

Approved by OMB
3060-0678

Date & Time Filed: Oct 29 2007 5:22:28:250PM
File Number: SAT-STA-20071029-00147
Callsign:

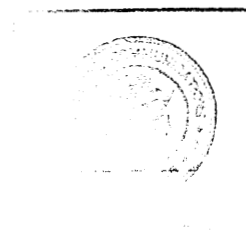
FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY
FOR OFFICIAL USE ONLY

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
STA Request for Horizons 2 to Conduct IOT at 67.5 W.L.

1. Applicant

Name:	PanAmSat H-2 Licensee Corp.	Phone Number:	202-944-7848
DBA Name:		Fax Number:	202-944-7870
Street:	3400 International Drive, N.W.	E-Mail:	susan.crandall@intelsat.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20008 -3006
Attention:	Susan H Crandall		



File # SAT-STA-20071029-00147
Call Sign S2423 Grant Date 11/30/07
(or other identifier)
Term Dates
From see #18 To:
[Signature]

Attachment
Conditions of Authorization
IBFS File Nos. SAT-MOD-20070628-00090, SAT-AMD-20070731-00108, and
SAT-STA-20071029-00147
PanAmSat Horizons 2
Call Sign: S2423
November 30, 2007

PanAmSat H-2 Licensee Corp.'s (PanAmSat)'s request to modify its authorization to launch and operate a Ku-band satellite, Horizons 2,¹ IBFS File No. SAT-MOD-20070628-00090 as amended by File No. SAT-AMD-20070731-00108 (Call Sign: S2423), to be located at the 74.05° W.L. orbital location IS GRANTED. Accordingly, PanAmSat is authorized to provide Fixed Satellite Services (FSS) in the 11.7-12.2 GHz (space to Earth) and 14.0-14.5 (Earth to space) frequency bands using the Horizons 2 satellite at the 74.05° W.L orbital location, in accordance with the technical specifications set forth in its application, this Attachment, and the Commission's Rules and subject to the following conditions:

1. PanAmSat shall operate the Horizons 2 satellite at the 74.05° W.L orbital location in compliance with all existing or future coordination agreements for that location.

2. PanAmSat shall prepare the necessary information, as may be required, for submission to the International Telecommunication Union (ITU) to initiate and complete the advance publication, international coordination, due diligence, and notification process of this space station, in accordance with the ITU Radio Regulations. PanAmSat shall be held responsible for all cost-recovery fees associated with these ITU filings. We also note that no protection from interference caused by radio stations authorized by other administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments of other administrations. See 47 C.F.R. §25.111(b).

3. Horizons 2 must begin providing service at the 74.05° W.L orbital location in the Ku-bands before the satellites it is replacing discontinues service at the 74.05° W.L orbital location.² Failure to meet this milestone date shall render this authorization null and void.

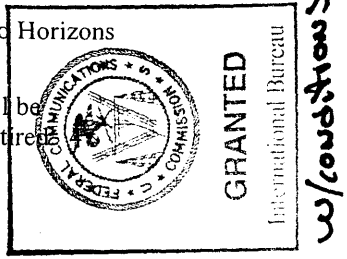
4. PanAmSat's request for waiver of Section 25.114(d)(3) of the Commission's

File #s
 SAT-MOD-20070628-00090
 SAT-AMD-20070731-00108
 SAT-STA-20071029-00147

Grant Date 11/30/07
 Term Dates
 From
 To
 Approved: *[Signature]* Policy Branch Chief

¹ As part of its modification request, PanAmSat changed the name of the satellite from SBS-6R to Horizons 2.

² Among other things, a replacement satellite is one that is scheduled to be launched so that it will be brought into use at approximately the same time as, but no later than, the existing satellites are retired. C.F.R. § 25.165(e)(2).



rules, 47 C.F.R. § 25.114(d)(3), IS GRANTED. Section 25.114(d)(3) requires predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. PanAmSat's application indicates that the Omni Antenna diagrams (Exhibits 6H, 6I, 6K, and 6L) were not prepared in accordance with the parameters specified in Section 25.114(d)(3) of the Commission's Rules because the satellite manufacturer did not provide contours in the required form since pointing of the omni antennas with respect to the Earth will vary during emergency situations. Similarly, PanAmSat's application indicates that the ULPC global horn antenna diagram (Exhibit 6M) was not prepared in accordance with the parameters specified in Section 25.114(d)(3) of the Commission's Rules because the satellite manufacturer did not provide contours in the required form. Under these specific circumstances, we find that Exhibits 6H, 6I, 6K, 6L, and 6M, together with the descriptive characterization provided in Sections 2.7.1 and 2.8 of the application,³ respectively, fulfill the requirements of Section 25.114(d)(3). Grant of this waiver request is consistent with our precedent.⁴

