

RCA AMATEUR RADIO CLUB

JUNE, 2007 MONTHLY NEWSLETTER INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, JUNE 5th, AT 6:30 PM AT DOOKZ SPORTS GRILL,
3800 E. 96th STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE MAY MEETING -- At the May meeting, the status of the '88 repeater was discussed. The north side receiver is down because the TV antenna structure supporting our antenna fell over. AF9A will make repairs. We need to get lightning arrestors for the Ethernet cable connecting Mike Koss' comm. center to our repeater shack. AF9A will follow up. Also, a security TV camera is to be installed at the repeater shack. K9RU will get video baluns to allow the video to be sent over the Cat5 cable. Dave Jarvis reported there were still seats available on the IRC bus to the Dayton Hamvention. The Club's rotor which was used at the Club station at Thomson is still on the roof at Thomson. Jon Powell KC9GUM will remove it when he gets time. Dick, W9ZB, received the World Radio gift certificates for Indy Hamfest prizes. Field Day is June 23-24. The Club will operate from Mike Koss' station probably in the 1E classification. We need some volunteers to manage the food and drinks. The Club will buy. Anyone interested should contact K9RU.

DAYTON HAMVENTION -- The weather was great this year! The flea market may have been down a little but it is was mostly ham radio and related stuff. The new Icom IC-7700 and the Icom robot girls drew a lot of attention. Although not necessarily in that order. Yaesu was showing the FT-450 HF/6M transceiver and Tokyo HY-Power was showing their line of Amps and the HT-200 HF/6M transceiver. He new German HF Radio was on display along with a new HF amp. Missing was CushCraft which for years has been a supplier of low cost and innovative antennas for ham radio. ARRL had a very nice area set up again this year and was a good place to take a break. I was told the forums were good, but did not get a chance to attend any of them. Les and Bob had their tent setup in the flea market (with the 101st airborne flag) and was great place to stop and enjoy their hospitality. Our Friday night dinner plans needed to be modified as the Chinese restaurant where we've eaten for years has closed. Saturday evening we got together and ate at the steak house as planned. Everyone I talked to that took the IRC Bus had a great time and with the price of gas and parking it was a good deal. --K9RU

W9RCA FIELD DAY -- We are planning to operate in the ARRL Field Day from Mike Koss' place this year on June 23-24. We will finalize the plans at the June meeting. We are going to operate in the "1E" class operating a home station on emergency power. We are planning to use K3BG's generator, K9RU's IC-756 Pro III, N9KZJ will handle the computer and field day logging program. A cook out is planed for Saturday evening. The Club is furnishing the food. Please plan to come over and operate for awhile or just socialize and eat some of the food! If you need directions, contact K9RU or AF9A. --K9RU

USS INDIANAPOLIS MUSEUM SHIP MEMORIAL OPERATION -- This will be the 2nd time for the USS Indianapolis operating from the USS Indianapolis Memorial as an official participating Museum Ship on the air event on June 8th, 9th and 10th. Operation starts at 8 PM, Friday evening June 8 and will end Sunday evening at 8 PM.

W9IND will be the callsign for the operation and it will be located at 700 N Senate, Indianapolis, IN at the Indiana University Education & Research Building; South Lobby. Parking is available north of the building. Visitors and guest operators are welcome.

USS Indianapolis approx. frequencies: (+/-10kHz)

SSB.. 3.860; 7.260; 14.260; 18.160; 21.360; 28.360 MHz & 50.160 MHz?

