ARRL Repeats Demand for FCC to Shut Down New York BPL Field Trial

NEWINGTON, CT, Dec 20, 2004--The ARRL has once again asked the FCC to shut down a BPL field trial now under way in Briarcliff Manor, New York. It's also asked the Commission to withdraw the system's Part 5 Experimental authorization. After the League's first shutdown request in October, the chief engineer of Ambient Corporation, which provided the pilot project's BPL hardware, suggested that Amateur Radio interference complaints had been addressed through improved software and notching performance. Not so, says a December 17 letter to the FCC from ARRL General Counsel Chris Imlay, W3KD. Writing on the League's behalf, Imlay contends that the FCC is not sticking to its commitment to prevent interference to Amateur Radio from BPL systems and to enforcement where interference occurs.



The Briarcliff Manor BPL field trial system incorporates this pole-mounted camera for local authorities to monitor traffic at an intersection near Route 9A. [Alan Crosswell, N2YGK, Photo]

"Based on the Commission's complete inaction to date with respect to documented interference complaints at various BPL test sites, the commitment seems vacuous," Imlay said. "ARRL demands that this BPL site be shut down immediately, pending compliance determinations and a demonstration that the system can operate without causing harmful interference." ARRL member Alan Crosswell, N2YGK, a resident of the community, has documented interference, complaints and related information on his "BPL in Briarcliff Manor" Web site.

Imlay says another complaint from Crosswell and the League's own observations on December 16 confirm the existence of harmful interference on 20 meters "sufficient to preclude virtually all Amateur Radio communications." At the time ARRL Lab staff members were visiting the Briarcliff Manor site,

Ambient's chief engineer was coincidentally in the area, "apparently measuring power line AC noise," Imlay noted. The Ambient engineer declined an offer by the ARRL staffers to have them demonstrate the BPL interference.

The December 17 communication went to FCC Enforcement Bureau Chief David Solomon, FCC Deputy Office of Engineering and Technology (OET) Chief Bruce Franca and OET's Experimental Licensing Division Chief James Burtle. Copies went to Ambient Chief Engineer Yehuda Cern and to FCC Special Counsel Riley Hollingsworth. In cooperation with utility Consolidated Edison, Ambient has been operating the Briarcliff Manor BPL system under an experimental license, WD2XEQ.



An Ambient BPL powerline connection in Briarcliff Manor. The yellow object is a tap off the mediumvoltage primary. The gray cabinet holds the electronics. [Alan Crosswell, N2YGK, Photo] ARRL observations December 16 indicated that BPL noise "precludes or repeatedly disrupts" ham radio communication using typical receivers. The harmful interference was noted at a distance of approximately three-quarters of a mile from the modem, affecting a wide area, "unlike Part 15 point-source radiators," Imlay said.

The FCC should shut down the Briarcliff Manor BPL field trial and pull the Experimental license too, Imlay argued. "Given the unsupported and demonstrably false allegations contained in the Ambient October 12, 2004, response to ARRL's interference complaint," he concluded, "the Commission should rescind the experimental authorization as well, and determine other appropriate sanctions against Ambient Corporation."

The Briarcliff Manor BPL system was the focus of a March 2004 front-page *Wall Street Journal* article, "In This Power Play, High-Wire Act Riles Ham-Radio Fans," by technology writer Ken Brown. ARRL staff members accompanied Brown to the BPL site so he could hear the interference firsthand. Ambient's BPL equipment uses orthogonal frequency-division multiplexing and generates multiple carriers in groups of three, spaced approximately 1.1 kHz apart. The system occupies multiple segments of the HF and low-VHF spectrum.

Broadband over Power Line World reporter Marc Strassman interviewed Ambient and Con Ed officials for a December 18 posting that also mentions the League's December 17 letter to the FCC.

For more information on BPL, visit the "<u>Broadband Over Power Line (BPL) and Amateur Radio</u>" page on the ARRL Web site.