

# RCA AMATEUR RADIO CLUB

JULY, 2008      MONTHLY NEWSLETTER      INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE  
TUESDAY, JULY 1st, 6:30 PM AT THE [G.T. SOUTH'S](#),  
5711 E. 71<sup>st</sup> STREET, INDIANAPOLIS, IN

**FIELD DAY IS THIS COMING WEEKEND, JUNE 28-29.**

## RCA ARC NEWS

**SUMMARY OF THE JUNE MEETING** – The plans for Field Day were discussed. Tom Chance from the Indy Radio Club has done a great job in getting things organized. Certainly much more detailed plans than our Club ever did! Jim Keeth, AF9A has joined Dave Jarvis, N9KZJ and Jim Rinehart, K9RU representing RCA ARC on the Field Day planning committee. The Indianapolis Hamfest is coming up on July 12 and we will need help loading our junk at Mike Koss' warehouse and unloading at the hamfest. **[We need as much help as we can possibly get this year for loading. We're going try and load as much as we possibly can and try to get rid of it. Although the stuff doesn't appear to have been damaged by all the rain and wet weather, many of the components, etc. are rapidly becoming obsolete.]** The loading will start at 3 PM Friday afternoon at Mike Koss'. Dave Jarvis, N9KZJ, will coordinate it. Jim Keeth, AF9A has arranged for the truck to move the stuff to the hamfest. Jim AF9A had advanced sales Indianapolis Hamfest tickets for sale at the meeting.

The Dayton Hamvention was another topic of discussion. Everyone enjoyed the hamfest and the weather turned out to be great Friday and Saturday. There were some complaints about having to wait for a table at one of the Dayton restaurants Friday evening. I can personally say WE did not have any problems and the food was great. –K9RU

**GET READY TO RIDE THE WAVES AT THE 2008 ARRL FIELD DAY** -- The 2008 ARRL Field Day <http://www.arrl.org/fieldday> will be here before you know it, so come on down and join us, June 28-29.

The Indianapolis Radio Club and the RCA ARC with the W9IMS group are doing a joint Field Day this year at the Marion County Fair grounds, Southeastern and Troy Avenue. This will be a 2A operation, with a VHF and GOTA station. There will be a cookout Saturday evening. Come on out to operate, socialize, or to eat!

Here is a copy of the announcement that will go the local media:

### **ADVANCE MEDIA ADVISORY FOR JUNE 28 AND 29**

#### **WHO'S BEHIND THE STORM REPORTS? – HAM RADIO OPERATORS**

**What:** Dozens of amateur radio enthusiasts (hams) will be at the Marion County Fairgrounds to demonstrate how *hams* serve the public with emergency radio communications during weather emergencies and communicate with thousands of amateurs throughout North America.

**Date:** June 28th 2:00PM to Jun 29th 2:00PM (24 hour event)

**Where:** Marion County Fairgrounds, Southeastern and Troy Ave.

**Why:**

1. Who was there to track the latest storm?: Ham radio operators
2. Who was there when communications in Bartholomew, Morgan and Johnson County was compromised? Ham radio operators.
3. How does the National Weather Service track bad weather on the ground? Who are their eyes and ears?
4. During a flood when all other communications is damaged or gone, who is the backup?
5. When your weather forecaster says, "ham radio operators report a tornado at..." Who are they talking about?
6. Amateur (ham) radio is there!

**Visuals and sound:**

7. Experienced operators will demonstrate how they talk around the world, twisting dials, checking digital displays.
8. Your station weathercast could be done by remote from the location, demonstrating how emergency notification depends on ham radio operators.

**Background:**

The **Indianapolis Radio Club** will provide demonstrations during a national radio event called Field Day. Field Day is a national emergency preparedness exercise organized by the American Radio Relay League (ARRL) to demonstrate vital communications during a disaster.

During this national exercise, amateur radio operators from around the country setup at remote sites with backup equipment and generators to simulate emergency conditions. It is open to the public.

**Contact: Tom Chance, K9XV: 317-213-9240.**

If you need information or direction to the Field Day site check out <http://www.indyradioclub.org/> or use the ARRL Field Day Site Locator <http://www.arrl.org/contests/announcements/fd/locator.php>. For information about using the ARRL Field Day locator, please check out the Locator Site Frequently Asked Questions (FAQ) Web page <http://www.arrl.org/news/stories/2008/06/03/10021/?nc=1>. More than 1100 Field Day sites have registered their sites on the Locator, with more being added every day.

