

October 14, 2011

VIA ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th St. S.W.
Washington, D.C. 20554

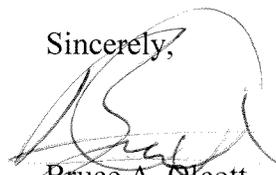
Re: Oral Ex Parte Presentation in
ET Docket Nos. W10-236 & 06-155

Dear Ms. Dortch:

On October 12, 2011, representatives of The Boeing Company met with representatives of the Office of Engineering and Technology ("OET") to discuss the above captioned proceeding. Participating in the meeting on behalf of OET were Julius Knapp, Bruce Romano, Ira Keltz, Geraldine Matise, Walter Johnston, Jamison Prime, James Burtle, and Rodney Small. Participating in the meeting on behalf of Boeing were Audrey Allison, Ronald Center, Alan Rinker and the undersigned.

The substance of the discussion is reflected in the attached talking points, which were distributed during the meeting. Please contact the undersigned if you have any questions.

Sincerely,



Bruce A. Olcott

Counsel to The Boeing Company

PART 5 EXPERIMENTATION NPRM

THE BOEING COMPANY

OCTOBER 2011

Experimental Licenses

- Major manufacturers such as Boeing depend on experimental licenses to develop new products and to conduct critically-important tests on highly sensitive operational systems.
 - Boeing develops wireless technologies for such uses as public safety surveillance, homeland security and border control, remote communications, and aircraft avionics.
 - Boeing conducts spectrum sweep tests on new aircraft both on the ground and in flight to ensure avionics systems are not disrupted by wireless device transmissions.
 - Boeing tests the communications and control systems of each new satellite and launch system to ensure their proper operation and control during launch and in orbit.
- Boeing's experimental operations are usually at very low power levels, for short time periods, and in remote locations, with measures available to cease operations in case of a complaint.
 - Despite the issuance to Boeing of hundreds of experimental licenses, Boeing has not received any complaints of harmful interference resulting from its test operations.
 - The imposition of burdensome coordination or consent requirements is therefore unnecessary with respect to the vast majority of Boeing's experimental authorizations.
- Boeing has experienced significant difficulty securing the cooperation of wireless licensees in the coordination process, delaying and sometimes preventing tests from occurring.
 - Boeing has been denied coordination by licensees with unconstructed networks.
 - One carrier recently asked Boeing to pay for coordination approval and to disclose Boeing's proprietary test results as a condition of its approval.
 - Even when wireless licensees cooperate, they often require the negotiation of detailed coordination agreements mandating indemnification and comparable requirements.
 - As V-Comm (Verizon) notes, wireless carriers do not have sufficient engineering staff to evaluate and monitor all the experimental tests proposed for CMRS spectrum.
- The OET should therefore impose coordination requirements only on experimental operations that pose an appreciable risk of causing harmful interference.
 - In all other cases, low power levels, brief transmission periods, remote locations or shielding, and "stop button" procedures are sufficient to prevent interference.

New Experimental License Classes

- To enable more robust and flexible testing, the Commission should create two new classes of experimental licenses – program experimental and innovation zone licenses.
 - Program experimental licenses should be available to private entities, which conduct the vast majority of experimental wireless operations according to OET records.
 - Innovation zone licenses should be permitted within the confines of exclusive-use facilities such as manufacturing plants.
 - The use of secure facilities is necessary for experiments involving technologies that are commercially sensitive or subject to export controls.
 - Given that a potentially unlimited number of program and innovation zone licenses can be issued, no justification exists to limit their availability to academic institutions and shared facilities.
- The rules for issuing and using program experimental and innovation zone licenses should be very similar to the existing rules for experimental licenses
 - When appropriate, such licenses should permit testing in restricted and CMRS bands.
 - Coordination with other licensees should be required only when clearly necessary.
 - Any periodic reporting requirements should permit confidential submissions.

RF Enclosures

- Experimental operations in properly designed RF enclosed facilities involve essentially no risk of interference to authorized radio communications.
- The Commission should therefore codify its policy of permitting unlicensed experimental operations in RF enclosures, such as anechoic chambers or Faraday cages.
 - Unlicensed experimental operations in RF enclosures should be permitted in all spectrum bands, including restricted bands and CMRS frequencies.
 - Any emissions limits that are adopted should be no more stringent than the existing limits for Section 15.109(b) Class A digital device unintentional radiators as measured outside of an RF enclosure.
 - V-Comm was the only party critical of this proposal, but failed to explain why CMRS networks are able to withstand existing emissions from unintentional radiators at up to Section 15.109(b) power levels.
 - Entities should be permitted to employ self-certification procedures to ensure their RF enclosures provide sufficient shielding and attenuation for the planned testing.