



RCA AMATEUR RADIO CLUB

DECEMBER, 2009 MONTHLY NEWSLETTER INDIANAPOLIS, IN

WISHING YOU A GREAT HOLIDAY SEASON !!!

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

RCA ARC NEWS

SUMMARY OF THE NOVEMBER MEETING – The Fort Wayne hamfest was discussed. K3BG will drive his van and has room for several passengers, Dave, N9KZJ, about the recent open house the USS Indianapolis exhibit at the Indiana War Memorial. Approximately 250 people attended. Dave, N9KZJ, and Bob, W9KVK, have both put in a good deal of time over the last six months making this exhibit a reality. Upcoming contests were discussed including CQ WW and SS.

INDIANAPOLIS AREA VE TESTING SCHEDULE -- Calling in advance to ensure testing availability is suggested but not mandatory. Walk-ins are accepted.

05-Dec-2009

Sponsor: Indianapolis Radio Club (W9JP)

Time: 9:00 AM (Walk-ins allowed)

Location: Indianapolis Training Center (ITC), 2820 N. Meridian Street.

Contacts: Gale Wuollet (317) 849-8449), <mailto:indy33windy@comcast.net> or
Dovid Ofstein (317) 908-5125) doctoro57@yahoo.com

16-Dec-2009

Sponsor: Chief Anderson ARC

Time: 7:00 PM (Walk-ins allowed)

Contact: Al A Wendling (765) 642-7291, <mailto:wyal@aol.com>

Location: Anderson Dispatch & EMA Center, 739 Gene Gustin Way, Bldg Handicap,
Anderson, IN 46011

19-Dec-2009

Sponsor: Mid State ARC

Time: 9:30AM (Walk-ins allowed)

Contact: David A Wendt (317) 881-6531, <mailto:hamwhatam@comcast.net>

Location: Johnson Cty Emer MGT Office, 1101 Hospital Rd Basement, Franklin, IN

HAMFESTS & EVENTS

Dec 4-6	ARRL 160 Meter Contest
Dec 12-14	ARRL 10 Meter Contest
Dec 26	South Dakota QSO Party
Jan 1	ARRL Straight-Key Night

Jan 2-3 Original QRP Contest
Jan 2-3 ARRL RTTY Roundup
Feb 4 Mansfield Mid-Winter Hamfest & Computer Show, Mansfield, OH
Mar 27 Bartholomew County 4-H Fairgrounds, Columbus, IN,
May 14-16 Dayton Hamvention, Hara Arena, Trotwood, OH

FCC TO CARIFY RULES FOR VANITY CALLS

On Wednesday, November 25, the FCC issued a *Notice of Proposed Rule Making (NPRM)* -- WT Docket No. 09-209 -- seeking to amend the Commission's Amateur Radio Service rules to clarify certain rules and codify existing procedures governing the vanity call sign system, as well as revise certain rules applicable to club stations.

According to the FCC, almost 80,000 licensees have replaced their sequentially issued Amateur Radio call signs with a vanity call sign since the program began in 1996. When the program began, the Commission established what they called "the broad outlines" of the vanity call sign system, concluding that call signs generally should not be available for reassignment for two years following the death of a licensee, or expiration or termination of the license for that call sign. In doing so, the Commission made exceptions for former holders of the call sign, close relatives of a deceased former holder and club stations of which a deceased former holder was a member.

The Commission did not, however, specify all of the procedures governing the vanity call sign system, but indicated that the procedures "would be set out in the *Public Notices* announcing 'starting gates' for the groups receiving initial priority and that the procedures would be adjusted from gate to gate as experience dictated." The procedures announced in the *Public Notices* announcing the gates are still in effect, but they are not set forth in the Commission's Rules. The *NPRM* states that the FCC "now believe[s] that certain provisions should be codified in our rules, and others added, so that the vanity call sign system will be fair, equitable and transparent to all amateur service licensees. The Commission also decided in the *Vanity Report and Order* [issued in 1996] to resume issuing new club station licenses. We believe that certain rule changes to the club station licensing rules may be appropriate."

