



Legacy Amateur Radio Club

# RCA AMATEUR RADIO CLUB



AFFILIATED CLUB

INDIANAPOLIS, INDIANA

JUNE, 2016

MONTHLY NEWSLETTER

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

**INDY HAMFEST \$6 ADVANCE TICKETS WILL BE AVAILABLE AT THE MEETING**

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## RCA ARC NEWS

**SUMMARY OF THE MAY MEETING** – Thanks to everyone who attended the May meeting. Jim, K9RU, reminded everyone that we will need help loading stuff for the Indy Hamfest **Friday morning July 8**. Also to man the tables to sell stuff on Friday afternoon and Saturday, July 8, 9. Field Day plans call for either a 2 or 3 station operation. Plan help out with the set-up Saturday morning and/or operating during the contest period. K9RU is making a list of those planning to attend the Friday evening dinner after the Dayton Hamvention. If you're interested in operating the W9IMS special event station in May, contact K9RU. Remember the ARRL VHF Contest in June and the CQ VHF Contest in July. Dave, N9KZJ, reminded us of the "Ships on the Air" which is the first weekend on June. Contact Dave if you're interested in operating.

**RCA ARC AT THE DAYTON HAMFEST** --We had our normal get together in the arena Friday at noon with a good turnout of the RCA group.

Rain threatened all day, but waited till after the close of the hamfest. Flea market was good as always and all the major manufacturers were there.

Bob Vanderverter and Les McClure had the tent located at the same spot as in past and provided a great place to take a break.

We did have to change our plans for the restaurant for our evening get together. When we tried to make reservation at the Bransiders Restaurant we found out it had closed. We got reservations at Company 7 BBQ. The food was great and we had a turnout of 12 for the dinner.  
- Jim K9RU

**BRENT WALLS, N9BA NEW INDIANA SECTION MANAGER** – In Indiana, Brent Walls, N9BA, of Indianapolis, will take over as the new SM on July 1. He has been the Assistant SM under incumbent SM Joseph Lawrence, K9RFZ, of Fort Wayne, who decided not to run for a new term after serving since July 2014. –ARRL Letter

**147.21 MHZ REPEATER IS BACK ON THE AIR** – The 147.21 MHz repeater is back on the air. This is one of the Indianapolis wide area coverage repeaters. John, KF9UH was one of the many hams that worked with Tom K9XV to get it back on the air.

There were a number of challenges to overcome, but they worked through them. – Jim K9RU

## NEXT RCA / IRC AMATEUR RADIO LICENSE TEST SESSION

**Time:** Saturday, June 11 Exams start at noon. Walk ins allowed.  
**Location:** Salvation Army EDS Training Facility  
4020 Georgetown Rd.  
Indianapolis IN 46254-2407  
**Contact:** Rhonda S. Curtis, (317) 363-7457, e-mail: [ws9h@arri.net](mailto:ws9h@arri.net)

## HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

June 11-13 ARRL June VHF/UHF Contest  
June 25-26 ARRL Field Day  
July 8-9 Indianapolis Hamfest <http://www.indyhamfest.com>

**The Indiana Statehood Bicentennial celebration Special Event Stations will be operating this month using the W9I call sign:**

June 11- 12 Central Indiana Amateur Radio Association Conner Prairie  
June 18-19 Clark County Amateur Radio Club Lewis & Clark Expedition

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

## DAYTON HAMVENTION GENERAL CHAIRMAN BELIEVES 2016 ATTENDANCE WAS UP SLIGHTLY

Recapping Dayton [Hamvention](#)<sup>®</sup> 2016, Jim Tiderman, N8IDS, who has served as general chairman of the event for the past 2 years, said attendance this year may have been up slightly from 2015. Tiderman, who now passes the baton to a new general chairman -- Ron Cramer, KD8ENJ -- said he feels the 2016 show, overall, went well.

"In my humble opinion, it went smoother than we had a right to think it could," Tiderman told ARRL. "The credit for that happening -- this year and last -- goes to our volunteer base and returning committee chairs, who get their talents in gear and go for it." He said each year's innovations feed into the vision that guides the next Hamvention administration, which Cramer will head after serving with Tiderman as assistant general chairman for the past 2 years.

Tiderman said that while it's still too soon to get an accurate attendance count for Hamvention 2016, "indicators we use as a matter of course are showing us the slightest increase." He said that while it may not have seemed that way to some visitors, he prefers to keep a positive mind. Official attendance at the 2015 show was 25,621, up by about 750 from the previous year.

