



International Bureau

Federal Communications Commission  
Washington, DC 20554

February 11, 2004

**In Reply Refer To:**

File Nos. SAT-MOD-20030711-00128

SAT-AMD-20030827-00241

*Via Fax (202-626-6780) and U.S. Mail*

Joseph R. Markoski  
Bruce A. Olcott  
Squire, Sanders & Dempsey L.L.P.  
1201 Pennsylvania Avenue, N.W.  
P.O. Box 407  
Washington, D.C. 20044-0407

**Re: The Boeing Company  
Application for Modification of License**

Dear Sirs:

In your letter of December 19, 2003 to the FCC's Secretary, you reported that Boeing had determined by application of the Inter-Agency Space Debris Coordination Committee (IADC) formula that an orbit with a perigee approximately 280 kilometers above the normal geostationary-satellite orbit would be appropriate for end-of-life disposal of the satellite proposed in its pending application for license modification. You therefore maintained that Boeing's previously-filed plan to use a disposal orbit with a perigee at least 300 kilometers above the geostationary orbit should be deemed satisfactory. We request the following additional information to assess the adequacy of the disposal plan:

- 1) the *maximum* cross-sectional area of the spacecraft with the solar panel and 22m antenna fully deployed;
- 2) the dimensions of the spacecraft and panel used for calculating the maximum cross-sectional area;
- 3) a diagram of the spacecraft with solar panel and 22m antenna fully deployed, showing the orientation used for calculating the maximum cross-sectional area;
- 4) the effective area-to-mass ratio of the 22m antenna, the method used for calculating the ratio, and the data used in the calculation;
- 5) a description of the 22m mesh antenna, specifying the dimensions and material composition of each component and the spacing of the lattice wires;

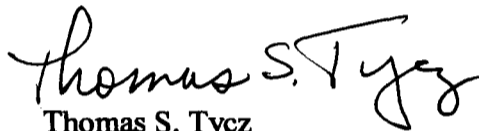
- 6) the area-to-mass ratio of the spacecraft, including the 22m antenna, and an explanation for use of any cross-sectional area other than the maximum to calculate this ratio.

In your letter of December 19, 2003, you asserted that maintaining longitudinal station keeping within a tolerance of  $0.05^\circ$ , rather than  $0.10^\circ$ , would increase the rate of propellant consumption by a factor of six and reduce the proposed satellite's service life by half. To facilitate our assessment of Boeing's proposal for station keeping, we request a graphic depiction of the projected ground trace of the satellite that shows the maximum longitudinal variation about its proposed nominal location as it crosses the equatorial plane. We also request the following information as to the satellite's planned orbital characteristics:

- inclination
- eccentricity
- apogee altitude
- perigee altitude
- right ascension of the ascending node (RAAN)
- argument of perigee.

Please provide this information before COB February 27, 2003, with hand-delivered or electronic courtesy copies to William Bell (William.Bell@fcc.gov). If the information is not provided within this time period the application may be dismissed pursuant to Sections 25.112(c) and 25.152(b) of the Commission's rules.

Sincerely,



Thomas S. Tycz  
Chief, Satellite Division