

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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| In the matter of |) | |
| |) | |
| |) | File No: SAT-LOA-20031113-00328 |
| PanAmSat Licensee Corp. |) | SAT-MOD-19970416-00033 |
| New Application for Launch Authority |) | SAT-STA-20031006-00311 |
| |) | SAT-STA-20031114-00330 |

ORDER AND AUTHORIZATION

Adopted: February 6, 2004

Released: February 6, 2004

By the Chief, Satellite Division:

I. INTRODUCTION

1. By this Order, we grant in part PanAmSat Licensee Corp's ("PanAmSat") application for authority to operate the SBS-4 satellite at the nominal 125° W.L. orbit location. This authority is granted on a conditional, non-harmful interference basis. Specifically, we allow PanAmSat to operate SBS-4 in the 11.7-12.2 GHz and 14.0 – 14.5 GHz bands at 124.95° W.L. until thirty days before a regularly authorized satellite¹ in those frequency bands is scheduled to be launched into that orbital location or until the SBS-4 is retired, whichever comes first.

II. BACKGROUND

2. In 1995, PanAmSat filed an application to operate a hybrid C/Ku-band satellite, to be named PAS-13, at the 103° W.L. orbit location. PanAmSat later amended this application, most recently on November 13, 2003, to redesignate SBS-4, its in-orbit Ku-band only satellite currently located at 77° W.L., as PAS-13, and to relocate it to 125° W.L.²

3. The SBS-4 satellite was launched on August 30, 1984 and initiated operations on September 15, 1984. The spacecraft's original authorization expired in 1994. Until recently, SBS-4 was operating in inclined orbit at 77° W.L. pursuant to Special Temporary Authority (STA).³ Last year, we authorized PanAmSat to drift⁴ the satellite to 124.95°W.L. and to operate tracking, telemetry and control (TT&C)

¹ To be regularly authorized, an applicant must show that it is both technically and legally qualified to hold a satellite license and its application must not conflict with a previously granted license or previously filed pending application.

² See Application of PanAmSat Licensee Corp. Application for Authority to Operate a Satellite in the Fixed Satellite Service, Amendment File No. SAT-AMD- 20030827-00284 (Aug. 28, 2003).

³ See File No. SAT-STA-20021024-00023.

⁴ See File No. SAT-STA-20030805-00141.

functions⁵ there until February 11, 2004.

4. PanAmSat now requests authority to operate SBS-4 on a regular basis at the 125.0°W.L. orbital location. In connection with this authority, PanAmSat also requests a waiver of Section 25.210(f) of the Commission's Rules, which requires satellites to employ full frequency reuse.⁶ PanAmSat states that SBS-4 was constructed and authorized prior to the Commission's adoption of the full frequency reuse requirement. PanAmSat incorporates by reference SBS-4's technical information from previous records.

5. New Skies Satellites N.V. (New Skies) has filed a Petition to Condition ("Petition") any license granted in this proceeding on successful international coordination of SBS-4 with the Netherlands planned satellite at the same orbit location and operating on the same frequencies. New Skies asserts that this satellite has filing date priority under international coordination procedures implemented by the International Telecommunication Union (ITU). New Skies further requests that any grant to PanAmSat require PanAmSat to terminate operations immediately once a satellite network with ITU date priority is brought into use at 125°W.L. and that PanAmSat inform customers that any service they receive from PanAmSat is temporary only. PanAmSat responds that New Skies lacks standing in the proceeding because it has not presented facts linking Netherlands's date priority with New Skies satellite deployment plans and that we should dismiss New Skies's Petition on those grounds. PanAmSat indicates that if we do not dismiss the Petition, it has no objection to the proposed conditions making the authorization subject to coordination and the termination of operations when a satellite with ITU date priority is brought into use at 125°W.L. PanAmSat objects however, to a third condition requiring PanAmSat to inform its customers that service is temporary only.

III. DISCUSSION

A. Waiver Request and Permanent Authority

6. PanAmSat requests a waiver of §25.210(f) of the Commission's Rules, which require full frequency reuse. PanAmSat states that SBS-4 was constructed and authorized prior to the Commission's adoption of the full frequency reuse requirement. PanAmSat also states that the Commission has never applied the requirement on SBS-4's operation and that grant of the waiver would allow additional service from an orbital location that would otherwise be vacant.

