Approved by OMB 3060-0678

## APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu: Castle Rock CO Pre—Grant STA Request September 2011

Name:	HNS License Sub, LLC	Phone Number:	301-428-5506	
DBA Name:		Fax Number:	301-428-2802	
Street:	11717 Exploration Lane	E-Mail:	Steven.Doiron@hughes.com	
City:	Germantown	State:	MD	
Country:	USA	Zipcode:	20876 –	
Attention:	Mr. Steven Doiron			



Conditions: SES-STA-20110916-01100 E060382

HNS License Sub, LLC (HNS) is granted Special Temporary Authority for 30 days, from 9/28/2011 through 10/28/2011, authorization to operate, for testing purposes only, telemetry, tracking, and command ("TT&C") signals over only the new 9.2 meter GDSATCOM transmit/receive Earth station antenna at Castle Rock, CO as described in SES-MFS-20110912-01065 filing. Based on the following conditions:

- 1. Testing may be conduct over only Galaxy 28 @ 89° W.L.(S2205), AMC-15 @ 105° W.L.(S2180), or AMC-16 @ 85° W.L. (S2181) on uplink frequencies:28351-28353 MHz and downlink frequencies: 20199.5000, 19700.5000-19702.5000 MHz.
- 2. All operations shall be on an unprotected and non-harmful interference basis, i.e., HNS shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station.
- 3. In the event that there is a report of interference, HNS must immediately terminate transmissions and notify the FCC in writing.
- 4. HNS must comply with all FAA antenna height restrictions defined in 47 CFR Part 17.
- 5. HNS must make all reasonable and customary measures to ensure that the earth station does not create a potential for harmful non-ionizing radiation to persons who may be in the vicinity of the earth station when it is in operation. At a minimum, permanent warning labels shall be fixed to the earth station and its housing warning of the radiation hazard and including a diagram showing the regions around the earth station where radiation levels could exceed 1 .0mW/cm2. The earth station operator shall be responsible for assuring that individuals do not stray into the regions around the earth station where there is a potential for exceeding the maximum permissible exposure limits required by 47 C.F.R. §1.1310. This shall be accomplished by means of signs, caution tape, verbal warnings, placement of the earth station so as to minimize access to the hazardous region, and/or other appropriate means.



FCC Form 312 – STA Castle Rock, CO Earth Station E060382 Attachment September 2011

## **Explanation and Public Interest Statement**

HNS License Sub, LLC ("Hughes") is seeking special temporary authority ("STA") for period of 30 days beginning on September 26, 2011, to operate for telemetry, tracking, and command ("TT&C") testing purposes the new 9.2 meter GDSATCOM transmit/receive Earth station antenna it has applied to add to its license for Call Sign E060382 at Castle Rock, Colorado. See File No. SES-MFS-20110912-01065 ("Modification Application"). Hughes also requests temporary authority to operate the three associated 1.8 meter beacon uplink earth station antennas proposed for beam pointing purposes in the Modification Application – two in North Las Vegas, NV and one in Brownsville, TX – as part of the TT&C tests. The 9.2 meter TT&C earth station antenna and the three Prodelin 1.8 meter beacon uplink antennas will be used with Hughes's Jupiter 107W satellite upon the spacecraft's launch in 2012. The temporary authority requested here proposes operation for TT&C testing purposes with Intelsat's Galaxy 28 satellite at 89° W.L. If capacity on Galaxy 28 is not available to Hughes, Hughes would conduct the tests using either the AMC-15 satellite at 105° W.L. or the AMC-16 satellite at 85° W.L. Under the requested STA, no traffic would be carried on these space stations other than test signals.

Operations of the 9.2 meter GDSATCOM antenna and the three 1.8 meter Prodelin antennas under the requested STA will be as proposed in the above-referenced Modification Application, and all testing is expected to be done at power levels consistent with Section 25.138 of the Commission's rules. All three potential space stations for testing operations are proposed in the Modification Application as points of communication for the new antennas on Hughes's license for Call Sign E060382. Hughes incorporates the technical showings from the Modification Application into this submission.

Good cause exists for the grant of the requested STA. As Hughes's Castle Rock, Colorado earth station is one of two earth station sites that will provide TT&C operations for Jupiter 107W upon its launch next year, it is important that Hughes ensure that the earth station antennas are functional and operationally prepared to be integrated with the space station as soon as the satellite is launched. Hughes is filing concurrently a request for similar temporary authority to test its proposed new GDSATCOM 9.2 meter TT&C

Hughes notes, with respect to the 1.8 meter antennas, that there is a possibility that during the testing, Hughes will need to increase the power levels of the beacon stations briefly to levels above those proposed in the Modification Application. Hughes will not operate beyond the proposed levels in any way without having completed coordination of those operations with all potentially affected satellite operators, and recognizes that all operations under this proposed STA are on a non-harmful interference/non-protected basis.

earth station antenna at Fillmore, California (File No. SES-MFS-20110912-01066) under Call Sign E060383.

For the foregoing reasons, Hughes respectfully requests special temporary authority to enable it to operate the new Castle Rock, Colorado 9.2 meter transmit/receive earth station and the proposed new 1.8 meter earth station antennas at North Las Vegas, Nevada and Brownsville, Texas proposed in the pending Modification Application with Galaxy 28 at the 89° W.L. orbital location, AMC-15, at the 105° W.L. orbital location, or AMC-16 at the 85° W.L. orbital location for a period of 30 days beginning on September 26, 2011.

2. Contact			
Name:	Stephen D. Baruch	Phone Number:	202-416-6782
Company:	Lerman Senter PLLC	Fax Number:	202-429-4626
Street:	2000 K Street, N.W.	E-Mail:	sbaruch@lermansenter.com
	Suite 600		
City:	Washington	State:	DC
Country:	USA	Zipcode:	20006 –
Attention:		Relationship:	Legal Counsel
(If your application is related to an application. Please enter only one.) 3. Reference File Number SESMF	application filed w ) 'S2011091201065	rith the Commission, enter or Submission ID	either the file number or the IB Submission ID of the related
4a. Is a fee submitted with this application?  • If Yes, complete and attach FCC Form 159.		, indicate reason for fee	If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
O Governmental Entity	y O Noncommercial educational licensee	onal licensee	
Other(please explain):	1):		
4b. Fee Classification	CGX - Fixed Satellite Transmit/Receive Earth Station	/Receive Earth Station	
5. Type Request			
Use Prior to Grant	O Ch	O Change Station Location	<b>O</b> Other
6. Requested Use Prior Date 09/26/2011	Date		
7. CityCastle Rock		8. Latitude (dd mm ss	8. Latitude (dd mm ss.s h) 39 16 35.0 N

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRIS (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)	14. Name of Person Signing15. Title of Person SigningSteven DoironSenior Director, Regulatory Affairs	13. 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.		Attachment 1: Narrative  Attachment 2:  Attachment 2:  Attachment 3:  Attachment 1: Narrative  Attachment 3:	(dd mm ss.s h) 104 48
IISHABLE BY FINE AND / OR IMPRISONMENT OF ANY STATION AUTHORIZATION FURE (U.S. Code, Title 47, Section 503).	f Person Signing Director, Regulatory Affairs	party to the application is  Yes No  No  No  Yes  No  No  No  No  No  No  No  No  No  N	erate for TT&C testing purposes the ng modification of license application 382. See Attachment.	Attachment 3:	s.s h) 104 48 30.0 W

## FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS. Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept 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 The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions,

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. Remember - You are not required to respond to a collection of information sponsored by the Federal government, and the government may not

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