ARRL Field Day is the most popular on-the-air operating event in Amateur Radio. On the fourth full weekend in June, tens of thousands of Amateur Radio operators gather for a public demonstration of our service. Field Day is part educational event, part operating event, part public relations event -- and all about fun! --ARRL Letter

**HAMS ON HAND AS FLOODS SWEEP ACROSS MIDWEST US** -- When severe thunderstorms started to threaten the Midwestern United States with tornadoes, hail, severe lightning and rain starting on June 4, state agencies were quick to call on Amateur Radio operators for assistance.

The Indiana Department of Homeland Security (IDHS) activated ARES members to help out with communication efforts, providing radios for those amateurs who offered to help. ARRL

Indiana Section Emergency Coordinator Tony Langer, W9AL, said hams were instrumental in many ways, including assisting in Emergency Operations Centers, sand bagging, helping out in shelters and even aiding in rescue efforts.

This storm brought 12 confirmed tornadoes to 11 Indiana counties, with some communities reporting up to 11 inches of rain, Langer said; 20 counties were under a State of Emergency. On June 9, President Bush declared 29 counties in central Indiana a major disaster area, opening up the region to receive federal aid and FEMA assistance. Four people perished in the storms.

In a call put out to Amateur Radio operators on June 8, IDHS said, "The flood waters have impacted several counties here in Indiana severely. Ham Radio operators have been operating continuously since activated and are growing weary. Some counties do not have a vast amount of active hams to relieve these tired operators." Specific areas needing amateur assistance were overnight relief operators at the Bartholomew County EOC, as well as the EOC and three shelters in Columbus County.

Marion County (Indiana) Emergency Coordinator Mike Palmer, N9FEB, called on ARES members in his area to help out. "People might think, 'Why not just use telephones or cell phones?' Well, many phones are not working down there at this time. With the high waters, electric transformers are out all over; even those servicing cell towers are out. Even with today's technology, we find ourselves looking at ham radio to assist. If you can spare a few hours or an entire evening, please consider helping."

Indiana Governor Mitch Daniels called in the United States Coast Guard to assist in evacuations and rescues. The Coast Guard responded by sending two helicopters to the state along with boats and personnel. The Indiana National Guard was called out to assist in evacuation and direct traffic and enforce road blocks on the many flooded roads.

Torrents of rain also brought flooding to Wisconsin. On June 9, five counties had requested aid from Amateur Radio operators, ranging from backup communications to disaster assessment and flooding communications. One county called on ARES members to provide patrols of the flooded areas overnight on Tuesday and Wednesday.

According to ARRL Wisconsin Section Emergency Coordinator Bill Niemuth, KB9ENO, approximately 90 ARES members responded to the call for assistance. "In Columbia County, ARES members provided dam monitoring communications early in the flooding. These communications gave critical information to public safety officials about two dams that were nearly compromised. Due to falling water levels, this activity has been discontinued, but hams remain on standby due to the threat of additional heavy rain," Niemuth said.

Richland County ARES members remain activated, Niemuth said. "Hams are providing a variety of services, including fielding information calls in the County's Emergency Operations Center and providing specialized communications for disaster assessment by hover craft and airplane. These communications are in addition to providing traditional ham radio communication links between the EOC and evacuation shelters."

On Thursday, June 12, more rains inundated the state and more counties requested aid from area Amateur Radio operators. Niemuth said Winnebago County ARES members are providing damage assessment assistance in the county and in the City of Oshkosh, while hams in Fond du Lac are helping out with shelter communications. ARES teams in Marquette and Outagamie are providing back-up communications and flooding reports to their respective Emergency Operations Centers. -- Information provided by ARRL Indiana Section Emergency Coordinator Tony Langer, W9AL, and ARRL Wisconsin Section Manager Don Michalski, W9IXG

**TWO INDIANAPOLIS REPEATERS STILL OFFER AUTO-PATCH** -- Once a feature that defined Ham Radio repeaters, now is only offered by a few repeaters in the Indianapolis area. In an era before cell phones, the auto-patch provided an easy access to the land line phone system. Amateur radio pioneered touch tone control and the auto-patch systems. The 443.250 (100Hz PL) repeater and the 147.120 machine (IRA) are the only two repeaters in Indy to still offer an auto-patch. -- Mike Palmer, N9FEB (edited)

**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.

July 12<sup>th</sup> (At a separate location with the Indianapolis Hamfest)

August 16th

Sept 6th

October 4th

November 1st

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

June 28-29 Field Day [http:// www.arrl.org/FieldDay](http://www.arrl.org/FieldDay)