CW.. 3.539, 7.039, 10.109, 14.039, 18.079; 21.039, 28.039 MHz

See the Indianapolis Radio Club website for additional information. QSL to either W9IND or W9IH or via the Bureau for over seas stations... Please include SASE or postage. -K9RU

JUNE ARRL VHF CONTEST -- The ARRL VHF contest usually offers the best operating conditions for six meters and the other VHF and UHF bands for the year. If your radio has 6 meters on it, check it out. See QST or ARRL.org for the rules. -K9RU

HAMFESTS; EVENTS

8-10 June USS Indianapolis – Museum Ships Event

23-24 June Field Day

7 July Indy Hamfest, Camp Sertoma

ARRL FILES FEDERAL APPEALS COURT BRIEF IN PETITION FOR REVIEW OF BPL RULES

The ARRL has filed a federal appeals court brief outlining its case and requesting oral arguments in its petition for review of the FCC's broadband over power line (BPL) rules. The League has petitioned the US 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 its 2006 Memorandum Opinion and Order. In its brief filed May 17, the ARRL contends, among other things, that the FCC's actions in adopting rules to govern unlicensed BPL systems fundamentally alter the longstanding rights of radio spectrum licensees, including Amateur Radio operators.

"For the first time ever, the FCC has permitted new unlicensed devices to operate in spectrum bands already occupied by licensees, even if the unlicensed operations cause harmful interference to the licensees," the League said in stating its case. "The orders under review reverse nearly seven decades of consistent statutory interpretation and upset the settled expectations of licensees without so much as acknowledging the reversal, let alone justifying it."

The ARRL argues that the FCC's approach to adopting rules to govern BPL flies in the face of Section 301 of the Communications Act, which requires that operators of devices that emit radio frequency energy first obtain 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 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."

The League's brief further asserts that the FCC "has failed to discuss or disclose significant information in the record that potentially contradicts its key interference findings," and seeks to have the FCC produce the information. The ARRL alleges that the Commission not only withheld its internal studies until it was too late to comment but has yet to release portions of studies that may not support its own conclusions. The FCC has claimed that these are "internal communications" that it did not rely upon in reaching its decision to adopt the BPL rules.

"If, as seems more likely, the Commission actually considered and rejected the information contained in the redacted portions of its studies, then it had a duty to disclose the information and reasons for rejecting it. Either way, the FCC acted improperly."

The League also takes issue with what it argues is the FCC's "arbitrary and capricious" adoption of a BPL emission measurement standard that's unsupported by the record in the proceeding and ignores contrary evidence. Additionally, the ARRL says, the FCC rejected a proposed alternative without even considering it.

Said ARRL CEO David Sumner, K1ZZ, in his "It Seems to Us . . ." editorial for July QST: "The Commission's penchant for ignoring contrary evidence is illustrated even more vividly with regard to how quickly RF emissions are assumed to decay as one moves away from the source. This is important because if the signal is assumed to decay more quickly than it really does, the interference potential of the emissions will be underestimated."

As Sumner notes, the FCC has claimed that "many parties" have presented experimental data supporting a 40 dB per decade (10 times increase in distance) rate. "In fact, there is no such evidence in the record -- and empirical evidence supporting a lower number was ignored," he asserts.

The League maintains that the Commission failed to consider the ARRL's sliding-scale alternative that would have avoided what Sumner calls "the logically indefensible situation that now exists in the rules: the extrapolation factor is 20 dB/decade at 30.001 MHz and 40 dB/decade at 29.999 MHz."

In addition, the ARRL wants the court to determine if the FCC was arbitrary and capricious in failing to limit BPL providers "to frequencies where interference was less likely to occur without materially harming BPL deployment." The League argues that the FCC ignored evidence that restricting BPL to the 30-50 MHz frequency range would have obviated interference to long-distance HF communications without causing problems for public safety services.

The ARRL brief asserts that, for the first time ever, the FCC "has authorized the operation of unlicensed devices that it concedes interfere with licensed devices" and has declared that such devices "may continue operating even where proven to cause interference."

The FCC, ARRL contends, has concluded that BPL's acknowledged interference risks are manageable, but it bases that conclusion -- which ARRL calls "the linchpin of the challenged orders" -- on FCC studies the Commission has declined to make public in unedited form.

"It is clear," the ARRL contends in his brief, "that the withheld pages contain information" that is at odds with the FCC's conclusion to adopt the current rules governing BPL deployments.

