

RCA AMATEUR RADIO CLUB

NOVEMBER, 2007

MONTHLY NEWSLETTER

INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, NOVEMBER 6th, 6:30 PM AT THE [CLADDAGH IRISH PUB](#),
3835 E. 96th STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE OCTOBER MEETING – The 2-October meeting was held at the Claddagh Irish Pub, just across the parking lot from Dookz which has closed. AF9A reported the '88 repeater was off the air for a couple of days the first part of Sept. because of a fuse failure in the Astron power supply which runs the final power amplifier. Echolink has been operating normally during September. UPSs have not yet been installed to power the two computers and Ethernet switches needed to maintain the internet connection to the shack in case of a short power failure. We have four 600-650VA UPSs available but they will need new batteries. K9RU will evaluate how many will be needed by the next meeting. Also, K9RU will update the Club information on QRZ.com. The physical security (reinforcing the door) of the repeater shack was discussed again. Those present voted to have the November meeting at Claddagh again. Any suggestions for other meeting locations will be considered.

ON THE AGGENDA FOR THE NOVEMBER MEETING – The Ft. Wayne Hamfest is coming up. Is anyone interested in car pooling? We will need to get the batteries for the UPSs for the repeater. [GT South's BBQ](#) on 71st and Binford Blvd. has been suggested and we think they have a meeting room.

W9CGI OFF TO THE USVI AGAIN -- The following was received from Dave, W9CGI: Good news ! I got the license for WP2AIJ so we are again "legal" in the Caribbean.

Please convey to RCA-ARC members at the November 6 meeting, all are still welcome to "join" the HEARO club and use the WP2AIJ anywhere in the USVI. HEARO dues are the same as the RCA-ARC dues, \$0.00.

It does not look promising (with my departure date Nov 6) for getting the ZF2CGI license for this trip, but I have laid all the paperwork and made some good email friends and contacts in the Caymans that I will look up while there. Maybe next trip. The place I am staying seems quite amiable to hams operating from there, and by email we even discussed giving us an upstairs corner (2nd floor of 2 throughout complex - 6 buildings) room(s) and putting a SMALL reasonable temporary antenna on the roof ?? I will pursue with them while there.

Hope all have fun at the November meeting as I hope to have one hand full of rum and the other... :-) .. by the time the meeting starts. Let me know on return if all still like the new restaurant. I think they treated us really well for a last minute drop in thing ??? Wish they had a room like DOOKZ - butttttt... was not noisy etc. and I'll bring my headlight for the menu next time ;-) ... thanks guys... Dave W9CGI

OTHER RCA RELATED NEWS – Thomson A/V SBU has been sold to Audiovox Electronics Corporation. This is a different business unit from the Audiovox Accessories Corporation which was the Thomson Accessories business that Audiovox purchased last January.

The RCA Retirees Health Insurance meeting did provide a chance to get together with some of the RCA hams not seen for awhile, Fred Tenner, Phil Owens, Jim Haussin, Tim Reynolds and Jim Canterbury to name a few.

On the bad news side, Thomson's Atlinks laid off their engineering department and we heard there was between 21 – 23 people involved. Club members affected include Clarence Rudd W2PGS, Terry Adams, W9GRZ, and Charlie Clauser, N9AQE. Clarence has been an active member and hosts the W9RCA.org website.

FOUR HOOSIER HAMS ARE TOP NOTCH -- Congratulations to four outstanding Hoosier Amateur Radio Operators who have been nominated for the prestigious 2007 IRCC Outstanding Amateur of the Year award. Each year the Indiana Radio Club Council selects one amateur who has recruited new hams, taught classes, volunteered to conduct exam sessions, participated in public service events and worked to advance amateur radio in the community.

Four individuals have met that criteria and will be honored in a special forum at the Ft. Wayne Hamfest November 17, 2007.