The comment period for WT Docket No. 09-209 will extend for 60 days after it is published in the *Federal Register*. Historically, items appear in the *Federal Register* approximately 7-10 days after they appear on the FCC Web site. Reply comments can be made up to 75 days after publication in the *Federal Register*. --ARRL Letter

NEW ARRL CENTRAL DIVISION VICE DIRECTOR

Kermit Carlson, W9XA, of Batavia, Illinois, edged out incumbent Howard S. Huntington, K9KM, of Hawthorn Woods, Illinois; Huntington for the ARRL Central Division Vice Director position. Huntington has served as the Central Division's second-in-command since 1983. Carlson received 1808 votes, while Huntington received 1466 votes. The three-year terms beginning at noon on January 1, 2010. --ARRL Letter

WRTC 2010 ORGANIZERS ANNOUNCE TEAMS

Last month, after a grueling selection process, the organizers of the 2010 World Radiosport Team Championships ([WRTC](#)) selected the 44 team leaders who will compete in the event next year. These 44 team leaders, representing all six continents, have [each chosen a partner](#). The rules state that while the leader's partner may be from a different call sign area, they must

be from the country as the leader. WRTC, held every few years, takes place during the IARU HF World Championships, July 10-11. In 2010, WRTC will be held just outside Moscow.

Eleven Teams will come from North America, 21 teams will come from Europe, six from Asia, one from Africa, one from Central America, two from Oceania and two from South America. Another six teams -- the WRTC 2006 Champions (John Sluymer, VE3EJ, and James Roberts, VE7ZO), a host team and four sponsored teams -- will bring the total to 50 teams. The host and sponsored teams will be announced at a later date.

The 11 North American teams are as follows:

- Area 1 (W1, W2, W3 and the VA, NC, SC, FL and GA portions of W4): Randy Thompson, K5ZD, and Tom Georgens, W2SC; Jeff Briggs, K1ZM, and Krassy Petkov, K1LZ; Andy Blank, N2NT, and Tim Duffy, K3LR.
- Area 2 (the KY, TN and AL portions of W4 and W8 and W9): Terry Zivney, N4TZ, and Marvin Bloomquist, N5AW; Scott Robbins, W4PA, and Ken Widelitz, K6LA,
- Area 3 (W5, W0): Steve London, N2IC, Bob Wilson, N6TV; Kevin Stockton, N5DX, and Stan Stockton, K5GO.
- Area 4 (W6, W7, KL7): Daniel Craig, N6MJ, and Chris Hurlbut, KL9A; Mitch Mason, K7RL, and Kevin Lahaie, K7ZS.
- Area 5 (VE1, VE2, VE3, VE4, VE9, VY2 and VO2): Yuri Onipko, VE3DZ, and Yury Romanov, VE3XB.
- Area 6 (VE5, VE6, VE7 and VE8): Lee Sawkins, VE7CC, and Dale Green, VE7SV.
- Michael Gibson, KH6ND, and John Hillyer, KH6SH, make up one of the two teams representing Oceania.

The 2010 WRTC will be held outside, "Field Day-style." According to organizers, the fields upon which WRTC will take place are located in a flat area about 35 kilometers south of Moscow in the Domodedovo district. Competitors will be located in clusters of 15-20 teams each in a total area encompassing about 40×30 kilometers. Height differences between teams will be no greater than 40 meters and each team will be separated by at least 500 meters. In order to prepare for this style of operation, organizers operated from these fields for the 2009 running of the Russian Radiosport Team Championship.

Each team will have antennas and power monitors [supplied](#), along with a tent, generator (and gasoline), tables, chairs and water. To avoid team members spending time refilling the generator, organizers will have a person dedicated at each location to help keep it up and running during the contest period.

