



Legacy Amateur Radio Club

RCA AMATEUR RADIO CLUB

INDIANAPOLIS, INDIANA



AFFILIATED CLUB

MAY 2017

MONTHLY NEWSLETTER

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

RCA ARC NEWS

SUMMARY OF THE APRIL MEETING – At the 11-April meeting the Indy Hamfest was discussed. It appears we still have a good deal of stuff to sell. We'll order a total of six tables, four for the Club and two for Jon, KC9GUM. Still, we have no plans in place to deal with Dave Brown's towers and antennas. Field Day (June 24-25) plans are coming together. Jace Thompson, KD9BIG, is this years' coordinator. At the Dayton Hamvention, we'll again plan a dinner get-together on Friday evening, and lunch somewhere at noon Friday and Saturday as before. Location to be determined. Remember the IRC bus to the Hamvention on Sat. \$30. The meeting concluded with a discussion of Lithium ion batteries and USB chargers.

RCA ARC AT THE DAYTON HAMVENTION

RCA ARC Friday Dinner - The Hamvention closes at 6 pm. We have reservation at 5:30 pm, so we can beat the crowd out of the Hamvention. We chose a new restaurant closer to the new Hamvention site with the help of Lyle, K9FIK; **BJ's Restaurant, 2715 Fairfield Commons Dr., Beavercreek, OH 45431** (Ph: 937-956-0500). You can check out the menu at: <https://www.bjsrestaurants.com/locations/oh/beavercreek>.

Details for the Friday and Saturday lunch get together are going to be rather vague, as none of us have been to that venue before. According to information from the Hamvention, there will be picnic tables setup for groups to use that used to meet in the bleachers at the arena.

We will use the RCA ARC 144.43 MHz simplex frequency to coordinate the noon meetings and the Friday evening dinner. Be sure to bring your HT and charge the batteries.

We have not been able to contact Bob Vandevender, N9OLO or Les McClure to see if they will have a spot in the flea market this year.

Mike Sercher, WA9FDO does have a good flea market location, spaces 9546 and 9547 on the end of a row. This could be a good place to stop by and say hi, and maybe take a break.

Additional details will be sent as an email as the time gets closer, stay tuned.

NEXT RCA / IRC AMATEUR RADIO LICENSE TEST SESSION

There is no test session in May due to all the Indy 500 activities and the Hamvention

Time: Saturday, **June 10**, Exams start at 12:00 noon. Walk ins allowed.

Location: Salvation Army EDS Training Facility,
4020 Georgetown Rd,
Indianapolis, IN 46254

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

THE INDIANAPOLIS RADIO CLUB HAS CHARTERED A BUS TO THE DAYTON HAMVENTION – The day trip will be on Saturday, May 20, with tickets for the bus running \$30 per person (same as last year). The bus has two pickup and drop off points in Indianapolis, Southern Plaza and Peddlers Mall. Stop for breakfast at McDonald's in Richmond and dinner on the way at MCL at Richmond. Contact Rhonda Curtis, WS9H, for more details and to purchase bus tickets: ws9h@comcast.net.

Note that the bus ticket does not include admission to the show. Hamvention tickets are on sale now via their web site at <http://hamvention.org/purchase-tickets/>

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

May 6	500 Festival Minimarathon
May 6	Indiana QSO Party (INQP)
May 12	Indianapolis Radio Club meeting*
May 19-21	Dayton Hamvention http://hamvention.org/
May 27	500 Festival Parade
June 24-25	ARRL Field Day
July 7-8	Indianapolis Hamfest http://www.indyhamfest.com/

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

*Editor's Note: The Indianapolis Radio Club is working with the IVY Tech ARC, W9IVY. They have a nice station with the FT-990 and FL2100 amp for HF and a FT736 for VHF. The antennas are from the mid to late 90s and guys wire and cables need replaced.

The club station will be open to before the IRC meeting May 12th, between 5 to 6PM. They will also demonstrate JT65. The club station is located in room T226A, 2nd floor of the Tech building.
–K9RU

INDIANA QSO PARTY - 11AM TO 11PM EDT SATURDAY, MAY 6

The Indiana QSO Party is a great opportunity to get on the air, have some fun and promote Indiana. The club competition encourages competition between Indiana clubs and can be a club membership operating activity. It is usually one of the first nice weekends of the year, so you can go out mobile and put a few counties on the air.