7. Section 1.3 of the Commission's rules provides that waivers may be granted when good cause is shown⁷. According to criteria delineated by the Court of Appeals, a waiver is appropriate when the Commission finds, in light of special circumstances presented in the case at hand, that granting such relief would not undermine the underlying purpose of the rule requirement in question and would better serve the public interest than insisting on strict compliance.⁸ Further, if it grants a waiver, the Commission

⁵ See File No. SAT-STA-20031219-00360.

⁶ 47 C.F.R. §25.210(f). The full frequency reuse requirements were revised in the *First Space Station Reform Order*, Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order*, 18 FCC Rcd 10760, 10859-60 (Paras. 261-264) (2003) (*First Space Station Reform Order*). SBS-4 is capable of using only vertical polarization on the uplink and horizontal polarization on the downlink. The orthogonal polarizations are not available on the spacecraft. Specifically the rule requires that a spacecraft shall employ state-of-the-art full frequency reuse either through the use of orthogonal polarizations within the antenna footprint/coverage area and/or the use of spatially independent antenna footprints/coverage area. SBS-4 utilizes only a single polarization per antenna coverage area.

⁷ 47 C.F.R. §1.3.

⁸ *WAIT Radio v FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969) (*WAIT Radio*); *Northeast Cellular Telephone Co., L.P. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990) (*Northeast Cellular*).

must articulate a rational justification for the exception that establishes a predictable, workable standard for non-discriminatory resolution of future cases.⁹ An applicant for waiver “faces a high hurdle even at the starting gate” and “must plead with particularity the facts and circumstances which warrant such action.”¹⁰

8. We deny PanAmSat’s request for a waiver of the Commission’s full frequency reuse requirement, which was adopted in 1983, for a regularly authorized satellite. Full frequency reuse allows satellites to double their capacity by using both horizontal and vertical polarization. In adopting this requirement, the Commission sought to maximize use of the scarce orbit/spectrum resource. It noted that assigning orbital locations to satellites that did not achieve state-of-the-art capacity could preclude the operation of more efficient designs to the detriment of the public’s ability to obtain a sufficient supply of transponder capacity. To this end, the Commission has denied applications that did not meet the full frequency reuse requirement as early as 1985.¹¹

9. PanAmSat has not persuaded us to grant it a waiver of this requirement for a regularly authorized satellite almost twenty years later. Doing so would, in essence, allow an obsolete satellite launched in 1984 and operating a decade beyond its regular license term to block entry by a state-of-the-art satellite. Indeed, PanAmSat’s predecessor-in-interest, Hughes Communications Galaxy represented that SBS-4 would reach its end-of-service life in 1994.¹² When Hughes requested authority in 1994 to operate SBS-4 in an inclined orbit mode to save fuel and prolong life, it indicated that SBS-4 would operate as a “back-up” satellite.¹³ Given the age and the fact that the satellite is already operating at an extremely high inclination of more than 7.8°, it is highly unlikely that SBS-4 will be capable of useful operation over a significant portion of a new 15-year license term.

10. Even if PanAmSat plans to launch a new satellite into that location upon SBS-4’s retirement, granting its request would set an adverse precedent. It would, in essence, allow PanAmSat to bootstrap itself into a “replacement expectancy” for a next-generation Ku-band satellite at 125° W.L. by moving an in-orbit “back-up” satellite that does not conform to Commission rules into that location. In light of the Commission’s newly adopted first-come, first-served licensing procedure for GSO satellites, allowing such maneuvers would give an unfair advantage to incumbent satellite operators who have large in-orbit fleets. While we agree with PanAmSat that there is a public interest in allowing an operator to provide service from an otherwise vacant orbit location, we find that the public can best be served by allowing service on a temporary basis until a state-of-the-art satellite is authorized and ready to be launched into that location, as detailed below. Indeed, PanAmSat is free to file an application for a regularly authorized state-of-the-art satellite pursuant to this procedure. Consequently, we deny PanAmSat’s application to operate SBS-4 at the 125° W.L. orbit location on a regular basis.

B. Temporary Authority

11. While we deny PanAmSat’s waiver request of §25.210(f) and its application for regular

⁹ *WAIT Radio*, 418 F.2d at 1159; *Northeast Cellular*, 897 F.2d at 1166.

¹⁰ *WAIT Radio*, 418 F.2d at 1157, quoting *Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F.2d 664 (D.C. Cir. 1968).

¹¹ See *Systematics General Corp.*, FCC 85-421 (Aug. 29, 1985).

¹² See *Hughes Communications Galaxy*, 7 FCC Rcd 7119 (1992) and 6 FCC Rcd 72 (1991).

