

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

**In the Matter of:**

**Inquiry Regarding Carrier Current )  
Systems, including Broadband over ) ET Docket 03-104  
Power Line Systems )**

**To: The Commission**

**COMMENTS OF WILLIAM A. TYNAN, W3XO**

1. I have been a licensed amateur since 1945 and hold an Extra Class license issued in 1974. My main interests have been in weak signal work on the bands above 50 MHz; although I have operated on the HF bands, in including taking part in a number of contests. From 1974 until 1992, I was the Conductor of the QST column, The World Above 50 MHz. I was one of the founders of the Radio Amateur Satellite Corporation (AMSAT) and currently serve as its Board Chairman. I served as AMSAT President from 1991 through 1998. I graduated from Rensselaer Polytechnic Institute in 1950 with a Degree in Management Engineering with an Electrical Engineering minor. I was employed by the Johns Hopkins Applied Physics Laboratory from 1951 through 1988, working on a number of missile programs for the U.S. Navy
  
2. I look with deep concern on the Commission's consideration of relaxing its rules to facilitate Broadband over Power Lines

(BPL). I note that in countries where this technique is being employed, interference to the amateur HF bands has increased markedly and that Japan has decided against implementing BPL because of potential interference to licensed services, including amateur. I am aware that ARRL has been studying this matter and, I am sure will have definitive comments regarding potential disruption of amateur activity by BPL. I hope the Commission will give the League's comments serious consideration.

3. I am particularly concerned about interference to the amateur bands above 50 MHz. Even if BPL is implemented in the HF spectrum, its harmonics are very likely to interfere with weak signal work on the VHF and higher bands. Many amateurs participate in such activities as Earth-Moon-Earth and/or long haul terrestrial ionospheric and tropospheric scatter propagation modes. These modes require reception of very weak signals and therefore require a very low noise floor. Harmonics from BPL are likely to raise the noise floor, rendering such worthwhile amateur operation impossible.
4. It is not sufficient to merely confirm that BPL is capable of bringing broader band Internet access into homes. Its impact on other licensed services, including amateurs, should be thoroughly investigated. Therefore, I ask that the Commission,

before permitting BPL, see to it that exhaustive tests are conducted to make certain it does not disrupt the operation of various types of amateur stations, including those engaged in weak signal VHF, UHF and microwave work.

RESPECTFULLY SUBMITTED,

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July 7, 2003