

RCA AMATEUR RADIO CLUB

AUGUST, 2011

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, AUGUST 9th, 6:30 PM AT G.T. SOUTH'S,
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE JULY MEETING -- At the July 12th meeting, the results of Field Day were discussed. We operated in the 3A class, with one station on 40M phone, the second on the other HF bands, but most of the time on 20m phone. The third station was on CW all bands, plus we had the GOTA and VHF stations. About 2900 QSO were made, conditions were good with 6 meters open for most of contest. The only downside was an annoying interference on 20m from some unknown source and a thunder storm forced a shutdown of the operations for one to two hours during the night. There were about 30 operators and a total of about 50 attending. K9RU reported that our repeater remote site receiver and antennas at the Indiana Training Center (home school) need to be removed in a week. (Editors note: It turns out IVY Tech is going to let us stay so we won't need to remove the equipment). We are still looking at possible new sites for the repeater.

THANKS FOR MAKING THE INDY HAMFEST A SUCCESS! -- The Indy Hamfest was another success story for our club. The weather and attendance was great and it was one of the largest flea markets in many years. And, stuff was priced to sell. Thanks to everyone who helped move the junk and man the booth. We saved some of the "leftovers" so we can do it again next year!

SATURDAY, AUGUST 6, IS THE ANNUAL BROAD RIPPLE HAMFEST -- The event is being hosted again by Joe and Betty Lobraico on the lot adjacent to their home at 7373 Westfield Blvd, Indianapolis, 46240. There is no admission fee or any fee for selling items. This is a "tailgate hamfest" with spots being available on a first come, first served basis. Typically, set up starts early, around 6 or so. There will be a cookout around 11:00, and probably some coffee and donuts available early.

HAMFESTS, OPERATING EVENTS & TESTING

Aug 6	Broad Ripple Hamfest & IRC Annual Picnic
Aug 6-7	ARRL UHF Contest
Aug 13	IRC Amateur Radio Testing - Noon at the Salvation Army EDS Training Facility, 4020 Georgetown Rd, Indianapolis, IN – Contact: Rhonda Curtis, WS9H
Aug 13-14	Worked All Europe (WAE) Contest
Aug 27	Indy Radio Club Hilltop Contest
Aug 27	Ripley County 4 th annual indoor hamfest
Sep 24	Hancock County Tailgate Hamfest

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.

ARISSAT-1/KEDR DEPLOYED ON AUGUST 3 - SIGNALS RECEIVED

ARISSat-1/KEDR has been deployed from the ISS during EVA-29 on Wednesday, August 3 by Cosmonaut/Flight Engineers Sergei Volkov and Alexander Samokutyaev. First signals have been received by JR8LWY reporting copy of the telemetry beacon as the satellite passed over Japan.

Full operational capability of ARISSat-1/KEDR is still under evaluation pending performance evaluation of the UHF antenna. Please submit your reception signal reports on AMSAT-BB and via the mission's e-mail boxes on <http://www.amsat.org>.

AMSAT President Barry Baines, WD4ASW, observed, "Welcome to a new era as AMSAT returns to space with ARISSat-1/KEDR. I encourage all hams, SWLs, educators, and experimenters to enjoy the unique opportunity presented by this mission to learn about amateur radio in space, enhance and improve your station, and hone your operating skills as you try out all of this satellite's features."

Barry continues, "ARISSat-1/KEDR marks a new type of satellite which has captured the attention of the national space agencies around the world for the unique educational opportunity we have been able to design, launch, and now operate. By designing an educational mission aligned with NASA's Science, Technology, Engineering, and Mathematics goals amateur radio operators around the world can now enjoy a new satellite in orbit."

ARISSat-1/KEDR Project Manager, Gould Smith, WA4SXM said, "Dozens of amateur radio volunteers, AMSAT, ARRL, NASA, and Energia have teamed up for this successful mission to bring you the most unique and innovative amateur radio satellite mission flying 220 miles above your QTH at 17,500 mph! Congratulations to all who made ARISSat-1 successful!"