The weather did provide some momentary excitement, Tiderman said, when a microburst occurred in the flea market just north of the

Mendelson's tent. The strong gust of wind took out two or three vendor tents, winding a pop-up tent leg around the fiber cable handling Internet service for the flea market office. "This caused stress and strain on the cable, and down it came," Tiderman recounted. "It did not break, but it did stop activity around the area of the downed cable until the Hara crew got it back into the air.

"So, where in other years there have been instances of things erupting 'from below,' this year it came from above," Tiderman quipped.

Vendor spaces were nearly full, both inside and outside Hara Arena. Tiderman said the 525 to 530 booth spaces inside were nearly filled to capacity, while first-day occupancy of the 2500 flea market spaces was at 96 percent.

Tiderman said he observed an "overall good mood" and "a positive attitude," and the Hamvention staff received many upbeat comments. Read [more](#). --ARRL Letter

## ARGENTINE SATELLITE CARRYING AMATEUR RADIO PAYLOAD LAUNCHED FROM CHINA

The Argentine [ÑuSat-1](#) carrying the [LUSEX](#) (LU Satellite Experiment) Amateur Radio U/V linear transponder and 436 MHz beacon launched May 30 at 0317 UTC from China. With [ÑuSAT-1](#) on the launch was sister satellite [ÑuSat-2](#), which carries a 437 MHz beacon. Gunter's Space Page [reports](#) that the Argentine [ÑuSat](#) Earth-observation satellites form the Aleph-1 constellation developed and operated by [Satellogic](#) S.A.

LUSEX is an [AMSAT-LU](#) project, and AMSAT-LU reports that both satellites are sending strong telemetry on 70 centimeters. Activation of the U/V Amateur Radio transponder will be announced on the [AMSAT Bulletin Board](#).

The transponder, with a 30 kHz bandwidth and transmitting with 250 mW, will have an uplink passband (SSB, CW) at 435.935~435.965 MHz, and a downlink passband at 145.965~145.935 MHz. CW telemetry will be transmitted on 145.900 MHz. The NuSAT-1 GFSK telemetry beacon is at 436.445 MHz, and the NuSAT-2 GFSK telemetry beacon is at 437.445 MHz.

## GEOSTATIONARY ES'HAIL-2 SATELLITE SET TO LAUNCH LATER THIS YEAR

Launch of the geostationary [Es'hail-2](#) satellite into orbit is planned for December 2016. The satellite will be placed in a 25.5° orbit. Coverage of the Amateur Radio narrowband (NB) and wideband (WB) transponders should extend from Brazil to Thailand.

Es'hail 2 will carry two "Phase 4" non-inverting Amateur Radio transponders operating in the 2.4 GHz and 10.45 GHz bands. A 250 kHz bandwidth linear transponder is intended for conventional analog operation, and an 8 MHz bandwidth transponder is designed for experimental digital modulation schemes and DVB amateur television.

The NB linear transponder will have an uplink at 2400.050-2400.300 MHz, with a downlink at 10,489.550-10,489.800 MHz. The WB digital transponder will uplink at 2401.500-2409.500 MHz and downlink at 10,491.000-10,499.000 MHz.

AMSAT-DL President Peter Guelzow, DB2OS delivered a [presentation](#) on Es'hail at the 2013 AMSAT-UK Colloquium. Read [more](#). -- *Thanks to AMSAT News Service via AMSAT-UK, and AMSAT-DL*

## SIGNAL BOUNCED OFF ISS HEARD ACROSS THE ATLANTIC

A 2 meter signal from the UK, reflected off the structure of the International Space Station (ISS) on May 2, was heard across the Atlantic. Following 2 weeks of preparation, Tim Fern, G4LOH, in Cornwall (IO70jc), and Roger Sturtevant, VE1SKY, in Nova Scotia (FN74iu) attempted a FSK441 contact.

Both stations aimed at the calculated grid HO11nl for a 144.175 MHz contact attempt with a mutual window of less than 1 minute. VE1SKY was able to copy G4LOH at a distance of 4441 kilometers (approximately 2753 miles). This was the first signal received via ISS bounce from Europe to North America, and the first *intentional* signal heard via ISS reflection in any direction across the North or South Atlantic.

While two-way communication did not happen, the reception is being verified as a possible DX record for satellite reflection.

