

# RCA AMATEUR RADIO CLUB

NOVEMBER, 2008      MONTHLY NEWSLETTER      INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, NOVEMBER 11th, 6:30 PM AT THE [G.T. SOUTH'S](#),  
5711 E. 71<sup>st</sup> STREET, INDIANAPOLIS, IN

## RCA ARC NEWS

**SUMMARY OF THE OCTOBER MEETING** – The October meeting started with an extended discussion about the DTV transition. The Zenith DTT901 converter is recommended by K9RU who has tested several of them. If you have not gotten your two \$40 discount coupons for the converter box, you should do it soon. To get the coupons go to: <http://WWW.DTV2009.GOV>. AF9A reported Echolink on the '88 repeater is working again thanks to Dave, N9KT. The general health of the repeater was discussed. K9RU thinks the range is not what it used to be. Also, but not related to that, the flexible piece of coax from the top of the tower up the mast to the transmit antenna has come loose and needs to be secured before it is broken in the wind. Several members indicated the desire to go to the Ft. Wayne Hamfest (Nov. 15) but no specific car pool details were work out. Dave, N9KZJ, gave a brief report on the Ten-Tech Factory Hamfest in Sevierville, TN. Dave, W9CGI, reported his 434.55 MHz PSK31 beacon is operating. See [Propnet.org](#).

[Editor's note: Jim, K9RU, climbed the tower and secured the coax to the repeater transmit antenna this past Saturday, while Jim AF9A did much needed maintenance on the repeater building. A picture of K9RU in action can be seen [here](#). ]

**RCA ARC NEWSLETTER BY EMAIL** – Remember, if you have contact with any of the hams who have left Thomson and may not have changed their email address on our newsletter distribution list, suggest that they do so. Point them to the bottom of the W9RCA.org web page where you will find this link to subscribe to or change your subscription: <http://lists.w9rca.org/mailman/listinfo/w9rca-news>

**INDIANAPOLIS VE TESTING SCHEDULE** -- Here is the Indianapolis Radio Club VE testing schedule for the rest of the year. Calling in advance to ensure testing availability is suggested but not mandatory.

December 6<sup>th</sup>

SPONSOR: Indianapolis Radio Club (W9JP)

LOCATION: Indianapolis Training Center 2820 N. Meridian Street.

CONTACTS: Gale Wuollet, AA9WU (h) 317-849-8449, or Jay Wright, KK9L 317-203-3335.

## HAMFESTS; EVENTS

- Nov 15-16    Fort Wayne Hamfest & Computer Expo.  
<http://www.fortwaynehamfest.com/>
- Nov 29      EARS & The Ham Station, Evansville, IN  
<http://w9ear.org/hamfest.htm>
- Mar 14      Wabash Valley ARA, Terre Haute, IN  
<http://www.w9uuu.org>

## RAY ANDREWS, K9DUR, WITHDRAWS FROM INDIANA SECTION MANAGER ELECTION

If you received a ballot from ARRL for Indiana Section, K9DUR was on the ballot, but Ray withdrew for health reasons.

After further discussions with Ray's doctors about the course of his cancer treatments, Ray decided to withdraw his nomination as Indiana Section Manager. The ballots were already mailed before Ray sent a letter to ARRL-HQ advising them of his official withdrawal.

Ray, a former RCA ARC member, worked at RCA Records in Indianapolis. He was very active in the Indianapolis Amateur Radio Community. He now lives in Terre Haute and is a leader in that area's amateur radio community. He is a member of the Hoosier DX and Contest Club, IRCC, W9IMS in addition to the Terre Haute ARC and is a VE. --Jim K9RU

## FCC RESPONDS TO ARRL PETITION AGAINST EXPERIMENTAL LICENSE USING 40 METER BAND

On Monday, October 20, the ARRL filed a "Petition for Modification or Cancellation of Experimental Authorization" (*Petition*) with the FCC with respect to WE2XRH. According to the FCC, this experimental license -- issued to Digital Aurora Radio Technologies (DART) -- proposes to "test digital transmissions in 4.50-5.10 MHz, 7.10-7.60 MHz and 9.25-9.95 MHz for a terrestrial digital radio service to the citizens of Alaska." The League's protest was prompted by the certainty that high-power operation in the frequency range 7.10 to 7.30 MHz would cause unacceptable and harmful interference to the Amateur Radio Service in this part of the 40-meter band, which is an exclusive amateur allocation in ITU Region 2 (North and South America).

