

RCA AMATEUR RADIO CLUB

SEPTEMBER, 2014

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE

TUESDAY, SEPTEMBER 9th, 6:30 PM AT [G.T. SOUTH'S](#),

5711 E. 71ST STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE AUGUST MEETING – Thanks to all who attended the August meeting. We had a good turnout. The results of the Indy Hamfest were discussed. Our Club did quite well. The batteries (thanks Leroy) and antenna tripods sold well. Charlie Clauser, N9AQE, donated some of the items from Steve McWilliams, N9SM (SK), estate for our Club to sell. Steve worked at RCA for several years before going to AT&T and was active in the club. We have enough stuff left to do it again next year! Jim, K9RU, reported on the recent VHF/UHF contest and the upcoming Sept. VHF contest. Jim also reviewed the W9IMS activity. Dave, N9KZJ, reported on the Indiana State Fair special event station.

NEXT TEST AMATEUR RADIO LICENSE TEST SESSION – September 13, Saturday

Time: 12:00 PM (Walk-ins allowed)

Contact: Rhonda S. Curtis, ws9h@arrl.net, (317) 363-7457

Location: Integrated Public Safety Commission, 8468 E 21st St., Indianapolis, IN 46219

FOR SALE : ONE 4' X 8' X 18-20" DEEP NU-WAY TRAILER. -- From Dave Brown, W9CGI... Currently licensed and in roadworthy condition. I am barely able to make the flea markets using the truck. Time to pass the "Green Hornet" on to needier individuals. Has four coats outdoor enamel over primer so is weather/water tight. NEW rims/tires, on it plus two rims and tires, plus spare mounted to front. "LID" is weather tight fit and has a black cover once a truck toneau. Built by the same guys that built the tow trailers for Indy race cars, so it is true and tows like a dream. Full secondary relay lighting, so no load on the truck signals or brakes lights. You have seen it many times at Dayton, Hoosier Hills, and Indy fests. Questions welcome, and all "serious" offers considered. Email me at w9cqi.dave@gmail.com. Thanks for your consideration.

HAMFESTS, OPERATING EVENTS, VOLUNTEER OPPORTUNITIES

Sept 6	Indiana State Parks On The Air 1600z-2400z http://inpota.com/
Sept 6	Multiple Sclerosis Bike Ride, N9FEB@comcast.net or at (317) 753-8691
Sept 13-15	ARRL Sept VHF Contest 1800z – 0259z
Sept 20	Hancock ARC Hamfest, Greenfield, IN http://www.w9atg.org/
Sept 27	Indianapolis Radio Club Hill Top Operating Event http://www.indyradioclub.org/irchilltop.html
Oct 4	Hoosier Hills Hamfest, Mitchell, IN http://www.w9qyq.org/hamfest
Oct 11	Hilly Hundred, Bloomington ARC, Tom, KC9IRG tmyers@bluemarble.net
Oct 18	Indianapolis Marathon, Lawrence, IN, N9FEB@comcast.net
Oct 25	Hoosier Hikers: Knobstone Run, contact Brian Elliott, n9jpx09@yahoo.com
Nov 15	Ft. Wayne Hamfest & Computer Expo, http://www.fortwaynehamfest.com/

All dates, unless otherwise stated, are UTC.

<http://www.arrl.org/contest-update-issues> Contests updates

<http://www.hornucopia.com/contestcal/> WA7BNM Contest Calendar

<http://www.arrl.org/special-event-stations> ARRL Special Event Stations page

http://www.arrl.org/exam_sessions/search ARRL training page for test sessions

<http://indyhams.org/events/> Indiana events and public service opportunities.

THE IRCC IS ACCEPTING NOMINATIONS FOR THE "IRCC AMATEUR OF THE YEAR AWARD"

The Indiana Radio Club Council, IRCC is accepting nominations for the "IRCC Amateur of the Year Award". The award recognizes Amateur's that have made outstanding contribution to Amateur radio in Indiana. These can be individual or club nominations and you don't need to be a member of the IRCC.