Those being honored are:

- Gary Adams W9EEU of Terre Haute
- Bill Kennedy WY9T of Indianapolis
- Tony Langer W9AL of North Judson
- Emery McClendon KB9IBW of Ft. Wayne

Join us for the IRCC forum and Outstanding Amateur of the Year presentation at 11:30AM in the White Room. Jack Parker, W8ISH, IRCC Chairman

ARTICLE ABOUT W9IMS IN NOVEMBER QST -- The long-awaited November 2007 QST issue has arrived... and as promised, it contains Brian Smith W9IND's, article about Amanda Feriante, AF9YL, the 11 year old extra class operator from California, and the Indianapolis Motor Speedway Amateur Radio Club. There are four photos that portray Amanda, her little brother Isaac, Heather Heining, KB9ZLB, and Johanna Fulk (Trevor's, N9YM, unlicensed -- but radio-savvy -- little sister), not to mention Terri Stacy and Jeff Pigeon of WIBC. --IRC Newsletter

NEW PROCEDURE FOR HAM RADIO LICENSE PLATES -- As some of you may have already found out, there is a change in the way we can get and renew our ham radio license plates. The plates will need to be reserved for the \$8.00 administrative fee in advance, as before. The difference is that the Ham plates will not be available at the local branches any longer. They will all be mailed from the Winchester branch. Thanks to Ron Williams, W9YZ, for this information. --IRC Newsletter

NOTE ON THE 2007 MUSEUM SHIPS EVENT – Here are the results for the 2007 Museum Ships event. Additional information is at <http://users.tellurian.com/freddie/nj2bb/ship-event.html> No official announcement on the Top Ship Award; but the USS Indianapolis Memorial had the top score in the world!!! 1634 confirmed.

Top Five on the list:

- 1. USS Indy Curiser Memorial..... 1634
- 2. LS Huron Lght ship MI 1376
- 3. ITN Dandolo Sub. Italy..... 1226
- 4. STR Portland Stearnwheel Tug, OR 1039
- 5. USS Missouri Battleship Pearl Harbor 848

Great job for all the USS Indianapolis OTA participants. Thanks! Chuck Crist- W9IH

The RCA ARC is one of the event sponsor Clubs and Dave Jarvis, N9KZJ is our club representative and active with the group.

BAND CONDITIONS AND CONTESTS – We are at the bottom of the sunspot cycle and with no sunspots to be seen band condition have been bad all summer. Last weekend was the CQWW Phone contest and the band were not that bad, despite the low sunspot numbers. Both 20 and 15 meters were open all day and 10 meters even opened. Contests seem to find the band openings otherwise missed. We have a couple of the major contest coming up, the ARRL SS CW and Phone contest in November and the ARRL 10 meter contest in December. These are great contests for anyone one working on a WAS. – K9RU

HAMFESTS; EVENTS

17-18 Nov Fort Wayne Hamfest, Ft. Wayne, IN <http://www.fortwaynehamfest.com/>
24 Nov EARS & The Ham Station, Evansville, IN <http://w9ear.org/hamfest.htm>

ARRL FACES FCC IN FEDERAL COURT OVER BPL ISSUES

On Tuesday, October 23, the ARRL faced the Federal Communications Commission in the US Court of Appeals over the continuing debate concerning harmful interference to licensed radio services from unlicensed Broadband over Powerline (BPL) systems. BPL is the delivery of broadband Internet communications using unshielded electrical wiring to conduct high-speed digital signals to homes and businesses. BPL systems are designed to conduct RF energy through unshielded, medium voltage power lines, using some or all of the HF spectrum between 1.7-80 MHz. At those frequencies on unshielded overhead power lines, the electrical wiring not only conducts the signals, it radiates them very efficiently for very substantial distances from the power lines.

In October 2006, the League petitioned the United States Court of Appeals for the DC Circuit to review the FCC's October 2004 Report and Order (R&O) in ET Docket 04-37 and 2006 Memorandum Opinion and Order which generally denied all of the 17 petitions for reconsideration. In its brief initially filed May 17, the ARRL contends, among other things, that the FCC's adoption of rules to govern unlicensed BPL systems fundamentally alter the longstanding rights of radio licensees, including Amateur Radio operators. Specifically, the FCC order, while adopting rules that it claimed would minimize instances of harmful interference to licensed services, eliminated a fundamental requirement for unlicensed devices, and held for the first time that BPL systems need not shut down in the case of unresolved instances of harmful interference to "mobile" stations.