¹³ See *Hughes Communications Galaxy*, 9 FCC Rcd 2155 (1994), at para. 2.

authority to operate SBS-4 at 125°W.L. under the circumstances, we see no reason to prevent PanAmSat from providing services from the nominal 125° W.L. orbital location on a temporary basis to customers that would not otherwise be served. Allowing the temporary use of unused orbital resources permits the public to receive services that would not otherwise be available. Consequently, over the past two and one half decades, the Commission has granted a variety of satellite operators temporary authority to operate satellites at orbit locations that are not regularly assigned to them, including satellites that did not meet its technical requirements. In issuing such authority, however, the Commission has been mindful to ensure that operations do not adversely impact regularly licensed satellite systems, and it has conditioned grants accordingly.¹⁴

12. We therefore issue a conditional grant to PanAmSat that will automatically terminate when its operations impact those of a regularly assigned spacecraft at this orbital location.¹⁵ In this regard, we will require PanAmSat to terminate operations on SBS-4 at least thirty days before a regularly assigned Ku-band (11.7 – 12.2 GHz and 14.0 – 14.5 GHz) satellite serving the United States is launched into the nominal 125° W.L. orbital location. To facilitate any termination of service that may be required, we require PanAmSat to inform its customers, in writing, that service from 125°W.L. orbital location is being provided pursuant to a grant of temporary authority. Further, within seven days of receiving notification of the launch date of a regularly assigned satellite intended for the 125°W.L. orbital location, PanAmSat must inform its customers that service will terminate 30 days before the launch. We hold PanAmSat responsible for ensuring that all end-users receive this notification, including those that are not directly served by PanAmSat but are served by resellers that access capacity on the PanAmSat satellite at 125° W.L. In granting PanAmSat this conditional authorization, we emphasize that this authority is limited to SBS-4 only and does not convey to PanAmSat any authority to operate another satellite at 125° W.L. in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz bands.

13. We note that PanAmSat has indicated in a series of filings¹⁶ that several satellites are operational in the vicinity of the nominal 125° W.L. orbital position and has filed a series of amendments and applications for special temporary authority to locate station-keeping positions on 0.05° centers in close proximity to the nominal 125°W.L. orbital position. Previously the Satellite Division granted PanAmSat authority to drift to and operate SBS-4's TT&C at the 124.95°W.L. orbital position. These filings were to provide a margin of safety to address potential collision of co-located spacecraft at the nominal 125°W.L. orbital location. While an application for permanent authority to operate SBS-4 at 124.95°W.L. does not exist before the Commission, the Commission may authorize operations at assigned orbital longitudes offset by 0.05° or multiples thereof from the nominal orbital location specified in the station authorization.¹⁷ We find that authorizing operations of SBS-4 at 124.95°, offset from the nominal orbital position by 0.05°, will provide a margin of safety from other co-located spacecraft in the vicinity of the nominal 125°W.L. orbital position.

14. Since this authorization is for temporary authority to operate at 124.95°W.L. there will be no impact on other current or future applications for authority to operate in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz bands at the nominal 125°W.L. orbital location. In addition, PanAmSat has no replacement expectancy as a result of this temporary authorization. In the event that PanAmSat wishes to pursue a regular Ku-band authority at the nominal 125°W.L. orbital location, it will be required to file an

¹⁴ See Columbia Communications Corporation, *Memorandum Opinion, Order, and Authorization*, 7 FCC Rcd 122, 123 (para. 16) (1991) (*First Columbia Order*), *Second Columbia Order*, 11 FCC Rcd at 8640 (para. 6). See also PanAmSat Corporation, Request for Special Temporary Authority to Operate a Space Station at 60° W.L., *Order and Authorization*, 15 FCC Rcd 21802 (Int'l Bur., 1999) (*PanAmSat 60° Order*).

¹⁵ *PanAmSat 60° Order*.

¹⁶ See SAT-LOA-20031224-00366, SAT-AMD-20031223-00365, SAT-STA-20031219-00360

¹⁷ Section 25.210(j)(3)

application under the first-come, first-served procedure adopted in the *First Space Station Reform Order*.¹⁸

C. Petition to Condition

15. We find that, since we are issuing PanAmSat a grant on a temporary conditional basis, the Petition to Condition filed by New Skies and PanAmSat's Opposition to Petition to Condition are rendered moot. Because we are authorizing PanAmSat on a temporary non-harmful interference basis, we do not need to address the merits of the Petition or its Opposition which assume a grant of regular authority.

