



Federal Communications Commission
Washington, D.C. 20554

DA 06-2010

October 11, 2006

Frank R. Jazzo, Esq.
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1300 N. 17th Street, 11th Floor
Arlington, VA 22209

Re: Call Sign: E010016
File Nos.: SES-MFS-20060720-01217
SES-AFS-20060905-01666

Dear Mr. Jazzo:

On July 20, 2006, Hawaii Pacific Teleport, L.P. (HPT) filed the above-captioned application to modify the license for earth station call sign E010016 to add the JCSAT-5A satellite at 132° E.L. as a point of communication using the C-band,¹ and to add a 9.3 meter antenna. On August 15, 2006, we dismissed the application, in part, as defective without prejudice to refiling.² On September 5, 2006, HPT amended the pending application to add emissions to the JCSAT-5A satellite at 132° E.L. For the reasons stated below, we now dismiss both above-referenced applications as defective without prejudice to refiling.

Our review of the proposed orbital debris mitigation plan for the JCSAT-5A satellite reveals that the calculations to support the statement detailing the post-mission disposal plans for the space station at end of life were not provided. In accordance with Section 25.114(d)(14)(iv) of the Commission's Rules and *Disclosure of Orbital Debris Mitigation Plans, Including Amendment of Pending Applications, Public Notice* (DA 05-2698, dated October 13, 2005), applicants for a geostationary-earth orbit space station are required to provide a statement disclosing the minimum altitude above the geostationary-earth orbit selected for a post-mission disposal orbit and the calculations that are used in deriving the minimum disposal altitude. In particular, the statements must disclose the values used for the solar radiation pressure coefficient (C_R) and the Area-to-mass ratio (A/m).³ Statements must also disclose the amount of fuel, in kilograms, that is intended to be reserved to accomplish post-mission disposal, as well as the

¹ 3700-4200 and 5925-6425 MHz bands.

² See Letter from Mr. Scott A. Kotler, Chief, Systems Analysis Branch, to Mr. Frank R. Jazzo, dated August 15, 2006 (DA 06-1636).

³ The area of the satellite should be calculated using a method that reflects its deployed and on-station configuration. To the extent that antenna and solar panels remain deployed upon disposal, calculations under the IADC formula should account for this fact. The area to be calculated is the average aspect area. Although the Second Report and Order does not specify a detailed methodology for calculating average aspect area, National Aeronautics and Space Administration (NASA) Safety Standard NSS 1740.14 may prove instructive in making this calculation. NSS 1740.14 may be found on-line at: http://orbitaldebris.jsc.nasa.gov/library/NSS1740_14/nss1740_14-1995.pdf.

methodology used to derive that quantity, including the methods used to determine and address fuel gauging uncertainty.⁴

In addition, it appears that the JCSAT-5A satellite may not comply with several of the Commission's technical requirements for satellites. In the event that HPT chooses to refile its application, we recommend that HPT demonstrate that the JCSAT-5A does comply with the Commission's rules or that HPT provide good cause for waiver of these rules.

In particular, in Section S7 of the Schedule S information filed for the JCSAT-5A satellite, HPT lists a minimum cross-polarization isolation of 27 dB for all of its transmit and receive antenna beams. In accordance with Section 25.210(i) of the Commission's Rules, 47 C.F.R. § 25.210(i), space station antennas in the Fixed-Satellite Service must be designed to provide a cross-polarization isolation such that the ratio of the on axis co-polar gain to the cross-polar gain of the antenna in the assigned frequency band shall be at least 30 dB within its primary coverage area.

Furthermore, in Sections S9 and S10 of Schedule S, HPT did not specify the telemetry, tracking and command (TT&C) frequencies and their associated polarization data, nor information on which antenna beams are connected or switchable to each TT&C function. In accordance with Sections 25.114(c)(4)(i) and 25.114(c)(4)(iii) of the Commission's Rules, 47 C.F.R. §§ 25.114(c)(4)(i) and 25.114(c)(4)(iii), radio frequencies and polarization plan (including beacon, telemetry, and telecommand functions), center frequency and polarization of transponders (both receiving and transmitting frequencies), as well as information on which antenna beams are connected and switchable with the TT&C, shall be provided in every application.

Since HPT's application does not include all the information regarding the orbital debris mitigation plan for the JCSAT-5A satellite, the application, as amended, is incomplete. Accordingly, pursuant to Sections 25.112(a)(1) and 0.261,⁵ we dismiss HPT's application, as amended, as defective without prejudice to refile.⁶

Sincerely,



Scott A. Kotler
Chief, Systems Analysis Branch
Satellite Division
International Bureau

⁴ See 47 C.F.R. § 25.114 (d)(14)(iv); Public Notice, "Disclosure of Orbital Debris Mitigation Plans," Report No. SPB-112, p. 4 (DA 05-2698, released October 13, 2005).

⁵ 47 C.F.R. §§ 25.112(a)(1) and 0.261. See also Echostar Satellite LLC, Order on Reconsideration, DA 04-4056 (released December 27, 2004).

⁶ If HPT refiles an application identical to the one dismissed, with the exception of supplying the defective information, it need not pay a further application fee. See 47 C.F.R. § 1.1109(d).