The nominee must be an Indiana resident. Nominations are in an essay form with as much detail as possible with information on their involvement in amateur radio and their achievements.

Former award winners are not eligible. Send nomination to: k9ru@arrl.net Nominations must be received by September 30, 2014.

US-TO-VK TRANSPACIFIC RECEPTION ON 630 METERS REPORTED

A radio amateur and medium-frequency (MF) experimenter in Australia has received a 630 meter (475.62 kHz) transmission from a radio amateur and Part 5 Experimental operator in Texas. While the approximately 8710 miles covered is not a distance record nor a "first" for that part of the spectrum, it does represent the sorts of accomplishments that the Amateur Radio community in the US might come to enjoy if a band at 472-479 kHz ever becomes a reality. John Langridge, KB5NJD, in Texas, who holds Experimental license WG2XIQ, told ARRL that having his [WSPR](#) signal heard in Australia on August 25 at 0952 UTC by David Isele, VK2DDI, was a "huge surprise."

"I did not know until I got a text message that morning," Langridge said. "I am normally checking the band during the overnight hours but went to bed very early on Sunday night and slept until almost 7:45 AM local. I had not seen my e-mails, but the local community as well as the one in Oceania was abuzz. Needless to say I woke up very fast and started looking at data."

Langridge said he only recently renewed his FCC Part 5 license, requesting a power increase to 10 W in the process. He said the only longer [WSPR reception report](#) on 630 meters was in February 2013 and involved a 10,450 mile path from Australia to France. Signals from North America have been heard in Australia on 630 meters using other modes.

"Many of us use *WSPR* as an effective means of determining band conditions very quickly, which can lead to two-way [communication]," Langridge said. "*WSPR* has a very well-established listener base, which provides tremendous amounts of data with a 2-minute transmit cycle." He said *WSPR* is a good tool to introduce newcomers to 630 meters and MF operation, and that many MF operators, including him, stumbled into the nether ranges of the spectrum by way of monitoring *WSPR* and, as he put it, "seeing how amazing this band really can be."

WG2XIQ is equipped with an 80 foot tall asymmetrical T-top vertical, base loaded with a motorized variometer and almost 3 miles of radials. He generates a signal on 630 meters using an MF Solutions transmit downconverter, driving two GW3UEP Class D/E amps in parallel, combining them using a 0° hybrid combiner and filter with a low-pass filter. "I can make 200 W total power output, which at this time of year equates to about 4 or 5 W ERP," Langridge said. "During the fall and winter, once the trees have lost their leaves and system resistance goes down, that 200 W TPO will look more like 10 W ERP, so things only stand to get better as we move into the 2014 MF season."

On the Australian end, VK2DDI, who lives in New South Wales, said he was just taking "a quick look on 630 meters" when "up popped WG2XIQ" in a faint trace on his display. He was expecting it to be another Australian operator. "Pleasant surprise for all concerned," he said in a post to a 630 meter news group.

Isele uses a 30 meter thin, galvanized-iron vertical wire, strung between a ground rod and a high tree branch for receiving on 630 meters. It has no radials and no antenna tuner. "I hear better than most on most bands," he told Langridge, adding that he lives in a rural area 512 meters above sea level with few noise issues.

"There are so many misconceptions about what goes on below the AM broadcast band," Langridge

told ARRL. "It's amazing how many people still know nothing about the 630 meter band." Langridge calls himself "one of those crazy individuals" who believes that one day radio amateurs will earn DXCC on 630 meters. "As modulation methods and receivers continue to improve, I do think it will be a reality," he said. "But it will be a lifelong pursuit. That alone will make it even more worthwhile."