The ARRL argues that the FCC's BPL rules violate Section 301 of the Communications Act, which requires that operators of devices that emit radio frequency energy which have a substantial interference potential cannot operate without an FCC license. "For years, the FCC has consistently read Section 301 to apply to unintentional radiators, such as BPL devices, and has expressly embodied that interpretation in its rules," the League's brief recounts. The brief notes that extensive studies done by the National Telecommunications and Information Administration conclude persuasively that interference from BPL to mobile stations can be expected at distances up to almost a football field, and to fixed stations at distances up to five football fields.

The Commission then compounded its error by asserting that BPL devices do not fall within Section 301 at all, the League said. "This hail-Mary attempt at justification is another unexplained departure from prior policy that independently requires invalidation of the orders," the ARRL remarked in its brief.

The ARRL contends that the FCC orders under review "jeopardize the license rights of ARRL's members and other license holders by authorizing providers of a new device -- Access Broadband over Power Lines, or 'BPL' -- to send radio signals across the electric grid in the frequencies the license holders occupy, but without having to obtain an FCC license."

Each side had 20 minutes to present their case, with the League going first. Attorney Jonathan Frankel, of the WilmerHale Law Firm, argued the case for ARRL before the three judge panel; Attorney C. Grey Pash, of the FCC General Counsel's office, argued for the FCC. According to ARRL President Joel Harrison, W5ZN, who attended the Court session, Frankel's argument centered on the removal of interference protection for licensed mobile stations, and the Commission's rules for measuring interference. "Frankel received multiple, direct questions from each of the judges concerning the topics in the briefs, and responded to each very well," Harrison said.

"Judges Tatel, Rogers and Kavanaugh interrupted both sides repeatedly with intelligent, challenging questions," ARRL Chief Executive Officer David Sumner, K1ZZ, said. "For example," Sumner continued, "while quizzing Frankel, the judges sounded skeptical that interference to mobile stations couldn't simply be regarded as 'not harmful' because it was temporary; but then, when quizzing the FCC's attorney, Judge Tatel said in response to the statement that 'mobile stations could simply move,' that in the case of BPL in Manassas, Virginia for example, you can only get away from the interference by leaving Manassas.' It wasn't, he went on to say, like a garage door opener."

For the first time in decades, the FCC decided against requiring that operations found to cause "harmful interference" be shut down immediately -- a stance that ignores the "right of the license holder to be free from interference," Frankel said in court. The FCC has also withheld portions of studies that would "potentially" show BPL does cause harmful interference to other devices -- and ignored reports of tests the ARRL argues offer "substantial" evidence of interference problems, he continued. "We're talking about devices that radiate for football fields in length and all along power lines," Frankel said of the BPL gadgets. "When you drive down the street, [an Amateur Radio operator's] service is interrupted constantly."

"All three judges were clearly very familiar with the written record. They spent a lot of time on the issue of what information the FCC had withheld from public view (redacted)," Sumner said. "In the course of the argument, the FCC's attorney had to acknowledge that the Commission's explanations in the BPL proceeding were deficient in a number of respects, although it wasn't clear that administrative agencies are held to a very high standard in that regard."

Harrison said that Pash, the FCC's attorney, began his defense of the FCC orders and was almost "immediately interrogated" by the judges on the Commission's premise that "a mobile station in a licensed service should not be afforded complete protection from harmful interference just because it can just move away from the interference.

Pash also came under what Harrison called "considerable direct questioning" concerning the redacted material from the FCC's response to the ARRL's Freedom of Information request. ARRL had asked the FCC to produce all of what FCC described as "extensive" studies allegedly justifying its BPL order, on which the FCC relied in adopting the BPL rules. The FCC had deleted what appeared to be any material in that one single study that indicated that interference from BPL systems was likely. One page that was completely redacted was a Powerpoint slide titled "New Information Arguing for Caution on HF BPL." The FCC claimed that was not factual information, but just staff advice. Pash "attempted to present a position that the material pertained to 'staff opinion' that was determined to not be a basis for the FCC's decision," Harrison said. According to Pash, the redacted sections referenced earlier sections of the report, and were not "a bunch of new information," Harrison added.

