Date & Time Filed: Jun 29 2018 1:32:02:343PM File Number: SES-MOD-INTR2018-03350

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:

E080215 – License Modification

Name:	EchoStar Broadcasting Holding Corporation	Phone Number:	202–463–3709
DBA Name:		Fax Number:	
Street:	1110 Vermont Ave NW	E-Mail:	Alison.Minea@dish.com
	Suite 750		
City:	Washington	State:	DC
<b>Country:</b>	USA	Zipcode:	20005 –
Attention:	Ms Alison Minea		

9–16. Name of Contact Representative

Name: EchoStar Broadcasting Holding Phone Number: 202–463–3709

Corporation

Company: Fax Number:

Street: 1110 Vermont Ave NW E-Mail: Alison.Minea@dish.com

Suite 750

City: Washington State: DC

Country: USA Zipcode: 20005–

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.	(N/A) b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive—Only Station b3. Amendment to a Pending Application
a1. Earth Station a2. Space Station	<ul> <li>b4. Modification of License or Registration</li> <li>b5. Assignment of License or Registration</li> <li>b6. Transfer of Control of License or Registration</li> <li>b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States</li> <li>(N/A) b10. Other (Please specify)</li> <li>(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</li> <li>(N/A) b12. Application for Database Entry</li> <li>b13. Amendment to a Pending Database Entry Application</li> <li>b14. Modification of Database Entry</li> </ul>
17c. Is a fee submitted with this application of the submitted with th	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
17d.  Fee Classification CGX – Fixed Satellite T Station	Transmit/Receive Earth

18. If this filing is in reference to an existing station, enter:	an 19. If this filing is an amendment to a pending application enter both fields, if this filing is modification please enter only the file number:		
(a) Call sign of station:	(a) Date pending application	n was filed:	(b) File number:
E080215			SESMFS2013010700007
TYPE OF SERVICE			
20. NATURE OF SERVICE: This filing is fo	or 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 only one.		22. If earth station ap Using U.S. licen	oplicant, check all that apply. sed satellites
Common Carrier Non–Common	Carrier	15.21	licensed satellites
23. If applicant is providing INTERNATION	AL COMMON CARRIER S	ervice, see instruction	s regarding Sec. 214 filings. Choose one. Are these

Connected to a Public Switched Network Not connected to a Public Switched Network N/A

facilities:

24	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)				
	Frequency Lower: 12200.0000	Frequency Upper: 17800.0000	(Please specify additional frequencies in an attachment)		
TYPE	OF STATION				
25. Cl	LASS OF STATION: Choose the butto	n next to the class of station that app	olies. Choose only one.		
<b>●</b> a	. Fixed Earth Station				
O b	. Temporary–Fixed Earth Station				
0 c	. 12/14 GHz VSAT Network				
o d	. Mobile Earth Station				
e	. Geostationary Space Station				
o f	. Non-Geostationary Space Station				
O g	. Other (please specify)				
26. T	YPE OF EARTH STATION FACILITY	·			
● T	ransmit/Receive	Receive-Only N/A			
"For S	Space Station applications, select 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.)
a — authorization to add new emission designator and related service
b — authorization to change emission designator and related service
c — authorization to increase EIRP and EIRP density
d — authorization to replace antenna
e — authorization to add antenna
f — authorization to relocate fixed station
g — authorization to change frequency(ies)
h — authorization to add frequency
i — authorization to add Points of Communication (satellites & Double
j — authorization to change Points of Communication (satellites & Double of Communication (satellites & Doub
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

#### **ENVIRONMENTAL POLICY**

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, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	ı rou	ite or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	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?	0	Yes	0	No	•	N/A

 $lackbox{ Yes } lackbox{ No}$ 

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental

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?	O Yes O	No 👩 N/A
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.	<b>o</b> Yes	No
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.	O Yes	No

