

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

In the matter of)	
)	
)	File No: SAT-MOD-20030828-00285
SES Americom, Inc.)	SAT-STA-20031114-00329
Application for Modification of Space Station)	SAT-AMD-20031125-00340
Authorization)	SAT-STA-20040514-00093
)	
)	Call Sign KS 49

ORDER AND AUTHORIZATION

Adopted: May 27, 2004

Released: May 27, 2004

By the Chief, Satellite Division:

I. INTRODUCTION

1. In this Order, we grant SES Americom, Inc.'s (SES Americom's) application, as amended, to operate its in-orbit Satcom SN-4 satellite, Call Sign KS49, at the nominal 172° E. L. orbit location in the 3700-4200/5925-6425 MHz (C-band) and the 11.7-12.2/14.0-14.5 GHz (Ku-band) frequency bands until the end of its license term in June 2006. SES Americom has been operating at Satcom SN-4 at 172° E.L. pursuant to special temporary authority since November 2000. In addition, we grant SES Americom's request for waiver of Section 25.114(c)(7) of the Commission's Rules, which requires space station applicants to submit detailed antenna gain contours with their license applications.¹ This license will allow SES to continue to provide additional competitive satellite services to customers in the U.S. Pacific Ocean region.

II. BACKGROUND

2. The Satcom SN-4 hybrid C/Ku-band satellite has been licensed to a number of companies and assigned to a number of orbit locations. It was originally licensed to American Satellite Company in 1983 as ASC-2 and assigned to the 83° W.L. orbit location.² In June 1991, GTE Spacenet Corporation (GTE Spacenet), the licensee at the time, launched the satellite into the 101° W.L. orbit location as Spacenet 4. GE Americom acquired Spacenet 4, among other assets, when it purchased GTE Spacenet

¹ 47 C.F.R. § 25.114(c)(7). We also grant SES Americom's applications for extension of its special temporary authority to operate SN-4 at 172° E.L. We note that this extension is superceded by our grant of authority in this Order.

² *American Satellite Company, Order and Authorization*, 94 FCC 2d 39 (1983); *Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service*, Memorandum Opinion and Order, 94 FCC 2d 129 (1983) (*ASC-2 Order*).

Corporation in October 1994, and renamed the satellite Satcom SN-4.³ GE Americom replaced Satcom SN-4 at 101° W.L. with its GE-4 satellite the following year.⁴ Subsequently, the Bureau granted GE Americom special temporary authority to operate Satcom SN-4 at several orbit locations, culminating in its current operations at 172° E.L.⁵ SES Americom acquired GE Americom in 2001 and, since then, has continued to operate SN-4 at 172° E.L. pursuant to the initial grant of special temporary authority and subsequent extensions.⁶ In 2003, the Bureau authorized SES Americom to provide capacity for direct-to-home video service over the spacecraft.⁷

3. In August 2003, SES Americom filed an application for a license to operate SN-4 from 172° E.L. until the end of its 15-year license term in June 2006. In connection with this request, SES Americom filed an amendment seeking a waiver of Section 25.114(c)(7) of the Commission's Rules, which requires applicants to supply specified space station antenna gain contour maps for each transmit and receive antenna beam. In November 2003, and May 2004, SES Americom filed applications requesting an extension of its special temporary authority to operate SN-4 at the 172° E.L. orbital location until November 15, 2004.⁸ No comments or objections were filed with respect to any of these filings.

III. DISCUSSION

A. Waiver Request

4. Section 25.114(c) of the Commission's rules⁹ explicitly requires all space station applicants to submit all applicable items of information listed in its subsections. Recently, the Commission conducted a comprehensive review of its space station rules and underlying policies, including the policies and practices related to Section 25.114(c). In the *First Space Station Reform Order*,¹⁰ the Commission revised the space station licensing process to adapt it to today's satellite environment. As part of the measures adopted in the *First Space Station Reform Order*, the Commission determined to continue to require applications to be substantially complete when filed.¹¹

³ See *Contel Corp., GE American Communications, Inc. and GTE Spacenet Corp.*, Order and Authorization, 9 FCC Rcd 5775 (1994).

⁴ *Id.*

⁵ At that time, the 172° E.L. orbital location was assigned to GE Americom's wholly-owned subsidiary, Columbia Communications Corporation, for a C/Ku-band hybrid satellite. Columbia Communications Corp., *Order and Authorization*, 14 FCC Rcd 3318 (Int'l Bur. 1999). The relocation of Satcom SN-4 to 172° E.L. in November 2000 allowed GE Americom to meet an applicable ITU deadline for bringing a satellite into use at that position. It did not, however, excuse Columbia from constructing and launching its authorized satellite by the August 2002 deadline imposed in its license, nor did GE Americom ask that it do so. Because neither Columbia, GE Americom nor SES Americom pursued the Columbia satellite authorization at 172° E.L. further, that authorization became null and void by its own terms.