WRTC began in 1990 under the auspices of the Goodwill Games, the brainchild of Ted Turner of CNN fame. The first Games were organized in Seattle, Washington, and focused on areas of cultural exchange, arts and other unique subjects -- one of these being Amateur Radio and WRTC. Radio amateurs from around the world gathered in an Olympic-style event, joining in competition and camaraderie. In 1996, WRTC moved to San Francisco, then Slovenia in 2000, Finland in 2002 and Brazil in 2006. WRTC 2010 is supported by the Moscow Regional Government and the Northern California DX Foundation ([NCDXF](#))

US CALL SIGNS NOT ISSUED BY THE FCC

If you're an American ham, chances are that your call sign was issued by the Federal Communications Commission. A "no brainer," right? Well, if you're an American ham who happens to be stationed at Guantanamo Bay or at one of the US bases in the Antarctic, your call sign is not issued by the FCC -- it's issued by the base commander. Guantanamo Bay (or Gitmo as it's commonly called) uses the KG4 prefix, followed by a two-letter suffix; this block is reserved exclusively for American hams at Gitmo. As for Antarctica, the [Antarctic Treaty](#), signed on December 1, 1959 (and entered into force on June 23, 1961), established the legal framework for the management of Antarctica, including allocation of amateur call signs; the National Science Foundation received their block on July 1, 1959. US military hams in Japan and Korea are also issued special call signs:

KA2AA-KA9ZZ -- reserved for US Army-authorized amateur stations

[KC4AAA-KC4AAF -- reserved for the National Science Foundation's use at the South Pole.](#)

KC4USA-KC4USZ -- reserved for US Navy-authorized amateur stations at their Antarctic bases.

[KG4AA-KG4ZZ -- reserved for US Navy-authorized amateur stations at Guantanamo Bay\).](#)

KL9KAA -- KL9KHZ -- reserved for assignment to US personnel stationed in Korea.

The 40 call signs having the first two letters AF, KF, NF or WF and the letters "EMA" following a numeral are available to the Federal Emergency Management Agency (FEMA).

The FCC once issued call signs to hams who lived in the Caroline Islands and the Marshall Islands. Even though these entities -- former United Nations Trust Territories -- now have their own sovereignty (and DXCC prefixes), the FCC will not issue call signs in the following blocks:

KC6AA-KC6ZZ -- KC6 was two DXCC entities: The Eastern Caroline Islands and the Western Caroline Islands. The Eastern Carolines became the Federated States of Micronesia (V6) and the Western Carolines became the Republic of Palau (T8).

KX6AA-KX6ZZ -- the former Marshall Islands, now the Republic of the Marshall Islands (V73).

You can [find out more](#) on the FCC's Web site. *Now you know!*

NEW ANTENNAS INSTALLED ON ISS

On Saturday, November 21, astronauts Mike Foreman and Randy Bresnik completed the second EVA (extra-vehicular activity) -- NASA's term for a spacewalk -- of their mission. While on the 6 hour, 8 minute EVA, Foreman installed the Amateur Radio on the International Space Station ([ARRL](#)) antennas for 2 meters and 70 cm on the *Columbus* module. NASA ISS Ham Radio Project Engineer Kenneth Ransom, N5VHO, told the ARRL that this new antenna -- along with another VHF antenna -- was developed by ARISS in cooperation with the European Space Agency ([ESA](#)) to support an experiment involving the maritime Automatic Identification System ([AIS](#)). "Both antennas were installed on the Earth-facing starboard edge of the *Columbus* module," he explained. "The AIS antenna is forward and the ARISS antenna is aft. The ARISS team is planning to migrate some stowed Amateur Radio gear to take advantage of the new antenna." Frequencies available for transmission to and from *Columbus* will be 2 meters, 70 centimeters and 13 cm. To start, two radios for 2 meters and 70 cm that don't see much use on the ISS will be moved and installed in *Columbus*. The space shuttle *Discovery* is expected to return to Earth on Friday, November 27 and will bring Nicole Stott, KE5GJN, back from her stay on the ISS. --ARRL Letter

THREE AMATEURS INDUCTED INTO CONSUMER ELECTRONICS HALL OF FAME

Earlier this year, the Consumer Electronics Association (CEA) named 13 men -- including three radio amateurs -- to the Consumer Electronics Hall of Fame. The honorees were inducted last month at CEA's Industry Forum in Phoenix, Arizona. Former ARRL Rocky Mountain Division Director Walt Stinson, W0CP, of Englewood, Colorado; Former ARRL Vice President and Central Division Director R.H.G. Mathews, W9ZN (ex-9ZN) (SK), and Karl Hassel, W9PXW (ex-8AKG) (SK).

