

Paul Ewing, N6PSE, and David Flack, AH6HY, of the [Intrepid DX Group](#) have visited North Korea several times since announcing intentions in 2013 to operate from P5 for 2 weeks with two groups of 12 operators. In an August 10 blog post that he has since removed from the web "in solidarity with other efforts to activate P5," Ewing seemed pessimistic that anyone would be allowed to operate from the secretive communist enclave anytime soon. For now, though, he's extending "best of luck to all efforts to activate the DPRK."

In addition to the 2001-2002 P5/4L4FN operation, the only other approved operations occurred in 1995, when Martti Laine, OH2BH, and two other Finnish radio amateurs demonstrated ham radio by making 20 contacts as P5/OH2AM. In 1999, Laine operated briefly as P51BH, making just 263 contacts.

In 2005, David Borenstein, KA2HTV, a physician, received advance permission from a cultural affairs official to operate while in Pyongyang, but he apparently did not have clearance from the Ministry of Telecommunications and Posts, and he was never allowed to get on the air once he arrived. -- *Thanks to The Daily DX, DxCoffee, North Korea Tech, and the Intrepid DX Group, ARRL Letter*

ROCKWELL COLLINS TO END MECHANICAL FILTER PRODUCTION

As more and more communications equipment designs have adopted digital signal processing techniques, [Rockwell Collins](#) has announced that it will stop manufacturing its renowned mechanical filters. It did not provide a specific date.

"Over the past several years, we have seen a dramatic reduction in demand for narrowband analog filters," the company [said](#) on its website. "Due to this and other economic reasons, [Rockwell Collins] Filter Products will be discontinuing its mechanical filter products in the near future."

Rockwell Collins makes two different types of mechanical filters, many of which have found their way into Amateur Radio products and applications. In a mechanical filter, input and output transducers convert the electrical signal to and from resonant mechanical vibrations, respectively.

Collins has made mechanical filters for more than 6 decades, and their initial application was in telephone circuits. The filters gained favor for Amateur Radio use because of their excellent selectivity, especially in IF applications. It is said to take about 12 weeks to manufacture a single unit. Read [more](#). -- *Thanks to Mike Morris, WA6ILQ; Rockwell Collins, ARRL Letter*

WWV'S 25 MHZ SIGNAL IS BACK ON ORIGINAL VERTICAL DIPOLE

Time and frequency standard station [WWV](#)'s resurrected 25 MHz signal -- now back on the air for more than a year after going silent in 1977 -- is once again transmitting on a vertical dipole from its original antenna and location. The 25 MHz signal returned to the air on an "experimental basis" in April 2014, and it's been transmitting ever since. The WWV vertical dipole is not something you'd likely find in the average ham radio antenna farm.

"The antenna the 25 MHz [transmitter] is on right now is the original antenna it was on in 1977," Matt Deutch, N0RGT, WWV's lead electrical engineer, told ARRL. "When the 25 [MHz transmitter] was shut down [that year], the radiating section was removed and tossed in the bone yard, and a new longer section put on the tower to make it a 15 MHz stand-by antenna."

Deutch said that when WWV first reintroduced the 25 MHz broadcast in 2014, it used a broadband monopole. It was later decided to use that antenna for WWV's 2.5 MHz stand-

by transmitter, though. "So, we decided to rebuild the 25 MHz antenna," he recounted. "A few weeks ago the boys dug the 25 MHz radiating section out of the mud in the bone yard and rebuilt the 25 MHz antenna, so that it looks identical to what it looked like in 1977."

Deutch said the 25 MHz WWV vertical dipole now is coupled to its own, dedicated transmitter, radiating 2.5 kW "with near zero watts reflected," he added, and modeling has showed that the dipole exhibits a lower angle of radiation than the broadband monopole did. "There is no automatic backup transmitter for 25 MHz at this time," Deutch added. The 25 MHz WWV signal had been operating at about 1 kW for the past 16 months.

