

RCA AMATEUR RADIO CLUB

SEPTEMBER, 2013

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, SEPT. 10th, 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 crowd. Jim, AF9A, gave a report (as usual) on the status of the '88 repeater. The remote receive site at Ivy Tech is operational. Echolink still isn't opotional [Ed. Note: John, KF9UH, as temporarily loaned us a laptop with Echolink installed. This has been running on the repeater since about mid August. This is running the basic Echolink program without the 'extras' which we were running at the old location.] David, N9KT, will configure a permanent computer in the near future. Field Day with the Indy Radio Club was discussed. It was a very successful and well organized operation. Dave, N9KZJ, discussed the special event operations at the State Fair (W9ISF), the MotoGP (W9IMS), and the WW2IND operation. The upcoming autumn hamfests were discussed.

NEXT TEST AMATEUR RADIO LICENSE TEST SESSION --

Time: Saturday, September 14th at 12:00 pm (walk-ins allowed)
Location: Integrated Public Safety Commission
8468 E. 21st St.
Indianapolis, IN 46219
Contact: Rhonda S. Curtis, WS9H, WS9H@arrl.net, (317) 363-7457

IRCC ACCEPTING NOMINATIONS FOR 2013 OUTSTANDING AMATEUR OF THE YEAR

– Nominations are being accepted for the 2013 Outstanding Amateur of the Year award. Each year the Indiana Radio Club Council selects an outstanding Indiana amateur radio operator from the nominations received. All nominees will be recognized along with the final winner. The 2013 award will be presented at the November 2013 Fort Wayne hamfest, during the IRCC forum. Nominations must be received no later than October 4, 2013. Past winners are not eligible to receive a second award.

Submit questions or nominations to: Dennis Gilbey, K9JZZ, IRCC Vice Chairman
k9jzz9@gmail.com or call 317-946-9721

WLW's 500KW TRANSMITTER – While in Dayton at Hamvention 2013 Randy, K7AGE, attended a tour of the WLW AM broadcast transmitter facility located in Mason Ohio. WLW has kept a major piece of broadcasting history alive by keeping much of the old high power transmitter intact. An amazing project back in 1932. The video is at <http://www.youtube.com/watch?v=CbHjcwloTiY&feature=c4x-overview&list=UUzqG5ilOZpqFBBkAgg5iN1w>

HAMFESTS, OPERATING EVENTS

Sept 07 South Bend Hamfest & Swapmeet, <http://w9ab.org/>
Oct 05 Hoosier Hills Hamfest, <http://www.hoosierhillshamfest.org/>
Nov 16 Ft. Wayne Hamfest & Computer Expo, <http://www.fortwaynehamfest.com/>
Nov 30 Evansville Hamfest, <http://w9ear.org/hamfest.htm>

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.

"HAM VIDEO" TRANSMITTER IS NOW ABOARD THE ISS

A Japanese cargo spacecraft has delivered an Amateur Radio on the International Space Station ([ARRISS](#)) digital TV transmitter to the ISS. The equipment arrived August 9 and is being stored in the space station's *Columbus* module. Gear includes the transmitter, power supply, NASA-provided Canon XF-305 camera, and antenna cables, reports [ARRISS-Europe](#) Chair Gaston Bertels, ON4WF, who says the DATV transmitter is being dubbed "Ham Video." "Installation will be done by US astronaut Michael Hopkins, KF5LJG, who has been trained for the commissioning of the Amateur Radio digital video equipment," Bertels said in a report posted on the ARISS-EU [website](#). Hopkins will be part of the ISS crew increment heading to the station next month. The 10 W EIRP S-band (2.4 GHz) Ham Video transmitter will use one of the L/S-band "patch" antennas installed on the ISS' *Columbus* module.

Commissioning will involve a series of tests that will be performed over the course of three or four orbits. Bertels says it's possible that the transmitter will send a continuous signal between commissioning steps, offering Amateur Radio ground stations a chance to test and tune their receiving equipment. "The transmissions will be performed in automatic mode, without requiring crew time," Bertels said. "The camera, which runs on a battery, will not be used, and the ground stations will receive a black image."