The ARRL is sponsoring the [WD2XSH experimental group](#) in the vicinity of 500 kHz. --ARRL Letter

BALLOONS CARRYING AMATEUR RADIO PAYLOADS STILL CIRCLING THE EARTH

Three plastic foil-envelope [balloons](#) carrying Amateur Radio payloads and launched from the UK by Leo Bodnar, M0XER, remain aloft and continue to circle the Earth. The oldest, identified as B-63, was released on July 8 and became the second of Bodnar's balloons to circumnavigate the globe. The first to do so, B-64, went up on July 12 and had completed one lap around the Northern Hemisphere by July 31. Air currents have carried the balloon within 9 km of the North Pole and within 10 km of its launch site. The last balloon to make it around the Earth was B-66, which Bodnar released on July 15.

Each balloon carries a tiny 10 mW solar-powered transmitter that can alternate between [APRS](#) and Contestia 64/1000 digital mode on 434.500 MHz (USB). The Amateur Radio payload weighs just 11 grams.

As of this week, the B-64 balloon (M0XER-4 on APRS) was north of Moscow, Russia, at an elevation of more than 40,200 feet; the B-63 balloon (M0XER-3 on APRS) appeared to be located nearly 42,000 feet above South Korea, and the B-66 balloon (M0XER-6 on APRS) appeared to be nearly 44,000 feet above Ukraine. Notes on the [M0XER-3](#) and [M0XER-6](#) APRS pages flag their reported trajectories with "Seriously bad path," however, and add, "This station appears to be flying at high altitude and using digipeaters, which causes serious congestion in the APRS network. The tracker should be configured to only use digipeaters when at low altitude."

The numeral following the "B" denotes the number of similar balloons Bodnar has launched (B-65 failed to deploy). The transmitter stores positions during its flight and transmits a log file that can recall 5 days of previous locations in the comments field of its APRS transmissions. If it has been out of radio contact, however, a straight line will appear on the APRS map. --ARRL Letter

MAJOR ARRL SECOND CENTURY CAMPAIGN GIFT FROM JA1BK WILL SUPPORT DX LOG ARCHIVE

A major donation from noted DXer Kan Mizoguchi, JA1BK, to the ARRL Second Century Campaign will support "The DX Log Archive

Endowed by JA1BK." Earnings from the generous gift will fund the creation and management of a DX Log Archive Program for paper DX logs of rare and significant DXpeditions that took place predominantly in the 1950s, 1960s, and 1970s. The archive also would include pre-1950 paper logs, as well as those from rare operations, and logs kept by long-time residents of very rare entities.

The ARRL will be reaching out to the DX community to collect paper DX station logs for inclusion. All logbooks will be inventoried and housed at ARRL Headquarters.

Confirmations from archived logs will be made available via Logbook of the World (LoTW) or, upon request, with a traditional QSL card.

The ARRL Membership and Volunteer Programs Department will manage the DX Log Archive Program. A qualified volunteer or part-time ARRL employee will execute the project. Earnings also will fund any equipment, software, and materials needed to maintain the program.

On behalf of the League, ARRL Individual Giving Manager Lauren Clarke, KB1YDD, expressed thanks and appreciation to Kan for his financial contribution that will make this new program possible. --ARRL Letter

SUMMITS-ON-THE-AIR ACTIVITY WEEKEND IS SEPTEMBER 13-14

North America Summits on the Air ([SOTA](#)) Activity Weekend 2014 is a casual event in which summing radio amateurs (called "activators") use tiny battery-powered radios to work home-based operators (called "chasers").

This year's event, September 13-14, is aimed at introducing SOTA to newcomers. There are no rules regarding power levels, modes, or bands.

SOTA operators have climbed mountains as high as 14,000 feet. They run low power, and they don't operate split, so operator courtesy is paramount.

The [SOTAwatch2](#) website offers information regarding what stations are on which mountains. Summits are numbered, and mousing over the number will reveal the name and point value for each summit.

Activity typically concentrates near 7.032, 7.185, 10.110, 14.061, 14.342, 18.095, 18.155, 21.061, 21.350, 24.905, 24.955, 28.061, 28.420, 146.52, and 446.00 MHz. Participants collect points toward SOTA certificates and trophies. -- *Thanks to Elliott Pisor, K6EL*

VENERABLE LUSAT-1 (OSCAR 19) TAKES TO THE DARK SIDE

Set to celebrate its silver anniversary next year, [LUSAT-1](#) -- which is also known as OSCAR 19 or LO-19 -- appears once again to be functioning, sort of, when not in sunlight. At this point, OSCAR 19 is only transmitting telemetry; its digital transponder has not been reported to be operational.