Mathews, along with Karl Hassel, W9PXW (ex-8AKG), founded what we know today as Zenith Electronics Corporation. In March 1916, Mathews was appointed Manager for the Central Division in the then-new American Radio Relay League; a year later, he was appointed to the ARRL Board of Directors. Known by other Amateur Radio operators as "Matty," Mathews changed his radio call letters from 9IK to 9ZN -- the origin of the famous Zenith trademark.

Mathews and Hassel met while serving in the Navy during World War I. After the War, both men stayed in Chicago and together started Chicago Radio Laboratory ([CRL](#)) -- and jointly operated 9ZN. The two focused on manufacturing a more developed version of Mathews' spark gap disk, as well as other Amateur Radio gear. They built these on the kitchen table of Mathew's family's Chicago home.

Since its equipment was built for the radio amateur, CRL placed its earliest advertisements in *QST*; the first was in June 1919. [According to Harold Cones and John Bryant](#), authors of *Zenith Radio -- The Early Years, 1919-1935*, it was at the suggestion of an employee that *QST* advertisements soon began listing the 9ZN call followed by a small "ith," thus providing the famous trade name Z-Nith.

Although literally a tabletop operation, CRL owned a valuable Armstrong regenerative receiver patent license, negotiated by Mathews in 1920. Such a license was necessary to manufacture any radio equipment. CRL had no inventory -- they manufactured product as orders came in. Along with three workmen, they built 12 radios at a time (which took two to three weeks) with oak ply cabinets made by a local cabinet maker.

CRL grew, and the pair moved their operations into a two-car garage located a few blocks away. Half of the garage was devoted to manufacturing, the other half to Mathews' Amateur Radio station, 9ZN. Mathews and Hassel erected a large antenna, and with the big synchronous rotary spark-gap transmitter, 9ZN was soon heard worldwide. 9ZN was a featured visitation site during the first National ARRL Convention held August 31-September 3, 1921 in Chicago. Mathews was the Director General (chairman) of the convention and toastmaster of the banquet.

CRL was further expanded in 1923 by an investment by Eugene F. McDonald, Jr, and began producing up to 15 "Z-Nith" brand 2-component regenerative receivers per day -- the Amplifig detector and amplifier, and the Paragon tuner. By 1921, CRL moved into a 3000-square foot factory in Chicago. Zenith Radio Corporation was officially incorporated on June 30, 1923. Two years later, Zenith acquired CRL's assets, creating one unified company. In late 1924, the company moved again to a larger factory in Chicago. Along with the size of the company, the volume of radios manufactured also increased. By the mid-1960s, the company had more than 15,000 employees.

Zenith helped found the Consumer Electronic Association, was instrumental in launching the National Association of Broadcasters (with the CEO as the first President), and recommended the formation of the FCC. Zenith held the follow calls WJAZ (AM 1923 - 24), W9XZN,

W9XZR, WWZR (FM), W9XZV, W9ZEN and KS2VBS.

Mathews left Zenith in 1928 to establish an advertising agency. He re-joined the Navy during World War II, assisting with recruiting. From 1937-1941, he also rejoined the ARRL Board as its Central Division Director. In 1954, he joined Magnavox and then worked for Westinghouse starting in 1957. After stints at several other companies during the next decade, he retired in 1967 to Mexico. Ralph Mathews died in 1982.

Hassel retired from Zenith in 1966 and served on its board until 1972. He passed away in 1975.

JERRY SEVICK, W2FMI, SK

Jerry Sevick, W2FMI, one of ham radio's great technical contributors, has passed away at the age of 90. Jerry was the author of the classic book "Transmission Line Transformers" published by the ARRL. In 2005, he received the Dayton Hamvention Technical Excellence Award where the Awards Committee noted that Sevick's April 1978 QST article on short ground-radial systems "now serves as the world's standard for earth conductivity measurements."