5. PanAmSat's request for a partial waiver of Section 25.283(c) of the Commission's rules, 47 C.F.R. 25.283(c), IS GRANTED. Section 25.283(c) specifies that space stations must discharge all stored energy sources at end-of-life of the space station. PanAmSat indicates that due to its design, Horizon 2's oxidizer tanks cannot be completely depleted but will retain approximately 13 kilograms of the oxidizer (less than a 3% fill fraction) after the oxidizer tanks are isolated from the Liquid Apogee Motor (LAE) and Dual Mode Thrusters (DMTs) immediately following the last orbit-raising maneuver. This waiver is granted because modification of the spacecraft would present an undue hardship, given the late stage of satellite construction. In making this determination, we note that, the information submitted in the application is not sufficient to support a finding that the intent of the rule would be satisfied by the described procedure for sealing the oxidizer tank.⁵

6. The license term for the space station is 15 years and will begin on the date PanAmSat certifies to the Commission that the satellite has been successfully placed into orbit and its operation fully conforms to the terms and conditions of this authorization. PanAmSat shall file its certification with the Chief, Satellite Division, International Bureau within 5 business days of the satellite being placed into operation at the 74.05° W.L. orbital location.

7. PanAmSat is afforded thirty days from the date of release of this grant and authorization to decline this authorization as conditioned. Failure to respond within this

³ See PanAmSat H-2 Licensee Corp. application for modification of authorization to launch and operate its Horizons-2 satellite (Call Sign: S2423) at 74.5° W.L, SAT-MOD-20070628-00090, Engineering Statement at 10-11, 13.

⁴ See SES Americom, Inc., Application for Modification of Space Station Authorization, DA 04-1581, *Order and Authorization*, 19 FCC Rcd. 20,377, 20,378-79 (paras. 4-8) (Int'l Bur., Sat. Div. 2004) (finding 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).

⁵ We note that the manufacturer of the Horizons 2 satellite has indicated that changes to its spacecraft design will allow its future satellites to be fully compliant with the requirements of Section 25.283(c), 47 C.F.R. 25.283(c).

period will constitute formal acceptance of the authorization as conditioned.

8. PanAmSat's Licensee Corp.'s request for special temporary authority to conduct in-orbit testing of Horizons 2 at the 67.5° W.L. orbital location for a period of 60 days prior to Horizon 2's installation at the 74.05° W.L. orbital location, File No. SAT-STA-20071029-00147, IS GRANTED. Accordingly, PanAmSat H-2 Licensee Corp. is authorized to conduct space station Telemetry, Tracking, and Control operations on Horizons 2 necessary to effect operation at the 67.5° W.L. orbital location in the 11.7-12.2 GHz (space to Earth) and 14.0-14.5 (Earth to space) frequency bands from December 26, 2007 to February 23, 2007, subject to the following conditions:

- a. All operations shall be on an unprotected and non-harmful interference basis, *i.e.*, PanAmSat shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radiocommunication system.
- b. In the event of any harmful interference as a result of PanAmSat's operations at the 67.5° W.L. orbital location, PanAmSat shall cease operations immediately upon notification of such interference and shall inform the FCC, in writing, immediately of such an event.
- c. While at the 67.5° W.L. orbital location, PanAmSat shall maintain the Horizons 2 spacecraft with an east/west longitudinal station-keeping tolerance of 0.05 degrees.
- d. Any actions taken as a result of the launch and operation of Horizons 2 are solely at PanAmSat's own risk.

9. These actions are issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and are effective upon grant. 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 30 days of the date of the public notice indicating that these actions were taken.

2. Contact

Name:	PanAmSat H-2 Licensee Corp.	Phone Number:	202-944-7848
Company:		Fax Number:	202-944-7870
Street:	3400 International Drive, N.W.	E-Mail:	susan.crandall@intelsat.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20008 -3006
Attention:	Susan H Crandall	Relationship:	Legal Counsel

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number or Submission ID

4a. Is a fee submitted with this application?