A preliminary "Experiment Sequence Test" (EST) is planned for August 28-29 involving ARISS ground station IK1SLD in Northern Italy. "IK1SLD, an ARISS telebridge station often used for educational ARISS school contacts on VHF, has been upgraded for S-band reception," Bertels pointed out.

Italian manufacturer, [Kayser Italia](#) has delivered a 1.2 meter dish, a down converter and precision tracking motors, all part of the ESA-funded equipment. "For the EST, the station will receive a DATV signal from a local, low-power S-band test transmitter," said Bertels. The decoded signal will be streamed over the web to the [British Amateur Television Club](#) server, to which BATC has offered ARISS free access. ESA investigators will evaluate reception via the streaming video. "The test transmissions at IK1SLD will cover the different frequencies and symbol rates available on the Ham Video transmitter," Bertels said.

Receiving the DATV signal will be the greater challenge, Bertels says. "[D]ecoding should be possible for a ground station equipped with a 1.2 meter dish, when the ISS is within a range

of about 800 to 1000 km," he said in an [overview paper](#) on the project. This would limit the DATV reception window to about 3 or 4 minutes during a favorable pass. "ISS tracking will be far more demanding than it is for receiving VHF signals," he added. According to Bertels, Kayser Italia is to provide five ground stations in Europe.

Once the Ham Video transmitter becomes operational, it will be used for ARISS educational contacts with schools in Europe. There are no immediate plans to deploy downlink video for ARISS contacts with US schools, in part because no North American ground stations have been planned. Read [more](#). -- *Thanks to ARISS-EU Chair Gaston Bertels, ON4WF; ARISS-EU; Kayser Italia –ARRL Letter*

AUSTRALIA ENDS HIGHER POWER TRIAL FOR RADIO AMATEURS

The Australian Communications and Media Authority ([ACMA](#)) has ended an 18-month [trial](#) that allowed participating Advanced licensees in that country to run up to 1 kW on the HF bands. Advanced licensees Down Under are limited to 400 W PEP. ACMA reached its [decision](#) earlier this month following a detailed assessment begun last March.

"After taking into consideration all the data obtained as part of the assessment process, the ACMA is of the view that the arrangements put in place for the trial should not continue," the regulatory agency said in terminating the arrangement.

ACMA pointed out that slightly less than 3 percent of the 10,690 eligible licensees -- 297 in all -- took advantage of the trial. Operators had to apply for permission to participate in the trial.

"Of the 297 that did obtain the authorization, the ACMA was advised by some participants that they had not used higher power," the agency said in its decision. ACMA said participant comments it received via the Wireless Institute of Australia ([WIA](#)) indicated that the benefits of running higher power "were confined to those respondents and do not demonstrate broader benefits to the wider community."

ACMA also said some participants' knowledge and awareness of Australia's RF exposure regulations "did not meet ACMA expectations."

ACMA said that while it's aware that some countries do permit higher transmitter power output levels than Australia does, "these countries are likely to have different and unique regulatory arrangements and policy considerations." The regulatory agency said it must base its decision "on the data collected during the assessment process and the requirements of the domestic legislative environment." Authorization to operate at higher power output expires August 31.

The WIA for some time has been pushing for higher power limits for Advanced licensees, who feel the current 400 W power limit puts them at a disadvantage, especially in contests, while other countries permit 1 kW or more. After the New Zealand Amateur Radio Transmitters ([NZART](#)) was able to convince regulators in that country to raise the power limit on similar grounds, the WIA was encouraged to again pursue the matter. After the WIA was informed of ACMA's decision to end the trial, and, following talks, it was decided that the ACMA would revisit the issue next year. -- *ACMA, WIA, Jim Linton VK3PC –ARRL Letter*

VANITY HQ WEBSITE PULLS THE PLUG

After serving the US Amateur Radio community for 14 years Mike Carroll, N4MC, has shut down his [Vanity HQ](#) website.

"Vanity HQ is closed," now greets visitors to the site. "It's been a good 14 years. Thank you everyone for participating, sending bug reports and comments, and I especially thank all the Elmer volunteers who have helped me over the years. It is time for me to move on. Regards to all."