"ARRL is not trying to stop the deployment of BPL," the League's brief concludes. ARRL and other commenters have provided the FCC with alternative proposals -- ones that have been demonstrated to work in the real world -- that would have allowed BPL to prosper without harm to licenses or to Congress's licensing regime."

"What is perhaps most unfortunate about the FCC's radical actions in this case is that they were entirely unnecessary."

The FCC's response to the League's brief is due July 2.--ARRL Letter

FCC DEMANDS AMBIENT DEMONSTRATE COMPLIANCE WITH BPL LICENSE CONDITIONS

The FCC has called on BPL equipment manufacturer Ambient Corporation to demonstrate that it's complying with all terms of its Part 5 Experimental license or face possible enforcement action. Ambient operates the Briarcliff Manor, New York, BPL pilot program under Experimental license WD2XEQ. In a May 21 letter to Ambient Chief Engineer Yehuda Cern, FCC Spectrum Enforcement Division Chief Kathryn S. Berthot noted that the FCC is investigating ARRL complaints dating back to 2006 that Ambient's Briarcliff Manor BPL system has caused and continues to cause harmful interference to Amateur Radio stations. She said Ambient's most recent six-month report failed to address one condition of its Part 5 license relating to emission measurements to prove compliance.

"Access BPL systems are generally required to meet the pertinent radiated emission requirements specified in Section 15.611(b) of the Commission's rules," Berthot wrote. "However, Ambient's facility, operating under an experimental license, is subject to the operating conditions contained on its license."

Condition 4, Berthot pointed out, requires a progress report six months from the date of grant, which was last August. Condition 5 provides that the progress report "should include, but is not limited to, a description of measurements and results demonstrating compliance" with the radiated emission limits of §15.109.

Ambient's most recent six-month report indicated that the company had notched out BPL signals on Amateur Radio bands, "demonstrating significant advancements," the FCC noted. Still lacking, the Commission contends, is information to satisfy Condition 5.

Berthot gave Ambient 20 days from the date of this month's letter to submit the results of any measurements it conducted before its most recent progress report to demonstrate compliance with §15.109. "Any measurements made in the areas addressed in the ARRL complaint should be highlighted," she continued. "If any area included in the ARRL complaint was not previously subject to measurements, measurements must now be taken in that area to test for compliance with §15.109."

Further, Berthot said, Ambient must note any measurements that reveal any non-compliance with §15.109, and, in that case, it must include a description of its plans to bring the system into compliance with the conditions of its Experimental license.

"Furthermore," Berthot concluded, "Ambient must submit to the Commission a follow-up report confirming compliance, once it has completed the necessary system modifications. We caution you that failure to respond to this letter may result in enforcement action."

Ambient operates the BPL system on power lines owned and operated by Consolidated Edison, under an experimental FCC authorization. In January 2006, in the wake of continued FCC inaction in response to several previous complaints, the ARRL filed a renewal of its complaint against Ambient's BPL system in Briarcliff Manor.

Without adjudicating ARRL's repeated complaints about interference throughout the amateur 20 meter band, the FCC renewed Ambient's experimental license for an additional term, from August 1, 2005 to August 1, 2007. --ARRL Letter

ARRL SUBMITS PLAN TO MITIGATE REPEATER INTERFERENCE TO MILITARY RADARS

The ARRL has submitted an interference mitigation plan to the US Department of Defense (DoD) as part of an effort to resolve reported interference from dozens of 70 cm amateur repeaters to US military radar systems on both MHz, hams must not interfere with primary users and, under the rules, can be forced to cease operation. Earlier this year, the US Air Force asked the FCC to order dozens of repeater systems to either eliminate interference to its "PAVE PAWS" missile and satellite detection and tracking radars in Massachusetts and California or shut down.

"We are waiting the response of the DoD representative to the proposal and will continue to provide information as to its status when it becomes available," commented ARRL Regulatory Information Specialist Dan Henderson, N1ND. The interference mitigation plan has four primary steps.