Later in May, Fern, operating as GK4LOH and transmitting in CW, was received twice in the much-closer GN37 grid by VO1HP at VO1FN in Newfoundland.

In 2014, RSGB VHF Manager John Regnault, G4SWX, [received](#) a 2 meter signal from VC1T, where a team was trying to win the Brendan Trophy for the first transatlantic contact on 144 MHz. Upon investigation, it was determined that the VC1T FSK441 signal that G4SWX heard

also had bounced off the ISS rather than via terrestrial propagation and would not qualify for the Brendan Trophy, offered by the Irish Radio Transmitters Society ([IRTS](#)). The Brendan Trophy will recognize the first "traditional mode" two-way contact (ie, SSB or CW) capable of being copied without machine assistance. --ARRL Letter

## DON WALLACE MUSEUM FOUNDATION CLOSING; DONATES ASSETS TO NCDXF

The Don Wallace Museum Foundation (DWMF) is shutting down, as the famous W6AM Rhombic Ranch in Rancho Palos Verdes, California, has been subsumed by residential development. The DWMF has donated \$29,000 to the Northern California DX Foundation ([NCDXF](#)).

"The donation comes with *no* restrictions or caveats," DWMF Board Chair Joe Locascio, K5KT, said. "As I strongly suspect, Don (the original) W6AM would favor such a donation to an organization dedicated to DXing!"

Locascio said the foundation is in the final phase of closing down after nearly 30 years of existence. "The W6AM Radio Club will continue as long as needed to support the W6AM call sign," he noted. Locascio said the Board was making the donation to NCDXF "on behalf of previous donors," who had hoped to see some radio activity at the old W6AM Rhombic Ranch.

"Unfortunately, we were not able to achieve our long term goal of an actual museum with an active radio station on the property," Locascio said. A 18 × 24 bronze plaque on a large rock, unveiled in March 2015 and dedicated to the memory of Don Wallace, W6AM, remains at the entry to the Wallace Ranch (see Sept 2015 QST, p 20), where more than 80 homes now sit. Read [more](#). --ARRL Letter

## ARRL "STRONGLY SUPPORTS" PETITION TO DROP 15 DB RESTRICTION FOR AMATEUR AMPLIFIERS

In comments filed on May 26, the ARRL said it "strongly supports" a petition to the FCC seeking to eliminate an Amateur Service rule, spelled out in §97.317(a)(2), that amateur amplifiers not be able to boost the RF input signal by more than 15 dB. The *Petition for Rule Making (RM-11767)*, was submitted in April on behalf of an amateur amplifier distributor, [Expert Linears America LLC](#) of Magnolia, Texas.

"The *Petition* proposes relief that is in the nature of eliminating unnecessary regulatory underbrush, and it continues an effort started by the Commission on its own motion in 2004...to do precisely that," the ARRL said in its comments. "The rule proposed to be eliminated is outdated; it constituted overregulation when it was adopted long ago, and it now substantially limits the flexibility of Amateur Radio operators to experiment with the current generation of software-defined Amateur Radio equipment."

The 15 dB provision came into the rules during an era when the FCC initiated various actions to rein in a major interference problem resulting from the use of illegal 11 meter amplifiers during the Citizens Band radio boom of the 1970s. "In its effort to address that problem, the Commission enacted a series of largely redundant and overlapping regulations that, in their overall effect, unnecessarily (and inappropriately) penalized the wholly innocent Amateur Radio operators," the League asserted. "There was created a plethora of restrictions on manufacturers of external RF power amplifiers."

The ARRL noted that while the FCC eliminated some of the unnecessary regulations in 2004, others remain, including the 15 dB gain restriction. The rules adopted in 1978 also called for type acceptance (certification) of manufactured RF power amplifiers operating below 144 MHz, including a 50 W minimum drive power requirement and a ban on amplifiers capable of operation between 24 and 35 MHz.

"Indeed, precisely the same rationale for elimination of the 50 W minimum drive power rule in

2006 applies to the elimination of the 15 dB gain rule for amateur amplifiers," the ARRL said in its comments. "There is no continued justification for retaining the 15 dB gain limitation." Read [more](#).. --ARRL Letter

## BOUVET ISLAND ACTIVATION PLANNED

Three proven and experienced DXpedition leaders and a large team of operators have announced plans to activate Bouvet Island (Bouvetøya), the number 2 most-wanted DXCC entity in late 2017 or early 2018. Ralph Fedor, K0IR, Bob Allphin, K4UEE and Erling Wiig, LA6VM, have been working on this project since returning from Peter I (3Y0X) some 10 years ago.