July 12 Indianapolis Hamfest, <http://www.indyhamfest.com/>

Aug 17 TARA Hamfest, Lafayette, IN <http://w9reg.org/hamfest/index.htm>

Nov 15-16 Fort Wayne Hamfest & Computer Expo. <http://www.fortwaynehamfest.com/>

## FCC LOOKS TO RAISE VANITY CALL SIGN FEES

The FCC released a Notice of Proposed Rulemaking and Order (NPRM) on May 8 seeking to raise fees for Amateur Radio vanity call signs. Currently, a vanity call sign costs \$11.70 and is good for 10 years; the new fee, if the FCC plan goes through, will go up to \$12.30 for 10 years, an increase of \$.60.

The FCC is authorized by the Communications Act of 1934 (as amended) to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. Instructions on how to comment on this NPRM are available on the FCC Web site at, <http://www.fcc.gov/cgb/consumerfacts/howtocomment.html>.

The vanity call sign fee has fluctuated over the 12 years of the current program -- from a low of \$12 to a high of \$50; the current fee of \$11.70 is the lowest the fee has been since the inception of the vanity call sign program. The FCC said it anticipates some 15,000 Amateur Radio vanity call sign "payment units" or applications during the next fiscal year, collecting \$184,500 in fees from the program.

The vanity call sign regulatory fee is payable not only when applying for a new vanity call sign, but also upon renewing a vanity call sign for a new term. The first vanity call sign licenses

issued under the current Amateur Radio vanity call sign program that began in 1996 came up for renewal two years ago. Those holding vanity call signs issued prior to 1996 are exempt from having to pay the vanity call sign regulatory fee at renewal, however. That's because Congress did not authorize the FCC to collect regulatory fees until 1993. Such "heritage" vanity call sign holders do not appear as vanity licensees in the FCC.

Amateur Radio licensees may file for renewal only within 90 days of their license expiration date. All radio amateurs must have an FCC Registration Number (FRN) before filing any application with the Commission. Applicants can obtain an FRN by going to the ULS site at, <http://wireless.fcc.gov/uls>, and clicking on the "New Users Register" link. You must supply your Social Security Number to obtain an FRN. –ARRL Letter

## GERMAN HAM CLAIMS FIRST DXCC ON 432 MHZ

The world of Amateur Radio DXing has passed a new milestone: On Friday, June 6, Jan Bruinier, DL9KR, of Niedernhausen, Germany, worked his 100<sup>th</sup> country on 432 MHz (70 cm) via moonbounce (EME) and CW.

Samek Zdenek, OK1DFC, and Hofbauer Zdenek, OK3RM, were getting ready to go on an EME DXpedition to Macedonia. Before they left, Samek asked Bruinier to help test out the equipment; Bruinier gave him a beacon, aiming a signal off the moon. According to VHF guru and conductor of QST's "World Above 50 MHz" column Gene Zimmerman, W3ZZ, this is done by transmitting a series of CW dashes and then stopping to listen for the signal to return a little more than a second later. The moon averages 384,000 km from the Earth; radio waves travel at ~300,000 km/sec.

After one of these transmissions, Bruinier was excited to hear Samek appear on frequency with a 549 signal. Thus, after an exchange of calls and reports, Bruinier's 100th country on 432 MHz was in the log. Once his QSL cards are confirmed in the near future, he will become DXCC #1 on 70 cm.

Bruinier's 70 cm EME operations began in 1977. He had followed the exploits of the early EME pioneers in QST, operators like KH6UK, W4HHK, W3GKP and W1FZJ who was conductor of the "World Above 50 Mc" during much of the 1960s. Jan and his family moved to a semirural location in Germany in 1976 where he could put up decent VHF antennas. Bruinier built an amplifier capable of running 1500 W continuously to deal with the high duty cycle found in EME operation -- long, slow CW with two minute transmissions at a time -- and receiver systems that yielded noise temperatures of 60 kelvins that could detect 7 dB of noise when he pointed his array into the ground. He uses an array of DL6WU design Yagis fed with 1-5/8 inch Heliac, currently having a gain of 28.4 dBd. For comparison, this is slightly more gain than the 28 foot Kennedy parabolic dish has at 432 MHz.

