



File # SAT-PPL-20050708-00144  
With Attached Conditions

Call Sign S2678 Grant Date Sept 9, 2005

(or other identifier) Approved by OMB  
3060-0678

Term Dates  
From See Conditions To: See Conditions

Approved: Robert G. Nelson Chief Satellite  
Engineering Branch

Date & Time Filed: Jul 8 2005 6:35:57:566PM  
File Number: SAT-PPL-20050708-00144  
Callsign/Satellite ID: S2678

APPLICATION FOR SATELLITE SPACE STATION AUTHORIZATIONS FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	FCC Use Only
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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Petition for Declaratory Ruling to Add the Star One C2 Satellite at 70 W.L. to the Permitted Space Station List

1-8. Legal Name of Applicant			
Name:	Star One S.A.	Phone Number:	552121219126
DBA Name:		Fax Number:	552121219321
Street:	Praia de Botafogo 228, 3o. and Rio de Janeiro	E-Mail:	lprates@starone.com.br
City:		State:	
Country:	Brazil	Zipcode:	-
Attention:	Mr Luiz Prates		

S2678 SAT-PPL-20050708-00144 IB2005001501  
Star One S.A.  
STAR ONE C2

**SAT-PPL-20050708-00144**  
**Conditions of Permitted Space Station List Grant**  
**September 9, 2005**

Pursuant to Sections 303(r), 308, 309, and 310 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 303(r), 308, 309, 310, and Sections 0.261 and 25.137(c) of the Commission's rules, 47 C.F.R. §§ 0.261, 25.137(c), the Petition for Declaratory Ruling filed by Star One SA (File No. SAT-PPL-20050708-00144) to add the hybrid C and Ku-band Star One C2 satellite (Call Sign S2678) located at the 70.0° W.L. orbital location, which is licensed by Brazil, to the Commission's Permitted Space Station List is GRANTED. Accordingly, each U.S.-licensed earth station with "ALSAT" designated as a point of communication, IS GRANTED authority to provide Fixed Satellite Services (FSS) in the 14.000-14.500 GHz (Earth-to-space), 11.700-12.200 GHz (space-to-Earth), 5925-6425 MHz (Earth-to-space) and 3700-4200 MHz (space-to-Earth) frequency bands, to, from, or within the United States, by accessing the Star One C2 satellite (Call Sign S2678) at the 70.0° W.L. orbital location, in accordance with the technical specifications set forth in its petition for declaratory ruling, this Attachment, and the Commission's Rules and subject to the following conditions:

- a) Star One C2 is not authorized to provide any Direct-to-Home (DTH) service, Direct Broadcast Satellite (DBS) service, or Digital Audio Radio Service (DARS) to, from, or within the United States;
- b) Communications between ALSAT-designated routine earth stations and the Star One C2 satellite shall be in compliance with the satellite coordination agreements reached between Brazil and other administrations;
- c) Star One's request for waiver of Section 25.210(a)(3) of the Commission's rules is GRANTED as conditioned. Section 25.210 requires that all space stations in the FSS used for domestic service in the C-band shall be capable of switching polarity upon ground command. This provision is required for two reasons: to permit U.S.-licensed satellites the flexibility to be assigned to different U.S. orbital positions and to mitigate potential interference between adjacent FSS systems transmitting analog TV signals. The transmission polarization of the C-band payload of the Star One C2 satellite cannot be reversed from the ground. Star One indicates that it has not completed international coordination of the Star One C2 with the operators of the adjacent satellites serving the U.S. market. Thus, as a condition of this waiver, Star One is prohibited from transmitting or receiving analog TV signals to, from or within the United States until such time as it has completed coordination. Further, Star One must accommodate future satellite networks serving the United States that are two-degree compliant. Grant of this waiver request is consistent with our precedent;<sup>1</sup> and

