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**RE: Municipal Broadband Over Power Line
System at Manassas, Virginia; FCC Response to
Interference Complaints.**

Greetings:

This letter is in response to that of Ms. Berthot dated December 14, 2006. The December 14 letter addresses harmful interference complaints pending for the past two years, submitted by residents of Manassas, Virginia, who are licensees in the Amateur Radio Service. The interference complained of by these individuals was caused by the Manassas Broadband Over Power Line system operated by Communication Technologies, Inc. (COMTek).

The December 14, 2006 letter from Ms. Berthot, a substantive response long overdue, itself raises a host of issues, even as it purports to dismiss the numerous, long-pending complaints of harmful interference to Amateur Radio stations. After consultation with the Manassas complainants, and speaking for them in this instance, as well as for ARRL, the National Association for Amateur Radio, we hereby request information, identified below, pertaining to the alleged Commission investigation of these interference complaints which resulted in their dismissal. In ARRL's view, the Commission owes the complainants a far more comprehensive response to their two-year-old complaints than what is set forth in the terse and uninformative dismissal letter. It is not necessary to recount the history of these interference complaints, as there is a sufficient record already. However, some recent events illustrate our significant frustration with the December 14 letter.

In ARRL's letter to Mr. Joseph Casey and Ms. Power dated August 2, 2006, ARRL noted the substantial flaws in the COMTek technical report concerning BPL radiated emissions in Manassas. ARRL reiterated its request, repeatedly made earlier, that the Manassas BPL system be shut down immediately, pending compliance with the Commission's Part 15 rules. If the Enforcement Bureau was unwilling to do that, the letter continued, ARRL insisted that the Bureau was "going to have to send Commission staff to observe this interference and conduct their own measurements in the presence of both COMTek and the local Amateur Radio operators who are receiving the interference." At that time, COMTek had previously filed incorrect and misleading reports concerning the interference matter, and they manipulated the BPL system to show false readings.¹ ARRL representatives later met with EB and OET staff on August 16, 2006, at which time we again urged that, instead of merely asking COMTek to provide information, it was necessary for Commission staff to visit Manassas to do some independent measurements. It was urged then that the complainants be contacted beforehand in order to provide an opportunity for all concerned to witness the testing and to be assured that valid test methodologies were used. Had that been done, and had the measurements been fairly and objectively made, and if the results were as the Commission stated in its December 14 letter, this matter would have been resolved. As it is, nothing is now resolved.

The December 14 letter, in summary, stated only the following: (a) During the past two years, five (sic) Amateur Radio licensees sent complaints to the Commission about interference from the Manassas BPL system, and that efforts to resolve that interference without Commission intervention were unsuccessful; (b) The EB commenced an investigation, which, together with OET, conducted field tests to determine compliance with radiated emission levels and to determine what harmful interference existed; (c) On October 25, 2006, Commission engineers arranged with COMTek and Main.net to operate the system in "six areas" in a test mode that was a

¹ For example, on 26 July, 2006, Mr. Blasdell, one of the complainants, monitored the BPL interference levels in the area of Weir and Traveller Streets in Manassas and found that the undesired signal levels in the 40-meter Amateur band were S9 plus 10 dB on his good quality amateur receiver and mobile antenna. This level of interference would preclude virtually all Amateur communications in that band.

“close representation” of “normal operation” in a “busy period;” (d) that the six areas were chosen based on “proximity to locations identified in the interference complaints filed by the five (sic) amateur radio operators;” (e) two locations were chosen for further testing on the next day, October 26, 2006; (f) measurements were made on October 26, 2006, which allegedly demonstrated that the Manassas system is in compliance with radiated emission limits in Section 15.611(b) of the Commission rules “at the two sites tested where emissions appeared (sic) to be the highest;” and (g) measurements demonstrated that the system is using notches of 20 dB or more to protect the 7 MHz Amateur band. On the basis of the foregoing statements, the letter dismissed the interference complaints.

In fact, the letter does not dismiss, or even mention, the interference complaint of Arthur Whittum, W1CRO, dated May 4, 2006. Mr. Whittum’s complaint refers to interference in an area of about two miles on Cloverhill Drive in Manassas, proceeding East, and then South on Wellington Road, to Business Route 234. The interference complained of by Mr. Whitten precluded his communications with the East Coast Amateur Radio Service (ECARS) emergency communications net on 7255 kHz and the MidCARS net on 7258 kHz. The Commission’s June 16, 2006 letter to COMTek asked COMTek and Manassas to respond to Mr. Whittum’s complaint as well as to those of other Amateur Radio licensees. Inasmuch as the December 14 dismissal letter neither identifies Mr. Whittum’s complaint as one being dismissed, nor even serves him with a copy, his complaint remains pending and unadjudicated.