According to Zimmerman, the range of contacts covered by the 70 cm band is less than 1000 km; even under the most enhanced conditions, it is less than double that. "To work the 100 entities needed for DXCC, EME communications are essential. EME is the most demanding form of operation there is in Amateur Radio," he said. "Every single aspect of the station must be optimized: The equipment, the antennas, the feed lines and most particularly, the talent of the operator. Even 1 dB may make the difference between a contact and no contact. Bruinier's achievement was accomplished the old fashioned way -- by dint of hard work, excellent equipment, big antennas and many, many hours on the air looking for new countries and not missing many, if any, DXpeditions to the many countries where there is no 432 MHz EME activity."

If you would like to read more details about Bruinier's career as an EMEer, please look for his story in his own words in the "World Above 50 MHz" column in the September 2008 issue of QST. –ARRL Letter

## **WORLD AMATEUR RADIO DIRECTION FINDING (ARDF) CHAMPIONSHIPS FAST APPROACHING**

Have you ever thought about competing on the world stage? ARRL Amateur Radio Direction Finding (ARDF) Coordinator Joe Moell, K0OV, reports that there are some openings available to compete for the USA this September at the ARDF World Championships in Korea. "All of this year's USA gold medalists plus those from last year and other competitors who did well have been offered positions on ARDF Team USA for the 14th ARDF World Championships," he said. "Many are unable to go this year for a variety of reasons, so at this time there is at least one opening remaining in every category except M50 (males age 50-59). This makes it possible for relatively inexperienced radio-orienteers to join the team. It is also possible to attend as a non-competing visitor, but all visitors must be listed on the national team roster."

Moell notes that those interested in traveling to the 2008 ARDF World Championships as a member of Team USA (or a USA visitor), to please contact him immediately via e-mail <mailto:homingin@aol.com>. Do not contact the Korean organizers directly. If you have not been on Team USA before, please include your full name, call sign, mailing address, home phone number and date of birth in your e-mail.

To be safe at the World Championships, Participants must be capable of solo navigating with a map and compass in the forest for several miles. IARU rules limit Team USA membership to US citizens and legal residents. Each member is responsible for his or her own travel arrangements and entry fees. For more information, go to the Championship Foxhunting News page of Moell's Web site [http://www.homingin.com/farsnews.html - korea](http://www.homingin.com/farsnews.html-korea) where prospective participants can get team status reports and download the latest bulletins from the organizers.

## **ARRL WELCOMES YAESU AS PRINCIPAL SPONSOR OF LOGBOOK OF THE WORLD WEB SITE**

The ARRL welcomes Yaesu as the principal sponsor of the Logbook of The World (LoTW) <http://www.arrl.org/lotw/> Web site. LoTW is a repository of log records submitted by users from around the world; when both participants in a QSO submit matching QSO records to LoTW, the result is a QSL that can be used for ARRL award credit. With almost 21,000 amateurs registered on LoTW, more than 170 million QSO records have been entered into the five year old system, resulting in more than 13.4 million QSL records.

"Yaesu is absolutely delighted to be the Principal Sponsor supporting the extremely popular ARRL Logbook of The World Web site," said Yaesu's Executive Vice President for Amateur Radio Sales and Marketing Dennis Motschenbacher, K7BV. "It provides Yaesu with an opportunity to serve the Amateur Radio community. We hope LoTW users will note our support and judge this action for what it is intended to be -- a 'Thank You' to the thousands of avid DXers and other active operators worldwide." In return for its sponsorship of the LoTW Web site, Yaesu will receive promotional consideration in QST and on the LoTW Web site.

Motschenbacher said he understands that hams have felt the "pain" of postal price increases around the world: "I am certain that a huge number of hams have had to give up their dream of having prestigious ARRL certificates and plaques on their wall simply because they could no

longer afford the postage costs associated with exchanging QSL cards to verify contacts. Those QSO verifications are, however, absolutely essential for maintaining the integrity of ARRL's DXCC and other awards.

LoTW, with its global acceptance, now allows nearly everyone interested in the excitement that goes along with chasing DX and awards to provide most if not all of the required all-important QSO verifications without burdensome postage expenses. LoTW provides a very valuable service for both the individual users and ARRL."

ARRL Chief Operating Officer Harold Kramer, WJ1B, thanked Yaesu for their ongoing support of the ARRL. "We look forward to working with them on the Logbook of The World Web site."  
–ARRL Letter

## MORSE CODE RETURNING TO MARS TOOLBOX

After more than a dozen years, Morse code will soon be returning to Military Affiliate Radio System (MARS) nets. In the mid-1990s, the Department of Defense (DoD) did away with CW operation across the board -- including MARS nets -- as automatic systems such as the Internet, SATCOM, cell phones and e-mail became available and the payroll cost of manual operators escalated.

