Approved by OMB 3060–0678

Date & Time Filed: Feb 27 2013 4:46:08:726PM File Number: SES–MOD–INTR2013–00484

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu: February 2013 Application to Modify E990170 to Add Transportable Antenna

1–8. Legal Name of Applicant **Phone Number:** HNS License Sub, LLC 301-428-5506 Name: DBA **Fax Number:** 301-428-2802 Name: Street: 11717 Exploration Lane E-Mail: Steven.Doiron@hughes.com City: Germantown State: MD USA Zipcode: **Country:** 20876 Attention: Mr. Steven Doiron

9–16. Name of Contact Representative

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
<b>Country:</b>	USA	Zipcode:	20006-
Attention:	Stephen D. Baruch	<b>Relationship:</b>	Legal Counsel

# CLASSIFICATION OF FILING

17. Choose the button next to the	
classification that applies to this filing for	(N/A) b1. Application for License of New Station
both questions a. and b. Choose only one	(N/A) b2. Application for Registration of New Domestic Receive–Only Station
for 17a and only one for 17b.	<b>b</b> 3. Amendment to a Pending Application
a1. Earth Station	b4. Modification of License or Registration
•	b5. Assignment of License or Registration
• a2. Space Station	b6. Transfer of Control of License or Registration
	• b7. Notification of Minor Modification
	(N/A) b8. Application for License of New Receive–Only Station Using Non–U.S. Licensed
	Satellite
	(N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United
	States
	(N/A) b10. Other (Please specify)
	(N/A) b11. Application for Earth Station to Access a Non–U.S.satellite Not Currently Authorized
	to Provide the Proposed Service in the Proposed Frequencies in the United States
	(N/A) b12. Application for Database Entry
	b13. Amendment to a Pending Database Entry Application
	• b14. Modification of Database Entry

17c. 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 G Noncommercial educational licensee						
• Other(please explain):						
17d.						
Fee Classification CGV – Fixed Satellite VSAT System						
18. If this filing is in reference to an existing station, enter:19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:						
(a) Call sign of station:	(a) Call sign of station: (a) Date pending application was filed: (b) File number:					
E990170	E990170					
		SESRWL2009051200582				

## TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:					
a. Fixed Satellite					
b. Mobile Satellite					
c. Radiodetermination Satellite					
d. Earth Exploration Satellite					
e. Direct to Home Fixed Satellite					
f. Digital Audio Radio Service					
g. Other (please specify)					
21. STATUS: Choose the button next to the applicable status. Choose	22. If earth station applicant, check all that apply.				
only one.	Using U.S. licensed satellites				
Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites				
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:					
• Connected to a Public Switched Network • Not connected to a Public Switched Network • N/A					
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s).					
a. C–Band (4/6 GHz) b. Ku–Band (12/14 GHz)					
c.Other (Please specify upper and lower frequencies in MHz.)					
Frequency Lower: Frequency Upper: (Please specify additional frequencies in an attachment)					

## TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.				
o a. Fixed Earth Station				
• b. Temporary–Fixed Earth Station				
● c. 12/14 GHz VSAT Network				
O d. Mobile Earth Station				
• e. Geostationary Space Station				
• f. Non–Geostationary Space Station				
• g. Other (please specify)				
26. TYPE OF EARTH STATION FACILITY:				
Transmit/Receive Transmit-Only Receive-Only N/A				
"For Space Station applications, select N/A."				

#### PURPOSE OF MODIFICATION



## ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.						
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.						
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	۲	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	۲	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	۲	N/A
32. Is the applicant a corporation of which more than one–fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	0	Yes	0	No	۲	N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than	0	Yes	0	No	<b>@</b>	N/A
one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign						
government or representative thereof or by any corporation organized under the laws of a foreign country?						

34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.

#### BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules? If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	O Yes	No     No     Second
36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	● Yes	O No
	Question 36	

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	● No
38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	O Yes	● No
39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhinit, an explanation of the circumstances.	• Yes	O No
40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.		