"We are making this announcement now, so that other DXpedition teams that may be considering Bouvet as a DXpedition target can redirect their time and effort elsewhere," the trio said in a news release.

The team has an agreement with R/V *Braveheart* skipper Nigel Jolly, K6NRJ, to provide transportation, a helicopter, pilot, and mechanic. The group's preliminary plan, submitted to the Norwegian Polar Institute, has been accepted, and a permit will be issued to land on Slakhallet — a huge glacier that covers the volcanic island.

A dependency of Norway, Bouvet is a subantarctic island in the South Atlantic.

Among them, the Bouvet DXpedition leaders hold 11 DXpedition of the Year awards, have activated a dozen Top 10 DXCC entities, and amassed huge contact totals during their most recent DXpeditions, such as Desecheo (118,000), HK0NA (195,000), FT5ZM (170,000), and K1N (140,000). A website is under development.

The last Bouvet activation was 3Y0E during a scientific expedition over the winter of 2007-2008. Petrus Kritzinger, ZS6GCM, was the DXpedition operator.

An activation from Bouvet Island that occurred in January 2001 was a surprise to the DX community. Dr Chuck Brady, N4BQW (SK), a retired NASA astronaut, operated solo as 3Y0C from Bouvet and got to talk about it at the Dayton DX Dinner a few months later.

Other Bouvet DXpeditions in the 2016 time frame had been planned and announced but apparently never came together. — *Thanks to* [The Daily DX](#)

## ARRL, COMMUNITY ASSOCIATIONS INSTITUTE FIND COMMON GROUND ON PARITY ACT LANGUAGE

ARRL and the Community Associations Institute (CAI) — the national association of homeowners associations (HOAs) — have reached consensus on provisions of the [Amateur Radio Parity Act](#), H.R. 1301. ARRL and CAI have worked intensively since February to reach agreement on substitute language for the bill in an effort to move it through the US House Energy and Commerce Committee and to overcome objections to the companion US Senate bill, S. 1685. Along the way, the offices of U.S. Representatives Adam Kinzinger (R-IL), Greg Walden, W7EQI, (R-OR), and Anna Eshoo (D-CA) mediated and offered assistance.

ARRL Hudson Division Director and Legislative Affairs Committee Chairman Mike Lisenco, N2YBB, called the agreement "a significant development in the League's 30-year pursuit to secure the ability to erect Amateur Radio antennas in deed restricted communities."

ARRL General Counsel Chris Imlay, W3KD, said the League was pleased to have reached an agreement with CAI over new proposed language in this legislation that both ARRL and CAI endorse and support. "We agree with CAI that the substitute amendment is balanced, and we think that this bill's language is more objective and offers perhaps more guidance to HOAs than would the PRB-1 'reasonable accommodation' test for municipal land use regulations," he said.

Imlay explained that ARRL did not have the final language for the substitute amendment until

late last week, and the amended bill has not been introduced in the House as of yet. ARRL planned no announcement about the text of the amended House bill until it was introduced. However, because the text became available from the House Office of Legislative Counsel, and as CAI released the text to its members, it was decided to release the amended text now.

“The bottom line,” Imlay said, “is that if the bill is enacted, it would allow every amateur living in a deed-restricted community — for the first time in the history of Amateur Radio in the U.S. — the ability to install an effective outdoor antenna.”

“That would benefit thousands of current and future hams living in deed-restricted communities,” Lisenco added.

Imlay explained that the substitute bill would guarantee that a radio amateur living in a deed-restricted community — including condominium or townhouse communities — could install and maintain an “effective outdoor antenna.” Achieving the agreement came without disrupting 30 years of zoning case law that has interpreted the PRB-1 federal preemption and protected radio amateurs from overregulation by zoning authorities. The bill incorporates the basic tenets of PRB-1.

According to the substitute bill’s language, the FCC would enact rules prohibiting the application of deed restrictions that preclude Amateur Radio communication on their face or as applied. Also prohibited would be deed restrictions that do not permit an Amateur Radio operator living in a deed-restricted community to install and maintain an effective outdoor antenna on property under the licensee’s exclusive use or control.

