

Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street 11th floor
Arlington VA 22209
703-812-0400 (voice)
703-812-0486 (fax)

MITCHELL LAZARUS
703-812-0440
LAZARUS@FHHLAW.COM

September 30, 2004

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

**Re: IB Docket No. 02-10, Earth Station Vessels
Ex Parte Communication**

On behalf of the National Spectrum Managers Association (NSMA) and pursuant to Section 1.1206(b)(2) of the Commission's Rules, I am electronically filing this notice of an oral ex parte communication.

Yesterday Ken Ryan of Comsearch, Dennis Gross of Alcatel, Dan Collins of Pinnacle Telecom Group, LLC, Lee G. Petro of this office, and I, all on behalf of the NSMA, met with James Ball, Lisa Cacciatore, Claudia Fox, Jennifer Gorny, Howard Griboff, Bill Howden, Shabnam Javid, Paul Locke, Frank Peace Jr., and David Strickland of the Commission staff to discuss the above referenced proceeding.

A copy of our presentation outline is attached.

We also commented that real-time data on ESV operations must be made available to Fixed Service operators if ESV functions on a non-coordinated basis.

If there are any questions about this filing, please call me at the number above.

Respectfully submitted,

Mitchell Lazarus
Counsel for the National Spectrum
Managers Association

cc: Meeting participants

*Providing leadership and guidance on today's
critical spectrum management issues*

nsma
national spectrum
managers association

Earth Station on Vessels

IB Docket 02-10

September 29, 2004

What is the NSMA?

- National Spectrum Managers Association
- Founded in 1984 to provide a forum for the wireless community to develop guidelines for efficient spectrum use
- Provides linkage between government regulations and industry practice
- Advises regulatory bodies on matters affecting terrestrial microwave, satellite and emerging technology radio services



NSMA Issues with C-band ESV

- Successful frequency coordination is possible if:
 - FCC Requires it
 - FCC Decides Allocation Status of ESVs
- Interference analysis technique and criteria is possible if parameters can be agreed to by all parties:
 - Well defined Area of Operation
 - Deep-draft only
 - Modeling of ESV in Motion
 - Route, Speed, Number of trips

ESVs and the NSMA: A Brief History

- NSMA became involved after meeting with FCC in early 1997
- NSMA took action to develop a coordination strategy which would:
 - Avoid interference into incumbent fixed service systems using standard industry accepted interference criteria and frequency coordination procedures
 - Reach an equitable sharing option that would facilitate ESV operation without unduly impacting future growth of microwave systems
 - Avoid creating any undue burden on incumbent microwave operators to analyze and monitor for potential interference
 - Allow the ESV service provider to efficiently operate on the same channel at various ports
 - Provide the ESV service provider with “long term” uninterrupted access to frequencies

NSMA ESV Working Group

- NSMA had six task groups:
 - Interference Criteria
 - Analysis Methodology
 - Coordination Data
 - Future Coordination Procedures
 - Operational Controls
 - Regulatory Issues



Frequency Coordination is Absolutely Necessary

- The potential for interference exists
- Long term growth of fixed and satellite services depends upon prior frequency coordination
- Victim of interference must have ability to review new system parameters
- Bi-lateral process gives both sides assurance that the deployment of ESVs will be interference free

Interference Analysis Techniques

- NSMA developed two techniques:
 - Critical Contour Point (CCP) Method
 - Contour Integration Method (CIM)
- ITU has developed a technique similar to the CCP
- NSMA and ITU methods are acceptable to industry
- All contingent upon interference criteria and model of ESV motion

Frequency Coordination Regime

- Coordinate ports using existing techniques
- Coordinate ESV routes by providing following items:
 - Typical parameters as specified in 25.203(c)
 - Copy of route, including coordinates of break points
 - Identification of CCP
- Allocation status will determine which party has the burden of proof

Assurance of Compliance Critical

- Protection of incumbent services can be assured if:
 - ESV stays within the operational contour and/or
 - ESV operates within the model of behavior coordinated
- ESV must not operate in those areas or under conditions which have not been coordinated

Decision of Primary vs. Secondary Allocation Necessary

- Allocation status of dockside and in-motion ESVs
- If ESV Dockside is primary:
 - Coordination and Protection using existing FS-FSS regime
- If ESV In-motion is primary:
 - Entire route area would be protected
 - Fixed services would need to redesign around routes
 - Burden of analysis and coordination of new fixed links on Fixed Service provider
- If ESV In-motion is secondary:
 - No protection for routes
 - Fixed links could use ESV spectrum
 - Burden of analysis and coordination of new links fall on ESV service provider

Rebuttal of Comments to NPRM

- ESV can operate within 300 feet of terrestrial stations¹
 - On-frequency interference can occur up to 200 miles away
 - Without Analysis and coordination selection of unused channel is not possible
- NSMA experts tentatively agreed to -145 dBW/4 kHz long-term interference objective²
 - NSMA has discussed interim objectives
 - NSMA has not, at this time, reached consensus on any specific “ESV in-motion objective”
 - Eventually an objective will be decided upon
 - NSMA asks FCC not to specify an interference objective, instead use existing standards and let industry develop new criteria using domestic and international organizations

1. BMI Ex-parte comments dated 6/2/04, p. 2

2. MTN Ex-parte comments dated 7/15/04, slide 7

Summary of NSMA Positions

- ESVs should be required to frequency coordinate their services
- Coordination is feasible if allocation status is specified
- ESVs must only operate within their coordinated area
- NSMA has developed analysis techniques for ESVs
- NSMA has developed and will work with FCC and industry to provide frequency coordination process
- NSMA would be willing to assist in the development of “ESV Interference Criteria”



www.nsma.org