Jerry embodied the old-fashioned amateur spirit of innovation by experiment, applying his many years of experience as a Bell Labs researcher to a retirement project analyzing the performance of short vertical antennas. That work led him to the study of transmission line transformers, for which he became well known in both the ham and professional radio engineering communities. He brought a little-known piece of technology to the forefront, and worried until the end whether enough people understood the principles behind the operation of these devices.

An excerpt from his obituary: "...Jerry was a graduate of Wayne State University and a member of their Athletic Hall of Fame. He was drafted by both the Chicago Bears and Detroit Lions, but did not play professional football. He served as a pilot in the US Army Air Corps in WWII. He graduated from Harvard University, with a doctorate in Applied Physics.

Jerry taught at Wayne State University and worked as the local weather forecaster at WXYZ TV in Detroit. He worked for Bell Laboratories in Murray Hill, NJ and retired as the Director of Technical Relations. An avid Ham radio operator (W2FMI), Jerry was renowned for his research and publications related to short vertical antennas and transmission line transformers..." --Gary Breed, K9AY

CALIFORNIA APPROVES NEW ENERGY STANDARDS FOR TVS

The first-in-the-nation criteria, approved unanimously Wednesday by the five-member California Energy Commission, is aimed at cutting the amount of electricity used by new high-definition TVs of up to 58 inches by a third starting Jan. 1, 2011. More stringent rules that take effect Jan. 1, 2013, would create a cumulative 50% power savings. "Efficiency is the cheapest and simplest way to save our citizens money, to provide a good quality of life and to drive our economy" said Commissioner James Boyd.

The California Energy Commission votes 5-0 in favor of the nation's first efficiency regulations for televisions of up to 58 inches sold in the state. The new stricter rules take effect Jan. 1, 2011 and TV sets will have to meet energy-efficiency standards that slash the amount of electricity they consume. The regulations also will lower owners' monthly electric bills.

Since the sale of flat-panel televisions began to rocket early in the decade, TV-related power usage has more than tripled to 10 billion kilowatt-hours per year, accounting for nearly 10% of residential electricity consumption, said Commissioner Arthur Rosenfeld, a nuclear physicist and UC Berkeley professor.

The new regulations were fought by the Consumer Electronics Assn., a leading trade group based in Arlington, Va. "Simply put, this is a bad policy: dangerous for the California economy, dangerous for technology innovation and dangerous for consumer freedom," the group said. Continuing to improve the efficiency of high-definition liquid crystal display, plasma and newer types of TVs should be voluntary, the group argues, saying that arbitrary standards could stifle innovation.

The regulations should have little effect on consumers for at least the first two years, commissioners said. About three-quarters of TV sets now in stores already comply with the 2011 standards, and 25% meet the tougher 2013 threshold. Any increase in the cost of TVs would be offset by savings in owners' electric bills, the commission said.

California and its Energy Commission, Schwarzenegger said, have since the 1970s pioneered energy-efficiency standards for various appliances that have allowed the state's per-capita electric consumption to remain flat despite a huge jump in population. During the same period, national per-capita power use jumped by 40%. Commissioner Rosenfeld said commission regulations have worked well in the past. In the 1970s, he said, the average refrigerator in California consumed 2,000 kilowatt-hours per year of electricity. Now, a typical refrigerator, which costs less and has more consumer-friendly features, uses just 400 kilowatt-hours per year.

