Approved by OMB 3060–0678

Date & Time Filed: Jun 24 2009 4:22:20:126PM File Number: SES-MFS-20090624-00788

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: Modification of E080216 to Add Two Antennas and Change Points of Communication

Name:	EchoStar Corporation	Phone Number:	303-723-1000
DBA Name:		Fax Number:	
Street:	100 Inverness Terrace East	E–Mail:	
City:	Englewood	State:	СО
<b>Country:</b>	USA	Zipcode:	80112 –
Attention	Linda Kinney – (202)293–0981		

ame of Contact	Representative		
Name:	Pantelis Michalopoulos	Phone Number:	202-429-6494
Company:	Steptoe & Johnson LLP	Fax Number:	
Street:	1330 Connecticut Ave, NW	E-Mail:	pmichalopoulos@steptoe.com
City:	Washington	State:	DC
<b>Country:</b>	USA	Zipcode:	20036-
Attention:		<b>Relationship:</b>	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.	<ul> <li>(N/A) b1. Application for License of New Station</li> <li>(N/A) b2. Application for Registration of New Domestic Receive–Only Station</li> <li>b3. Amendment to a Pending Application</li> </ul>
<ul> <li>a1. Earth Station</li> <li>a2. Space Station</li> </ul>	<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> </ul>
	<ul> <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?					
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):	• Other(please explain):				
17d.					
Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station					
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) Date pending application was filed:	(b) File number:			
E080216		SESLIC2008092601251			

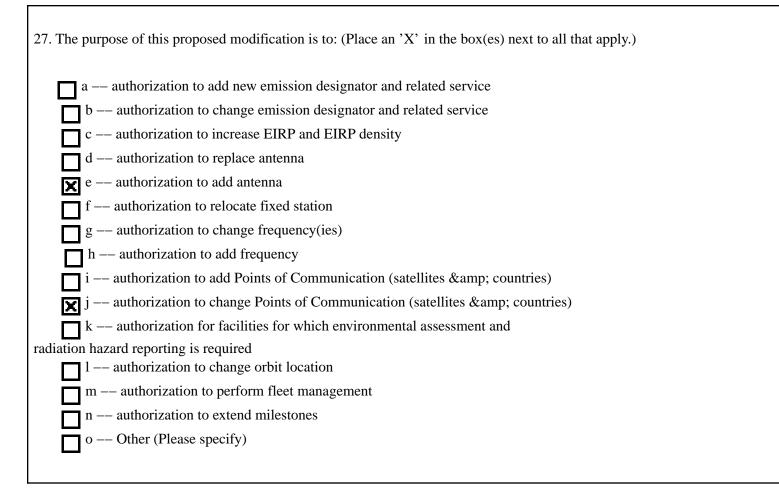
## TYPE OF SERVICE

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) Direct Broadcast Satellite Service
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 O 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: 12200Frequency Upper: 17800(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.
a. Fixed Earth Station
• b. Temporary–Fixed Earth Station
o 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 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
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	

O Yes O No ⊚ N/A

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.

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

Question 42

Yes

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? Mexico

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.)

EchoStar Corporation seeks to modify its transmit/receive earth station for the purposes of adding two antennas and making changes to the points of communications.

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				
• Unincorporated Association				
• Partnership				
• Corporation				
• Governmental Entity				
Other (please specify)				
45. Name of Person Signing	46. Title of Person Signing			
Linda Kinney	Vice President, Law and Regulation			
>				
	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:	Spokane	E5. Call Sign:	E080216			
E2: Contact Name	Silas Cole	E6. Phone Number:	307-633-5225			
E3. Street:	9815 West Hallett Road	E7. City:	Spokane			
		E8. County:	Spokane			
E4. State	WA	E9. Zip Code	99224			
E10. Area of Operat	tion:	USA				
E11. Latitude:	47 °35 '31.7 "N					
E12. Longitude:	117 °33 '4.2 "W					
E13. Lat/Lon Coord	linates are:	O NAD−27	● NAD-83	O <sup>N/A</sup>		
E14. Site Elevation	(AMSL):	741.9 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.	O Yes	<b>O</b> <sup>No</sup>	● 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?	• Yes	O <sup>No</sup> (	O N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	•	ło

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.	۲	Yes	0	No

POINTS OF COMMUNICATION

Satellite Name: OTHER   OTHER   If you selected OTHER, please enter the following:					
E21. Common Name: ECHOSTAR 8	E22. ITU Name:				
E23. Orbit Location: 77 W.L.	E24. Country: Mexico				

Satellite Name: ECHOSTAR 5 | ECHOSTAR 5 | 148 W.L. 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 at GHz)	
Spokane	WAT5	1	Vertex	13.2	13.2	62.0 dBi at 12.2	
Spokane	WAT5	1	Vertex	13.2	13.2	65.0 dBi at 17.8	
Spokane	WAT8	1	Vertex	13.2	13.2	62.0 dBi at 12.2	
Spokane	WAT8	1	Vertex	13.2	13.2	65.0 dBi at 17.8	

