Approved by OMB 3060–0678

Date & Time Filed: Feb 2 2009 3:32:18:760PM File Number: SES-MFS-20090202-00119

FCC A	PLICATION 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 E980081

1–8. Legal Name of Applicant						
	Name:	EchoStar Corporation	Phone Number:	303-723-1000		
	DBA Name:		Fax Number:			
	Street:	90 Inverness Circle E.	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).					
• Governmental Entity • Noncomme	ercial educational licensee				
• Other(please explain):					
17d.					
Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station					
<ul><li>18. If this filing is in reference to an existing station, enter:</li><li>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:</li></ul>					
(a) Call sign of station: E980081 (a) Date pending application was filed: (b) File number:					
SESLIC1997112501672					

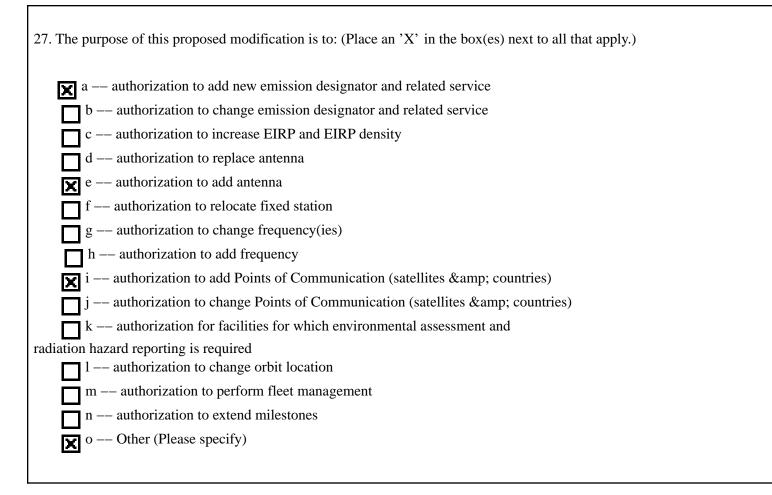
# TYPE OF SERVICE

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:	service, see instructions regarding Sec. 214 mings. Choose one. The mese			
• 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: 12200 Frequency 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.



Yes

O 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? Canada and 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 correcting the geographical coordinates, adding a second antenna facility, correcting the site name and antenna ID, adding emission designators, and adding points of communication.

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 S	tation Site					 
E1: Site Identifier:	Cheyenne	E5. Call Sign:	E980081			
E2: Contact Name	Silas Cole	E6. Phone Number:	307-633-5200			
E3. Street:	530 EchoStar Drive	e E7. City:	Cheyenne			
		E8. County:	Laramie			
E4. State	WY	E9. Zip Code	82007			
E10. Area of Operation:		USA				
E11. Latitude:	41 °7 '58.2 "N					
E12. Longitude:	104 °44 '11.0 "W					
E13. Lat/Lon Coordinates are:		O NAD−27	● NAD-83	O <sup>N/A</sup>		
E14. Site Elevation (AMSL):		1809.0 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 <sup>Yes</sup>	<b>O</b> <sup>No</sup>	● <sup>N/A</sup>
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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?	• Yes	<b>O</b> <sup>N0</sup>	0	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	(	9	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as Frequency Coord	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	<b>®</b> <sup>1</sup>	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	•	No

POINTS OF COMMUNICATION

Satellite Name: ECHOSTAR 10   USABSS 26   110 W.L.	If you selecte	ed OTHER, please enter the following:
E21. Common Name:		E22. ITU Name:
E23. Orbit Location:		E24. Country:

Satellite Name: ECHOSTAR 11 | ECHOSTAR 11 | 110 W.L. If you selected OTHER, please enter the following:

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: OTHER   OTHER   If you selected OTHER, please enter the following:			
E21. Common Name: ECHOSTAR 6	E22. ITU Name:		
E23. Orbit Location: 72.7 W.L.	E24. Country: Canada		