The purpose of the Indiana QSO Party (INQP) is to encourage contact with Indiana hams by other Indiana hams and hams worldwide. Stations outside of Indiana work Indiana stations only. Indiana stations work everybody, including other Indiana stations.

The INQP is Saturday, May 6th 11am to 11pm EDT. All stations may operate the full 12-hour period.

Entry Categories: Single-operator (High Power, Low Power or QRP) ,Multi-operator single transmitter (Multi-Single), Mobile, Portable and Rover.

There one important change this year: The county name abbreviations have changed. The intent is that the new abbreviations will be more compatible with the other QSO Parties that occur at the same time as INQP. See for the details: <http://www.hdxcc.org/inqp/rules.html>

ARRL HAMVENTION FORUM TOPICS WILL ENCOMPASS MAKERS, YOUTH, HAMSCI

When Hamvention® opens on May 19 for the first time in Xenia, Ohio, the focus of ARRL activities will be the ARRL EXPO in Building 2 of the [Greene County Fairgrounds and Expo Center](#). ARRL will sponsor a slate of forums on all 3 days of Hamvention.

To highlight the new location, some fresh ARRL forum topics will accompany the old standards. Space is limited at some forum venues.

ARRL has reached out to the Maker movement, and **"Ham Radio Makers and Hackers"** will kick off the League's forum schedule on Friday at 10:30 AM (Room 4). The ham radio community has always promoted the DIY (do it yourself) approach -- what some hams call "homebrewing." The panelists at this hour-long session will share experiences about how ham radio is finding kinship with the new generation of creators, makers, hackers, and innovators. Panelists will include ARRL author Glen Popiel, KW5GP, and ARRL Education & Technology Program instructor Tommy Gober, N5DUX. Also on the panel is Cara Kouse, Innovation and Makerspace Manager at the Xenia Community Library, who will talk about the new Makerspace opened at the library early this year.

Also new at Hamvention 2017 will be the **"[HamSCI](#), the Ham Radio Science Citizen Investigation"** forum, Saturday at 9:15 AM (Room 4). Nathaniel Frissell, W2NAF, will answer the question, "What is HamSCI?" A group of panelists will share information about professional research programs supported by radio amateurs. Presentations also will address investigations related to the total solar eclipse in August, and Frissell will discuss "The [Solar Eclipse QSO Party](#): Ionospheric Sounding Using Ham Radio QSOs."

One popular forum at the Orlando HamCation focused on the **ARRL Collegiate Amateur Radio Initiative ([CARI](#))**. Andy Milluzzi, KK4LWR, will bring the discussion to Hamvention on Saturday at 12:30 PM (Room 4).

"Learning. Discovery. And FUN!" on Sunday at 9:15 AM (Room 2). [ARRL Teachers Institute](#) on Wireless Technology instructor Tommy Gober, N5DUX, will introduce teachers to a variety of tools, as well as a curriculum to take back to their classrooms.

At **"Ham Radio and the Law: Antenna Permits and Problems"** on Friday at 2:45 PM (Room 2), attorney Fred H. Hopengarten, K1VR -- the author of *Antenna Zoning for the Radio Amateur* -- will head a panel of Amateur Radio attorneys in a discussion of legal issues.

"ARRL National Parks on the Air Recap" on Sunday at 10:30 AM (Room 2) will review the highly successful [NPOTA](#) activity that commemorated the centennial of the US National Park

A [complete schedule](#) of Hamvention forums is available on the Hamvention website. --ARRL Letter

OHIO COLUMNIST ALERTS LOCALS TO UPCOMING HAM "INVASION"

Fairborn Daily Herald columnist Bill Taylor, N8YGS, is giving readers in the Fairborn, Ohio area a heads up regarding the thousands of radio amateurs soon to be descending upon Xenia, Ohio for Hamvention® -- being held there for the first time, May 19-21, at tvention attendance has been in the 25,000 range. "As for attendance this year, that's a bit of a question because of the change in venue," Taylor wrote, "but we can still expect thousands of folks visiting our county, many for the first time."