The site has had its ups and downs over its lifetime. Carroll made a similar announcement in 2004, citing "a shift in my priorities," but the site eventually remained open. Over the years Vanity HQ often was the first stop for radio amateurs seeking a vanity call sign. Among other information, it provided a list of recently issued vanity call signs as well as available call signs and active vanity call sign applications.

In 2008, the ARRL Board okayed a partnership with the Vanity HQ site to have QST Silent Key listings included in the Vanity HQ history project in an electronically searchable format.

After Carroll announced he was shutting down in 2004, Eldon Lewis, K7LS, inaugurated his [RadioQTH](#) website, which offers essentially the same information Vanity HQ did. --ARRL Letter

FCC SHOULD RETAIN OVERSIGHT OF EQUIPMENT CERTIFICATION PROCESS, ARRL SAYS

In [reply comments](#) filed July 31 on an FCC [proposal](#) to alter its Part 2 equipment certification process, the ARRL suggests that the Commission not be so quick to delegate greater authority to private telecommunication certification bodies (TCBs). The FCC's equipment authorization program aims in part to ensure that RF devices imported, marketed and used in the US comply with Commission rules and not cause harmful interference. The ARRL said it agrees with the National Association of Broadcasters ([NAB](#)), which expressed concern about the current level of TCB performance and advised against outsourcing all equipment authorization functions to TCBs. At present, the FCC still conducts evaluations for initial approval of devices requiring certification. It also approves certain "exempt" equipment, including devices that operate in UHF bands on which Amateur Radio is secondary.

"This is not a docket proceeding that *directly* affects the Amateur Service," the ARRL said in its reply comments. "However, the track record for TCB certification of RF devices in terms of errors and ill-advised grants of certification is abysmal. FCC lab staff constantly has to review and set aside TCB grants of RF equipment."

As an example the League cited the TCB grant of the ReconRobotics licensed, non-broadcast video transmitter. "The inadequacies of the TCB's evaluation of this device were visited on the Amateur Service," the ARRL told the FCC. The ARRL reminded the FCC that the League subsequently discovered several errors in the authorization application and the TCB grant of certification. The Commission is still reviewing the League's complaint, three years after it was filed.

The League also said it agrees with the NAB that the TCB certification process is less

transparent than it should be. "The public is not informed about TCB equipment authorization grants until after the fact, at which time an equipment manufacturer may have already sold large numbers of a non-conforming product if a TCB made an error in the grant," the League said. Further, the League said, the public should be informed regarding TCBs' level of accuracy and reliability.

The League said that, as a general matter, Commission enforcement of equipment authorization rules "is the proper task of the Commission's staff," and urged that the FCC, not a TCB, resolve complaints.

"ARRL is concerned that the reliability of TCBs exhibited heretofore is not sufficiently high to justify the proposed extensive delegation of the evaluation of more complex types of equipment authorizations, where interference potential is significant or where RF exposure is an issue," the League concluded. --ARRL Letter

NTIA TO INITIATE PILOT SPECTRUM MONITORING PROGRAM

The National Telecommunications and Information Administration or NTIA has filed a budget request to Congress for fiscal year 2014 seeks an initial \$7.5 million for a research and development investment. This, for a two-year pilot program to determine the benefits of an automated spectrum measurement and data collection system to better analyze actual spectrum usage.

In addition, the NTIA has issued a Notice of Inquiry to seek public comment on this proposed spectrum monitoring pilot program that, if funded, would develop and deploy a prototype system to monitor spectrum usage in up to ten metropolitan areas throughout the United States.

The Notice of Inquiry requests input from all interested stakeholders on the measurement system's design, its features, deployment options, operational parameters, expected utility, potential benefits, and other issues.

Subject to the availability of funds, NTIA will design, develop, validate, and field this prototype system and evaluate whether a more comprehensive monitoring program would create additional opportunities for more efficient spectrum access through, for example, increased and more dynamic sharing. NTIA intends to use the input received in response to the Notice of Inquiry to help design and implement such a spectrum monitoring program.

If this project goes forward it means that the ham bands from the lowest to the highest in frequency, along with that assigned to all other current users will come under the scrutiny of such a program. So to coin a phrase made popular by 73 Magazines Publisher Wayne Green, W2NSD, back in the 1980's, when it comes to our bandpace we had better use it or we might just loose it.