Deutch has said that WWV has received reports on the 25 MHz signal from across the Atlantic. The 25 MHz transmission not only provides another option to check your frequency calibration or the exact time, it also can serve to indicate the state of propagation on 12 and 10 meters. The 25 MHz broadcast includes the same information transmitted on all other WWV frequencies and at the same level of accuracy.

Located in Fort Collins, Colorado, WWV is operated by the National Institute of Standards and Technology ([NIST](#)). WWV has [invited](#) listeners' comments and signal reports –ARRL Letter

UNDERGRAD RADIO AMATEUR USES REVERSE BEACON NETWORK IN RESEARCH PROJECT

A Virginia Tech undergraduate researcher and radio amateur has used Super Dual Auroral Radar Network ([SuperDARN](#)) and Reverse Beacon Network ([RBN](#)) data to study how solar flares impact HF radio propagation over the entire dayside -- the time Earth is in sunlight -- with communication loss related to both flare intensity and distribution. Carson Squibb, KM4MBQ, recently summarized his findings in a [poster presentation](#), "Dayside Ionospheric Response to X-Class Solar Flare Events Observed with Reverse Beacon Network High Frequency Communication Links." As most HF operators understand, higher-intensity flare events can cause complete signal loss on HF, while weaker flares may only partly inhibit radio propagation.

According to Squibb's poster, a solar flare is an event in which the Sun emits high levels of ultraviolet and X-ray radiation, resulting in increased photoionization in the ionosphere, primarily in the D-layer, which is largely responsible for absorption of HF radio waves. So, as ionization increases during flare events, communication can be diminished or lost completely. Such fadeouts can occur in minutes, while subsequent recovery can take hours, "which is why understanding these flare effects is of critical importance," Squibb said.

According to Squibb, the rate of communication loss is related to the increase in X-ray intensity, and the period of recovery is influenced by both flare intensity and the rate of decline in X-ray flux after peaking. Squibb determined that lower frequencies experience fades in propagation *prior* to the flare peak, with recovery taking longer, while the degree of loss is more severe as frequency decreases.

Squibb's poster explains that SuperDARN detects a ground-scatter band that results from waves reflecting from the ionosphere and ground, and that this band is degraded during solar flare events. To determine the spatial distribution of flare effects, Squibb used data from four radars across North America. He used the RBN -- an array of passive receivers which detects Amateur Radio signals and posts identifiable call signs on the Internet -- to measure HF communication. Squibb chose 3.5, 7, 14, 21, and 28 MHz for study. X-ray flux data within the 0.05-0.4 nm and 0.1-0.8 nm ranges were taken from the GOES-15 geostationary weather satellite.

Squibb said future research should focus on quantifying the relationship between flare characteristics and HF signal fadeout.

Squibb conducted his research under the guidance of graduate student Nathaniel Frissell, W2NAF, and SuperDARN group supervisors Jo Baker and Mike Ruohoniemi, as part of his participation in the Research Experiences for Undergraduates ([REU](#)) program sponsored by the National Science Foundation and hosted by the Center for Space

Science and Engineering Research (Space@VT). His co-authors included Magda Moses, KM4EGE, of Virginia Tech, and Robyn Fiori of the Canadian Space Weather Forecast Center. --ARRL Letter

TECHNICAL

Make a digital radio hot spot with the DV4mini — The [Helitron DV4mini](#) is a tiny but powerful USB stick that can change any PC or single board computer (RaspberryPi, etc.) into a HOTSPOT for the modes D-Star, DMR, or C4FM Fusion. It contains a powerful 32-bit micro controller as well as a complete 70cm transceiver and modulator/demodulator for GMSK and 4FSK (including raised cosine) as well as a USB interface. It does not require its own power supply as it is powered through the USB interface. Thanks to a power saving voltage transformer even older USB interfaces will suffice. It will be shipped with a comprehensive but simple to use software package which allows for the linking with DCS reflectors for D-Star, DMR, and Fusion reflectors. Made in Germany, it is expected to be available worldwide in the near future.