On October 24, the FCC responded by issuing an amended license that redefined one of the station's frequency ranges to eliminate conflict with the Amateur Radio Service. The amended license narrows the range to 7.30 to 7.60 MHz and gives as the reason for the change, "operation in the band 7.1-7.3 MHz will cause harmful interference to Amateur Radio Service licensees."

"We are delighted that the FCC acted so promptly to correct this error and are pleased that the matter has been resolved," said ARRL CEO David Sumner, K1ZZ.

WE2XRH will be using a 20 kHz bandwidth digital emission at a transmitter output power of 100 kW and an ERP of 660 kW within a radius of 1500 kilometers of Delta Junction, Alaska. According to the amended license, the transmissions will take place in the frequency ranges 4.4 to 5.1 MHz, 7.3 to 7.6 MHz and 9.25 to 9.95 MHz. --ARRL

## RICHARD GARRIOTT RETURNS FROM THE ISS

The following email from Owen Garriott, W5LFL, was received by Frank H. Bauer, KA3HDO, ARISS International Chairman:

Richard, W5KWQ, landed in Kazakhstan on Friday, 24 October 2008 at about 0936 local time and was met there by his father Owen, W5LFL. They became the first American "second generation" father/son combination to have both flown in space and the first cosmonaut/astronaut-trained pair in the world. They returned to Star City near Moscow that afternoon for medical evaluation and this is the first interview provided by Richard the very next day. It is transcribed and delivered by Owen to the ham community.

"On my recent flight I had the great opportunity to speak directly with and trade call signs with hundreds of hams around the globe. For me it was an unexpected joy to find so many enthusiastic hams, who were so well informed and interested in my activities in orbit. When I began my transmissions with preplanned SSTV images including "pirate messages", test patterns and family images, I did not know how they would be received. But it seemed that fellow hams really enjoyed seeing this beginning to my time on the International Space Station (ISS). Throughout the bulk of my 10 days on the ISS I tried to be speaking by voice or transmitting SSTV images whenever possible. After my first 100 or so QSOs, I understood how well "networked" the global ham community really is. I received specific reports back through Mission Control-Moscow about technical aspects of my work and how the community was enjoying the transmissions. This redoubled my enthusiasm to do quality work for the amateur radio legions around the world as I realized how much it meant to those with whom I had the chance to talk. By late in my flight I had contacted many hundreds of hams by voice and I have good records of these contacts. Finally I sent some "Goodbye" images on my last day in space. I also contacted many hams that had listened to or contacted my father from space 25 years ago. Some hams contacted 2 to 4 times on my flight.

On those last days I was very moved when sent many "soft landing" messages from individuals and classrooms full of children as I passed on my flight. I can only hope that you enjoyed it as much as I did. Thanks so much and 73, Richard, W5KWQ" --AMSAT News Service

## SKYWARN RECOGNITION DAY SET FOR DECEMBER 6

The 10th Annual SKYWARN Recognition Day (SRD) Special Event will take place Saturday, December 6, 2008 <http://hamradio.noaa.gov/>. SRD is co-sponsored by the ARRL and the National Weather Service (NWS) as a way to recognize the commitment made by Amateur Radio operators in helping to keep their communities safe. According to SRD Coordinator David Floyd, N5DBZ, Amateur Radio operators can visit their local participating NWS office [http://www.crh.noaa.gov/hamradio/participating\\_offices.php](http://www.crh.noaa.gov/hamradio/participating_offices.php), working as a team to contact other hams across the world throughout the 24 hour event.

The idea for the first SRD took shape in the summer of 1999. Meteorologist-in-Charge of the Goodland, Kansas NWS office Scott Mentzer, N0QE, tried to find a way to recognize the valuable contributions storm spotters make to the National Weather Service. "Since many of those storm spotters were also hams," Floyd said, "it seemed like a natural fit for the recognition to be centered on Amateur Radio."

With the approval of NWS headquarters and a commitment to participate from many local NWS offices across the country, the first National Weather Service Special Event took place on November 27, 1999. "At the end of the event, an amazing 15,888 QSOs were logged, with contacts made to all 50 states and 63 countries," Floyd recounted. "The Des Moines forecast office took the honor of making the most contacts of any office that first year with 761 QSOs, and went on to lead the pack until 2003 by logging between 1300-1500 contacts each year!"

