

Federal Communications Commission Washington, DC 20554

May 24, 2005

Mr. Pantelis Michalopoulos Steptoe & Johnson LLP 1330 Connecticut Avenue Washington, DC 20036-1795

Re:

EchoStar Satellite L.L.C. Application for Special Temporary Authority To Move EchoStar 5 to 129° W.L. and To Conduct Telemetry, Tracking and Command

Operations During the Relocation to this Orbital Location.

File Number: STA-STA-20050203-00018

Dear Mr. Michalopoulos,

On May 11, 2005, on behalf of EchoStar Satellite L.L.C. (Echostar), you submitted a letter in response to our request for additional information in connection with the above-referenced application.¹ In the May 11, 2005 letter, EchoStar states in Attachment 2 that "Two momentum wheel anomalies previously experienced require operation of the spacecraft in a modified earth-pointing mode utilizing thrusters to maintain spacecraft pointing. While this operating mode provides adequate earth-pointing performance, it results in both an increase in fuel usage (with corresponding reduction of spacecraft life), and continuous operations of the digital integrated rate assemblies (DIRAs). Current total DIRA on-times exceed those recommended by the spacecraft manufacturer." This leads us to request the following additional information:

- Please provide a reliability analysis showing the probability of failure of the remaining momentum wheel, taking into account the failures of the first two momentum wheels, and the resulting overall probability of being able to maintain spacecraft attitude control sufficient to provide DBS service and to not cause unacceptable interference to other systems due to mispointing.
- 2. If failure of its remaining momentum wheel would not require retiring EchoStar 5, what would be the impact of this failure on fuel consumption?
- 3. Please provide a reliability analysis showing the probability of failure of the DIRAs, taking into account the possibility of failure of the remaining momentum wheel, and the resulting overall probability of being able to maintain spacecraft attitude control sufficient to provide DBS service and to not cause unacceptable interference to other systems due to mispointing.
- 4. Please explain the impact a DIRA failure or failures or the failure of the remaining momentum wheel would have on the ability to properly dispose of the satellite at the end of its

¹ See Letter from Thomas S. Tycz, Chief, Satellite Division, International Bureau, to Pantelis Michalopoulos, Counsel for EchoStar (Apr. 4, 2005).

mission life, or when spacecraft attitude control sufficient to provide DBS service and to not cause unacceptable interference to other systems due to mispointing is no longer feasible.

Please provide the requested information by May 31, 2005. Failure to respond will subject the application to dismissal pursuant to Section 25.152 of the Commission's rules.

Please hand-deliver or email courtesy copies of any filing made in response to this letter to Karl Kensinger (Karl.Kensinger@fcc.gov) and Jay Whaley (Jay.Whaley@fcc.gov) of my staff.

Sincerely,

Thomas S. Tycz

Chief, Satellite Division