Continuing, Gould said, "ARRISat-1/KEDR has been developed, built, and tested by a remarkable team of radio amateurs. As the Project Manager for ARISSat-1/KEDR these past three years I have had the opportunity to work with these creative people to get to where we are now ... IN ORBIT!"

ARISSat-1 will be active on the following frequencies and modes:

145.950 MHz FM Downlink: FM transmissions will cycle between a voice ID as RS01S, select telemetry values, 24 international greeting messages in 15 languages, and SSTV images.**435 MHz - 145 MHz Linear Transponder:** The linear transponder will operate in Mode U/V (70 cm Up, 2m Down). It is a 16 kHz wide inverting passband and the convention will be to transmit LSB on the 435 MHz uplink and receive USB on the 145 MHz downlink.

145.919 MHz/145.939 MHz CW Beacons: The CW transmissions will be call sign ID RS01S, select telemetry, and call signs of people actively involved with the ARISS program. **145.920 MHz SSB BPSK-1000 Telemetry:** The BPSK transmissions will feature a new 1kBPSK protocol developed by Phil Karn, KA9Q. When the CW2 beacon on 145.919 MHz is active this indicates that the BPSK-1000 format is being transmitted. If the CW1 beacon on 145.939 MHz is active this the backup of BPSK-400 format is being transmitted. More information and links to software downloads are available on the **AMSAT web site:** <http://www.amsat.org/amsat-new/index.php>. --AMSAT News Service

ARRL ASKS FCC TO KEEP 2300 MHZ PROCEEDING OPEN

In June, the FCC released a *Public Notice* that sought comments on whether or not it should terminate **approximately 800 docketed proceedings** in the Wireless Telecommunications Bureau (WTB), the International Bureau (IB), the Office of Engineering and Technology (OET) and the Enforcement Bureau (EB). Some of the proceedings set for possible termination affect the Amateur Radio Service. On July 20, the ARRL filed **comments** with the FCC on this matter, explaining that it has no objection

to the termination of the proceedings in the *Public Notice*, save for one item. “With respect to the Office of Engineering and Technology dockets slated for termination,” the ARRL stated in its comments, “there is one Amateur Radio-related proceeding that, in the ARRL’s view, should not be terminated, but retained in open status.

Earlier this year, the FCC adopted procedural rules specifying that proceedings where pending petitions addressing the merits should not be terminated without the consent of the parties involved. “With this in mind, the ARRL does not consent to the termination of the proceeding initiated by its May 2001 rulemaking petition [RM-10165](#), *Amendment of Parts 2 and 97 of the Commission’s Rules Regarding the 2300-2305 MHz Band*,” the League stated in its comments. In this *Petition*, the ARRL requested that the FCC change the Amateur Radio Service’s allocation in that band from Secondary to Primary.

According to the ARRL, the status of the Amateur Radio allocation at 2300-2305 MHz is of current relevance because of actions taken by the Commission with respect to an adjacent band at 2305-2320 MHz and because of other unrelated proposals for the use of the 2300-2305 MHz band. “In a [Report and Order and Second Report and Order](#), the FCC amended certain technical rules governing the Wireless Communications Service (WCS) in the 2305-2320 MHz band, so as to delete the effective limitations on WCS terrestrial operations to fixed services and to enable licensees to provide mobile broadband services in 25 megahertz of the WCS band, the ARRL said in its comments. “In so doing, the Commission indicated that out-of- band emissions from WCS, when expanded to permit mobile broadband and portable devices at up to 250 mW EIRP, will have an effect on amateur operations in the 2300-2305 MHz band.”

The FCC, in the *Report and Order and Second Report and Order*, explained that “we note that some amateur stations operating around 2304 MHz may experience an increased antenna noise temperature caused by the implementation of mobile WCS operations, and will have to tolerate this change in the RF environment. Due to the technical flexibility allowed to amateur stations in Part 97 of our rules, however, we believe that operators of these stations may be able to offset or mitigate the effects of this change by relocating or redirecting their antennas, or by making other permitted technical adjustments.”

