Approved by OMB 3060–0678

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APPLICATION FOR EARTH STATION AUTHORIZATIONS	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:

J2 Gateway - 8.1m antenna in Duluth, MN

1–8. Legal	Name of App	plicant		
	Name:	HNS License Sub, LLC	Phone Number:	301-428-5893
	DBA Name:		Fax Number:	301-428-2818
	Street:	11717 Exploration Lane	E-Mail:	jennifer.manner@echostar.com
	City:	Germantown	State:	MD
	Country:	USA	Zipcode:	20876 –
	Attention:	Jennifer Manner		

Name:	Jennifer A. Manner	Phone Number:	3014285893
Company:	HNS License Sub, LLC	Fax Number:	3014282818
Street:	11717 Exploration Lane	E-Mail:	jennifer.manner@echostar.com
City:	Germantown	State:	MD
Country:	USA	Zipcode:	20876-
Attention:		Relationship:	

CLASSIFICATION OF FILING

17. Choose the button next to the	b.		
classification that applies to this filing for	b1. Application for License of New Station		
both questions a. and b. Choose only one for 17a and only one for 17b.	 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 		
a. al. Earth Station (N/A) a2. Space Station	 (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 		
	(N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United States b10. Other (Please specify)		
	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. b12. Application for Database Entry		
	(N/A) b13. Amendment to a Pending Database Entry Application (N/A) b14. Modifiction 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).		
O Governmental Entity O Noncomme	rcial educational licensee		
Other(please explain):			
17d.			
Fee Classification BAX – Fixed Satellite Transmit/Receive Earth Station			

18. If this filing is in reference to an	19. If this filing is an amendment to a pending ap	oplication enter:
existing station, enter:	(a) Date pending application was filed:	(b) File number of pending application:
(a) Call sign of station:		
Not Applicable	Not Applicable	Not Applicable

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide	e 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
O Common Carrier	Using Non–U.S. licensed satellites
facilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these
• 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: 18300Frequency Upper: 30000

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.
a. Fixed Earth Station
b. Temporary–Fixed Earth Station
c. 12/14 GHz VSAT Network
d. Mobile Earth Station
(N/A) e. Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Choose only one.

Transmit/Receive Transmit–Only
Receive–Only
N/A

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

Not Applicable

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.

Yes

No No

29. Is the applicant a foreign government or the representative of any foreign government?	O Yes ● No
30. Is the applicant an alien or the representative of an alien?	O Yes O No ⊚ N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes O No ● 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?	O Yes O No ⊚ N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than 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.	• Yes	O No
	Exhibit B	
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
	Exhibit E	

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 attemptiing 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	
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.	O Yes	
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.	Exhibit C	

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	O 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 Exhibit D	O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued coordinated or is in the process of coordinating the space station?Papua New Guinea	, what administr	ation has

. Description. (Summarize the nature of the application and the services to be provided). t appear in this box, please go to the end of the form to view it in its entirety.)	(If the complete description does			
J2 Gateway application for 8.1m antenna in Duluth, MN				
Attachment 1				

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.	O ^B
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.	O C
	Exhibit A

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 net	xt to applicable response	.)			
O Individual					
O Unincorporated Association					
• Partnership					
• Corporation					
• Governmental Entity					
Other (please specify)					
Limited Liability Company					
45. Name of Person Signing		46. Title of Person Signing			
Jennifer A. Manner		Vice President, Regulatory Affairs			
47. Please supply any need attachments.					
Attachment 1:	Attachment 2:		Attachment 3:		
	L				
			BY FINE AND / OR IMPRISONMENT		
			Y STATION AUTHORIZATION		
(0.5. Code, 1110 47, Sec	$\sin (1)$, AND/O	K FUKFEITUKE (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 Sta	ation Site			
E1: Site Identifier:	1	E5. Call Sign:		
E2: Contact Name	Network Management Ctr	E6. Phone Number:	301− 428−7205	
E3. Street:	3401 Technology Drive	E7. City:	Duluth	
		E8. County:	Saint Louis	
E4. State	MN	E9. Zip Code	55811	
E10. Area of Operat	tion:	CONUS		
E11. Latitude:	46 °49 '33.6 "N			
E12. Longitude:	92 °7 '49.8 "W			
E13. Lat/Lon Coord	linates are:	O NAD-27	NAD-83	O N/A
E14. Site Elevation	(AMSL):	414.3 meters		

E15. If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the 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.	• Yes	○ ^{No}	O ^{N/A}
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 ^{No}	● 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	۲	Yes	0	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: JUPITER 97W	E22. ITU Name: RAGGIANA−5
E23. Orbit Location: 97.1 WL	E24. Country: Papua New Guinea
POINTS OF COMMUNICATION (Destination Points)	
E25. Site Identifier:	
E26. Common Name:	E27. Country:

ANTENNA

Site ID	E28. Antenna Id		E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
1	1	1	ASC Signal	Ka 8.1m	8.1	65.3 dBi at 30
						62.0 dBi at 20.2

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)		(meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
1	8.1/8.1	8.3	422.6	0.0	200.0	0.0	88.3

FREQUENCY

 E43/44. Frequency Bands	E45. T/R Mode		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)		L,R)	(dBW)	Carrier (dBW/4kHz)

1	18300 19300	R	Left and Right Circular	100KG7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
M-ary PSK	Inroute					
1	18300 19300	R	Left and Right Circular	250MG7W	0.0	0.0
M-ary PSK	Inroute					
1	19700 20200	R	Left and Right Circular	250MG7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If	the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
M-ary PSK	Inroute					

1	19700 20200	R	Left Hand Circular	100KG7W	0.0	0.0
E50. Modulation entirety.)	and Services (If t	the complete descript	tion does not appear in	this box, please	go to the end of th	he form to view it in its
M-ary PSK	Inroute					
1	27850 29100	Т	Left and Right Circular	100KG7W	58.8	44.8
M-ary PSK	Outroute					
1	27850 29100	Т	Left and Right Circular	250MG7D	88.3	44.8
E50. Modulation entirety.) M-ary PSK		the complete descript	tion does not appear in	this box, please g	go to the end of th	he form to view it in its

1	27850 29100	Т	Left and Right Circular	89M8G7W	88.3	44.8
E50. Modulation entirety.)	a and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of the	he form to view it in its
M-ary PSK	Outroute					
1	29250 30000	Т	Left and Right Circular	100KG7W	58.8	44.8
M-ary PSK						
1	29250 30000	Т	Left and Right Circular	250MG7D	88.3	40.4
E50. Modulation entirety.)	n and Services (In	f the complete de	escription does not appear	in this box, please	go to the end of the	he form to view it in its
M-ary PSK	Outroute					

1		29250 30000	Т	Left and Right Circular	89M8G7W	88.3	44.8
	50. Modulation	and Services (If th	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entir	ety.)						
	M-ary PSK	Outroute					

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	Range of Satellite Arc E/W Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
1	Geostationary	18300 20200	97.1/97.1	186.7	35.9	186.7	35.9	-9999.0
	Geostationary	27500 30000	97.1/97.1	186.7	35.9	186.7	35.9	-44.8

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E65. Phone Number 3014287205
E62. Street Address 11717 Exploration Lane	

MD/ USA		E63. City Germantown	E67. County Montgomery	E64/68. State/Country MD/ USA	E66. Zip Code 20876
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