Pascal, VA2PV, has made a series of YouTube videos explaining the operation:

<https://www.youtube.com/watch?v=4oYpyrjcXBc>
<https://www.youtube.com/watch?v=ZChLLaEkQPA>
<https://www.youtube.com/watch?v=Ma2F0Qi88cE>
<https://www.youtube.com/watch?v=VvgS4FNUCXI>

SHORTS

FCC Universal Licensing System, Other Applications to be Down for Maintenance – FCC website maintenance in early September will make the Universal Licensing System (ULS), the Electronic Comment Filing System (ECFS), the Electronic Document Management System (EDOCS), and other public applications unavailable for more than 5 days. The Commission said the outage will begin at 2200 UTC on Wednesday, September 2, and continue through the Labor Day weekend. The maintenance work should be completed by 1200 UTC on Tuesday, September 8. During the ULS outage, it will not be possible to file any Amateur Radio applications.

FCC Proposes to Fine Ohio Radio Amateur for Mailicious Interference, Failure to Identify – The FCC has proposed levying an \$8000 fine on a Cincinnati, Ohio, radio amateur, Daniel R. Hicks, KB8UYZ, who at one point had volunteered to track down the interference he was causing on a number of primarily VHF repeaters. In a *Notice of Apparent Liability for Forfeiture* ([NAL](#)) released on August 20, the FCC Enforcement Bureau asserted that Hicks intentionally interfered with other Amateur Radio operators' communications and failed to identify properly. According to the *NAL*, an agent from the Bureau's Detroit office first responded to multiple complaints of interference on various repeaters in April 2014.

Joint Cuba-US DX Operation Planned; Will Include CQ World Wide SSB Contest – In the wake of the recently announced normalization of diplomatic relations between the US and Cuba, a joint US-Cuba operation is being planned for this fall, to include the dates of the CQ World Wide SSB contest.

"The combined group will be operating under the call sign [T42US](#) between October 21 and October 28, including during the CQ WW DX SSB Contest," the announcement said. "There will be nine operators from the USA and approximately the same number from Cuba. The T42US group will operate 160-10 meters, SSB and CW."

The US Team leader is Jim Millner, WB2REM, and the Cuban Team Leader is Bob Ibarra, CM2KL. Millner said the T42US operation will be among the first of its kind in Cuba and will involve a joint effort between the US and Cuban teams. Read [more](#). --ARRL Letter

JARL Sets 90th Anniversary QSO Party -- The Japan Amateur Radio League (JARL) will commemorate its 90th anniversary with the [JARL 90th Anniversary QSO Party](#) during

the entire month of September (UTC). The event is open to all radio amateurs and short-wave listeners and activity will take place on all amateur bands. Certificates are available to JA and DX stations for working a certain number (either 9 or 90, depending upon category) of participating stations. Stations exchange call signs and signal reports. Only one contact may be counted in the event of multiple contacts with the same station operating from different locations. All stations submitting a log and summary will receive a Participation Certificate from JARL via the QSL Bureau. [E-mail](#) submissions are welcome. Submit a [summary](#) sheet and [logs](#) of one or more categories. The deadline for submissions is October 30, 2015. Results will be announced in the spring 2016 issue of JARL News and [posted](#) on JARL's website.

Send Your Name (and Call Sign) to Mars! – Mars enthusiasts can participate in NASA's next journey to Mars by adding their names -- and call signs -- to a silicon microchip headed to the Red Planet aboard NASA's InSight Mars lander, scheduled to launch next year. "Our next step in the journey to Mars is another fantastic mission to the surface," said Jim Green, director of planetary science at NASA Headquarters in Washington. "By participating in this opportunity to send your name aboard InSight to the Red Planet, you're showing that you're part of that journey and the future of space exploration." NASA issued a similar invitation in 2014 for its Orion test flight. So far nearly 365,000 "boarding passes" have been registered with the InSight mission. NASA will accept submissions until September 8. [Visit](#) the Mars InSight "Revealing the Heart of Mars" website to get onboard. -- *Thanks to NASA*

