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BEFORE THE

Federal Communications Commission  
Office of Secretary

**Federal Communications Commission**

WASHINGTON, D.C. 20554

In the Matter of )  
 )  
Procedures to Govern the Use of Satellite Earth ) IB Docket No. 02-10  
Stations on Board Vessels in the 5925-6425 )  
MHz/3700-4200 MHz Bands and 14.0-14.5 )  
GHz/11.7-12.2 GHz Bands )  
 )

To: The Commission

**CONSOLIDATED OPPOSITION AND COMMENTS OF MARITIME  
TELECOMMUNICATIONS NETWORK, INC.  
ON PETITIONS FOR RECONSIDERATION AND CLARIFICATION**

Maritime Telecommunications Network, Inc. ("MTN"), by its attorneys and pursuant to Section 1.429(f) of the Commission's rules, 47 C.F.R. § 1.429(f), hereby opposes the petition for reconsideration of the Fixed Wireless Communications Coalition ("FWCC") and either opposes or comments on discrete portions of the petitions for reconsideration or clarification filed by The Boeing Company ("Boeing"), PanAmSat Corporation ("PanAmSat"), and ARINC Incorporated ("ARINC") in the above-captioned proceeding, in which the Commission established licensing and service rules for Earth Stations on Vessels ("ESVs").<sup>1</sup>

<sup>1</sup> Petition for Reconsideration of the Fixed Wireless Communications Coalition, IB Docket No. 02-10 (filed March 2, 2005) ("FWCC Petition"); Petition for Partial Clarification or Reconsideration of The Boeing Company, IB Docket No. 02-10 (filed March 2, 2005) ("Boeing Petition"); Petition of PanAmSat Corporation for Reconsideration or Clarification, IB Docket No. 02-10 (filed March 2, 2005) ("PanAmSat Petition"); ARINC Incorporated Petition for Reconsideration, IB Docket No. 02-10 (filed March 2, 2005) ("ARINC Petition").

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MTN strongly supports the regulatory framework establishing the ESV service. The newly adopted rules provide ESV operators with what they need most: critical regulatory certainty in a manner that will permit their industry to advance and to grow. At the same time, these rules have been crafted to assure adequate protection of the legitimate interests of incumbent and future fixed service (“FS”) and fixed-satellite service operations. The balancing of interests reflected in the ESV rules results from years of careful consideration, intense international technical study within the International Telecommunication Union, and enlightened compromise among multiple interests within the U.S. The Commission need not and should not revisit the ESV rules to any significant degree.<sup>2</sup>

Disappointingly, the FWCC has called for a radical revision of the new ESV rules, in total disregard of the Commission’s findings in this and other proceedings. The FWCC first resurrects its proposal to restrict ESV operations in U.S. waters to the Ku-band despite the proven need for ESV spectrum in the C-band and that band’s inherent technical advantages over the Ku-band in the maritime environment.<sup>3</sup> Alternatively, the FWCC requests that ESV-equipped vessels operating in the C-band be limited to at least 5,000 gross tons so as to effectively preclude ESV service to vessels traveling inland waterways.<sup>4</sup> The FWCC then unreasonably attempts to warehouse spectrum for the FS at the expense of already constrained ESVs by requesting that ESV operations be limited to spectrum “actually used” and to affecting

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<sup>2</sup> In addition to the few minor requests for rule modifications supported herein, MTN believes that three elements of one subsection of the new rules require clarification or reconsideration. *See* Petition for Clarification and/or Partial Reconsideration of Maritime Telecommunications Networks, Inc., IB Docket No. 02-10 (filed March 2, 2005) (addressing Section 25.221(e)).

<sup>3</sup> FWCC Petition at 6. The FWCC apparently would have the Commission prohibit C-band ESV operations anywhere in U.S. waters (not just in inland waterways). This position is grossly out of line with the U.S.-supported results of the 2003 World Radiocommunication Conference (“WRC-03”).

<sup>4</sup> *Id.* at 8.

no more than two 30 MHz FS pairs per coordination location.<sup>5</sup> In advancing these proposals, the FWCC either ignores or dismisses the many operational conditions imposed on ESV operators designed to ensure that FS operators are protected from harmful interference. The FWCC also ignores the fact that the Commission recently and flatly rejected the FWCC's similar "actual use" proposal for C-band terrestrial earth stations.<sup>6</sup> The FWCC refuses to accept it, but the question of whether FS/ESV sharing is viable has been firmly and conclusively settled in the affirmative. The backward-looking proposals of the FWCC, premised on unwarranted and wholly unsubstantiated concerns regarding the possibility of ESV interference to terrestrial FS operations, should be summarily rejected.