Floyd said that feedback from that first event was "overwhelmingly positive" from both the

NWS staff and the local ham clubs: "Suddenly there was incentive for more NWS staffers to either obtain a license or upgrade so that more people could work ham radio during severe events. In addition, many club members had never visited an NWS office before. When they came for the special event, they learned the value of their reports and how they were used in conjunction with existing technology."

And so began an annual tradition. The following year, 85 of the 122 NWS offices -- almost 70 percent -- participated in the event, making nearly 24,000 QSOs. "Perhaps the most unusual contact occurred in 2000 with an airliner 39,000 feet above Utah," Floyd said. "The pilot ended the QSO with a request for a 'spot weather forecast' for his arrival at Salt Lake City airport."

In 2001, the name of the event was changed to SKYWARN Recognition Day, a name Floyd said better relayed what the day was all about: "Each year since the inception of SRD, the number of NWS offices and local ham clubs participating has increased, until now more than 100 offices sign up each year to take part. The most contacts made during any SRD occurred in 2006 when -- thanks to the staff and local hams in the Grand Junction, Colorado area -- 1640 QSOs were logged!"

2008 SKYWARN Recognition Day will be held on December 6 from 0000 UTC-2400 UTC. Last year, contacts were made in all 50 states and 40 countries during the 24 hour event. If you haven't joined in the fun, make 2008 your year to do so! --ARRL Letter

## **NOMINATIONS OPEN FOR THE 2008 INTERNATIONAL HUMANITARIAN AWARD**

Nominations are open for the 2008 ARRL International Humanitarian Award <http://www.arrl.org/FandES/field/awards/humanitarian.html>. The award is conferred upon an amateur or amateurs who demonstrate devotion to human welfare, peace and international understanding through Amateur Radio.

The League established the annual prize to recognize Amateur Radio operators who have used ham radio to provide extraordinary service to others in times of crisis or disaster. A committee appointed by the League's President recommends the award recipient(s) to the ARRL Board, which makes the final decision.

The committee is now accepting nominations from Amateur Radio, governmental or other organizations that have benefited from extraordinary service rendered by an Amateur Radio operator or group. Amateur Radio is one of the few telecommunication services that allow people throughout the world from all walks of life to meet and talk with each other, thereby spreading goodwill across political boundaries. The ARRL International Humanitarian Award recognizes Amateur Radio's unique role in international communication and the assistance amateurs regularly provide to people in need.

Nominations should include a summary of the nominee's actions that qualify the individual (or individuals) for this award, plus verifying statements from at least two people having first-hand knowledge of the events warranting the nomination. These statements may be from an official of a group (for example, the American Red Cross, The Salvation Army or a local or state emergency management official) that benefited from the nominee's particular Amateur Radio contribution. Nominations should include the names and addresses of all references.

All nominations and supporting materials for the 2008 ARRL International Humanitarian Award must be submitted in writing in English to ARRL International Humanitarian Award, 225 Main St, Newington, CT 06111 USA. Nomination submissions are due by December 31,

2008. In the event that no nominations are received, the committee itself may determine a recipient or decide to make no award. The winner of the ARRL International Humanitarian Award receives an engraved plaque and a profile in QST and other ARRL venues. --ARRL Letter

## OHIO HAMS DISCOVER, FIX "DITTERS" ON 40 METERS

Silent since the summer of 2000, "ditters" have been heard once again <http://www.arrl.org/news/stories/2000/07/28/2/> on 40 meters by hams in North Carolina. According to ARRL Field and Regulatory Correspondent Chuck Skolaut, K0BOG, hams in that state contacted him on October 22 complaining of hearing a continuous string of "dits" on 7.0574 MHz. "We informed the FCC HFDFing station of the situation and asked if they could locate the approximate area of the 'dits' so we could get this resolved as soon as possible," Skolaut said. "They responded promptly and said it was coming from Westerville, a town just north of Columbus, Ohio."

Once the general location had been pinpointed, Skolaut called on ARRL Ohio Section Official Observer Coordinator Rick Swain, KK8O for assistance. Swain immediately alerted his team of Official Observers (OO) to check out the situation. "Neither I nor the OOs could hear the transmitter," Swain said in his report. "In a telephone conversation with one of the OOs near the target area, he suddenly stated that he could hear it, but that the signal was at the noise level, about S2 to S3. At just about the same time, I could hear it as well at my location [about 50 miles from the target area] -- just above the noise level -- for about five or ten seconds, then it disappeared."

