



Federal Communications Commission  
Washington, D.C. 20554

**DA 09-2363**

October 30, 2009

Ms. Jennifer D. Hindin  
Wiley Rein LLP  
1776 K Street, NW  
Washington, D.C. 20006-3006

Re: PanAmSat Licensee Corp. Application to  
Modify Authorization for Galaxy 11 to  
Relocate to 76.85° W.L., IBFS File No.  
SAT-MOD-20090910-00097 (Call Sign:  
S2253)

Dear Ms. Hindin:

On September 10, 2009, PanAmSat Licensee Corp. (PanAmSat) filed the above-captioned application to modify its authorization to permit relocation of Galaxy 11 from 32.8° E.L. to 76.85° W.L., for the purpose of providing C- and Ku-band capacity in the Atlantic Ocean region. As discussed below, we dismiss the application as defective, without prejudice to refiling.

Section 25.112 of the Commission's rules, 47 C.F.R. § 25.112, requires the Commission to return, as unacceptable for filing, any space station application that is not substantially complete, contains internal inconsistencies, or does not substantially comply with the Commission's rules.

Section 25.114(d)(14)(iv) of the Commission's rules, 47 C.F.R. § 25.114(d)(14)(iv), requires entities to include a statement detailing the post-mission disposal plans for the geostationary-Earth orbit space stations, "including the quantity of fuel – if any – that will be reserved for post-mission disposal maneuvers" as well as "the altitude selected for a post-mission disposal orbit and the calculations that are used in deriving the disposal altitude." In its filing, PanAmSat stated that the Galaxy 11 spacecraft would be disposed of at end of life by moving it to an "altitude above the geostationary arc and [would] reserve the necessary fuel to effectuate this end of life maneuver." PanAmSat's application does not specify the information required by Section 25.114(d)(14)(iv) of the Commission's rules because it does not provide the quantity of fuel reserved for post-mission disposal maneuvers. PanAmSat did not seek a waiver of Section 25.114(d)(14)(iv), and its application is accordingly subject to dismissal. We request that, when refiling, PanAmSat provide both the amount of fuel reserved and the projected end-of-life spacecraft orbital parameters (including orbital eccentricity, perigee, and apogee) used as a basis for deriving the fuel reserve. In addition, please provide full information concerning the methods that will be used to assess and provide adequate margins concerning fuel gauging uncertainty.

We note that the Commission did not specify a minimum altitude for disposal of grandfathered satellites in the *Orbital Debris Order*.<sup>1</sup> However, the Commission emphasized that “[t]he stated current practice of several U.S. operators is, barring catastrophic hardware failures, to execute end-of-life maneuvers that result in a disposal altitude of no less than 150 kilometers above” the geostationary altitude.<sup>2</sup> The Commission also noted variations in the stated practices at that time of space station operators, with minimum perigee targets ranging from 100-192 kilometers above the geostationary altitude. The Commission stated that “[a]lthough operators claim that such minimum disposal altitudes are sufficient to protect the geostationary earth orbit, the target orbits, particularly those in the lower end of this range, could, in fact, result in decommissioned spacecraft drifting back into altitudes at which active ... spacecraft operate.”<sup>3</sup> Accordingly, we request that PanAmSat, to the extent it plans to dispose of the Galaxy 11 satellite at an orbit of less than 150 kilometers, submit an analysis of the long-term evolution (100 years or more) of the orbit for the Galaxy 11 satellite, taking into account perturbing forces such as gravitational effects and solar radiation pressure, and focusing in particular on perigee altitude. Please also provide an analysis of the potential risks or constraints this satellite would present for operational geostationary spacecraft, based upon the evolution of the orbit.

In addition, PanAmSat omitted information in Column (g) of FCC Form 312 – Schedule S, Table S7: Space Station Antenna Beam Characteristics. Specifically, PanAmSat did not provide the Minimum Cross-Polar Isolation information required in Column (g). We request that, when refile, PanAmSat provide the information required in Table S7, Column (g).

Accordingly, pursuant to Section 25.112(a)(1) of the Commission’s rules, 47 C.F.R. § 25.112(a)(1), and Section 0.261 of the Commission’s rules on delegations of authority, 47 C.F.R. § 0.261, we dismiss the modification application of PanAmSat Licensee Corp. without prejudice to refile.

Sincerely,



Robert G. Nelson  
Chief, Satellite Division  
International Bureau

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<sup>1</sup> *Mitigation of Orbital Debris*, Second Report and Order, IB Docket No. 02-54, 19 FCC Rcd 11567 (2004) (*Orbital Debris Second Report and Order*).

<sup>2</sup> *Id.* at 11600-01. See also Disclosure of Orbital Debris Mitigation Plans, Including Amendment of Pending Applications, International Bureau Satellite Division Information, *Public Notice*, Report No. SPB-112, DA 05-2698, October 13, 2005. The Commission also noted that a number of operators had exceeded that minimum. *Orbital Debris Second Report and Order*, 19 FCC Rcd at 11600 n.208 (noting disposals in excess of 300 kilometers above GSO by SES Americom and Intelsat).

<sup>3</sup> *Id.* at 11597 n.191.