HAM RADIO PAYLOADS PREPARING TO LAUNCH

Two CubeSats carrying SSB/CW and FM voice transponders are scheduled to be launched into a 600 km orbit during the first half of next year. That news came during the [QB50 Project presentation](#) at the AMSAT-UK International Space Colloquium earlier this summer. The QB50 project team has signed a *Memorandum of Understanding* with AMSAT-UK, AMSAT-

Francophone and AMSAT-NL to enable two Amateur Radio payloads to fly on two yet-to-be-named "precursor" CubeSats in advance of the main mission, to deploy about 40 double satellites. The CubeSat launch allows for the testing of key satellite and payload components. In addition, the precursor mission allows for experimentation and validation of the QB50 operational concept. The Amateur Radio payloads will become the primary payload of the spacecraft once all QB50-related experimentation has been concluded.

The AMSAT-F payload for one of the satellites will be an FM voice relay with VHF uplink and UHF downlink. It will also transmit FX25 telemetry at 9.6 kbit. The AMSAT-NL payload on the other precursor satellite will incorporate an SDR-based, linear V/U transponder core. It will provide a telemetry downlink at 1.2 kbit. The QB50 spacecraft generally will have downlinks in the 435-438 MHz Amateur Satellite Service allocation, although some are expected to use 2.4 GHz.

Meanwhile, the Baltic nation of Lithuania is hoping that its first two satellites will be launched later this year from the International Space Station ([ISS](#)). The nanosatellites carrying Amateur Radio payloads could be among the CubeSats sent by payload handler [NanoRacks LLC](#) to the ISS on the [SpaceX](#) CRS-3 mission this November. The [Kaunas University of Technology](#) is developing LituanicaSAT-1, while the [Lithuanian Space Association](#) is working on LitSat-1.

This year marks the 80th anniversary of the [historic flight](#) by Lithuanian pilots Steponas Darius and Stasys Gireenas in the *Lituanica* aircraft. On July 15, 1933, they took off from Floyd Bennett Field in New York and flew across the Atlantic, covering a distance of 6,411 kilometers in 37 hours and 11 minutes. Tragically they perished after crashing in Germany, just 650 kilometers from their destination of Kaunas, Lithuania.

LituanicaSAT-1 will carry a VGA camera, GPS receiver, 9600 bps AX25 FSK telemetry beacon and a 150 mW V/U FM voice transponder. LitSat-1 is planning a U/V linear transponder for SSB/CW communications. --*AMSAT News Service/AMSAT-UK*

POPULAR "MM" APPLICATIONS RELEASED FOR OPEN-SOURCE DEVELOPMENT

Mako Mori, JE3HHT, the author of *MMTTY*, *MMVARI* and *MMSSTV*, has released these applications to open-source development under the [LGPL](#) license. This license enables developers and companies to use and integrate *MMTTY*, *MMSSTV* and *MMVARI*, while ensuring that all improvements to source code are made publicly available. [MM-Open](#) has been established to encourage and facilitate open source development. Anyone may create public or private branches of these applications.

A set of committers will maintain a master branch for each application (the initial committers are Bob, N4HY; Eric, KE5DTO; Oba, JA7UDE, and Steve, N5AC). Packaged versions of [MMTTY](#), [MMVARI](#), and [MMSSTV](#) assembled from the master branches will continue to be available from [MM Hamsoft](#). Source code for these applications is available via [GitHub](#), courtesy of [FlexRadio](#). Existing [Yahoo](#) Groups will continue to be used to convey defect reports and enhancement requests. -- *Thanks to Dave Bernstein, AA6YQ, secretary, MM-Open*

SHORTS

TOM CHRISTIAN, VP6TC/VR6TC, SK – As reported in our August Newsletter, Tom Christian, VP6RC/VR6TC, a long-time radio amateur who became known as "the Voice of

Pitcairn," died July 7 on the tiny South Pacific Island that was his lifelong home. Here is an interesting link to the New Your Times story:

http://www.nytimes.com/2013/08/24/world/asia/tom-christian-descendant-of-bounty-mutineer-dies-at-77.html?emc=eta1&_r=1&

Thanks, W9PTO.