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.	• Yes	<b>⊚</b> 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	• 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	<b>⊘</b> 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	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.		O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, we coordinated or is in the process of coordinating the space station? Canada	hat administr	ation has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description box, please go to the end of the form to view it in its entirety.)  Add antennas ILT5 and ILT7 along with associated emissions.	on does not a	ppear in this

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.	<b>●</b> 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.	<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 ap	oplicable response.)
o Individual	
Unincorporated Association	
Partnership	
Corporation	
Governmental Entity	
Other (please specify)	
45. Name of Person Signing	46. Title of Person Signing
Alison Minea	Director & Senior Counsel, Regulatory Affairs
>	
	DE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT

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).

### 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:	Monee	E5. Call Sign:	E080215			
E2: Contact Name	Scott Thums	E6. Phone Number:	3076335750			
E3. Street:	6737 West Steger Road	E7. City:	Monee			
		E8. County:	Will			
E4. State	IL	E9. Zip Code	60449			
E10. Area of Operat	ion:	United States				
E11. Latitude:	41 °28 '6.5 "N					
E12. Longitude:	87 °46 '36.0 "W					
E13. Lat/Lon Coordinates are:		O NAD-27	● NAD-83	O N/A		
E14. Site Elevation	(AMSL):	228.9 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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Set Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	O Yes	O No	<b>⊚</b> N/A	
E17. Is the facility operated by remote control? If YES, provide the loca point.	ation and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	o Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.1 have you attached a copy of a completed FCC Form 854 and/or the FAZ the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION				
Satellite Name: If you selected OTHER, please enter the following:				
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
POINTS OF COMMUNICATION (Destination Points)	•			
E25. Site Identifier:				

E26. Common Name:	E27. Country:

# 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 atGHz)	
Monee	ILT5	1	Vertex	13.2 Meter Vertex	13.2	62.0 dBi at 12.2000	
Monee	ILT5	1	Vertex	13.2 Meter Vertex	13.2	65.0 dBi at 17.8000	
Monee	ILT7	1	Vertex	13.2 Meter Vertex	13.2	62.0 dBi at 12.2000	
Monee	ILT7	1	Vertex	13.2 Meter Vertex	13.2	65.0 dBi at 17.8000	

Id	Diameter	E35. Above Ground Level (meters)	` ′	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
ILT5	0.0/0.0	15.5	244.4	0.0	1600.0	0.0	97.0
ILT7	0.0/0.0	15.5	244.4	0.0	1600.0	0.0	97.0

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
ILT5	12200.0000 12210.0000	R	Left and Right Circular	800KG2D	0.0	0.0
E50. Modulation entirety.)  Telemetry		,		, r	to the end of the form	
ILT5	12690.0000 12700.0000	R	Left and Right Circular	800KG2D	0.0	0.0
E50. Modulation entirety.)	and Services (If the	ne complete descript	tion does not appear in	this box, please go	to the end of the form	to view it in its
Telemetry						
ILT5	12200.0000 12210.0000	R	Left and Right Circular	1M50F3D	0.0	0.0

E50. Modulation entirety.)	n and Services (If t	he complete descripti	ion does not appear in	n this box, please go	to the end of the form	to view it in its
Ranging To	ones					
ILT5	12690.0000 12700.0000	R	Left and Right Circular	1M50F3D	0.0	0.0
E50. Modulation entirety.)	and Services (If t	he complete descripti	ion does not appear in	n this box, please go	to the end of the form	to view it in its
Ranging To	ones					
ILT5	17300.0000 17310.0000	Т	Left and Right Circular	800KG2D	82.3	59.3
E50. Modulation entirety.)	,	he complete descripti	ion does not appear in	n this box, please go	to the end of the form	n to view it in its
ILT5	17790.0000 17800.0000	Т	Left and Right Circular	800KG2D	82.3	59.3