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<sup>1</sup> See Mabuhay Philippines Satellite Corp. Petition for Declaratory Ruling, Application of Loral CyberStar, Inc. for Authority to Operate Two Transmit/Receive Earth Stations at Kapolei, Hawaii, for Use in Conjunction with the Mabuhay Satellite Located at 146 E.L., *Order and Authorization*, 15 FCC Rcd

d) Star One's request for waiver of Section 25.210(i) of the Commission's rules IS GRANTED as conditioned. Section 25.210(i) directs, "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 crosspolar gain of the antenna in the assigned frequency band shall be at least 30 dB within its primary coverage area." Star One indicates although the cross-polarization isolation of the Star One C2 satellite's antennas will comply with 30 dB minimum isolation over 80% the coverage area, the isolation of the C-Band BSC antenna may be as low as 27 dB and the Ku-Band MK antenna may be as low as 28 dB in the remaining 20% of the coverage area (typically at edge of coverage). The shortfall will not produce a significant increase in interference, except to Star One C2. Further, Star One must accommodate future satellite networks serving the United States that are two-degree compliant. Grant of this waiver request is consistent with our precedent.<sup>2</sup>

e) Star One also seeks waiver of the sections 25.211(a) and (b). Section 25.211(a) requires C-band analog video transmissions to occur at specific center frequencies and Section 25.211(b) requires carrier frequencies for Ku-band TV/FM transmissions to be identified for coordination with adjacent U.S. satellite systems and affected satellite systems of other administrations. Star One states that it has not completed coordination with all potentially affected U.S. satellite operators and thus it is not certain what center frequencies may be used for C-band and Ku-band FM/TV transmissions. Star One has agreed to provide such information after completion of the coordination with potentially affected U.S. satellite operators and request any necessary waivers at that time. Under these circumstances, we find that Star One's failure to identify the center frequencies to be used for C-band and Ku-band FM/TV transmissions does not preclude grant of the petition for declaratory ruling in this instance as we have already precluded this type of transmission. Specifically, as noted above as a condition of inclusion on the Permitted List, U.S. licensed earth stations are prohibited from transmitting or receiving FM/TV transmissions from television signals from the satellite. In addition to the points discussed above, this condition will only be lifted upon the filing of a modification request that demonstrates compliance with the Commission's rules, including section 25.211(a) and (b).

f) Unless extended by the Commission for good cause shown, Star One C2 shall be removed from the Permitted Space Station List in the event the space station is not constructed, launched, and successfully placed into operation in accordance with the technical parameters in its Petition for Declaratory Ruling and the terms and conditions of this grant, by the following dates:

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23671, 23676 para. 13 (2000) (granting a waiver of section 25.210(a)(3) and imposing the same condition imposed here).

<sup>2</sup> Star One S.A.; Petition for Declaratory Ruling to Add The Star One C1 Satellite at 65° W.L. to the Permitted Space Station List, *Order*, 19 FCC Rcd 16334 (Sat. Div. 2004) (finding that the impact on neighboring satellite systems of a 3-5 dB difference from the required cross polarization isolation ratio would be negligible).

1. Execute a contract for construction: September 9, 2006;
2. Complete Critical Design Review: September 9, 2007;
3. Commence Physical Construction: September 9, 2008;
4. Launch: September 9, 2010 and

Star One S. A. must file a bond with the Commission in the amount of \$3 million, pursuant to the procedures set forth in Public Notice, DA 03- 2602, 18 FCC Rcd 16283 (2003), no later than October 9, 2005.

g) This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon adoption. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.1 15 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.

9-16. Name of Contact Representative

Name:	Alfred Mamlet	Phone Number:	202-429-3000
Company:	Steptoe & Johnson LLP	Fax Number:	202-429-3902
Street:	1330 Connecticut Avenue, N.W.	E-Mail:	amamlet@steptoe.com
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Attention:		Relationship:	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

a.

- (N/A) a1. Earth Station  
 a2. Space Station

b.

- b1. Application for License of New Station  
(N/A) b2. Application for Registration of New Domestic Receive-Only Station  
(N/A) b3. Amendment to a Pending Application  
(N/A) b4. Modification of License or Registration  
(N/A) b5. Assignment of License or Registration  
(N/A) b6. Transfer of Control of License or Registration  
(N/A) b7. Notification of Minor Modification  
(N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States  
 b10. Replacement Satellite Application - no new frequency bands  
 b11. Replacement Satellite Application - new frequency bands (Not eligible for streamlined processing)  
 b12. Petition for Declaratory Ruling to be Added to the Permitted List  
(N/A) b13. Other (Please specify)