The ARRL explained that this conclusion -- and the issue of interference to Amateur Radio operation at 2300-2305 MHz -- has been challenged by ARRL in a pending [Petition for Clarification or Partial Reconsideration](#) filed September 1, 2010

Due to the current relevance of the allocation status (and interference protection status) of the Amateur Service at 2300-2305 MHz, and considering that in October 2002, the FCC did not make any decision with respect to the allocation status of that band and postponed it to some unspecified future time, the ARRL maintains that “the RM-10165 proceeding should remain open and pending, and that the Commission should revisit the allocation status of the Amateur Radio Service at 2300-2305 MHz, and the ARRL’s justifications offered for a change from Secondary to Primary status in that band now.”

ARRL SOLICITING STATIONS TO BECOME EMERGENCY LIAISON STATIONS

During the 2008 hurricane season, ARRL Headquarters instituted a Command-Control-Coordination (C3) operation to support operations taking place in the affected ARRL Sections. One requirement was the need for Headquarters to establish radio links into the affected areas. Due to a number of factors,

W1AW had no capability to reach into these areas. Even as propagation improves with the return of sunspots, normal characteristics of the bands will not permit continuous communications links over the high frequency bands from Newington.

Propagation on 40 and 80 meter HF nets -- while providing excellent coverage of several hundred miles in the impacted areas -- did not allow W1AW to monitor these frequencies, nor did it permit monitoring of developing conditions that would allow Headquarters staff to maintain a higher level of situational awareness and disaster intelligence necessary for support operations.

ARRL West Gulf Division Director David Woolweaver, K5RAV, offered his EchoLink system to ARRL during the 2008 hurricane season. Woolweaver -- who had good propagation into the impacted areas during the tropical events in the Gulf of Mexico area -- established a connection between his home HF equipment and EchoLink. By connecting in to this, W1AW was able to use a direct EchoLink connection to Woolweaver's home station, enabling W1AW to come up on these HF frequencies. With EchoLink, the ARRL was to maintain contact between the affected areas and with the **National Hurricane Center** and **VoIP Hurricane Net** operations

The need to build out the capability to link HF stations to EchoLink was clear and Woolweaver began to enlist other stations in Texas to develop it. But according to ARRL Emergency Preparedness Manager Mike Corey, W5MPC, it has been an ad hoc effort with known stations with no official standing for emergency communications with the ARRL. Additionally, while a regional capability was developed in a part of Texas, the ARRL needed to have this capability throughout the rest of the country.

The concept of the *Emergency Radio Internet Linking System* (ERILS) was crafted to meet this need, with ERILS stations operating under the ARRL Emergency Preparedness Program. Stations would be designated Official ERILS Stations after meeting specific criteria that would enable them to blend the capabilities of radio and the Internet, permitting emergency communications and a W1AW presence to occur. Stations would be geographically diverse, providing redundant pathways into multiple areas of the United States. While EchoLink was used successfully in 2008, other current and future software platforms could be used with traditional RF capabilities to meet the mission needs.

"Individual stations are the key component of ERILS," Corey explained. "These stations require a particular designation for planning and response purposes, and as recognition of the station owner's resources and commitment. These stations are designated as an *Emergency Liaison Station*. An ELS is not an Official Emergency Station (OES) that is part of the ARES® program, but is a separate resource available to the Emergency Preparedness Manager, or designees, and the ARRL Leadership."