"We knew that our LUSAT started transmitting again a couple of years ago, but only when illuminated by sunlight and was not heard during the night," Pedro Converso, LU7ABF, reported to the AMSAT-BB. During a recent nighttime pass, though, he was surprised to hear "the usual strong 900 mW continuous carrier on 437.125 MHz," 22 minutes after LO-19 had emerged from Earth's shadow.

"It's almost a miracle that after almost 25 years, LUSAT's vintage Ni-Cd batteries can receive and hold [a] charge," he said.

Launched in 1990 from Kourou, French Guyana, on an Ariane 4 vehicle, the satellite -- Argentina's first -- has completed more than 128,000 orbits, and is one of the oldest active Amateur Radio satellites. The satellite carries a digital store-and-forward packet transponder with uplink frequencies at 145.84, 145.86, 145.88, and 145.90 MHz 1200 bps FM, with AX.25 protocol downlink at 437.125 MHz SSB.

An audio clip, tracking information, and listener reports are available via the [AMSAT-LU Reports](#) website. [Reports](#) are welcome via e-mail. --ARRL Letter

PIRATE RADIO SHIP REDUX: RADIO CAROLINE RETURNS, RADIO VERONICA, NORTHSEA SPECIAL EVENT SET

The renegade Radio Caroline, which entertained rock 'n' roll fans in the UK and Europe from the 1960s until the 1990s from offshore shipboard transmitters and studios, is back on the airwaves from the River Blackwater off England's Essex Coast using a temporary, low-power license. It has plans to obtain a permanent AM broadcasting authorization. Radio Caroline was among the first, and most famous, pirate radio ships of the era. In a related vein, Arie Rietveld, PD0ARI, of Giessenburg, The Netherlands, has announced plans to operate special event station PD538RNI to commemorate two other pirate radio ship broadcasters from rock's early days -- Radio Veronica, which last broadcast on 538 meters (557 kHz), and Radio Northsea International (RNI). PD538RNI will operate on phone from August 28 until September 19 on 10, 20, and 40 meters. Rietveld said his love of radio stemmed from listening to Radio Veronica and RNI in the early 1970s.

"Both stations transmitted from radio ships on the North Sea and had millions of listeners," Rietveld recounted in an [article](#) on Southgate Amateur Radio News. "Every day, good programs, fantastic DJs, nice jingles and radio tunes! The DJs became sort of family -- a part of your life!" Rietveld said Radio

Veronica transmitted on medium wave, while Radio Northsea International transmitted on medium wave, shortwave, and FM.

"Radio Northsea International on shortwave triggered me to listen to [shortwave] radio stations, and a new hobby was born," he said. RNI and Radio Veronica shut down on August 31, 1974, after the Dutch government made changes in the radio regulations. Radio Veronica subsequently went legit and continues to operate. After the pirate stations went dark, Rietveld got his ham radio license. "My love for radio started by listening to Radio Veronica and Radio Northsea International!" he said.

Rietveld, who enjoys operating from various locations, also occasionally operates marine/maritime mobile, and said he is on the air from PD0ARI every day.

According to Chris Arundel, G4KDX, another special event station, PA40VRON, will be on the air in late August to mark the Radio Veronica shutdown 40 years ago.

Radio Caroline, which was motivated by similar pirate radio operations on the high seas by Scandinavian and Dutch broadcasters, began operation in 1964. Named either after Caroline Kennedy or after a girlfriend of its founder, Ronan O'Rahilly, Radio Caroline transmitted on various medium-wave frequencies over the years, starting out on 1520 kHz -- announced as "199 meters, since that rhymed with "Caroline." The station ran nearly 20 kW, using linked Continental Electronics transmitters.