Id	Diameter	E35. Above Ground Level (meters)	· · · ·	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
WAT5	0.0/0.0	15.5	757.4	0.0	1600.0	0.0	97.0
WAT8	0.0/0.0	15.5	757.4	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)
WAT5	12200 12210	R	Left and Right Circular	800KG2D	0.0	0.0
E50. Modulation entirety.) Telemetry	and Services (If th	ne complete descripti	on does not appear in	this box, please go to	o the end of the form	to view it in its
WAT5	12690 12700	R	Left and Right Circular	800KG2D	0.0	0.0
E50. Modulation entirety.) Telemetry	and Services (If th	ne complete descripti	on does not appear in	this box, please go to	o the end of the form	to view it in its
WAT5	17300 17310	Т	Left and Right Circular	800KG2D	82.3	59.3

E50. Modulation	n and Services (If t	he complete descripti	on does not appear ir	n this box, please go	to the end of the form	to view it in its
entirety.)						
Telecommar	nd					
WAT5	17790 17800	Т	Left and Right Circular	800KG2D	82.3	59.3
E50. Modulation entirety.)	and Services (If t	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its
Telecomman	nd					
WAT5	12200 12210	R	Left and Right Circular	1M5F3D	0.0	0.0
E50. Modulation entirety.)	and Services (If t	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its
Ranging To	ones					
WAT5	12690 12700	R	Left and Right Circular	1M5F3D	0.0	0.0

E50. Modulation entirety.)	and Services (If th	ne complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
Ranging To	ones					
WAT5	17300 17310	Т	Left and Right Circular	1M5F3D	85.06	59.3
E50. Modulation entirety.)	and Services (If th	ne complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
Ranging To	ones					
WAT5	17790 17800	Т	Left and Right Circular	1M5F3D	85.06	59.3
E50. Modulation entirety.)	and Services (If th	ne complete descripti	on does not appear in	this box, please go t	o the end of the form	to view it in its
Ranging To	ones					
WAT5	12210 12690	R	Left and Right Circular	24M0G7W	0.0	0.0

E50. Modulation	n and Services (If	the complete descrip	tion does not appear	in this box, please g	go to the end of the	he form to view it in its
entirety.)						
Compressed	d Digital Vide	o and Data				
WAT5	17310 17790	Т	Left and Right Circular	24M0G7W	86.9	49.1
E50. Modulation entirety.)	n and Services (If	the complete descrip	tion does not appear	in this box, please g	go to the end of the	he form to view it in its
Compressed	d Digital Vide	o and Data				
WAT8	12200 12210	R	Left and Right Circular	800KG2D	0.0	0.0
E50. Modulation entirety.)	n and Services (If	the complete descrip	tion does not appear	in this box, please g	go to the end of the	he form to view it in its
Telemetry						
WAT8	12690 12700	R	Left and Right Circular	800KG2D	0.0	0.0

E50. Modulatio entirety.)	n and Services (If	the complete descript	tion does not appear	in this box, please	go to the end of the	he form to view it in its
Telemetry						
WAT8	17300 17310	Т	Left and Right Circular	800KG2D	82.3	59.3
E50. Modulatio entirety.)	n and Services (If	the complete descript	tion does not appear	in this box, please	go to the end of the	he form to view it in its
Telecomma	nd					
WAT8	17790 17800	Т	Left and Right Circular	800KG2D	82.3	59.3
E50. Modulatio entirety.)	n and Services (If	the complete descript	tion does not appear	in this box, please	go to the end of the	he form to view it in its
Telecomma	nd					
WAT8	12200 12210	R	Left and Right Circular	1M5F3D	0.0	0.0

E50. Modulation entirety.)	n and Services (If t	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its
Ranging T	ones					
WAT8	12690 12700	R	Left and Right Circular	1M5F3D	0.0	0.0
E50. Modulation entirety.)	n and Services (If t	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its
Ranging T	ones					
WAT8	17300 17310	Т	Left and Right Circular	1M5F3D	85.06	59.3
E50. Modulation entirety.)	n and Services (If t	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its
Ranging T	ones					
WAT8	17790 17800	Т	Left and Right Circular	1M5F3D	85.06	59.3

E50. Modul entirety.)	ation and Services	(If the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Ranging	g Tones					
WAT8	12210 12690	R	Left and Right Circular	24M0G7W	0.0	0.0
Compres	ssed Digital Vi	deo and Data				
WAT8	17310 17790	Т	Left and Right Circular	24M0G7W	86.9	49.1
E50. Modul entirety.)	ation and Services	(If the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Compres	ssed Digital Vi	deo and Data				

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)
WAT5	Geostationary	12200 12700	61.0/148.0	116.0	13.4	218.5	27.9	0.0
	Geostationary	17300 17800	61.0/148.0	116.0	13.4	218.5	27.9	-1.88
WAT8	Geostationary	12200 12700	61.0/148.0	116.0	13.4	218.5	27.9	0.0
	Geostationary	17300 17800	61.0/148.0	116.0	13.4	218.5	27.9	-1.88

#### 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

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