The requirements for being an ELS station are:

- Hold at least a General class Amateur Radio license
- Have a high speed Internet connection
- Have primary and back-up HF transceivers
- Have multiple antenna capabilities for operating on 80, 40 and 20 meters
- Be an experienced EchoLink user capable of interfacing software/hardware with HF transceiver
- Have the computer equipment necessary to support current and future software platforms
- Be able to serve as control operator for long durations
- Have backup power capability for the station

The ELS designation is made by the ARRL Emergency Preparedness Manager, at the recommendation of the amateur's Section Manager. If you are interested in the ELS designation, please contact your Section Manager. You can find a listing of Sections **here**, or on page 16 in any issue of *QST*. –ARRL Letter

FCC ISSUES *CITATION* TO CANADIAN COMPANY FOR MARKETING UNAUTHORIZED DEVICES IN US

On July 6, the FCC issued a *Citation* to **New Generation Hobbies** of Woodbridge, Ontario, Canada, for marketing unauthorized radio frequency devices in the United States that operate on restricted frequencies. This is in violation of Section 302(b) of the Communications Act and Sections **2.803** and **15.205(a)** of the FCC's rules. In the *Citation*, the FCC advised New Generation Hobbies to "take immediate steps to come into compliance and to avoid any recurrence of this misconduct. As explained [in the *Citation*] and as provided in the Communications Act, future violations of the Rules in this regard may subject [the] company to substantial monetary penalties, seizure of equipment and criminal sanctions."

The FCC acted in response to a complaint alleging that New Generation was marketing certain video transmitters that operate on restricted frequencies in the 2.4 GHz band. In September 2009, the FCC sent a *Letter of Inquiry* to New Generation. At that time, the FCC Spectrum Enforcement Division observed that New Generation was marketing two 2.4 GHz transmitters on its website: the LawMate 500 mW 2.4 GHz transmitter and the LawMate 1 W 2.4 GHz transmitter. The Amateur Radio Service is allocated portions of the 2.4 GHz band on a primary basis. As of July 6, the LawMate 500 mW 2.4 GHz transmitter was **still available** on the store's website.

New Generation responded to the FCC's *Letter of Inquiry* in October 2009, saying that it began marketing these devices on its website in 2008 and has sold 25 units each of the LawMate 500 mW 2.4 GHz transmitter and the LawMate 1 W 2.4 GHz transmitter to customers in the United States. According to the *Citation*, New Generation told the FCC that both devices are capable of operating on 2410 MHz, 2430 MHz, 2450 MHz, 2470 MHz, 2370 MHz, 2390 MHz, 2490 MHz and 2510 MHz. In its response, New Generation indicated that it purchases these two devices from a manufacturer in Taiwan. New Generation claims that it sells the devices in question online via its website and maintains that "the customer who makes the purchase is the importer."

The FCC noted in the *Citation* that New Generation claims that it does not target United States customers with any of its products: "In this regard, it states that it does not advertise or promote any of its products in the United States and that its website is 'located in Canada and not in the United States.' Further, it asserts that '[a]s a Canadian company that does not have any affiliates, agents, distributors or resellers in the United States,' it is 'not required to be aware of or follow United States and FCC regulations when listing products' on its website."

Even so, New Generation told the FCC that beginning in 2009, it placed "notes and warnings next to product descriptions informing customers to be aware of the legality of their respective purchases and importing such products to the United States." New Generation also indicated to the FCC that there is a warning next to the two devices in question that a US Amateur Radio license is required to operate the devices due to their power output. New Generation also told the FCC that it has "placed additional warnings for the channel numbers which are outside of the allowed US frequency spectrum."

According to the *Citation*, based on the information provided in New Generation's response to the FCC's *Letter of Inquiry*, the LawMate 500 mW 2.4 GHz transmitter and the LawMate 1 W 2.4 GHz transmitter are both ineligible for a grant of certification. "New Generation's response confirms that both transmitters operate within restricted frequency bands listed in section 15.205(a) of the rules," the *Citation* reads. "As such, these devices cannot comply with the FCC's technical standards and therefore cannot be certified as required by Commission Rules or marketed in the United States."