The substitute bill would prohibit deed restrictions that do not impose the minimum practicable restriction on amateur communication to accomplish the lawful purposes of a homeowners association (HOA) seeking to enforce the restriction. Amateurs wishing to install an antenna in a deed-restricted community would have to notify and obtain prior approval of the homeowners association. HOAs would be able to preclude the installation of antennas in common areas — ie, property not under the licensee’s exclusive use.

The substitute measure provides that HOAs could enact *reasonable* written rules governing height, location, size, and aesthetic impact of outdoor antennas and support structures, as well as installation requirements. Those rules could not preclude amateur communication nor restrict the absolute entitlement of each amateur living in a deed-restricted community to an effective outdoor antenna, however. The amended measure reiterates the strong federal interest in Amateur Radio communication in a licensee’s residence.

“Community associations should fairly administer private land use regulations in the interest of their communities, while nevertheless permitting the installation and maintenance of effective outdoor Amateur Radio antennas,” the negotiated language states. “There exist antenna designs and installations that can be consistent with the aesthetics and physical characteristics of land and structures in community associations while accommodating communications in the Amateur Radio services.”

Lisenco cautioned that getting the Amateur Radio Parity Act signed into law still remains a long process. “Much work needs to be done,” Lisenco said. “ARRL will still need to call upon the entire membership to contact their elected officials, especially in the Senate, to ask for their affirmative vote on this bill,” he stressed.

[More information](#) on the Amateur Radio Parity Act, including a copy of the complete substitute amendment agreed to by ARRL and CAI, is available on the ARRL website.

## MYSTERIOUS TESTS WILL SCRAMBLE GPS SIGNALS ON AMERICA'S WEST COAST THIS MONTH

Get your best tin foil hat ready, because something strange is going on in the deserts of California.

The [Federal Aviation Administration](#) (FAA) has warned that GPS signals could be unavailable or

unreliable on June 9, 21, 23, 28, and 30 across the west coast. The signals are most likely to be disturbed primarily around California, although surrounding southwestern states and the northern corner of Mexico will also suffer some disruption. Although the disruptions will be more severe at higher altitudes, the signal could be scrambled as low as 15 meters (50 feet).

As such, the FAA have advised pilots to avoid the areas in the [statement](#) at the mentioned times and instructed them to closely monitor their flight control systems.

According to the FAA's warning, the problem is something to do with "GPS Interference Testing". Other than that, they remain curiously quiet. However, the center point of the disturbances is the [Naval Air Weapons Station China Lake](#) in the Mojave Desert, according to [Gizmodo](#). This complex is the US Navy's largest installation, which is dedicated to researching, developing, and testing the majority of their weaponry and armaments.

Obviously, these kinds of things tend to remain on the secretive side. Neither the FAA or the Navy have revealed information on the tests, so it's purely speculative to say what's going on. Nevertheless, military bases in the dusty deserts of the west coast paired with top-secret aviation technology is certain to get a few imaginations sparked. – IFLScience.com

## SUN IS SUNSPOT FREE FOR 5 STRAIGHT DAYS

The Solar Influences Data Analysis Center ([SIDC](#)) in Belgium is among the sun watchers noting that June 7 marks the fifth day in a row with no visible sunspots. Well-known DXer and contest-er Frank Donovan, W3LPL, — a long-time propagation observer — has suggested that this is a noteworthy development.

"Single spotless days are a statistical anomaly, multiple spotless days are much more significant," Donovan said.

Just one spotless day occurred during 2014, and two were reported during 2011. Donovan pointed to 2010, when a few "stretches of 2 to 4 spotless days, one stretch of 7 days and one stretch of 12 days" took place.

According to [SpaceWeather.com](#), "Quiet conditions are likely to continue as long as the face of the sun remains blank."

The SIDC's 1230 UTC June 7 report indicated that solar activity "once more was very low." The report continued: "No active regions are visible. No flares or CMEs were observed."

The SIDC predicted that solar activity was expected to remain "very low" for the next 24 hours.

The NOAA Space Weather Prediction Center ([SWPC](#)) forecast no G1 (minor) or greater geomagnetic storms are expected over the next 3 days, and no significant transient or recurrent solar wind features are forecast.

A dearth or complete lack of sunspots does not mean that Solar Cycle 24 is finished, but it is on its way down. Experts predict that Cycle 24 will hit solar minimum in the 2019-2020 time-frame. *Thanks to [The Daily DX](#) for some information*

## THE 2016 ARRL JUNE VHF CONTEST IS UPON US!

One of the premier VHF/UHF events on the contest calendar is the [ARRL June VHF Contest](#), which gets under way at 1800 UTC on Saturday, June 11, and continues until 0259 UTC on Monday, June 13.