Taylor told ARRL that he's planning "at least a couple more columns about Hamvention and Amateur Radio, including one next week." He said his editor is "very supportive" of Hamvention and plans to devote as many column inches as possible to the event.

"It seems to me that folks hereabouts should be forewarned that in a few weeks we will be subjected to what might be called an 'invasion,'" Taylor [wrote](#). "Oh, it won't be by zombies, aliens from outer space, or locusts -- nope, it's going to be by very friendly 'hams,' known more formally as 'Amateur Radio operators.'"

A member of ARRL and of the Hamvention-sponsoring Dayton Amateur Radio Association (DARA), Taylor pointed out that past

Hamvention attendance has been in the 25,000 range. "As for attendance this year, that's a bit of a question because of the change in venue," Taylor wrote, "but we can still expect thousands of folks visiting our county, many for the first time."

Taylor told ARRL that he's planning "at least a couple more columns about Hamvention and Amateur Radio, including one next week." He said his editor is "very supportive" of Hamvention and plans to devote as many column inches as possible to the event. --ARRL Letter

FCC PERSONAL RADIO SERVICE REVISION WILL AFFECT GMRS, FRS, CB AND OTHER PART 95 DEVICES

In a lengthy *Report and Order* ([R&O](#)) in a proceeding (WT Docket No. 10-119) dating back 7 years, the FCC has announced rule changes affecting the General Mobile Radio Service (GMRS), the Family Radio Service (FRS), the Citizens Band Radio Service (CBRS or "CB"), as well as other applications that fall under the FCC's Part 95 Personal Radio Services (PRS) rules and regulations. Part 95 devices typically are low-power units that communicate over shared spectrum and, with some exceptions, do not require an individual user license from the FCC. As the *R&O* explains, common examples of PRS devices include "walkie-talkies;" radio-control cars, boats, and planes; hearing assistance devices; CB radios; medical implant devices; and Personal Locator Beacons.

"This draft *Report and Order* completes a thorough review of the PRS rules in order to modernize them, remove outdated requirements, and reorganize them to make it easier to find information," the FCC said in a summary attached to the *R&O*. "As a result of this effort, the rules will become consistent, clear, and concise."

The rule changes will phase out the use of voice-scrambling or "obscuring" features in all Part 95 devices, and it will ultimately prohibit manufacture, importation, or sale of any devices incorporating such features, "regardless of whether the Commission has previously certified that radio."

The FCC said changes to the decades-old Citizens Band (CB) rules will remove outdated requirements, including certain labeling requirements. DXing on Citizens Band will become legal too. Once the new rules are effective, CBers will be allowed to contact stations outside of the FCC-imposed — but widely disregarded — 155.3-mile distance limit.

The revised CB rules further clarify how hands-free devices can be used with CB radios and will allow the use of wireless microphones with CB radios. "We find the record persuasive regarding the consumer demand for this feature, and it will promote safety on the highways by reducing driver distraction for those using CB [radios]," the FCC said. The FCC left in place the current power limits for the CB Radio Service.

GMRS and FRS devices are used for personal communication over several miles; compact FRS handhelds, often sold in pairs, are widely available. While GMRS and FRS share spectrum, GMRS provides for greater communications range and requires an FCC license; FRS does not.

"The rules will increase the number of communications channels for both GMRS and FRS, expand digital capabilities to GMRS (currently allowed for FRS), and increase the power/range for certain FRS channels to meet consumer demands for longer range communications (while maintaining higher power capabilities for licensed GMRS)," the FCC explained.

The amended rules eventually will eliminate combination FRS/GMRS radios for the most part, **but allow up to 2 W PEP output for FRS transceivers.** "[M]any current users of GMRS/FRS combination radios do not obtain licenses to operate over the GMRS frequencies in those radios," the FCC said. "Much of this problem likely arises as a result of the mass consumer marketing of combination devices for sale to the public in large quantities to users who do not know about or do not understand the licensing requirements attached to such radios and obligations associated with operating in the GMRS."