Launch Date Set for AMSAT Fox-1A Set -- AMSAT Vice President of Engineering Jerry Buxton, N0JY, has announced that the Fox-1A CubeSat will launch on October 8 from California. It initially had been set to launch in August. Fox-1A will include an FM transponder with an uplink frequency of 435.180 MHz, and a downlink frequency of 145.980 MHz. The first phase of the Fox series 1-Unit CubeSats will allow simple ground stations using handheld transceivers and simple dual-band antennas to make contacts. The [Fox-1](#) CubeSats will also be able to transmit continuous telemetry during normal transponder operation. The satellites will feature 200 bps telemetry in the audio spectrum below 300 Hz. -- *Thanks to AMSAT News Service*

International Lighthouse and Lightship Weekend Registration Topped 500 this Year
– The number of registrations in the International Lighthouse and Lightship Weekend ([ILLW](#)) reached 506, with 32 countries represented. Activity for the August 15-16 event was higher this year from the major seafaring nations of Australia, England, and Germany, adding to growth from Bulgaria, Canada, Cuba, France, Portugal and Scotland, ILLW organizers reported. That was down from 2014, however, when there were 544 entrants for the operating event.

Michael Sealfon, WA2OCG, put the number of 2015 registrations over the 500 mark, when he signed up to operate from [Alki Point Lighthouse](#) marking the southern entrance to Seattle's Elliott Bay in Washington. More than 70 US lighthouses and lightships were activated for the 2015 event, some identifying with 1×1 special event call signs. Cuba this year had 13 registered sites, possibly a reflection of the normalization of diplomatic relations with the US.

Australia Broadcasting Corporation informed listeners that visitors to the red-and-white candy-striped Point Moore Lighthouse, some 400 km north of Perth and dominating the Geraldton skyline in West Australia, had claimed a new world record for the most people hugging a lighthouse. The lighthouse -- built in 1878 and one of Australia's oldest steel lighthouses -- hosted the ILLW operation of Maarten Plug, VK6MP. More than 1000 turned out for the world record-attempting embrace. During ILLW, the doors of the lighthouse were opened to allow a glimpse inside.

The next and 19th annual Lighthouse and Lightship Weekend on August 20-21, 2016, already has 30 registrations. The annual Amateur Radio event was initiated in Scotland by John Forsyth, GM4OOU, and the Mike Dalrymple, GM4SUC (SK). Lighthouses and lightships in some 85 countries have been represented in the annual event since its inception. -- *Thanks to Jim Linton, VK3PC, ILLW, Gerry Metz, N1QLL*

In a tantalizing historical tidbit, it appears that HF propagation was pretty good from the US East Coast to Europe during 1941 to 1945, so much so that even battlefield communications could be monitored. [A farm in Scituate, Rhode Island, was set up as a listening post](#). The location turned out to be stellar, and was instrumental in providing a wide range of radio-derived intelligence information during WWII.

Jameco recently did a survey of Electronic Hobbyists ([PDF](#)), and while it's market research oriented, it reflects the population of their most avid customers. The profile of their typical customer is one that has been involved in their hobby for 35 years (so, older), and has twice as much education as the average American, among other characteristics. The report identifies popular technologies, future hobbyist intent, and expectations of how the hobby will evolve. U.S. Hams [may be getting new allocations soon in the 2200m and 630m bands](#). Band noise and propagation is different at VLF. ['Natural' RF noise has been the subject of enthusiast interest for a long time](#). Emanating from lighting, geomagnetic events, and other known and unknown sources, and then subject to the propagation effects of the Earth's magnetic field, different words are used to describe the received noises: 'sferics', 'tweeks', and 'whistlers.'

Sure the bands have been a bit lacking lately, but [what if Earth were directly in the path of a really big Coronal Mass Ejection](#)? More folks are realizing that it could be very bad news.

Which state has the least expensive electrical power? [The US Energy Information Administration has profiles on each state](#). Oh, and it's Louisiana at 6.9 cents per kWh.

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/>