

The Boeing Company
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Seattle, WA 98124-2207

July 24, 2003



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 23, 2003, Boeing staff met with members of the International Bureau 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.

The following people attended the meeting:

From Boeing:

Audrey Allison – Director, Regulatory Affairs, Americas

Guy Christiansen – Counsel

Alan Rinker – Systems Engineer

From the Commission:

Breck Blalock

Rick Engelman

Claudia Fox

Paul Locke

Ron Repasi

Marlene H. Dortch
July 24, 2003
Page 2

One document (attached) was left with the Commission staff outlining issues raised by WRC-03 which may need to be considered in the Commission's upcoming NPRM in this matter.

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

Sincerely,

A handwritten signature in cursive script that reads "Guy Christiansen / DC".

Guy Christiansen
Counsel

Enclosure

cc (w/ encl.): Breck Blalock
Rick Engelman
Claudia Fox
Paul Locke
Ron Repasi



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]?