The remaining petitioners are far more constructive than the FWCC and, with the following exceptions, MTN generally supports their requests for rule modifications.<sup>7</sup> Like the proposed clarifications in MTN's own petition, these proposals would fine tune the Commission's ESV rules without negatively affecting the protection provided to the fixed service.

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<sup>5</sup> *Id.* at 10, 12.

<sup>6</sup> See FWCC Request for Declaratory Ruling on Partial-Band Licensing of Earth Stations in the Fixed-Satellite Service That Share Terrestrial Spectrum, Second Report and Order, IB Docket No. 00-203, 17 FCC Rcd 2002 (2002). The FWCC's instant petition amounts to an untimely petition for reconsideration of issues that were resolved in IB Docket No. 00-203.

<sup>7</sup> MTN specifically supports Boeing's proposed rule modifications that would: (1) allow Ku-band ESV systems to operate, in two specific circumstances, at higher power levels up to the levels included in Resolution 902; (2) permit ESV applicants to file a certification from the serving satellite operator establishing that proposed higher power off-axis e.i.r.p. levels have been accepted by adjacent satellite systems through the coordination process (to the extent that the current rules do not already allow for waiver requests involving operations at higher off-axis e.i.r.p. power); (3) revise the requirements on time to cessation of emissions to reflect pointing accuracy technology limitations in line with the standards under review by the European Telecommunications Standards Institute; and (4) adopt Resolution 902's 125 km distance as the distance within which foreign ESV operations in Ku-band must be conducted pursuant to a bilateral agreement with the U.S. Boeing Petition at 8, 14, 18, 22.

MTN disagrees with ARINC's request to delete or relax the requirement that a Ku-band applicant demonstrate a pointing error of less than 0.2 degrees.<sup>8</sup> The pointing error requirement remains necessary because less accurate pointing will undoubtedly increase the potential for off-axis emissions in excess of the current limits, and that could lead to adjacent-satellite interference. On this point, PanAmSat proposes a requirement that ESV applicants demonstrate through an automatic antenna pointing mechanism and technical showing that they can achieve the required pointing accuracy.<sup>9</sup> MTN can support PanAmSat's proposal provided that the level of detail required be limited to the following specification of the ESV's stabilization and pointing system: (1) mechanisms used to detect a system failure or exceedance of the pointing error limits; (2) operating pointing accuracy, both RMS and peak; and (3) response time after detection of a stabilization and pointing system failure or exceedance of the pointing error limit. Stipulating any additional information would be unduly burdensome and possibly impractical, as it would require antenna manufacturers to divulge proprietary mechanisms for pointing and stabilization.

MTN cannot support PanAmSat's request to replace the off-axis e.i.r.p. density limits for ESVs with separate requirements for off-axis antenna gain and power density at the input of the earth station antenna.<sup>10</sup> With the requirements currently in the rules for pointing accuracy within 0.2 degrees and the off-axis spectral density within the mask given in Section 25.221, MTN believes that adjacent satellites are already protected from off-axis emissions. MTN additionally notes that the automatic cessation of operation provisions of Section 25.221 kick in if the pointing accuracy is not maintained. There is no basis for changing the ESV rules in this regard.

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<sup>8</sup> ARINC Petition at 3 (addressing Section 25.222(a)(6)).

<sup>9</sup> See PanAmSat Petition at 2.

<sup>10</sup> *Id.* at 4.

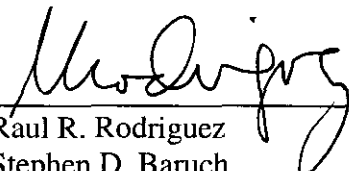
## CONCLUSION

MTN commends the Commission for establishing licensing and services rules that allow for the co-existence of ESV and FS operations. The objections to these rules raised by the FWCC in its petition have previously been vetted and rejected by the Commission. There is no need to revisit the FWCC's rehashed objections now. The Commission should revise or clarify the ESV rules in the modest manner proposed by MTN in its own petition and as supported by MTN here. All other proposals for revision of the rules should be rejected.

Respectfully submitted,

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April 21, 2005

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## CERTIFICATE OF SERVICE

I, Rebecca J. Cunningham, hereby certify that on this 21<sup>st</sup> day of April 2005, I sent via first class U.S. mail, postage prepaid, a copy of the foregoing Consolidated Opposition and Comments of Maritime Telecommunications Network, Inc. on Petitions for Reconsideration and Clarification to the following:

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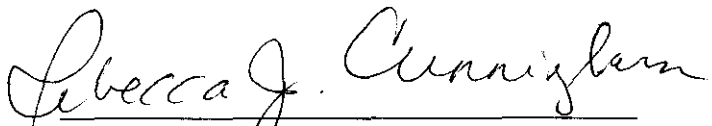
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