⁶ See *General Electric Capital Corporation and SES Global S.A.*, Order and Authorization, DA 01-2100, 16 FCC Rcd 17575 (2001), Supplemental Order, DA 01-2482, 16 FCC Rcd 18878 (2001) ("*GE/SES Order*"); see also File No. SAT-STA-20011106-00095 (granted November 28, 2001); File No. SAT-STA-20020517-00077 (granted June 28, 2002); File Nos. SAT-STA-20021025-00197 and SAT-STA-20030506-00082 (granted Aug. 15, 2003).

⁷ *SES Americom, Inc. and Columbia Communications*, Order and Authorization, 18 FCC Rcd 18598 (2003).

⁸ See File Nos. SAT-STA-20031114-00329 and SAT-STA-20040514-00093.

⁹ 47 C.F.R. § 25.114(c).

¹⁰ *Amendment of the Commission's Space Station Licensing Rules and Policies*, First Report and Order and Further Notice of Proposed Rulemaking, IB Docket No. 02-34, 18 FCC Rcd 10760, 10852 (para. 244) (2003) (*First Space Station Reform Order*).

¹¹ *First Space Station Reform Order*, 18 FCC Rcd at 10852 (para. 244).

5. SES Americom requests a waiver of Section 25.114(c)(7) of the Commission's Rules, which requires space station antenna gain contours for each transmit and receive antenna beam to be plotted on a map showing the antenna gains at 2, 4, 6, 8, 10, 15, 20 dB below the peak values.¹² Although SES Americom has provided a contour map, it does not provide all the antenna gain contours required by Section 25.114(c)(7). SES Americom notes that Satcom SN-4 was procured and launched by GTE Spacenet and was already in orbit when SES Americom's predecessor, GE Americom, acquired Spacenet in 1994.¹³ SES Americom states that it was unable to produce more detailed contours because it has only limited data about Satcom SN-4 from the satellite manufacturer.¹⁴ SES Americom also asserts that the primary function of the contour map is to permit the potential for harmful interference to be evaluated and to allow the adjacent satellite operators to determine to what extent the proposed satellite's area of strongest signal coverage overlaps with the adjacent satellite operator's primary service area. SES Americom states that it has had discussions with adjacent satellite operators and been operating the Satcom SN-4 satellite for the past three years at 172° E.L. without any interference complaints.¹⁵

6. The Commission's rules may be waived when good cause is demonstrated.¹⁶ The Commission may exercise its discretion to waive a rule where the particular facts make strict compliance inconsistent with the public interest.¹⁷ In doing so, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.¹⁸ Commission rules are presumed valid, however, and an applicant for waiver bears a heavy burden.¹⁹ Waiver of the Commission's rules is therefore appropriate only if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.²⁰

7. We find that SES Americom has demonstrated good cause for granting waiver of Section 25.114(c)(7) of the Commission's Rules. We agree with SES Americom that the main purpose of the contour map is to allow evaluation of the potential for harmful interference with other operators and services in the frequency band. According to SES Americom, it submitted an interference analysis in its 1999 application for special temporary authority to relocate Satcom SN-4 to 172° E.L.²¹ The analysis assumed that adjacent satellites would operate in the same frequencies, with the same polarization, over the same coverage area. With these assumptions, the analysis showed that Satcom SN-4's operations would not cause harmful interference to adjacent spacecraft. SES Americom provided a copy of this interference analysis in the amendment to its reassignment application.²²

8. This analysis has been proven reliable. Presently, PanAmSat operates the PAS-2 C/Ku-band hybrid spacecraft at 169° E.L. and Intelsat operates the Intelsat 802 C/Ku-band hybrid spacecraft at

¹² 47 C.F.R. § 25.114 (c)(7).

¹³ *SES Americom Amendment* at 2.

¹⁴ *Id.*

¹⁵ *SES Modification* at 5.

¹⁶ 47 C.F.R. § 1.3; *see also WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972) (*WAIT Radio*).

¹⁷ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (*Northeast Cellular*).

¹⁸ *WAIT Radio*, 418 F.2d at 1159; *Northeast Cellular*, 897 F.2d at 1166.