- If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).
- Governmental Entity Noncommercial educational licensee
- Other (please explain):

4b. Fee Classification CRY -- Space Station (Geostationary)

5. Type Request

- Change Station Location Extend Expiration Date Other

6. Temporary Orbit Location
67.5 W.L.

7. Requested Extended Expiration Date

8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

PanAmSat H-2 Licensee Corp. herein requests a grant of STA for 60 days, from 12/26/2007 through 02/23/ 2008, to conduct in-orbit testing of Horizons 2 at 67.5 W.L. in the conventional Ku-bands 14000-14500 MHz and 11700-12200 MHz before drifting the satellite to its permanent location of 74.05 W.L.

9. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. Yes No

10. Name of Person Signing
Susan H. Crandall

11. Title of Person Signing
Asst. General Counsel, Intelsat Corporation

12. Please supply any need attachments.

Attachment 1: STA Request

Attachment 2:

Attachment 3:

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PER, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

October 29, 2007

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554



Re: Request for Special Temporary Authority to Conduct In-Orbit Testing of
Horizons 2
Call Sign: S2423

Dear Ms. Dortch:

PanAmSat H-2 Licensee Corp. ("PanAmSat") herein requests a grant of Special Temporary Authority ("STA")¹ for 60 days, from December 26, 2007 through February 23, 2008, to conduct in-orbit testing of Horizons 2 at 67.5° W.L. in the conventional Ku-bands 14000-14500 MHz and 11700-12200 MHz before drifting the satellite to its permanent location of 74.05° W.L. Horizons 2 is currently scheduled to be launched on December 18, 2007. In support of its request, PanAmSat submits the following information.

In 2003, the Commission authorized PanAmSat Licensee Corp. to launch Horizons 2 and operate it at 74.0° W.L.² On June 28, 2007, PanAmSat filed an application to modify the Horizons 2 license, including a revision of the orbital location to 74.05° W.L.³

During in-orbit testing of Horizons 2, PanAmSat will operate in the conventional Ku-bands. PanAmSat is in the process of coordinating the planned in-orbit testing of Horizons 2 with all operators of satellites operating co-frequency up to six degrees away from 67.5° W.L. Specifically, PanAmSat

¹ PanAmSat has filed this STA request, an FCC Form 159 and a \$790.00 filing fee electronically via the International Bureau's Filing System.

² See Satellite Policy Branch Information, Report No. SAT-00158, File No. SAT-LOA-20000929-00137 (Aug. 29, 2003) (Public Notice). This authorization was subsequently assigned to PanAmSat H-2 Licensee Corp. See Policy Branch Information; Actions Taken, Report No. SAT-00318, File No. SAT-ASG-20050727-00148 (Sept. 9, 2005) (Public Notice).

³ See *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00464, File No. SAT-MOD-20070628-00090 (Aug. 10, 2007) (Public Notice). PanAmSat subsequently further amended the pending modification application to revise its orbital debris mitigation statement and to request a waiver of Section 25.283(c). See *Policy Branch Information; Satellite Space Applications Accepted for Filing*, Report No. SAT-00464, File No. SAT-AMD-20070731-00108 (Aug. 10, 2007) (Public Notice).

Ms. Marlene H. Dortch
October 29, 2007
Page 2

is coordinating with Star One with regard to the Star One C1 satellite, which will be located at 65° W.L. following its launch, and the Nahuel 1 satellite located at 71.8° W.L.; Loral Skynet, the operator of the Estrela do Sul 1 satellite located at 63° W.L.; and SES AMERICOM, the operator of the AMC 6 satellite located at 72° W.L. In the unlikely event that harmful interference occurs, PanAmSat will take all necessary steps to eliminate the interference.

The in-orbit testing of Horizons 2 at 67.5° W.L. is a critical step in ensuring that the satellite will be fully operational at 74.05° W.L. This, in turn, will ensure continuity of existing services at the nominal 74° W.L. location, and thereby promote the public interest.

For the reasons set forth herein, PanAmSat respectfully requests that the Commission grant this request.

Sincerely,



Susan H. Crandall
Assistant General Counsel
Intelsat Corporation

Cc: Robert Nelson
Karl Kensinger
Andrea Kelly
Jabin Vahora