The FCC said it no longer will certify FRS devices that incorporate GMRS capabilities or capabilities of other services. Existing GMRS/FRS combination radios that operate at power levels of less than 2 W ERP will be reclassified as FRS devices; existing GMRS/FRS radios that operate above that power level will be reclassified as GMRS devices, requiring an individual

license. Radios that can transmit on GMRS repeater input channels will continue to be licensed individually and not by rule.

"We believe the 2 W limit for FRS is appropriate, because many of the existing combination GMRS/FRS radios already operate under that level with no significant complaints about interference or other problems, and it provides a reasonable balance between the desire for increased range over the prior FRS power levels and battery life," the FCC said.

Overall, the FCC said, its action "achieves a thorough review of Part 95 rules and creates a new rule structure where common administrative rules are consolidated to reduce duplication, and individual subparts are structured with a common numbering scheme." The FCC said the changes remove "outdated and unnecessary rules, while clarifying others."

Most of the new Part 95 rules will become effective 30 days after their publication in *The Federal Register*.

ARMED FORCES DAY CROSSBAND COMMUNICATIONS TEST SET FOR SATURDAY, MAY 13

US Army, Air Force, Navy, and Coast Guard stations will participate in the annual [Armed Forces Day Crossband Communications Test](#) on Saturday, May 13. This annual HF communication interoperability event, sponsored by the Department of Defense since 1934, challenges Amateur Radio operators to contact military stations across the US.

The event marks the 66th annual Armed Forces Day (AFD), officially on May 20. The AFD Crossband Military-Amateur Radio event takes place a week earlier in order to avoid schedule conflicts with those attending Hamvention.

Radio amateurs will transmit on Amateur Radio frequencies and listen on military frequencies, while military stations will transmit on military frequencies and listen on Amateur Radio frequencies. The annual event tests two-way communication between radio amateurs and military stations (authorized under §97.111 of the Amateur Service rules). It features traditional military-to-amateur crossband SSB voice, CW, practice using legacy interoperability waveforms, and the opportunity for participating hams to utilize more modern military modes, such as MIL-STD Serial PSK and Automatic Link Establishment (ALE). Military stations and Amateur Radio stations are authorized to communicate directly on certain 60-meter interoperability channels -- 5,330.5, 5346.5, and 5,371.5 kHz.

Select stations will transmit the Armed Forces Day message using Military Standard mode M188-110A. Amateur Radio operators may download [software](#) to receive the broadcast.

Shortwave listeners are welcome to participate. [Complete details](#), including stations, times, and operating modes are on the US Army MARS website. Read [more](#). --ARRL

US FISH AND WILDLIFE SERVICE SEEKS COMMENTS ON BAKER ISLAND DXPEDITION COMPATIBILITY

The US Fish and Wildlife Service (FWS) appears open to a DXpedition to Baker Island in the Pacific, which has not been activated for 15 years. Baker and Howland Islands (KH1) is the fourth most-wanted DXCC entity, according to the Club Log *DXCC Most Wanted List*. On April 24, the FWS released a [Draft Compatibility Determination for Amateur Radio Operation](#) for public review and comment. The comment period ends on May 8. Public access to the Baker Island National Wildlife Refuge (NWR) is managed through a special use permit (SUP). Baker and Howland Islands are part of the Pacific Remote Islands Marine National Monument ([PRIMNM](#)), created by former President George W. Bush under the authority of the Antiquities Act of 1906. The monument was expanded by President Barack Obama.

"Amateur Radio operation is an existing use at Baker Island NWR; however, it is not a common use," the FWS said in opening the *Draft Compatibility Determination* for comment. "The Service

last permitted an Amateur Radio operator group to access Baker Island NWR in April 2002. The SUP authorizing this use will include stipulations, conditions, and restrictions to ensure compatibility and mitigate for potential anticipated impacts to refuge resources."

Comments may be [submitted via e-mail](#) to Monument Superintendent Laura Beauregard. Include "Baker Amateur Radio Comments" in the subject line.