The dismissal letter is far less than the complainants in this case deserve after a supposedly objective investigation by the Commission. These are licensees of the Commission, not just members of the public at large. They have diligently worked with COMTek and Manassas to attempt a cooperative resolution of this matter. They are deserving of protection from interference from unlicensed RF devices. Yet, the dismissal letter provides no information which would permit an evaluation of the alleged testing, and because the alleged tests were conducted outside the presence of the complainants (though, anomalously, with the full involvement of not only Main.net and COMTek, but also staff of the Office of Engineering and Technology) there is no independent way to evaluate the bare conclusions contained in the letter. Understandably, because the Commission (and especially the Office of Engineering and Technology) has exhibited an overwhelming and obvious bias in favor of BPL, and because it has done everything possible to deny or obfuscate the substantial interference potential of BPL systems operating below 30 MHz, the Manassas complainants, and ARRL, are unwilling to accept the unsupported conclusions set forth in the letter. Those conclusions are at substantial variance with the empirical observations and measurements of the Manassas complainants (and as well of ARRL laboratory staff, which recently visited Manassas and conducted measurements.)

The Commission therefore should be willing to provide the information requested below, in order to permit a fair evaluation of the test methodologies, the test results, and the levels of harmful interference at the test locations. Responses to the following will also permit followup measurements to see whether there is any correlation between the

locations where interference was reported, and the locations of the testing allegedly conducted by Commission staff.

1. Were any of the complainants notified prior to the testing that the Commission intended to conduct testing in Manassas on October 25 or 26, 2006? If so, who was notified and by what means?
2. Is it the Enforcement Bureau's standard procedure to not contact interference complainants when field tests of the interference source are conducted, or to permit the complainants to observe the tests?
3. What was the role of the Office of Engineering and Technology in the test procedures? Is OET routinely involved in enforcement proceedings involving field measurements for compliance purposes?
4. When were COMTek and Main.net notified of the Commission's planned testing, and by what means?
5. What precisely were the "six areas" where the Commission's testing occurred? How were those six areas tested determined? Can the Commission quantify the "proximity" of the six test locations to the "locations identified in the interference complaints filed by the five (sic) amateur radio operators"? Why were the test locations not the locations identified in the interference complaints?
6. How was it determined that the test mode during the tests constituted a "close representation" of "normal operation" in a "busy period?" What was the extent of loading of the system during each test at each location? What time of day was the system tested? What were the conditions of the "test mode?"
7. Why were two test locations segregated from the six identified the previous day for testing? Were the results of the testing on October 26 different from those obtained during the testing the previous day? What changes in the system were made by COMTek or Main.net prior to the second day's testing?
8. What were the test methodologies? What equipment was used? What was the positioning of the receive antenna? What was the sensitivity of the receiver or field strength meter used? What radiated emission levels were recorded? What frequencies or frequency bands were tested? How far from the power lines were the measurements conducted? Were distance extrapolations utilized? If so, what were they? Were any underground BPL lines tested, or only overhead lines? Were the underground lines notched?
9. What band segments were notched, and what were the radiated emission levels outside the notched segments? What methods of notching were utilized?

10. What correspondence exists regarding these tests between or among OET, EB, Main.net, COMTek, or the City of Manassas? We request copies of any written or e-mail correspondence.

Nothing in the December 14 dismissal letter even hints at an answer to any of the foregoing questions. All of the questions would have been answered had the Commission simply invited the complainants to observe the Commission's testing. The Enforcement Bureau's response to the two-year-old interference complaints made in good faith by licensed radio amateurs deserving of protection from interference caused by BPL spectrum pollution is, frankly, unacceptable. The complainants have spent hundreds of hours of their own time, attempting in good faith to cooperatively address the harmful interference caused by COMTek and the City of Manassas. They have been stonewalled by the City and COMTek,² and now they have been stonewalled by the Commission, after waiting patiently for two years for some action.

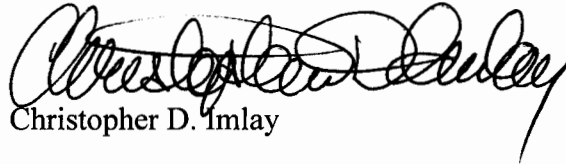
We expect a reasonable response to the foregoing questions, and the documentation requested, without further delay. We refuse to accept the December 14 letter, the deficiencies of which are obvious. We also request adjudication of Mr. Whittum's complaint. It is hoped that the Commission will in the future respond honestly and in a forthcoming manner to the interference complaints made and documented by Messrs. Agnew, Tarnovsky, Blasdell, Cochran, South, and Whittum. And we expect a more timely response than two years in the process. Commissioner Copps has acknowledged that radio amateurs should not have to wait months for a resolution to interference complaints. In this case, the Amateur Radio community in Manassas has waited years.

It is beyond dispute that the BPL facility at Manassas, Virginia has not been in compliance with Commission rules regarding radiated emissions. None of the Main.net equipment in use there is certified under the Commission's equipment authorization procedures. The system has not been in compliance with the non-interference requirement of Section 15.5 of the Commission's Rules. If the Commission seriously intends to claim that the system is now compliant, it must be willing to provide the

² It is noteworthy that COMTek and the City of Manassas never did provide any response to the specific questions contained in Mr. Joseph Casey's letter to each of them dated June 16, 2006, nor did they ever take any steps to resolve the interference to Mr. Agnew's Amateur radio operations. For example, neither Manassas nor COMTek ever stated what steps it will take to notify customers of a cessation of services should it be required to cease operations, either part or system-wide.

information necessary to support its dismissal order with documentation that is objectively verifiable. We await your response.

Yours very truly,



Christopher D. Imlay

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