Swain also placed a call to Assistant Section Manager Bill Carpenter, AA8EY. "Bill lives within the target area. I briefed him on the situation and he went right to his station," Swain said. "Bill checked the frequency and told me he was hearing [the 'dits'] at about S9. He said he thought he might know who it could be and that would make some calls."

Around 7:30 AM on October 23, Swain checked the frequency and found no signal. "I assumed that either Bill had found the transmitter or the owner came home, found it transmitting and turned it off," he said. "Later that morning, Bill sent me an e-mail saying that the signal was back on and about S7. I called Bill's house and left a message telling him I was on my way to Westerville to track down the signal. If he wanted to ride along with me while I looked for it, he was more than welcome to come." Skolaut said the signal was also heard in Newington that day.

When Swain arrived in Westerville, he had a list of the names and addresses of 172 licensees in the area, as well as a general idea of where the signal should be, based on the data from the FCC's HFDFing station. He also had his HF radio, an all-band screwdriver antenna, a GPS receiver and a VHF radio for information and directions.

"I drove around the area checking the signal and noted that it was about S9 and climbing," Swain said. He and Carpenter met up and continued the search together. About 15 minutes later -- with Swain driving and Carpenter giving directions -- "we noted that the signal was 30 over S9 and Bill had me make a left turn at the next street, saying that there was an address on the list we should check out. We stopped at that address, but no luck."

Swain said he then injected 30 dB of attenuation and continued to drive in the same direction: "The signal was now reading 20 dB over S9 with the attenuator still on. We turned down the next street and the signal rose another 20 dB. I pulled into a parking lot and made a 360-degree turn as to determine the signal's direction. The turn indicated that we should proceed to a newly constructed housing area adjacent to the parking lot."

Swain and Carpenter then made their way over to the housing development and found that signal peaked. "Bill checked the list and found a ham lived on the street we were on, so we stopped and knocked on the door, but no one answered," Swain said. "We checked out the backyard and saw a 4-band trapped vertical antenna. We went next door and spoke to the neighbor and told him who we were and what we were trying to do."

With help from the neighbor, Swain contacted the ham at work and explained the situation. The ham told the neighbor how to get in the house and where they would find the transmitter. "We went in, found the transmitter in operation and turned it off," Swain said. "I noticed the ham had a large cat lounging near the transmitter and assumed the cat could have leaned up against the keyer paddle and started the transmitter. No other explanation could be possible without the owner hearing the transmit relay clicking."

When Swain and Carpenter left the house, they listened to the receiver and discovered the signal had disappeared.

"This was a great example of coordinated cooperation by the FCC and OOs to resolve a problem in a timely fashion," Skolaut said. "The DFing station told us that hopefully the OOs could handle it as the FCC District Office was unable to work on the case at this time."

Calling this a "splendid example of cooperation," ARRL Great Lakes Division Director Jim Weaver, K8JE, echoed Skolaut's praise: "I believe the response to the situation was as fine an example of symbiotic relationship between member-staff-FCC-staff-field organization as one might find. Extremely well done by all hands." --ARRL Letter

## 2008 FIELD DAY RESULTS POSTED

The results from this year's Field Day are now available on line at <http://www.arrl.org/members-only/contests/results/2008/FD/>. The joint operation between the RCA ARC and Indianapolis Radio Club made very good showing. Think of what it would have been had there not been such a bad power line noise problem. If I counted correctly, we were 38<sup>th</sup> nationally, 3<sup>rd</sup> in the Central Division and 2<sup>nd</sup> in Indiana. of in the 2A category.

"The addition of the online ARRL Field Day Locator site was a huge success, as more than 1500 sites were listed in this first year of use," said ARRL Field Day Manager Dan Henderson, N1ND. "When you scan the Online Soapbox <http://www.arrl.org/contests/soapbox>, Field Day continues to be the most popular on-the-air event in Amateur Radio." You can find the results in the Members Only section of the ARRL Web site.

Call	Score	Category	QSOs	Power Mult	GOTA Call	Section	Participants	Club
W9JP	6,192	2A	2,010	2	W9RCA	IN	40	Indianapolis RC

## FRACTAL ANTENNAS ON NOVA

NOVA's new episode, *Hunting the Hidden Dimension* -- The episode features Nathan Cohen, W1YW co-founder of Fractal Antenna Systems, Inc. His interview explains how he first used the design for his amateur radio hobby.

