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Mr. Tom Stanley  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Twelfth Street Lobby, TW-A325  
Washington, DC 20554

January 5, 2000

**RE: Docket No. IB 98-172 - Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands.**

Dear Mr. Stanley:

In response to questions raised at the December 15, 1999 Wireless Telecommunications Bureau meeting with the Fixed Wireless Communications Coalition (FWCC), Blonder Tongue Laboratories respectfully submits these Ex Parte comments. This is presented in a three part response. The first part addresses the business impact of the loss of the upper 30 MHz. The second part discusses the technical and equipment implications. The third part proposes a reassignment of the band displaced 30 MHz below its present location.

***Private Cable Operator (PCO) Business Implications:***

The present 438 MHz capacity band was originally assigned in 1991. At that time this capacity was reasonably competitive. Since that time the appetite for channel capacity has increased and franchise cable operators presently provide 1 GHz networks (940 MHz downstream capacity or approximately 156 TV channels). The full currently available band from 18.142 to 18.580 GHz offers 438 MHz of bandwidth, or 72 TV channels. Under these circumstances it is a struggle for the PCO's to be competitive with microwave transmission. The potential loss of the upper 30 MHz of bandwidth from 18.58 to 18.55 GHz will be extremely detrimental. Thus, an elimination of 5 additional TV channels should not be considered in our extremely competitive environment for PCO's.

***18GHz Microwave Transmitter and Receiver Equipment Implications:***

18GHz transmitters produce essentially *no spurious* out of band emissions in the 18.58 GHz and above frequency range. This is accomplished with out any special filtering in the transmitters. This aspect of the transmitter performance is intrinsic. If not, there would exist spurious signals in band that would be visible in the programs delivered by the microwave systems. Therefore, Blonder Tongue projects that the

operators could simply extinguish those five channels in question and no longer transmit them. This deletion or elimination of use of the 5 upper most channels should require no change or adjustment to the microwave equipment presently in use.

***Band Reassignment Proposal:***

Competition is fierce and every private cable operator needs to exercise each and every resource at their disposal. As such, a favored alternative would be to slide down the band 30 MHz to become 17.842 to 18.55 GHz and would maintain the bandwidth currently available to PCO's. This alternative would have no negative business implications and would allow the PCO's to remain at the current service level and not diminish their offering. No elimination of television channels would be required.

The technical or equipment impact with this alternative would be serious but manageable. All the microwave transmitter & receiver equipment would need to be rebuilt at the factory. Implementation would require field exchanging selected transmitters and associated receivers with those that have been rebuilt. The equipment that was removed would then be returned to the factory for rework. It would require approximately 10 hours of field labor per link exchange @ \$125/hour for \$1250 per link. At the factory, the frequency reference oscillators and waveguide filters for each unit would be replaced, as well as each unit being realigned and tested. An approximate cost of \$7500 per transmitter and \$5000 per receiver would cover the rework including labor costs. With approximately 1900 PCO links presently in existence, (Source: Comsearch), this translates to approximately \$2,375,000 of field labor expenses and \$7,125,000 and \$4,750,000 for transmitter and receiver rework expenses respectively. An approximate expense grand total of \$14,250,000 would be required to transition to this alternative.

This alternative offers a means to continue to allow the PCO to enjoy the same channel capacity that is currently available without the need to eliminate channels and/or services to present customers.

Sincerely,



Cliff Fox  
Product Manager  
Blonder Tongue Laboratories, Inc.

CC:  
Ron Netro  
Steve Selwyn  
Geraldine Matise  
Michael Pollak  
Ed Jacobs  
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