The FWS allowed that while Amateur Radio is not a wildlife-dependent public use, it does offer "some value as a source of public information about wildlife resources and to bring public attention to the Refuge," the FWS said. Baker Island is 1,830 nautical miles southwest of Honolulu -- an 8-day voyage.

Visitors to Baker Island would be accompanied by an FWS representative, who would approve the landing zone. The FWS would also have to approve QSL cards to ensure that they include "an informative or educational statement about the Refuge." The FWS called QSLs "a valuable outreach tool."

"By allowing Amateur Radio operators to visit the PRIMNM refuges, the refuges benefit through the ability of staff to visit remote island sites to monitor wildlife populations and habitats, detect invasive species introductions, and perform management actions that would otherwise require the Service to charter a vessel," the FWS, said, pointing out the mutual advantage to the Service of accompanying a DXpedition to the island.

The 2002 K1B Baker Island DXpedition logged 96,000 contacts. Read [more](#). -- Thanks to [The Daily DX](#), FWS

WRTC 2018 PLANS CALL FOR GREATER PARTICIPATION BY YOUNG CONTESTERS

The 8th World Radiosport Team Championship, [WRTC 2018](#) in Germany next July, will offer seats on three teams for contesters who are 25 or younger at the time of the event. Prospective participants need only to apply. The international event July 12-16, 2018, will feature 42 competing teams. This will mark Germany's first time hosting WRTC, which takes place in conjunction with the [IARU HF Championship](#) event, July 15-16, 2018. The IARU contest provides a framework for the WRTC; the rules for each event differ. Contester Sandy Raeker, DL1QQ, who handles WRTC 2018 US fundraising, [spoke](#) recently with Tim Duffy, K3LR, for a DX Engineering video.

"I think we're making good progress," Raeker said. She noted that WRTC 2014 in New England had one youth team. "We decided to have three youth teams this time, because it's so important to involve more young people in this great contesting hobby," she said.

Managing preparations for WRTC 2018 is a 12-member organizing committee, headed by Chris Janssen, DL1MGB. Raeker said the sites, all in the relatively flat Jessen-Wittenberg region south of Berlin in the former East Germany, have yet to be evaluated, but added that organizers aim to offer comparable operating sites for all WRTC 2018 participants.

WRTC 2018 has wrapped up its qualification process, drafted [official rules](#) for the competition, selected 160 possible station sites, picked and tested antennas and antenna-related gear, completed an initial round of testing, and signed several major sponsorship contracts. In March, WRTC 2018 began accepting applications for referees.

Raeker said some 39% of contributions for WRTC 2018 to date have come from the US, with 56% from Germany. US supporters may donate to WRTC 2018 via the World Wide Radio Operators Foundation ([WWROF](#)) website. Read [more](#). --ARRL Letter

FCC PROPOSES LEVYING HUGE FINE ON NEW YORK POLICE RADIO JAMMER

The FCC has proposed imposing a fine of more than \$400,000 on a Queens, New York, man who has admitted making unauthorized transmissions on New York City Police Department

(NYPD) radio frequencies, maliciously interfering with NYPD officers' communications. Jay Peralta, 20, is alleged to have transmitted false bomb threats, false claims of criminal activities involving firearms, false distress calls from purported NYPD officers, and threats against individual NYPD officers. The unauthorized transmissions began a year ago, according to the FCC.

"Through his actions, as he described them to the NYPD, Mr. Peralta has demonstrated not only a deliberate disregard of the Commission's authority and rules, but of the safety of NYPD officers and the public that they are called to serve and protect," the FCC said in a *Notice of Apparent Liability* ([NAL](#)), issued on April 14. "Commission action in this context is therefore essential to safeguard authorized operations on spectrum licensed for public safety uses, and, accordingly, a substantial penalty appears warranted."

The FCC said the *NAL* addresses nine unauthorized and interfering transmissions that Peralta has admitted to the NYPD that he made on its radio system. According to the FCC, Peralta's unauthorized transmissions included false bomb threats, false claims of criminal activities involving firearms, false distress calls from purported NYPD officers, and threats against individual NYPD officers.