Army MARS launched a limited test of CW nets in four Midwestern states in late 2007. During a DoD interoperability test this past March, a Transportation Security Administration (TSA) station used it to communicate with Fort Huachuca. In announcing the return of CW to MARS nets, Navy-Marine Corps MARS Chief Bo Lindfors cited an emergency where CW was sorely missed: "I remember the [1998] Northeast Ice Storm shortly after I became [Navy-Marine Corps MARS] Chief and the unnecessarily lengthy effort by all of southern New England to receive one voice EEI [Essential Elements of Information Report] from a northern New England member whose antenna was covered in ice and lying on the ground. It took more than an hour when CW could have handled it in a few minutes. As more and more of our members enter MARS with no Morse code experience, I am afraid that we will soon lose that skill set if we don't do something." Army MARS Chief Carter said the imminent return of CW will not replace modes such as WinLink, Pactor 3 and MT63. "Our CW nets will focus on maintenance of skills and will necessarily be limited by the shortage of available frequencies and trained members," he said. "But if members want to add CW to their skills, the nets will be available for training." –ARRL Letter

## SHORTS

**HEIN HVATUM, N4FWA (SK):** Hein Hvatum, N4FWA, who in the 1970s and '80s supervised construction of one of the world's most powerful radio observatories, died of cancer May 22 at his home in Charlottesville, Virginia. He was 85. In 1974, Hvatum assumed responsibility for construction of the National Radio Astronomy Observatory's Very Large Array (VLA), an arrangement of radio telescopes near Socorro, New Mexico. The VLA has made key observations of black holes and protoplanetary disks around young stars, discovered magnetic filaments and traced complex gas motions at the Milky Way's center, probed the Universe's cosmological parameters, and provided new knowledge about the physical mechanisms that produce radio emission. The observatory is perhaps best known to the general public for its appearance in the 1997 movie "Contact" with Jodie Foster; it has also appeared in Carl Sagan's documentary "Cosmos," in the movie "Independence Day," in a Bon Jovi music video and on the cover of a Dire Straits album. The VLA was completed in 1982. Hvatum, an ARRL member since 1981, was responsible for computing, antenna design and electronics for the \$78 million project, the largest the National Science Foundation had funded at the time. Hvatum became

acting director at NRAO in 1984 and project manager for the Very Long Baseline Array the next year. He retired in 1987.

**BE CAREFUL ON 10 METERS:** With recent band openings beginning on 10 meters, ARRL has received word that a number of US amateurs have been heard using SSB below 28.300. "We urge everyone to remember that 28.000 to 28.300 MHz is reserved for RTTY and data, including CW," said ARRL Field and Regulatory Correspondent Chuck Skolaut, K0BOG. "Phone is permitted from 28.300 to 28.500 for Novice and Technician class licensees with a maximum power of 200 W. Phone and image are allowed from 28.300 up to 29.700 for General, Advanced and Extra class license holders." Skolaut, who manages the Official Observer and Intruder Watch programs, said that people have called and e-mailed ARRL HQ inquiring about hearing IDs repeated in code on various 10 meter frequencies. "What they are hearing are beacons," Skolaut said; he suggests checking out some Web sites for more information on beacons you might hear on 10 meters <http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=1114> and other bands <http://www.ncdxf.org/beacons.html>.

**NEW EXTRA CLASS LICENSE MANUAL NOW SHIPPING:** The "ARRL Extra Class License Manual" <http://www.arrl.org/catalog/?item=1352p> and "ARRL's Extra Q&A" <http://www.arrl.org/catalog/?item=1379> are your tickets to every privilege granted to Amateur Radio operators. Expert instruction leads you through all of the knowledge you need to pass the exam, including rules, specific operating skills and more advanced electronics theory. Everything you need to know to pass the 50 question Extra class exam is right at your fingertips -- both books contain the latest Extra class question pool and answer key. Study the "ARRL Extra Class License Manual" to understand the theory and applications needed to upgrade your license. With more than 700 questions included in the question pool -- valid from July 1, 2008 to June 30, 2012 -- reading the "ARRL's Extra Q&A" is the best way to review for the exam with confidence. The Extra class license is the highest of all three US Amateur Radio licenses. To upgrade to Extra class you must already hold a General class license (or have recently passed all of the exams required for a General class license). Upgrading to an Extra license only requires passing a written examination. As an Extra class licensee, you will have full privileges on all frequencies authorized by the FCC for Amateur Radio.

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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/>