The earlier Radio Caroline inspired a number of competing offshore pirate radio stations, and these operations eventually compelled the staid BBC to start airing more popular musical fare. Radio Caroline finally departed the airwaves as a pirate broadcaster in 1991, after losing its anchor and running aground. The story of the shipboard station was fictionalized in the movie "The Boat That Rocked," which starred the late Phillip Seymour Hoffman. The latter-day incarnation of Radio Caroline has been a satellite and Internet broadcaster. -- *Southgate Amateur Radio News*

CANADIAN RADIO AMATEURS WILL JOIN SPECIAL EVENT THIS FALL ON 630 METERS

Canadian radio amateurs will take part in the previously announced CW-only special event operation on 600/630 meters this fall. The Maritime Radio Historical Society ([MRHS](#)), which maintains the KPH/KSM commercial coast stations, also will participate in the event. [ARRL 600 Meter Experimental Group](#) Coordinator Fritz Raab, W1FR, said the MRHS participants will conduct a mini "Night of Nights" operation, with special attention to MF operation.

"This will give listeners the best chance of copying their MF signals by operating during the fall and extending our operating hours well into the evening hours Pacific time," he said. Coast station KPH will keep 500 kHz and 426 kHz active, as well as HF, with special messages, press and weather and will verify listener reports. Raab pointed out that the event will coincide with the 106th anniversary of the Berlin Treaty that created the international distress frequency at 500 kHz.

Amateur Radio operators in Canada [gained access](#) to the 472-479 kHz band on May 1. Three Canadian radio amateurs will conduct cross-band communication tests with amateurs operating on 80 and 40 meters. Joe Craig, VO1NA, in Torbay, Newfoundland, will transmit on 477.7 kHz starting at 2130 UTC on October 31 and continuing until 0130 UTC on November 1, and listen on 3562 and 7062 kHz. On the West Coast, Steve McDonald, VE7SL, on Mayne Island, British Columbia, will be active November 1, 0200-0600 UTC, transmitting on 473.0 kHz and listening on 3566 and 7066 kHz. John Gibbs, VE7BDQ, in Delta, British Columbia, will be on the air from 0100 until 1000 UTC on November 1, transmitting on 474.0 kHz and listening on 3536 kHz.

All stations either will call CQ or run "VVV" marker beacons while listening on their respective receive (QSX) frequencies, which will be included in the CQ or marker beacon.

"The official time period is 0000 UTC on November 1 through 2359 UTC on November 2," Raab said. "These include Friday and Saturday evenings in North America. Stations on the East Coast may start a little earlier if they like."

All activity will occur between 465 and 480 kHz and between 495 and 510 kHz. Read [more](#). --ARRL Letter

SHORTS

2014 ARRL FIELD DAY LOGS RECEIVED LIST AVAILABLE FOR REVIEW – The ARRL "[Logs Received](#)" page now contains all 2014 ARRL Field Day logs received to date (scroll to bottom of page), including logs submitted via e-mail, web applet or on paper. The ARRL Contest Branch requests that Field Day participants review the [list](#) and contact ARRL Contest Branch Manager [Matt Wilhelm](#), W1MSW, (860-594-0232) no later than September 12, if anything appears to be incorrect with their entry information. --ARRL Letter

GERALD YOUNGBLOOD, K5SDR, WILL BE 2014 ARRL/TAPR DIGITAL COMMUNICATIONS CONFERENCE BANQUET SPEAKER – Gerald Youngblood, K5SDR, will be the banquet speaker at the 2014 ARRL/TAPR Digital Communications Conference (DCC), September 5-7 at the Austin Marriott South in Austin, Texas. His presentation will be, "Accidental Company, the Making of FlexRadio."

The 33rd annual DCC will offer 2 days of technical forums on Friday and Saturday and a concurrent introductory forum on Saturday (the *Proceedings* will be available following the conference). The Sunday morning seminar will be "Introduction to SoC FPGA Programming for Mixed Signal Systems," by Chris Testa, KD2BMH.

