The Boeing Company
P. O. Box 3707
Seattle, WA 98124-2207

July 29, 2003

BOEING

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

Re: Notice of Ex Parte Presentation in IB Docket No. 02-10 - In the Matter of Procedures to Govern the Use of Satellite Earth Stations on Board Vessels in Bands Shared With Terrestrial Fixed Service

Dear Ms. Dortch:

On July 28, 2003, Boeing staff met with Jennifer Manner, Senior Counsel and Anna Mackowiak, Intern from Commissioner Abernathy's Office regarding the above captioned matter. The purpose of the meeting was to discuss the outcome of WRC-03 and its impact on Ku-band maritime systems. Also discussed was Boeing's interest in pursuing maritime applications for its Connexion by Boeing service. Specifically, Boeing requested that the Commission allow for Ku-band only maritime systems in its upcoming Notice of Proposed Rulemaking ("NPRM"). The Notice of Inquiry on this matter did not specifically contemplate Ku-band only systems.

Attending the meeting on behalf of Boeing were: Audrey Allison - Director, Regulatory Affairs, Americas; Guy Christiansen – Counsel; and Alan Rinker – Systems Engineer.

Two documents (attached) were left with the Commissioner's office: one outlining issues raised by WRC-03 which may need to be considered in the Commission's upcoming NPRM in this matter and a second summarizing the topics discussed in the meeting.

Any questions regarding this matter may be directed to the undersigned.

Sincerely,

Guy Christiansen /CN

Guy Christiansen
Counsel

Enclosure
cc (w/encl.): Jennifer Manner
Anna Mackowiak

BOEING

New Questions Regarding ESV Rules as a Result of WRC-03 Actions

1) WRC-03 adopted Resolution [COM4/20] which contains technical limitations for ESVs that are slightly different from those proposed by the US. The US originally proposed a maximum bandwidth of 2.4 MHz for ESV signals, but during the conference, the US fully supported a set of technical limitations that did not include this bandwidth limitation, but did include limitations on maximum e.i.r.p. spectral density towards the horizon and the maximum e.i.r.p. towards the horizon (Annex 2 to Resolution [COM4/20]).

The original limitation of 2.4 MHz was proposed as a protection for fixed service systems. This, however, limits the types of modulations that could be used in providing this service. Wideband technology, such as spread spectrum, would be precluded. Instead, WRC-03 decided that the fixed service could be protected by limitations on maximum e.i.r.p. spectral density towards the horizon and the maximum e.i.r.p. towards the horizon which would not prohibit the use of wideband technologies.

With the new technical limitations on signal e.i.r.p. towards the horizon, is the bandwidth limitation of 2.4 MHz no longer necessary?

2) The US originally proposed to WRC-03 a minimum antenna diameter of 1.2 m for ESVs operating in the 14 – 14.5 GHz band. In Resolution [COM4/20], WRC-03 adopted a minimum antenna diameter for antennas of 1.2 m for ESVs operating in the 14 – 14.5 GHz band, but also stated that "licensing administrations may authorize the deployment of smaller antenna sizes down to 0.6 m at 14 GHz provided that the interference to the terrestrial services is no greater than that which would be caused with an antenna size of 1.2 m, taking into account Recommendation ITU-R SF.1650."

Antenna sizes smaller than 1.2 m decreases the cost of ship earth stations and so are desirable in those situations in which compatibility with the Fixed-Satellite Service can be maintained.

Should the US license ESV earth stations in the 14.0 – 14.5 GHz band with antenna diameters between 0.6 and 1.2 m, as permitted by Res. [4/20]?

July 29, 2003

The Boeing Company

Talking Points on IB Docket No. 02-10

- The Boeing Company (Boeing) intends to utilize its Connexion by Boeing[sm] network to provide mobile broadband capability to maritime platforms. Such maritime service will complement the service that Connexion will soon be providing to aircraft.

- Boeing intends to provide an Earth Station on Vessel (ESV) network operating solely on Ku-band frequencies.

- The licensing regime that the FCC promulgates for ESVs (as contemplated in the upcoming NPRM) should take cognizance of such Ku-band only systems, including the markedly different sharing environment present in that band.

- Ku-band only systems can be accommodated with some adjustments to the ESV regime contemplated in the NOI

- Boeing is pleased with the results of the 2003 World Radiocommunication Conference (WRC-03) and urges the Commission to take those results into account when formulating rules for the domestic implementation of ESVs.

- No linkage is necessary between the ESV NPRM and the Aeronautical Mobile-Satellite Service (AMSS) Petition for Rulemaking which Boeing filed recently.