- * All repeaters the DoD has identified as potential interference sources will immediately and temporarily reduce transmitter power output (TPO) to 5 W.

- * The ARRL will conduct Longley-Rice studies on each repeater system to determine what further mitigation techniques might apply to individual repeaters. These could include relocating the system, the use of directional antenna systems to create nulls towards the PAVE PAWS site, permanent power reductions or a combination of these techniques.

- * The DoD will review ARRL's studies to determine if the proposals will meet DoD's unspecified field strength requirements to mitigate the potential interference satisfactorily.

- * Once the DoD reviews and approves the proposals, the ARRL will provide the recommendations to respective repeater frequency coordinating groups and the FCC.

The situation affects 15 repeaters within less than 100 miles of Otis Air Force Base on Cape Cod, Massachusetts, and more than 100 repeaters within some 140 miles of Beale Air Force Base near Sacramento, California. PAVE PAWS facilities occupy essentially the entire 70 cm band -- one factor that makes mitigation difficult. Feeding upward of 1800 active antenna elements, the broadband radar transmitters emit an average power output of more than 145 kW.

Henderson says repeater owners and trustees ultimately would be responsible for implementing the mitigation proposals or for developing alternatives that protect the radar systems to the same extent.

Cooperation will be the key to a successful resolution of the situation, Henderson says. "Although ARRL has no means to compel compliance with the mitigation strategies, each repeater is absolutely obligated not to interfere with these radars," he emphasized. "Failure to

implement the mitigation strategy or otherwise eliminate interference attributed to an individual repeater will result in immediate FCC action."

Henderson points out that the FCC is aware of and monitoring this situation and will act as necessary to protect the radars from interference. He stresses, however, that the US military is aware of the critical role Amateur Radio repeaters play in disasters and emergencies, and a wholesale shutdown of US 70 cm Amateur Radio activity is not under consideration.

A US Air Force contractor identified the allegedly problematic repeater systems last summer, but the situation didn't become critical until the Air Force contacted the FCC in March. ARRL officials met with Defense Department representatives later that month to discuss alleged interference to the PAVE PAWS radar sites, and last month Henderson contacted Amateur Radio frequency coordinating organizations in both affected areas -- the Northern Amateur Radio Council of California (NARCC) and the New England Spectrum Management Council (NESMC).

Contact Dan Henderson, N1ND <n1nd@arrl.org>; (860-594-0236), with specific questions or issues associated with this situation. --ARRL Letter

FCC'S TERMINATION OF PROCEEDINGS A MIXED BLESSING FOR HAM RADIO

The FCC's recent termination of two aging proceedings has some favorable and less-than-favorable implications for Amateur Radio. As part of a recent effort to clear the decks of languishing proceedings, the FCC closed out a Notice of Inquiry and Notice of Proposed Rule Making (NOI and NPRM) in ET Docket 03-237 <http://www.arrl.org/announce/regulatory/et03-237/>, aimed at establishing an "interference temperature metric" as a model for managing interference and "to expand available unlicensed operation" in certain bands. ARRL CEO David Sumner, K1ZZ, referred to the interference temperature model as "a flawed concept" and said the May 4 termination Order http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-78A1.pdf is good news. The FCC appeared to agree.

In a second Order -- http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-79A1.pdf released May 4, the FCC also terminated its inquiry, in ET Docket 03-65, into whether it should "incorporate receiver interference immunity performance specifications into spectrum policy decisions on a broad basis." Sumner commented that immunity standards for consumer electronics devices, including receivers, have long been an ARRL objective. The Commission again asserted that "the passage of time" had rendered out of date its Notice of Inquiry http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-54A6.doc and record in the proceeding.

"Further, to the extent receiver interference immunity performance specifications are desirable, they may be addressed in proceedings that are frequency band or service specific," the Commission remarked in the Order. The FCC also left the door open to consider the issue again down the road.