VANITY CALL SIGN FEE GOES UP ! --The new FCC regulatory fee of \$16.10 to apply for an Amateur Radio vanity call sign went into effect Friday, August 23, when the new regulatory fee schedule will appeared in the [Federal Register](#). Earlier this year the FCC had proposed upping the vanity call sign fee from its current \$15 to \$15.20, but in the [Report and Order](#) in MD Docket 13-140, released August 12, the Commission offered no explanation for the higher fee.

In another change, starting in FY 2014, the FCC will require that all regulatory fee payments be made electronically.

The R&O ordered a broad schedule of new fees and waived the usual 30-day waiting period following *Federal Register* publication, because it feared there would not be time for FY 2013 fees to become effective before the start of the new federal fiscal year on October 1.

The FCC says it expects \$230,230 in revenue to cover the costs of administering the vanity call sign program. It anticipates 14,300 vanity call sign applications. --ARRL Letter

DXPEDITION PLANS SHAPING UP – Plans by one Canadian and two Americans to mount the [CYØP DXpedition to Sable Island](#) October 1 to October 11 are well underway.

The CYØP team includes VE1RGB, AI5P and WA4DAN, who coordinated two previous CYØ DXpeditions, including one in October 2012 cut short by Hurricane Sandy. The trio plans to operate CW, SSB and RTTY on 160 through 10 meters. VE1RGB plans to operate S&P in the California QSO Party October 5-6 as VE1RGB/CYØ. Located off the coast of Nova Scotia, Sable Island (NA-063) is the 59th most-wanted DXCC entity, according to the [ClubLog DXCC Most Wanted List](#). The group will log on paper. QSL via VE1RGB (no LoTW, eQSL or ClubLog) or via the bureau.

Separate DXpeditions this fall and winter will make Saint Vincent and the Grenadines more available for DXers. The first -- and larger -- [J88HL](#) DXpedition is planned for November 17-29 by seven operators from Poland -- SP2EBG, SP3CYY, SP3GEM, SP6EQZ, SP6IXF, SP9FOW and SP9PT. While considering possible destinations, they noticed that J8 -- which is the 116th most-wanted DXCC entity, according to the [ClubLog DXCC Most Wanted List](#). -- hasn't seen a major DXpedition in recent years. SP6EQZ says this is will not be a "holiday operation" but a dedicated radio activity on all HF bands, a serious effort on 160 and some operation on 6 meters. At least three stations will be on the air 24 hours a day on CW, SSB and RTTY. One operator may participate in the CQ World Wide DX CW in a single-operator category, while the others will operate outside the contest. QSL direct or via the bureau.

February 10-17 will see the [Caribbean Buddies](#) DX Group "enduring the hardships of DXing from [Isis Villa](#) on Bequia." This will be a lower-key "suitcase" DXpedition with Buddipole antennas and wires and 100 W transceivers -- the group's equipment complement of choice. J88EA is a possible call sign. -- Thanks to [The Daily DX](#)

COLLINS RADIO 80TH ANNIVERSARY SEPT 21-23 AND 28-30 -- Four club stations honoring the famed Rockwell Collins collaboration will be celebrating the 80th anniversary of the Collins Radio Company with a special event operation the last two weekends of September.

Stations W0CXX and N0CXX Cedar Rapids, Iowa; W5ROK Richardson, Texas; W4CRC Mel-

bourne, Florida and W6CXX Tustin, California will be on the air September 21st to the 23rd and again on September 28th to the 30th to take part in the event. Operation is from 9AM to midnight local time for each station based on operator availability.

A special QSL card for the overall event will be available to all making contact with any of the stations. A commemorative certificate will be obtainable for those working 3 or more club stations on any combination of bands and modes. More information on the operation and QSL instructions is on the web at www.w0cxx.org. --Collins ARC

VOICE OF RUSSIA TO CEASE SHORTWAVE RADIO SERVICE TO GO QRT -- It appears the Voice of Russia will cease shortwave radio service on January 1st, 2014. According to this article on a major S-W-L website, the shortwave service is closing due to government mandated funding cuts. The Voice of Russia was known as Radio Moscow in the Cold War era but actually first took to the shortwave bands back in 1922 with a single transmitter located in Moscow. (swling.com)

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