 41. 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

 42a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.
 Yes
 No

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station? See Exhibit D.

43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

See attached narrative.

Exhibit A

43a. Geographic Service Rule Certification By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.	● A
By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.	<b>О</b> <sup>В</sup>
By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.	<b>O</b> C

## CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)					
O Individual					
O Unincorporated Association					
• Partnership					
• Corporation					
• Governmental Entity					
Other (please specify)					
45. Name of Person Signing	46. Title of Person Signing				
Steven Doiron	Senior Director, Regulatory Affairs				
>					
(U.S. Code, Title 18, Section 1001), AND/OR R	A ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT EVOCATION OF ANY STATION AUTHORIZATION FORFEITURE (U.S. Code, Title 47, Section 503).				

#### SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth St	ation Site					
E1: Site Identifier:	HUB-D	E5. Call Sign:	E990170			
E2: Contact Name	Mike Pewarchie	E6. Phone Number:	248-353-1562			
E3. Street:	2400 Northwestern Highway	E7. City:	Southfield			
		E8. County:	Oakland			
E4. State	MI	E9. Zip Code	48075			
E10. Area of Operation:		CONUS, AK, HI, P	PR, VI			
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	linates are:	O NAD-27	● NAD-83	O <sup>N/A</sup>		
E14. Site Elevation	(AMSL):	0.0 meters				

proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide as a technical analysis showing compliance with two-degree spacing policy.
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E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurements?	O Yes	O <sup>No</sup>	● N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	• Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	۲	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	۲	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is required, have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard of the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	0	Yes	۲	No

# Satellite Name: OTHER | OTHER |If you selected OTHER, please enter the following:E21. Common Name: ALSATE22. ITU Name:E23. Orbit Location:E24. Country:VOINTS OF COMMUNICATION (Destination Points)E25. Site Identifier:

E26. Common Name:	E27. Country:
	127. County.

# ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
HUB–D	HUB–D	1	Andrew Corporation	ESA2.4VSMKU	2.4	47.7 dBi at 11.95
HUB–D	HUB–D	1	Andrew Corporation	ESA2.4VSMKU	2.4	49.2 dBi at 14.25

Id	Diameter			Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
HUB–D	0.0/0.0	0.0	0.0	0.0	300.0	0.0	74.0

# FREQUENCY

	E43/44. Frequency Bands (MHz)				EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
HUB–D	11700.0000 12200.0000	R	Horizontal and Vertical	200KG7D	0.0	0.0

E50. Modulation entirety.)	n and Services (If	the complete descript	ion does not appear i	n this box, please go	to the end of the form	to view it in its
	PSK, 128 ksps					
HUB–D	11700.0000 12200.0000	R	Horizontal and Vertical	800KG7D	0.0	0.0
E50. Modulation entirety.)	n and Services (If	the complete descript	ion does not appear i	n this box, please go	to the end of the form	to view it in its
Inbound, 1	PSK, 512 ksps					
HUB–D	14000.0000 14500.0000	Т	Horizontal and Vertical	36M0G7D	73.97	34.43
E50. Modulation entirety.)	n and Services (If	the complete descript	ion does not appear i	n this box, please go	to the end of the form	to view it in its
Outroute,	PSK, 30 Msps					
HUB–D	14000.0000 14500.0000	Т	Horizontal and Vertical	1M60G7D	61.22	35.2

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Outroute, PSK, 1024 ksps

## FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern Limit	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit		E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
HUB–D	Geostationary	11700.0000 12200.0000	62.0/143.0	95.0	15.0	265.0	80.0	0.0
	Geostationary	14000.0000 14500.0000	62.0/143.0	95.0	15.0	265.0	80.0	-2.5

## REMOTE CONTROL POINT LOCATION

E61. Call Sign E990170 NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E66. Phone Number 248–353–1562
E62. Street Address 24000 Northwestern Highway	

I MI/ USA	E63. City Southfield	E68. County Oakland	E67/68. State/Country MI/ USA	E64. Zip Code 48075
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