IV. CONCLUSION AND ORDERING CLAUSES

16. Consistent with the foregoing discussion, we conclude that PanAmSat has not shown good cause for a waiver of the Commissions Rules for a regular authorization, but find that the public interest, convenience, and necessity will be served by allowing PanAmSat to provide temporary Ku-band service on a non-harmful interference basis from an orbit location that is not being used.

17. Accordingly, pursuant to Section 309 of the Communications Act, 47 U.S.C. § 309, and Section 0.261 of the Commission's rules, 47 C.F.R. § 0.261, IT IS ORDERED that Application File No. SAT-LOA-20031113-00328 IS GRANTED IN PART and DENIED IN PART to the extent provided for herein and PanAmSat Licensee Corp. IS AUTHORIZED to operate the SBS-4 satellite callsign S2602 at the 124.95° W.L. orbit location in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz frequency bands subject to the following conditions:

- a. No harmful interference shall be caused to operations of any regularly authorized satellite serving the United States in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz frequency bands at the 125° W.L. orbital location and PanAmSat shall cease operations from the SBS-4 satellite immediately upon notification of interference;
- b. This authorization will terminate thirty days before the date on which a regularly authorized satellite serving the United States in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz frequency bands is launched into the 125°W.L. orbit location or until the SBS-4 spacecraft is retired, whichever occurs first. In no case does this SBS-4 authority exceed fifteen years from the date of this order;
- c. PanAmSat is required to inform its customers in writing, including end-users receiving service from resellers accessing capacity on SBS-4 that service is being provided pursuant to a grant of temporary authority and will terminate as specified in paragraph 17(b), above;
- d. PanAmSat is required to inform its customers, including end-users

¹⁸ A request to modify the original SBS-4 authorization SAT-MOD-19970416-00033 and relocate the spacecraft to 81° W.L. is rendered moot by this conditional authorization at 124.95°W.L. as the SBS-4 authorization has been reassigned to this conditional grant and associated call sign S2602. The spacecraft associated with the modification SAT-MOD-19970416-00033 call sign KS39 has been reassigned and thus no longer exists. In addition SAT-STA-20031006-00311 and SAT-STA-20031114-00330 requesting temporary operational authority are dismissed as moot.

receiving service from resellers accessing capacity on SBS-4, within seven days of receiving notification of the launch date of a regularly authorized satellite serving the United States in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz frequency bands at the 125° W.L. orbital location that service will terminate 30 days before the launch occurs;

18. PanAmSat will, barring catastrophic failure of satellite components, maintain the capability to deorbit the satellite to an orbit with a perigee of no less than 300 kilometers above the geostationary satellite orbit altitude, by for example, maintaining adequate fuel reserves;

19. Assignment of any orbital location is subject to change by summary order of the Commission on 30 days notice and does not confer any permanent right to use the orbit and spectrum.

20. Neither this grant nor any right granted by this authorization, shall be transferred, assigned or disposed of in any manner, voluntarily or involuntarily, or by transfer of control of any corporation holding this authorization, to any person except upon application to the Commission and upon a finding by the Commission that the public interest, convenience and necessity will be served thereby.

21. This temporary grant is limited to PanAmSat Licensee Corp's use of the SBS-4 satellite at 124.95° W.L. and does not convey to PanAmSat Licensee Corp. any authority to operate another satellite at the nominal 125°W.L. orbital location or any priority in the U.S. application processing queue relative to applications for authority to operate a regularly authorized satellite at this orbital position in the 11.7 – 12.2 GHz and 14.0 – 14.5 GHz frequency bands.

22. IT IS FURTHER ORDERED that the request for waiver of Section 25.210(f), filed by PanAmSat IS DENIED IN PART and GRANTED IN PART to the extent provided for herein.

23. IT IS FURTHER ORDERED that the application for modification SAT-MOD-19970416-00033 and the requests for Special Temporary Authority SAT-STA-20031006-00311 and SAT-STA-20031114-00330 are DISMISSED as MOOT.

24. IT IS FURTHER ORDERED that the New Skies Satellites N. V. Petition to Condition and the PanAmSat Licensee Corp. Opposition to Petition to Condition are DISMISSED as MOOT.

25. PanAmSat is afforded thirty days to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.

26. This Order is effective upon release. Petitions for Reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within thirty days of the date of the release of this Order (see 47 C.F.R. § 1.4(b) (2)).

FEDERAL COMMUNICATIONS COMMISSION

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