Free tables will be available to demonstrate projects and for vendors to display products. --ARRL Letter

[More information](#) on the conference is available on the TAPR DCC web page.

ARRL FIRST VICE PRESIDENT RICK RODERICK, K5UR, TO KEYNOTE W9DXCC 2014 – ARRL First Vice President Rick Roderick, K5UR, will be the banquet speaker for the 62nd annual [W9DXCC](#), September 19-20, 2014, in Schaumburg, Illinois. [Registration](#) remains open. The special hotel rate is valid through August 28; banquet orders must be received by September 13.

DXers, anyone interested in learning more about DXing, and their guests are welcome. There is a full program of forums and discussions, and some of the illuminati of the DXing community will be on hand. [E-mail](#) for more information.

W9DXCC is an ARRL-approved Operating Specialty Convention and is sponsored by the [Northern Illinois DX Association](#). --ARRL Letter

73 ON 73 AWARD ANNOUNCED – Paul Stoetzer, N8HM, is sponsoring a new award for contacts made via the UK Amateur Radio Educational Satellite [FUNcube-1](#) (AO-73) to promote activity on the satellite. The award period begins on September 1. Requirements are simple: Work 73 different stations on AO-73 (SSB or CW). There are no geographic restrictions on operating location, no QSLs are required, and the award is free, although Stoetzer encourages contributions to AMSAT-UK and to AMSAT-NA's Fox program.

[E-mail](#) log extracts containing the call sign of each station worked and the date/time (UTC) of each contact. Include your mailing address.

The AO-73 inverting transponder uplink is 435.150-435.130 MHz (LSB). The downlink is 145.950-145.970 MHz (USB). Use no more than 5 W to a 7 dBi gain antenna when accessing the AO-73 transponder. -- *Thanks to AMSAT News Service via Paul Stoetzer, N8HM* –ARRL Letter

EN GPS SATELLITE IS NOW IN ORBIT – On August 1st, a United Launch Alliance Atlas 5 rocket successfully carried an Air Force GPS-IIF satellite in the orbit. This is the seventh such satellite launched of a planned constellation of 12 such birds. This satellite is the third launched in 2014, with one more planned for later this year. (Published news reports)

ICOM PREVIEW 50TH ANNIVERSARY LIMITED EDITION IC-7850 - ICOM has displayed a pre-release version of what is calling a very special High Frequency and 6 meter radio in celebration of the company's 50th anniversary. Designated as the IC-7850, the radio is based on Icom's IC-7800 but incorporates several circuitry improvements as well as special styling.

Icom says that the IC-7850 will be produced early in 2015 but in very limited numbers. You can download a brochure on this 50th anniversary Icom radio in PDF format at tinyurl.com/new-ic-7850. A short video of the IC-7850 recorded at the Tokyo Hamfaire is on line at tinyurl.com/icom-anniversary-radio

YAESU FT-991 KW/50/144/430 MHz TRANSCEIVER - Yaesu has announced the introduction of a new High Frequency, VHF and UHF base station transceiver dubbed the model FT-991. This new transceiver is capable of operating SSB, CW, AM, FM, Packet as well as the company's exclusive System Fusion C4FM Digital Voice mode.

The FT-991 is not yet listed on the Yaesu English language website nor has any pricing been announced. However specifications are available at several independent sites on the World Wide Web including nicktoday.com. You can see a short video of this new transceiver on YouTube at tinyurl.com/n462ksn.

NEW 222 MHZ BEACON ON THE AIR FROM GRID EN52 from Clinton, Wisconsin - Located in Grid Square E N 52 the beacon operates on 222.058 MHz signing N9HF running about 3 ½ watts from a vintage Midland 13-509 transceiver into a single horizontally polarized halo antenna. The N9HF beacon went on the air at 0001 GMT on August 23rd. Reception reports go to [n9hfonthear \(at\) gmail \(dot\) com](mailto:n9hfonthear@gmail.com) (VHF Reflector, W9JJ)

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