FCC Chairman Ajit Pai said that with the *NAL*, the FCC is making it "abundantly clear that it will not tolerate unauthorized and illegal use of the radio spectrum." The entire Commission now must sign off on such proposed fines, and Pai said he was grateful to his fellow FCC members for "agreeing to act swiftly and strongly" in the matter. "This may not be a typical pirate radio case in which an unauthorized operator inflicts damage on a radio broadcaster that is operating with a valid FCC license," Pai said, "but it does involve unauthorized interference to critical public safety communications systems."

Peralta was arrested last fall, along with two other men suspected of committing several robberies. According to news accounts, police found a cache of scanners and radios in one of the suspects' homes. Read [more](#). --ARRL Letter

TECHNICAL

Bud, AA3B, [talked about using N1MM for RTTY Contesting at a recent Frankford Radio Club meeting](#). In addition to addressing N1MM's integration with the MMTTY program, he discussed appropriate macros for RTTY contesting, and compared RTTY frequency usage in general versus during RTTY contests. One encouraging observation made is the doubling of CQ WW RTTY contest participation since 2006.

The Four States QRP Group has introduced the new [BUZZ-KILL](#) kit for removing power-line buzz from an audio channel. The BUZZ-KILL is a comb filter - a notch at 60 Hz and every harmonic of 60 Hz. According to the website, "This is a compact, flexible design that can be used as a stand-alone outboard unit, or it can be easily integrated into an existing receiver (see manual for details). Its onboard audio amp is capable of driving a speaker or headphones. Gain is constant from 100 Hz to 5kHz, so it can be used with any CW, SSB or AM receiver." The circuit uses two analog delay lines to combine the signal with a time-shifted version of the signal, which creates a [comb filter](#). (QRP-L mailing list)

If you're looking for a little more selectivity, you can retrofit an existing radio with an audio DSP filter from SOTABEAMS. Their [LASERBEAM-VARI modules](#) need just a single rotary encoder to provide a variable filter bandwidth of 200Hz to 3500Hz. The module is 36mm x 36mm and requires a supply voltage of between 5 and 15 Volts.

Recently, an app has been created that for the first time ever allows blind hams to participate in PSK31. The app is being given away to the world for free. Essentially, this app allows blind hams to use their computer's "screen reader" to work with DigiPan. Several members of the "Westside [of Los Angeles] Amateur Radio Club" participated in creating this

app. We would be most grateful to you if you could forward this email on to your club members. Please help us spread this great news!

To support the continued creation of adaptive technologies for blind hams, a GoFundMe webpage has been created. The link to it is below. You can learn a little more about this app there too. <https://www.gofundme.com/accessible-digipan-for-blind-hams>

Please donate in whatever amount you can. Most especially, forward this email on to all of your friends and family, "Like" the GoFundMe webpage on Facebook, "Share" it with all your friends, tweet it out and ask everyone to do the same! - Richard KK6MRH

IN3OTD's reviews of various transformers used for 160 meter receive antennas: "...a nice complement to the other RF design websites familiar to top band station builders." IN3OTD also has a performance comparison of different common mode choke configurations. (Frank, W3LPL, via TopBand reflector) –ARRL Contest Newsletter

Fair-Rite is making a new, larger sized #31 material toroid core. Each four-inch part 2631814002 weighs nearly 15 ounces, and according to Jim, "This relatively new Fair-Rite part ...offers the potential for many more turns and/or larger cables. The mechanical properties are obvious. I would expect one of these cores to be approximately equivalent to two of the 2.4-in O.D. toroids that we've been using and that I've measured. My basis for that is that their thickness dimension (the length of cable going through the core) is twice that of the smaller core. Inductance is proportional to the length of that path. Thus, three of these cores should be equivalent to six of the smaller ones." Current lead times for these parts are approximately 14 weeks. (Jim, K9YC) –ARRL Contest Newsletter

SHORTS

Spratly Islands DXpedition Postponed: An international Amateur Radio team has postponed its DXpedition to the Spratly Islands, planned for December 2017. The DXpedition, which will take place from Layang Layang Island (Swallow Reef -- AS-051) under Malaysian call sign 9MOW, now will be on the air March 10-20, 2018. Operation will be on 160 through 6 meters, CW, SSB, and digital modes. Layang Layang Island is approximately 15 acres, which includes "reclaimed" land. While the Royal Malaysian Navy maintains a presence on the reef, ownership -- as with all of the Spratlys -- is disputed. It is also claimed by the People's Republic of China, Taiwan, and Vietnam. --ARRL Letter