E50. Modulation entirety.)	n and Services (If t	he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
TELECOMMAN	ND					
ILT5	17300.0000 17310.0000	Т	Left and Right Circular	1M50F3D	85.06	59.3
E50. Modulation entirety.)  Ranging To		he complete descripti	on does not appear in	n this box, please go t	o the end of the form	to view it in its
ILT5	17790.0000 17800.0000	Т	Left and Right Circular	1M50F3D	85.06	59.3
E50. Modulation entirety.)  Ranging To	ones			n this box, please go t		
ILT5	12210.0000 12690.0000	R	Left and Right Circular	24M0G7W	0.0	0.0

E50. Modulation entirety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Compressed	l Digital Video	and Data				
ILT5	17310.0000 17790.0000	Т	Left and Right Circular	24M0G7W	85.06	49.1
E50. Modulation entirety.)	l Digital Video		on does not appear in	This con, preuse go to	o the end of the form	
ILT7	12200.0000 12210.0000	R	Left and Right Circular	800KG2D	0.0	0.0
E50. Modulation entirety.)  Telemetry	and Services (If the	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
ILT7	12690.0000 12700.0000	R	Left and Right Circular	800KG2D	0.0	0.0

E50. Modulation entirety.)	n and Services (If t	he complete descripti	ion does not appear in	n this box, please go t	to the end of the form	to view it in its
Telemetry						
ILT7	12200.0000 12210.0000	R	Left and Right Circular	1M50F3D	0.0	0.0
E50. Modulation entirety.)	n and Services (If t	he complete descripti	ion does not appear in	n this box, please go t	to the end of the form	to view it in its
Ranging To	ones					
ILT7	12690.0000 12700.0000	R	Left and Right Circular	1M50F3D	0.0	0.0
E50. Modulation entirety.)	n and Services (If t	he complete descripti	ion does not appear in	n this box, please go t	to the end of the form	to view it in its
Ranging To	ones					
ILT7	17300.0000 17310.0000	Т	Left and Right Circular	800KG2D	82.3	59.3

E50. Modulation entirety.)	n and Services (If	the complete descrip	otion does not appear	in this box, please	go to the end of th	ne form to view it in its
TELECOMMA	ND					
ILT7	17790.0000 17800.0000	Т	Left and Right Circular	800KG2D	82.3	59.3
TELECOMMA	ND					
ILT7	17300.0000 17310.0000	Т	Left and Right Circular	1M50F3D	85.06	59.3
E50. Modulation entirety.)	ones	the complete descrip	otion does not appear		go to the end of th	ne form to view it in its
ILT7	17790.0000 17800.0000	Т	Left and Right Circular	1M50F3D	85.06	59.3

E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appear	in this box, please	go to the end of the	he form to view it in its
Ranging To	nes					
ILT7	12210.0000 12690.0000	R	Left and Right Circular	24M0G7W	0.0	0.0
E50. Modulation entirety.)  Compressed	and Services (If the Digital Video		on does not appear	in this box, please	go to the end of the	he form to view it in its
ILT7	17310.0000 17790.0000	Т	Left and Right Circular	24M0G7W	86.9	49.1
E50. Modulation entirety.)	and Services (If the Digital Video		on does not appear	in this box, please	go to the end of the	he form to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency 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	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
ILT5	Geostationary	12200.0000 12700.0000	61.0/148.0	142.7	34.9	249.2	13.4	0.0
	Geostationary	17300.0000 17800.0000	61.0/148.0	142.7	34.9	249.2	13.4	-1.9
ILT7	Geostationary	12200.0000 12700.0000	61.0/148.0	142.7	34.9	249.2	13.4	0.0
	Geostationary	17300.0000 17800.0000	61.0/148.0	142.7	34.9	249.2	13.4	-1.9

# REMOTE CONTROL POINT LOCATION

E61. Call Sign	E66. Phone Number							
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.								
E62. Street Address								
E63. City	E68. County		E67/68. State/Country	E64. Zip Code				

#### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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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.