Pash defended the Commission's approach. He said the FCC didn't require the so-called "cease-operations" rule because it didn't find ample evidence that BPL posed any real potential for "harmful" interference. He said the studies the FCC relied upon, including one by the US National Telecommunications and Information Administration, found that so long as the FCC restricts the strength of the signals emitted by BPL devices -- as it did through its rules -- others sharing that spectrum "won't notice a difference" in the quality of their services.

Attorney Frankel reserved seven of his allotted 20 minutes for rebuttal mobile operations and also emphasized that "unless we have an opportunity to review the redacted material, no determination can be made as to its role in the FCC's rulemaking decision," Harrison said.

Both Sumner and Harrison said they were "quite impressed" with the knowledge that the judges had concerning the case and with the questions that they asked. Harrison said it could be "three months or more" before the Court announces its decision. - Some information from cnet.com --ARRL Letter

FCC'S RILEY HOLLINGSWORTH TO RETIRE IN JANUARY 2008

Riley Hollingsworth, Special Counsel in the FCC's Enforcement Bureau, announced his retirement this week, effective Friday, January 3, 2008. While his successor has not been named, Hollingsworth was quick to point out that the FCC's Amateur Radio enforcement program will continue.

Hollingsworth told the ARRL: "After about a year of thinking about the 'if not now, when?' question, I decided to retire January 3. I love working for the FCC and I've always had great jobs, but this one involving the Amateur Radio Service has been the most fun and I have enjoyed every day of it. For nine years I've worked with the best group of licensees on earth, enjoyed your support and tremendous FCC support and looked forward every day to coming to work. The Amateur Radio enforcement program will continue without missing a beat, and after retirement I look forward to being involved with Amateur Radio every way I can. I thank all of you for being so dedicated and conscientious, and for the encouragement you give us every day."

Speaking at the New England Division Convention in August 2000, Hollingsworth offered his 10 personal suggestions to secure a sound future for Amateur Radio <http://www.arrl.org/arrlletter/00/0901/rileys10.html>, encouraging amateurs to "seize the moment" to ensure a bright future for Amateur Radio. "Look beyond enforcement," he urged, "because if I do my job right, in five years you won't even remember my name." Hollingsworth said that while no one can predict the future, amateurs must invent theirs in an era of converging digital and RF technology. "There is no reason why our Amateur Radio Service can't be the envy of the rest of the world," he said. Getting there, he suggested, comes with each amateur's taking responsibility for his or her behavior on the air. Amateurs should encourage arrogant, negative operators to "take their anger and hate to the Internet," he said. "Every minute they are on the Internet is a minute they aren't on Amateur Radio."

Upon learning of Hollingsworth's retirement, ARRL Chief Operating Officer Harold Kramer, WJ1B, said, "Riley Hollingsworth has been a tremendous supporter of and asset to the Amateur Radio Service. He will be remembered as being the force behind the re-introduction of Amateur Radio enforcement in 1998 and continuing those efforts through today. His contribution in cleaning up the amateur bands has been substantial and effective. We are very sorry to see him go, and we wish him every continued success." --ARRL Letter

NEW ARISS ANTENNAS INSTALLED ON COLUMBUS

Two Amateur Radio on the International Space Station (ARISS) antennas have been installed on the nadir side of the new International Space Station's Columbus module, set to launch later this year. On October 12, the antennas successfully passed electrical and SWR tests, with one of the two antennas, Antenna 42, going through a final test -- a thermal test under vacuum. Based on modeling, engineers have no fear the antenna will pass with flying colors. Columbus will house an additional Amateur Radio station, including the first digital Amateur Radio TV (DATV) station in space, as well as a ham radio transponder. The yet-to-be-built Columbus amateur gear will facilitate operation on new frequencies that will make it possible for ARISS to establish wideband and video operations for the first time and allow continuous transponder operation. Video from the installation and inspection is available at the Columbus Web site <http://www.ariss-eu.org/columbus.htm>.