Since 1988, Nathan has experimented with fractal antennas and is recognized as the pioneer and expert in an exciting field that is now an integral part of the antenna art. 'Fractal Antenna

Systems', was started by Nathan and his dad, Hy (WA1ZWT, now SK) in 1995. Nathan finds it very gratifying to see the real impact this technology has had and it started with my ham radio work.

In mid-2007, after 12 years, the US patent office finally acknowledged, through patent award, that Nathan is the pioneer in the use of fractals in tuned circuits. He has had the humbling distinction of giving rise to two modern technologies from his Part 97 tinkering.

Nathan was a DX'er and in 1995 he achieved a (nearly) 30 year goal by attaining #1 Honor Roll DXCC. That was after 8BDXCC and the like. These days he is not as active on the air, but does get on for antenna testing and emergency capability, or an occasional contest. He usually passes up the chase but is getting more tantalized as sunspots pick up. His station is a IC-756ProIII; IC-7000. Henry 2K Classic as main QRO, with backups. Proprietary binaural signal processing on RX. Various fractal antennas with various gains, directionality, and multi-wide bandedness.

If you missed it on PBS you can view it at: <http://www.pbs.org/wgbh/nova/fractals/>

## FCC APPROVES WHITE SPACES DEVICES

Turning back efforts by broadcasters to block the move, the FCC voted unanimously Tuesday, with one partial dissent, to approve the use of unlicensed mobile devices in the TV spectrum band, but under conditions billed as a "compromise." FCC Chairman Kevin Martin called it a significant victory for consumers. He said the new devices would not disrupt TV service or wireless microphone use, calling it a "cautious approach."

The FCC will initially allow hybrid devices that use both geo-location and spectrum sensing, but will put numerous conditions on approval of devices that rely only on sensing technologies, including power limits, requiring extensive testing, a certification process, public comment on that process, and a separate FCC decision to approve proposed devices. Broadcasters argue that without geo-location, the devices are loose cannons aimed at their business models.

The commissioners said they trusted the FCC engineers had built in sufficient protections for TV signals and microphones in the testing and vetting process. Several joked that they would publish their home phone numbers just to make sure.

Read more at: <http://www.broadcastingcable.com/article/CA6611639.html?industryid=47174>  
-- Broadcasting & Cable

## SHORTS

**TAPR ANNOUNCES HPSDR MERCURY RECEIVER BOARD:** High Performance Software Defined Radio (HPSDR) is an open-source hardware and software project designed and developed by a group of enthusiasts with representation from interested experimenters worldwide. TAPR <http://www.tapr.org/> is looking for a "show of interest" to determine the production run for the new HPSDR Mercury receiver board. The assembled Mercury receiver board uses SMT parts and is manufactured in quantity by machine. If interested, please check out the HAMS DR Web site and log in <http://www.hamsdr.com/>. You will find the interest page under the <Projects><TAPR-HAMS DR> tab. Once interest has been determined, Mercury boards may be purchased from TAPR. Mercury board specifications can be found

here <http://hpsdr.org/wiki/index.php?title=MERCURY>.

**SAVE THE DELANO VOA** -- A video on YouTube highlights the fact that the VOA shortwave facility in Delano, California is facing destruction. The YouTube description reads: The last remaining intact **Voice of America** shortwave broadcast facility in Delano, California is facing destruction unless we act now to save a vital part of our cultural heritage. The Voice of America radio service was not only important to deployed troops and Americans working overseas, it also provided oppressed people around the world a window onto a free society. Watch the video [\*'Save The Delano VOA'\*](#)

**SPAIN GETS NEW 70 MHZ AND 1.8 MHZ ALLOCATIONS** -- An announcement on the website of the Spanish National society, URE, says Spanish Radio Amateurs are getting access to new 70 MHz and 1.8 MHz allocations. The new 4 meter allocation is 70.150 - 70.200 MHz with a 10 watts ERP restriction. Also Spanish Amateurs will be permitted to operate on 1810-1830 and 1850-2000 kHz during specified international contests.

**'ON THE AIR' 1937 - HOW RADIO WORKS** -- A short, 1937 movie, explaining how radio works, has been made available on YouTube. The video can be seen here: [http://www.southgatearc.org/news/oct...on\\_the\\_air](http://www.southgatearc.org/news/oct...on_the_air)

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