

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

In the Matter of)	
)	
Utilities Telecom Council and Winchester Cator, LLC)	RM - 11429
)	
Petition for Rulemaking to Establish Rules Governing Critical Infrastructure Industry Fixed Service Operations in the 14.0-14.5 GHz Band)	

To: The Commission

**REPLY COMMENTS OF
THE BOEING COMPANY**

The Boeing Company (“Boeing”), by its attorneys and pursuant to Section 1.405 of the Commission’s Rules, 47 C.F.R. § 1.405, hereby submits the following reply comments in response to the oppositions and comments filed in the above-referenced docket.¹ Boeing fully supports, and participated in the development of, the reply comments filed by the Satellite Industry Association.²

The vast majority of the commenting parties agree that the allocation requested in the Petition is unnecessary and technically infeasible. The Commission should not

¹ *Consumer and Government Affairs Bureau, Reference Information Center, Petition for Rulemakings Filed*, Public Notice, Report No. 2868 (May 27, 2008). Boeing comments on the petition for rulemaking filed by Utilities Telecom Council and Winchester Cator, LLC (“UTC-Winchester”) to amend Parts 2 and 101 of the Commission’s Rules to add a new secondary fixed service allocation in the 14.0 – 14.5 GHz satellite band, including a commercial service to be provided by Winchester. *See* Utilities Telecom Council and Winchester Cator, LLC, Petition for Rulemaking to Establish Rules Governing Critical Infrastructure Industry Fixed Service Operations in the 14.0 – 14.5 GHz Band (filed May 6, 2008) (“Petition”).

² Reply Comments of the Satellite Industry Association, RM-11429 (filed August 11, 2008).

institute a rulemaking to consider a secondary fixed allocation in the 14.0 – 14.5 GHz satellite band. The petitioning party has failed to demonstrate any real need for an FS allocation in the 14 GHz band. In stark contrast, numerous commenters observed that existing primary FS spectrum is underutilized, with several parties suggesting the 27 GHz, 38 GHz and 71 GHz frequency bands as alternatives.

Further, UTC-Winchester has made no legitimate argument why a secondary allocation for a commercial fixed service the 14.0 – 14.5 GHz band should be allocated exclusively to Winchester and no commenter appeared to support this proposal. In fact, most commenters agree that the allocation requested in the Petition would amount to a give-away of commercial spectrum to Winchester without an auction.

Commenters agree that the proposed secondary service would cause harmful interference to important satellite services in the band. Of particular concern is the harmful interference that would be caused to mobile FSS applications that are currently offered on a secondary and experimental basis. For example, Boeing’s aeronautical mobile satellite service (“AMSS”) is used to provide advanced broadband communications to special U.S. Government aircraft. Other important government communications functions are being developed by Boeing and other companies using VMES and ESV technologies. The UTC-Winchester proposal does not address harmful interference to or from existing secondary or experimental mobile services in the band, or account for future innovations in such services.

The parties further agree that the UTC-Winchester service could not be protected from interference. In this regard, it is difficult to believe that UTC-Winchester could operate “critical” services—services that they claim require a 99.999% availability—on

an unprotected secondary basis in the face of the interference concerns raised by the satellite industry.

UTC has stated that “CII entities are perhaps more accustomed to the necessities of sharing than satellite entities, which have had the luxury of large amounts of spectrum for their dedicated use.”³ Nothing could be farther from the truth. The satellite industry has a long history of spectrum sharing with FS in the C-band under a formal coordination process and must cope on a daily basis with the operational difficulties that occur because of that sharing. That experience reinforces the need to preserve the Ku-band as exclusively available for FSS. If a spectrum sharing regime were imposed on the Ku-band FSS allocation, it would jeopardize innovative satellite services such as those employing small fixed and mobile antennas and spread spectrum technologies.

The Fixed Wireless Communications Coalition (“FWCC”) filed comments in support of the UTC-Winchester Petition explaining that FS could not coordinate their operations in the C-band because of the proliferation of registered receive-only satellite dishes at 4 GHz and uplink earth station transmitters at 6 GHz.⁴ The FWCC’s observation highlights the fact that spectrum sharing among FS and satellite services is untenable. Moreover, the difficulties acknowledged by the FWCC would be exacerbated if AMSS and VMES applications were licensed in the 4 GHz and 6 GHz bands, as they are in the 14.0 – 14.5 GHz band.

³ Comments of the Utilities Telecom Council, RM-11429, (unnumbered) (filed June 26, 2008).

⁴ See Comments of the Fixed Wireless Communications Coalition, RM-11429, at 2 (filed June 26, 2008).

Finally, it should be particularly relevant to the Commission that UTC-Winchester's petition for rulemaking included a technical analysis that purported to show that its proposed service could operate effectively on a secondary basis in the band without causing harmful interference to satellite services. When the full extent of the interference concerns were raised by Boeing and the satellite industry, however, UTC-Winchester was unprepared and requested an additional 30 days to develop a response. This demonstrates that UTC-Winchester did not truly understand the extent of the spectrum sharing difficulties that exist in the 14 GHz band. Therefore, the technical analysis that was filed by UTC-Winchester with its petition was obviously inadequate to demonstrate that UTC-Winchester's proposed services could co-exist with satellite services without resulting in harmful interference to both services.

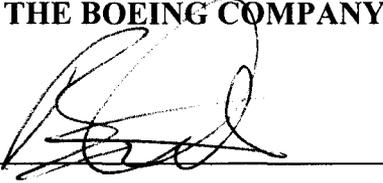
The Commission should not institute a rulemaking to consider UTC-Winchester's Petition because it proposes an incompatible use of the band, namely a secondary service that would cause harmful interference to incumbent primary, secondary and experimental services that operate in the band.

Moreover, any additional consideration should await conclusion of the pending AMSS and VMES proceedings regarding the status of important mobile operations in the band.

Respectfully submitted,

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