Satellite Name: ECHOSTAR 4   USABSS-10   77 W.L.	If you selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: RAINBOW1   BSS-17   61.5 W.L. If you select	cted OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: CIEL 2     128.85 W.L If y	ou selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: ECHOSTAR 7   USABSS 7   119 W.L.	If you selected	OTHER, please enter the following:
E21. Common Name:		E22. ITU Name:
E23. Orbit Location:		E24. Country:

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:

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

Satellite Name: ECHOSTAR 3   USABSS 8   61.5 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)	
Cheyenne	Т5	1	TIW	13.2 Meter	13.2	62.0 dBi at 12.0	
Cheyenne	Т5	1	TIW	13.2 Meter	13.2	65.0 dBi at 18.0	
Cheyenne	Т6	1	TIW	13.2 Meter	13.2	62.0 dBi at 12.0	

Cheyenne	Тб	1	TIW	13.2 Meter	13.2	65.0 dBi at 18.0	

Id	Diameter	E35. Above Ground Level (meters)	E36. Above Sea Level(meters)	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
T5	0.0/0.0	13.7	1822.7	0.0	1773.8	0.0	97.5
T6	0.0/0.0	13.7	1822.7	0.0	1773.8	0.0	97.5

FREQUENCY

	E43/44. Frequency Bands (MHz)			E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Τ5	12200 12210	R	Left and Right Circular	800KG2D	0.0	0.0

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.)

Telen	netry			

E50. Modula 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
Telemet	ry					
T5	17300 17310	Т	Left and Right Circular	800KG2D	86.4	63.4
E50. Modula 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
Telecom	umand					
T5	17790 17800	Т	Left and Right Circular	800KG2D	86.4	63.4
E50. Modula 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
Telecom	ımand					
T5	12210 12690	R	Left and Right Circular	24M0G7W	0.0	0.0

E50. Modulatio	n and Services (If	the complete descript	tion does not appear	in this box, please g	o to the end of th	e form to view it in its
entirety.)						
Digital d	ata and compre	ssed video				
Т5	17310 17790	Т	Left and Right Circular	24M0G7W	87.4	49.6
E50. Modulatio entirety.)	n and Services (If	the complete descript	tion does not appear	in this box, please g	o to the end of th	e form to view it in its
Digital d	ata and compre	ssed video				
Т6	12200 12210	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 g	o to the end of th	e form to view it in its
Telemetry						
Т6	12690 12700	R	Left and Right Circular	800KG2D	0.0	0.0

E50. Modula 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
Telemet	ry					
T6	17300 17310	Т	Left and Right Circular	800KG2D	86.4	63.4
E50. Modula entirety.)	ation and Services	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Telecom	mand					
Т6	17790 17800	Т	Left and Right Circular	800KG2D	86.4	63.4
E50. Modula entirety.)	ation and Services	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Telecom	ımand					
T6	12210 12690	R	Left and Right Circular	24M0G7W	0.0	0.0

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.)

Digital data and compressed video

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T6	17310	Т	Left and Right	24M0G7W	87.4	49.6
	17790		Circular			

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.)

Digital data and compressed video

## FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	Range of Satellite Arc Eastern/West	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)
T5	Geostationary	12200 12700	34.0/176.0	102.9	5.7	257.4	5.3	0.0
	Geostationary	17300 17800	34.0/176.0	102.9	5.7	257.4	5.3	12.93

Т6	Geostationary	12200 12700	34.0/176.0	102.9		5.7	257.4	5.3	0.0	
	Geostationary	17300 17800	34.0/176.0	102.9		5.7	257.4	5.3	12.93	
REMOTE CONTROL POINT LOCATION										
E61. Call Sign       E66. Phone Number         NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.       E66. Phone Number         E62. Street Address       E67. Street Address										
E63. City			E68. County				E67/68. State/Country /	E6	4. Zip Code	

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