¹⁹ *WAIT Radio*, 418 F.2d at 1157.

²⁰ *Id.* at 1159.

²¹ *See* File No. SAT-STA-20000906-00130; *see also* File No. SAT-ASG-20030722-00134.

²² *See* File No. SAT-AMD-20031125-00340 (Attachment A).

174° E.L. SES Americom claims that pursuant to coordination discussions with both operators, Satcom SN-4 has been operating adjacent to these spacecraft for over three years without any complaints of harmful interference.²³ Accordingly, we grant SES Americom's waiver request and will not require it to submit additional detailed antenna gain contour maps for Satcom SN-4.

B. Request for Assignment to 172° E.L.

9. SES Americom requests authority to operate Satcom SN-4 at 172° E.L. for the remaining term of its license - which runs through June 18, 2006 pursuant to the automatic five-year license extension granted in the Space Station Reform Order.²⁴ SES Americom states that allowing it to operate at 172° E.L. until this time will allow the Satcom SN-4 spacecraft to continue to serve customers and will eliminate the need for repetitive filings requesting extension of the temporary authority under which Satcom SN-4 has been operating for over three years.

10. We consider SES's Americom's request for reassignment of Satcom SN-4 to the 172° E.L. orbit location under the first-come first-served procedure adopted for geostationary-like satellites in the *First Space Station Reform Order*. Under this procedure, we will issue a license to the applicant filing first, if the applicant is qualified and the proposed satellite does not conflict with any previously licensed satellite or previously filed application. No other satellites are authorized to serve the United States from the C-band or the Ku-band frequencies at 172° E.L. nor have any other applicants proposed such satellites. Thus, if SES Americom is qualified, we may grant it a license to operate Satcom SN-4 at 172° E.L. until the end of its license term.

11. We find that Satcom SN-4 meets all Commission technical requirements at C-band. With regard to the Ku-band payload, we note that although Satcom SN-4 does not meet the Commission's full frequency reuse requirements,²⁵ the Commission waived this requirement when it authorized Satcom SN-4 (previously ASC-2), in 1983.²⁶ Because this waiver remains effective until the end of the license term, we need not revisit this issue here. Accordingly, we authorize SES Americom to operate the Satcom SN-4 C-band and Ku-band transponders at 172° E.L. until June 2006.²⁷

III. CONCLUSION AND ORDERING CLAUSES

12. We conclude that SES Americom has shown good cause for a waiver of Section 25.114(c)(7) of the Commission's Rules. We also find that the public interest, convenience, and necessity will be served by allowing SES Americom to provide C/Ku-band service from the 172 E.L. orbit location until the end of Satcom SN-4's license term, June 18, 2006.

13. 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 Nos. SAT-MOD-20030828-00285 and SAT-AMD-20031125-00340 ARE GRANTED to the extent provided for herein and SES Americom IS AUTHORIZED to operate the Satcom SN-4 satellite, call sign KS49, at

²³ See *SES Americom Modification* at 3.

²⁴ The *First Space Station Reform Order* extended all space station licenses automatically from 10 to 15 years. *First Space Station Reform Order*, 18 FCC Rcd at 10860 (para. 266)

²⁵ See 47 C.F.R. § 25.210(f); (requirement that satellites double their capacity by using both horizontal and vertical senses of polarization in each set of frequencies in which they operate).

²⁶ *ASC-2 Order*, 94 FCC 2d 129 (para 6).

²⁷ We note that SES Americom has a pending application to construct, launch and operate a new satellite (AMC-23) at the 172° E.L. orbit location. We will consider the AMC-23 filing in a separate order.

the 172°E.L. orbit location in the 3700-4200 MHz, 5925-6425 MHz, 11.7-12.2 GHz and 14.0-14.5 GHz frequency bands until June 18, 2006 in accordance with the terms, conditions and technical specifications set forth in its applications, the Commission's Rules and the following condition:

SES Americom 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.

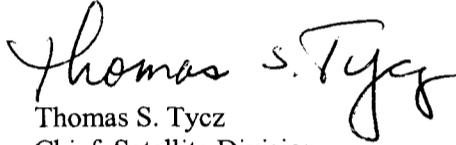
14. IT IS FURTHER ORDERED that the request for waiver of Section 25.114(c)(7), filed by SES Americom IS GRANTED.

15. IT IS FURTHER ORDERED that SES Americom's Applications for Special Temporary Authority, File Nos. SAT-STA-20031114-00329 and SAT-STA-20040514-00093 ARE GRANTED to the extent provided for herein.

16. SES Americom 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.

17. 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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