Motorola Solutions Expands Patent Infringement Complaints against Hytera: [Motorola Solutions](#) on March 29 [announced](#) that it had filed patent infringement complaints with the Regional Court of Düsseldorf, Germany, against [Hytera Communications](#) of Shenzhen, China, and Hytera Mobilfunk of Bad Münde, Germany. The legal action in Germany came on the heels of [complaints](#) the company filed in the US District Court for the Northern District of Illinois, alleging that Hytera's digital mobile radio (DMR) products employ techniques and systems that infringe on Motorola Solutions' patents and trade secrets. Already known for its Land Mobile Radio Service products, Hytera entered the Amateur Radio DMR market last year. The Regional Court complaints assert that Hytera's two-way wireless communication devices that utilize "pseudo-trunking" functionality infringe on a Motorola Solutions' patent. Motorola also has filed a patent infringement complaint against Hytera with the US International Trade Commission. --ARRL Letter

Russian "Buzzer" Disappears, Chinese "Foghorn" Returns: The International Amateur Radio Union Region 1 (IARU-R1) Monitoring System ([IARUMS](#)) [March newsletter](#) reports that the Russian "buzzer" on 6,998.0 kHz has disappeared. For a long time the system interfered with the lower edge of the 40-meter band. In addition, a Russian F1B transmission on 7,193 kHz -- believed to be emanating from Kaliningrad -- has ceased. IARUMS credits German

telecoms authorities for submitting complaints and the Russian military. The IARUMS March newsletter further reports that a Chinese over-the-horizon (OTH) burst system radar "foghorn" signal is being heard again on both 40 meters (jumping between 7,128 and 7,187 kHz) and on 20 meters (14,218 kHz). The signals are 10 kHz wide with burst durations of 3.8 and 7.6 seconds. A "numbers" station said to be from the Ukraine SZRU intelligence agency was reported on March 30 on AM (female voice) on 14,212 kHz. --ARRL Letter

Thailand recently created a new class of licensee, the "Advanced" class, equivalent to the US Extra. According to an [email message by Charles Harpole](#), HS0ZCW, and as [shown on the Radio Amateur Society of Thailand website](#), Advanced Class licensees are now able to use up to 1 KW, after [obtaining a 1KW station license](#). --ARRL Contest Newsletter

The HF propagation prediction software VOACAP, Voice of America Coverage Analysis Program is the focus of the independent website VOACAP.com. The website has a section where you can plug in your grid locator, and you'll get a series of charts predicting propagation for current and upcoming DXpeditions. --ARRL Contest Newsletter

A new form of aurora may have been 'discovered.' Amateur scientists took pictures of ribbon like phenomena occurring well away from any polar regions, and posted them on social media. Professional researchers initially thought the occurrences to be proton arcs, but something didn't look quite right. Realizing that one picture coincided with a fly-through of a European Space Agency Swarm Satellite, E-field data were examined by researchers, and they noted at 300 km above the Earth's surface an elevated temperature level of 3000 degrees C, in a flow of gas moving at about 6 kilometers per second. This new type of aurora has been nicknamed 'Steve' in honor of the children's movie Over the Hedge.

GigaParts, just opened their new store in Las Vegas and ICOM [tweeted some pictures](#) of the event.

The Amateur Collegiate Radio Initiative aims to foster increased activity at the post-high school level are facing challenges. Some existing college / university radio clubs include outmoded or neglected equipment, antennas, or cabling, lack of continuity from year to year, lack of recognition. Can your radio club spare some cycles to help a radio club? If your alma mater has a club, what are they up to and how can you help?

Next time you have a conversation where you're lamenting how old our hobby is getting, make an effort to encourage concrete ideas about what you can do personally to foster the interests of a younger crowd. --ARRL Contest Newsletter

THANKS FOR READING!

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