At the ARISS International conference last year in San Francisco, Graham Shirville, G3VZV, speaking on behalf of ARISS-Europe, outlined plans for a mode L/S ham radio transponder as well as a DATV downlink on S1 band (2.4 GHz). "So, future ARISS contacts could have pictures as well as sound," Shirville told the delegates. ARISS-Europe is looking at a 10 W transmitter and a signal bandwidth of from 4 to 8 MHz. Since the Columbus module will be some distance from the other two ARISS stations, parallel operation will be possible.

Funding to finish and install ham radio antennas on the European Space Agency (ESA)-built laboratory module has been uncertain, however. ARISS Vice Chairman Gaston Bertels, ON4WF, says donations from various sources covered a payment of 9000 Euros (approximately \$12,000) in March. A second payment is due this fall. Donations already have come in from the ARRL Foundation, AMSAT-NA and AMSAT-UK, among other organizations, as well as from many individual donors. According to Bertels, there is still a funding shortfall of 15,000 Euros (approximately \$21,000 USD). To help out, PayPal donations are being accepted (access the PayPal site via the Columbus Web page). --ARRL Letter

AMSAT-NA CONCLUDES SUCCESSFUL SPACE SYMPOSIUM

AMSAT North America held their annual symposium over the weekend of October 26-28 in Pittsburgh, Pennsylvania.

Rick Hambly, W2GPS, AMSAT President along with Bob McGwier, N4HY, AMSAT Vice-President of Engineering were able to make public the results of their recent work which will change the face of amateur radio going forward. AMSAT has been in consultation with Intelsat regarding an application of an Intelsat platform carrying our amateur radio satellites into geosynchronous orbit.

Engineering studies, funding studies, among other negotiations are continuing at this point. However Bob, N4HY made the following observation of the project AMSAT has termed Phase IV Lite, "There is enough in place at this time that AMSAT needs to begin planning engineering work and possible construction of a geosynchronous payload so we are ready if Intelsat says they have a ride for us."

The Phase IV Lite Geosynchronous Payload is planned to consist of similar transponders already under development for the Phase 3 satellites. Accelerated development on the digital Advanced Communication Package is anticipated. In addition to the communication payload flown to space, AMSAT plans to develop an earth station attainable by the average ham so that users can immediately take advantage of the audio, digital messaging, and video services.

The Advanced Communication Package would be a self-contained earth station which could be sent with amateur radio communication teams or delivered to disaster areas for 24/7/365 emergency communications. These teams would be able to point a small dish at a predictable spot in the sky and immediately begin delivering disaster communication support without depending on HF propagation.

A Phase IV payload could also be used to provide TDRSS-like relay of ARISS communications. The 10 minute school contact could now be expanded to hours-long contact with the International Space Station. This opens possibilities for student involvement with experiments aboard the space station.

The Intelsat geosynchronous platform would be able to provide the AMSAT Phase IV Lite payload with approximately 400 watts of DC power for 15 years. The primary payload would also perform the GTO boost phase as well as perform station keeping and antenna pointing once it has arrived on station. Bob, N4HY summarized, "The Intelsat team would be doing all the things nearly impossible for amateurs and that enables AMSAT to do what we do best ... build a communication system that changes amateur radio for the better!"

More details will be published in upcoming editions of the AMSAT Journal. –AMSAT News Service

SON OF FIRST HAM TO OPERATE IN SPACE TO FOLLOW IN FATHER'S FOOTSTEPS

Richard Garriott, KE5QNX, son of Owen Garriott, W5LFL, will be launching into space and living aboard the International Space Station in October 2008 as a client of Space Adventures. Owen Garriott operated the world's first Amateur Radio Station from space, W5LFL, as part of the Spacelab mission on the space shuttle Columbia (STS-9) in 1983; he is on the Astronaut Advisory Board of Space Adventures. Space Adventures is a company that allows private citizens the chance for space travel on Russian Soyuz spacecraft at an estimated cost of \$30-55 million per person. Richard, who is Space Adventures vice chairman, has applied for his grandfather's call sign, W5KWQ. He plans on making Amateur Radio on the International Space Station (ARISS) contacts when he is in space.