"With the current explosion of consumer electronics and unlicensed devices," the League said, "the Commission must establish interference rejection standards for unlicensed home electronic equipment and systems." --ARRL Letter

LOSS OF AMATEUR RADIO LICENSE IS PART OF SETTLEMENT WITH FCC

An Indiana radio amateur will have to surrender his General ticket under the terms of a Settlement Agreement reached with the FCC stemming from alleged corporate and personal misdeeds. In addition, Timothy M. Doty, WB9MCD, of W Terre Haute, will have to yield his General Radiotelephone Operator License, and Commercial Radio Service (CRS) Inc, in which he's an equal partner with his brother, Gary, will have to surrender its Land Mobile Service licenses. In a Memorandum Opinion and Order (MO&O) <http://www.fcc.gov/eb/revocations/files/FCC-07M-12.pdf> in EB Docket 06-168, released April 26, the FCC said the settlement spares all parties from a lengthy legal proceeding, although according to its terms, neither the Dotys nor CRS admit to any violation of the Communications Act of 1934 or FCC rules.

"Suffice it to say, approval of the Agreement will obviate the need for a protracted hearing, thereby conserving the resources of the Commission and the private parties," the FCC said in its MO&O. "In addition, approval of the Agreement will provide for a fair and equitable resolution of this proceeding."

The agreement stipulates that neither Doty will be able to apply for or hold "any attributable interest in any Commission license or authorization" for five years. CRS and the Dotys also will make a "voluntary donation" of \$10,000 to the US Treasury. If the matter had gone to hearing, CRS could have been liable for fines approaching \$100,000.

In an Order to Show Cause last August, the FCC ordered Timothy Doty and CRS to show cause why their respective Commission licenses should not be revoked. The FCC cited information it had received suggesting that CRS may not have properly disclosed information about Timothy Doty's felony convictions in applications the company filed with the Commission.

In several proceedings in recent years, the FCC has considered a licensee's or applicant's character among factors it takes into account when determining whether an individual possesses the requisite qualifications to be a Commission licensee.

As the agreement recites, in 1991 Doty was convicted in federal court of a felony that involved manufacture and possession of unauthorized satellite TV descrambling devices. He received three years' probation and a \$2000 fine. In 2001, Doty was found guilty in state court on a felony count of possessing a controlled substance and sentenced to 18 months incarceration with all but 30 days suspended.

"It appears, therefore, that the concerns raised by the Commission in its order designating this case for hearing will have been resolved," the FCC concluded. The Settlement Agreement is on the FCC's Web site http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519409544
.--ARRL Letter

SHORTS

FCC CITES DISTRIBUTOR FOR MARKETING UNAUTHORIZED RF DEVICE:
The FCC has sent an official Citation to Tower Products Inc of Saugerties, New York, for marketing an unauthorized RF device capable of operating on 70 cm Amateur Radio

frequencies. The FCC contends that the product in question, the "Laird Telemedia model LTM-WAVE-AG Wireless Monitoring System (LTM-WAVE-AG), requires FCC certification. As an "intentional emitter," the device cannot be operated legally under Part 15 rules. The device is not a Part 97 transmitter, which would not require FCC certification, because it can transmit on spectrum not allocated to the Amateur Radio Service. Additionally, the devices, the FCC said, bore an FCC identification number assigned to another device. The FCC said Tower has acknowledged that the LTM-WAVE-AG is not certified and that it marketed the device in the US, apparently in violation of §302(b) of the Communications Act of 1934, as amended, and §2.803(a) of the FCC rules. In addition, the FCC asserts, Tower apparently violated §2.2304(a) of the rules by importing an RF device that did not meet one or more of 10 specified import conditions, and §2.1204(b) by being unable to document compliance with import conditions. The FCC warned Tower that future such violations could lead to fines of up to \$11,000 "for each violation or each day of a continuing violation." -- ARRL Letter

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