The FCC disagreed with New Generation's claims that it is not targeting its marketing to customers in the United States and that, as a Canadian company, as it does not have any affiliates, agents, distributors or resellers in the United States, it is not required to be familiar with or follow FCC regulations: "Section 302(b) of the Communications Act and Section 2.803 of the rules apply to radio frequency devices marketed in the United States regardless of whether the devices are marketed by a domestic or foreign company. 'Marketing' includes 'sale or lease, or offering for sale or lease, including advertising for sale or lease, or importation, shipment or distribution for the purpose of selling or leasing or offering for sale or lease.' New Generation admits that it offered for sale (via its website), sold and shipped the devices at issue to customers located in the United States. While New Generation claims that it included warnings on its website informing customers that it may not be legal to operate these devices in the United States, these warnings do not negate New Generation's violations of the Communications Act and the Commission's Rules."

While Amateur Radio Service equipment is exempt from the FCC's equipment certification requirement, it is a "violation of the Commission's rules to market in the United States a transmitter that is designed or intended to operate on frequencies outside of the authorized Amateur Radio Service bands if such equipment has not been issued a grant of equipment certification," the *Citation* noted. "The LawMate 500 mW 2.4 GHz and 1 W 2.4 GHz transmitters operate on frequencies outside of the authorized Amateur Radio Service bands, including restricted frequencies listed in section 15.205(a). Thus, these devices are not Amateur Radio devices exempt from the equipment certification requirements."

Furthermore, the FCC emphasized that it is "insufficient and misleading for manufacturers and retailers, like New Generation, to include a disclaimer on their websites stating or implying that US consumers bear sole responsibility for complying with the applicable legal obligations." The FCC noted that such disclaimers are misleading "because they fail to disclose that entities offering unauthorized devices are also violating the Communications Act and the Rules. In this regard, we note that section 2.803 of the Rules is specifically directed at, and enforceable against, persons *selling*, *leasing*, *offering for sale* or lease, *importing*, *shipping*, or distributing for the purpose of sale or lease, noncompliant radio devices in the United States. Consequently, New Generation violated the Rules both by offering the device for sale to US customers and completing the sale transaction, and its use of a disclaimer does not absolve it of liability."

If, after receipt of the *Citation*, New Generation violates the Communications Act or the Rules continuing these actions, the FCC may impose monetary forfeitures of up to \$16,000 for each such violation or each day of a continuing violation, and up to \$112,500 for any single act or failure to act. In addition, violations of the Communications Act or the Rules can result in seizure of equipment through *in rem* forfeiture actions, as well as criminal sanctions, including imprisonment.

New Generation has until August 5 to respond to the *Citation*, either through a personal interview at the FCC office in Detroit or via a written statement. –ARRL Letter

SHORTS

SOUTH SUDAN DXPEDITION -- Here is the latest information from **Paul, N6PSE** regarding the South Sudan DXpedition:

Dispatch Juba: The STOR team continues to work through the pile ups, now passing the 60,000 QSO mark. We are continuing to run five stations and we are trying to get QSOs into the hands of all who need them.

As is the custom and practice of the Intrepid-DX Group, we have invited local youth to visit our operation. Today, we arranged a visit of 25 boys from the Juba Secondary Boy's Academy. We gave

the boys a tour of the STOR shack and explained to them the various aspects of amateur radio. We allowed them to listen as we made QSOs across the world. We have recorded this visit on the STOR photos page: <http://www.dxfriends.com/SouthernSudan2011/photos.php>

We are just at the half-way mark of the DXpedition and we will continue to be active until August 10th, 2011. Thank you, *The STOR Team* --SouthGate ARC

ONE HAM KILLED, ANOTHER SERIOUSLY INJURED IN TOWER ACCIDENT -- As a group of South Dakota hams were dismantling a 110 foot tower outside of Hot Springs on Saturday, July 16, a gust of wind toppled the final section, trapping two local hams underneath. Tim Anderson, K0OR, 54, and Tom Embree, NC0K, were transported to Rapid City Regional Hospital via helicopter, where Anderson died of his injuries. Embree underwent surgery on Sunday and Wednesday; he remains in serious condition. Both are members of the Hot Springs Amateur Radio Club; Anderson was the club's president. Hot Springs is located about 57 miles south of Rapid City. Read more [here](#). -- ARRL Letter