Richard will be the sixth private citizen to venture into space. According to his Web site <http://www.richardinspace.com/>, his "main objective for his mission is to encourage commercial participation. By fostering the involvement of individuals, companies and organizations in his spaceflight Richard hopes to demonstrate that there is commercial potential in private space exploration, while furthering the understanding of space. Richard plans to demonstrate this by taking on various commercial projects, corporate sponsors for his mission activities and by helping companies market their products through their association with an actual space mission."

A self-described experienced terrestrial explorer -- "I have traveled to all seven continents on adventures that have included tracking mountain gorillas in Rwanda, canoeing down the Amazon, diving in a submarine to the Titanic and trekking Antarctica in search of meteorites" -- Richard says on his Web site that he is excited about his trip into space. "Journeying to space has been a dream of mine since I was young. So for me, space exploration was tangible, it was part of my family's DNA. But I was also acutely aware of the costs and complexity that kept it under the purview of the government. There was no imaginable way I was going to get a front-row seat like my father." Richard, 46, is the first American second-generation astronaut. In Russia, Sergey Volkov, 34, a pilot, is set to fly to the ISS as commander next spring. His father, Aleksandr, rocketed into orbit in the 1980s and early 1990s.

The first commercial research partner involved in Richard's space mission is ExtremoZyme, Inc, a biotechnology company co-founded by his father. According to his Web site, "Richard will operate an ExtremoZyme protein crystallization experiment loaded with proteins, many of which have important cellular functions and are often associated with common human diseases. Having access to these superior crystals will enable researchers to learn more about the molecular structure of these proteins, which is essential for protein engineering and drug design."

A well-known computer game developer, Richard, also known in the gaming world as Lord British, was the owner of now-defunct Origin Systems. The company is best known for gaming software such as the Ultima fantasy computer role-playing game series, Wing Commander and Crusader. Richard then founded Destination Games, which has since merged with NCsoft where he is an executive producer; his new game, Tabula Rasa, is set to be released by NCsoft later this month.

Rosalie White, K1STO, ARRL ARISS Program Manager, said, "With Richard's fame with the general public and Owen's fame in the science industry and with ham radio operators, Richard's planned ARISS educational activities should generate a great deal of interest for ham radio in all ages and types of people. This will be good for Amateur Radio and ARISS. The ARISS Team is really looking forward to supporting his ARISS school goals; we were so pleased to hear that he's already earned his ham license."

Richard lives in Austin, Texas. His home, Britannia Manor, has been featured on MTV. -- Thanks to Fred Maia, W5YI, for some information. --ARRL Letter

SHORTS

THAI HAMS NOW AUTHORIZED TO OPERATE ON MORE BANDS: On October 12, radio amateurs in Thailand were granted permission to operate on 12, 17 and 30 meters and in the CW portion of the 80 and 160 meters on a permanent basis. Before this time, Thai hams had only been able to operate on 80 and 160 meters on weekends during international contests; authorization to operate on 12, 17 and 30 meters was only granted on a few occasions for certain special event stations. These new privileges are part of a complete revision and consolidation of Amateur Radio regulations by Thailand's National Telecommunications Commission (NTC), and follows more than five years of lobbying by the Radio Amateur Society of Thailand (RAST), Thailand's IARU Member-Society. Specifically, the Amateur Radio HF spectrum in Thailand increased to the following: 1.800 to 1.825 MHz, 3.500 to 3.540 MHz, 10.100 to 10.150 MHz, 18.068 to 18.168 and 24.890 to 24.990 MHz. RAST advises Thai amateurs to respect the IARU Region 3 band plan <http://www.jarl.or.jp/iaru-r3/r3bandplan.doc>. --ARRL Letter

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