SHORTS

SUNSPOT ACTIVITY SEEMS TO BE GROWING STEADILY - Sunspot region 1029 disappeared after October 30 and made its trip around the Sun and has re-emerged as sunspot 1032. Sunspot region 1030 ran for three days with sunspot numbers of 15, 16 and 11. Then on November 9, the sunspot region re-emerged, with sunspot numbers of 14, 13 and 11 through November 11. A new sunspot -- number 1033 -- has come over the eastern limb of the Sun. Since then, from November 19-24, they were 30, 31, 14, 13, 0 and 0. This steady appearance of sunspots has raised the MUF over many paths, and 15 meters is beginning to open regularly. In the southern hemisphere -- which gets more solar radiation this time of year -- you can see a [pronounced effect on the \$f_{0F2}\$ reading around mid-day](#). This is a measurement taken with an ionospheric sounder on Cocos-Keeling Islands in the Indian Ocean, 12.5 degrees South latitude and 96.8 degrees East longitude. The instrument sweeps a radio signal across the spectrum, beams straight up to the ionosphere overhead and measures the strength of the signal bouncing back to determine optimum frequency. You can see during mid-day f_{0F2} is going above 10 MHz. Another interesting tool to see varying MUF around the world updated every five minutes is [here](#). The contour lines show the MUF over that particular area. During the day recently, some areas over Africa were going above 30 MHz. None of this observation would be possible but for the [STEREO mission](#). --ARRL Letter

NEW TECHNICIAN CLASS QUESTION TO BE RELEASED - The Question Pool Committee (QPC) of the National Conference of Volunteer Examiner Coordinators (NCVEC) is due to release the new Technician class (Element 2) question pool to the 14 VECs on December 1, 2009; it will be released to the public in January 2010. Each question pool for

the three Amateur Radio license classes -- Technician, General and Amateur Extra -- is reviewed on a four-year rotation. This new Technician class pool will become effective on July 1, 2010. --ARRL Letter

AO-7 35 YEARS OLD - Thirty-five years ago AO-7 reached orbit. The following is from the AO-7 page on the AMSAT-North America Web site: "AMSAT-OSCAR 7 was launched November 15, 1974 by a Delta 2310 launcher from Vandenberg Air Force Base, Lompoc, California. AO-7 was launched piggyback with ITOS-G (NOAA 4) and the Spanish INTASAT. The second phase 2 satellite (Phase II-B). Weight 28.6 kg. Orbit 1444 x 1459 km. Inclination 101.7 degrees. Octahedrally shaped 360 mm high and 424 mm in diameter. Circularly polarized canted turnstile VHF/UHF antenna system and HF dipole."

SKYWARN RECOGNITION DAY SET FOR DECEMBER 5 - The 11th Annual SKYWARN Recognition Day (SRD) Special Event will take place Saturday, December 5, 2009. 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 to contact other hams across the world throughout the 24 hour event.

DTV COUPONS QUIETLY DISAPPEAR - On November 9th the last of the final 200,000 coupons government-issued coupons mailed in mid-August toward the purchase of a digital television converter box expired, hitting the 90-day expiration date. After months of hand-wringing over the switch to all-digital TV signals and cries from Congress and the White House to delay the transition by four months because the country was unprepared, Americans managed to redeem just over half of the 64.1 million coupons that were distributed, federal records show.

"The DTV coupon program was a tremendous success," NTIA Administrator Lawrence Strickling said. "It educated millions of Americans about how to prepare for the transition and helped millions of households with the cost of purchasing a converter box." With about \$1.8 billion in funding to help Americans ready for the transition by offering \$40 toward the purchase of a converter box, more than \$500 million remained unused, according to rough estimates. Store shelves are now largely devoid of the boxes, leaving anyone with an analog TV set with few choices.

ARRL OFFERS A NEW SUITE OF AMATEUR RADIO MOBILE SOFTWARE -- designed specifically for use with the Apple's iPhone and iPod Touch. The applications -- or "apps" -- are named [ARRL Technician](#), [ARRL General](#) and [ARRL Extra](#) and function as an electronic version of practice exam flash cards. Amateur Radio exam candidates can use the applications as a study companion to the [ARRL license manuals](#) and classroom instruction. The apps include all the possible questions and answers that will be on each of the license tests. Users can flag questions that need more review, segment questions for study by sub-element, or even study the questions in a random order. The ARRL apps are available for \$1.99 each on Apple's iTunes "App Store". --ARRL Letter

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