The object for participants in the US and Canada (and their possessions) is to work stations in as many different  $2^{\circ} \times 1^{\circ}$  [Maidenhead grid squares](#) as possible, using authorized frequencies above 50 MHz. Stations outside the US and Canada (and their possessions) may only work stations in the US (and its possessions) and Canada. Stations in KH0-9, KL7, KP1-KP5, CY9, and CY0 count as W/VE stations and may be worked by DX stations for contest credit.

Whether from a home station, mobile, or even portable (perhaps mountaintopping or on the air at a nearby [National Parks On The Air](#) site), you won't need large antennas or elaborate gear to operate in the June VHF Contest, and you don't have to be a contesting "pro."

June also is a favorable month for band openings on the "Magic Band" -- 6 meters. Even DX contacts are possible on 6.

There are several classic entry categories, but for those new to VHF, these categories might be a great place to get started in VHF contesting:

- Single-Operator, Portable: For those who enjoy operating low power from a portable power source and using portable antennas.
- Rover: For mobile operators who enjoy traveling from one grid square to another to hand out contacts.
- Single-Operator, FM-only: A category for the 50, 144, 222, and 440 MHz bands at a power of 100 W or less.

Even with a modest station, it's possible to work hundreds of miles on the VHF bands during a good opening. For more information, [contact](#) the ARRL Contest Branch. Quiet to unsettled geomagnetic levels ( $K < 4$ ) are expected on June 7, 8, and 9.

## SHORTS

**"Hunting Down Interference"** is the topic of the current (May 19) episode of the "[ARRL The Doctor is In](#)" podcast. Listen...and learn!

Every 2 weeks, your host, QST Editor in Chief Steve Ford, WB8IMY, and the Doctor himself, Joel Hallas, W1ZR, will discuss a broad range of technical topics. You can also e-mail your questions to [doctor@arrl.org](mailto:doctor@arrl.org), and the Doctor may answer them in a future podcast.

Enjoy "ARRL The Doctor is In" on [Apple iTunes](#), or by using your iPhone or iPad podcast app (just search for "ARRL The Doctor is In"). You can also listen online at [Blubrry](#), or at [Stitcher](#) (free registration required, or browse the site as a guest) and through the free Stitcher app for iOS, Kindle, or Android devices.

If you've never listened to a podcast before, download our [beginner's guide](#) --ARRL Letter

**Hamvention 2016 Post-Show "Satisfaction Survey" Under Way:** Was [Hamvention](#)<sup>®</sup> 2016 a hit? The sponsoring Dayton Amateur Radio Association ([DARA](#)) and the various committees responsible for making Hamvention happen want to know. Hamvention has posted a post-show "[Satisfaction Survey](#)" to solicit comments and observations from those who attended this year's big show. "Comments and observations are important in the continual effort to make improvements," DARA said. As an incentive, three survey respondents will be selected to receive two tickets to the 2017 Hamvention. The survey provides the opportunity for respondents to describe their Hamvention experiences in their own words, telling what they enjoyed and/or what could be improved. The current survey will remain active for at least 90 days, and the ticket drawing will take place on August 22. DARA has sponsored Hamvention since 1952. It is the world's largest Amateur Radio gathering. The next Hamvention is scheduled for May 19-21, 2017. --ARRL Letter

**DX Engineering Announces New Acquisitions:** [DX Engineering](#) has acquired exclusive rights to Clifton Laboratories' ham radio product line. Clifton Laboratories manufactured preamplifiers and filters, which DX Engineering will now produce. DX Engineering said that part numbers and design specifications will remain the same. The company will manufacture more than a dozen Amateur Radio products and will offer parts and tech support for owners of Clifton Laboratories legacy products. DX Engineering also has just purchased TW Antennas, the



maker of the TransWorld Antenna and related components. The TransWorld Antenna is popular with hams who enjoy portable operation, because it's small and easily transported. DX Engineering is tooling up to begin production of Clifton Laboratories' products and of the TransWorld Antenna and accessories by mid-summer. --ARRL Letter

**THANKS FOR READING!**

***Don't forget to come to the meeting and buy Indy Hamfest advance tickets!***

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/>