PUBLIC SERVICE: HURRICANE WATCH NET SEEKS NEW MEMBERS -- The various organizations that assist the National Hurricane Center (NHC) in Miami are gearing up for what forecasters are predicting to be a very active storm season. One organization that assists the NHC is the Hurricane Watch Net (HWN). One of the functions of HWN is to provide on-the-ground, real-time weather data to the forecasters at the NHC. The HWN gets this weather data from Amateur Radio operators who volunteer their time to monitor data from their calibrated home weather stations and report that data to the HWN. To better assist the NHC, HWN Manager Kirk Harding, K6KAR, told the ARRL that the HWN is looking for new members. Read more [here](#). --ARRL Letter

ON THE AIR: THE BANDS HEAT UP FOR THE 2011 ARRL AUGUST UHF CONTEST -- VHF/UHF weak-signal operators across North America are making final tests on their stations in preparation for the [2011 ARRL August UHF Contest](#), scheduled for the weekend of August 6-7. Most VHF+ SSB/CW operation takes place on the two lowest-frequency bands of the VHF spectrum: 6 and 2 meters. But a lot of activity takes place above 144 MHz in the UHF portion of the radio spectrum and beyond. This contest will focus on 220 MHz and above and there will be lots of activity -- and hopefully lots of propagation, too! Read more [here](#). -- ARRL Letter

OFCOM TESTS 70 CM BAND IN ADVANCE OF 2012 SUMMER OLYMPIC GAMES IN LONDON -- In April, Ofcom -- the British equivalent to the FCC -- approached the Radio Society of Great Britain (RSGB) to help determine which sections of the 70 cm band could be used by the London Olympic Committee for a limited period before, during and after the 2012 Summer Olympic Games and the 2012 Summer Paralympic Games. Both events will be held in London.

"As a secondary user of the band, we as radio amateurs have no specific rights to any of those frequencies," the RSGB stated on its website. "Rather than just imposing changes, Ofcom has approached the Society in the spirit of cooperation to work together to solve the problem. The RSGB intends to work constructively on this matter to reach agreement with Ofcom on the segments that can be released on a temporary basis. Ofcom has given clear and unambiguous assurance that the segments used will be returned once the London 2012 Games are over." Read more [here](#). --ARRL Letter

RECONROBOTICS PAYS \$17,500 TO END FCC INVESTIGATION OF RULES VIOLATIONS - July 13, the FCC announced that its Enforcement Bureau and ReconRobotics have entered into a Consent Decree. This resolves an FCC investigation in response to a complaint filed by the ARRL. In 2010, the ARRL alleged that ReconRobotics had violated Section 302a(b) of the

Communications Act of 1934 as amended and Section 2.803 of the Commission's rules regarding the manufacturing, marketing, distributing and selling of radio frequency transmitters. In the complaint the ARRL alleged that ReconRobotics had unlawfully marketed the Recon Scout -- a remote-controlled, maneuverable surveillance robot operating in the 430-448 MHz band -- to public safety agencies and certain security personnel prior to the grant of a necessary waiver. The FCC granted a waiver to ReconRobotics in 2010 allowing public safety licensees to operate the device in a portion of the 70 cm band. To date, no license applications have been granted by the Commission for the device and the ARRL has petitioned to deny all applications filed.

HURRICANE WATCH NET SEEKS NEW MEMBERS -- The various organizations that assist the National Hurricane Center (NHC) in Miami are gearing up for what forecasters are predicting to be a very active storm season. One organization that assists the NHC is the Hurricane Watch Net (HWN). One of the functions of HWN is to provide on-the-ground, real-time weather data to the forecasters at the NHC. The HWN gets this weather data from Amateur Radio operators who volunteer their time to monitor data from their calibrated home weather stations and report that data to the HWN. To better assist the NHC, HWN Manager Kirk Harding, K6KAR, told the ARRL that the HWN is looking for new members.

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