Approved by OMB 3060–0678

Date & Time Filed: May 27 2005 5:32:01:806PM File Number: SES-MFS-20050527-00662

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 to E020306 (GD2)

Nai	me:	EchoStar Satellite L.L.C.	Phone Number:	303-723-1000	
DB. Nai			Fax Number:	303-723-1699	
Str	eet:	9601 South Meridian Blvd.	E-Mail:		
Cit	y:	Englewood	State:	СО	
Cou	untry:	USA	Zipcode:	80112 –	
Att	ention:	David K Moskowitz			

Name:	Pantelis Michalopoulos	Phone Number:	202-429-6494
Company:	Steptoe & Johnson LLP	Fax Number:	202-429-3902
Street:	1330 Connecticut Ave., NW	E-Mail:	pmichalo@steptoe.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036-1795
Attention:		<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.	• (N/A) b3. Amendment to a Pending Application
a1. Earth Station	(N/A) b4. Modification of License or Registration
•	b5. Assignment of License or Registration
• a2. Space Station	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
	• (N/A) b10. Other (Please specify)
	<ul> <li>(N/A) 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> </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     O     Noncommercial educational licensee						
• Other(please explain):						
17d.						
Fee Classification CGX – Fixed Satellite 7 Station	Transmit/Receive Earth					
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending ap modification please enter only the file number:	pplication enter both fields, if this filing is a				
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:				
E020306		SESMOD2003080101101				

## TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provid	le 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) DBS	
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	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER facilities:	service, 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 a	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.	f 🗸 🖉					
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	rout	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	۲	No	0	N/A
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	Ō	Yes	o	No	۲	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	● <sup>No</sup>
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.	<b>()</b> Yes Q. 36	O 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.	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?

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.)

This modification requests to add EchoStar 4 at 77W as point of communication for E020306. The requested operation of this earth station with EchoStar 4 will serve the public interest because it will allow EchoStar to improve the efficiency of its satellite fleet deployment and would enable EchoStar, in the future, to provide additional services into

#### 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.)

Individual

O Unincorporated Association

- Partnership
- Corporation

Governmental Entity

Other (please specify)

45. Name of Person Signing	46. Title of Person Signing
David K. Moskowitz	Executive Vice President and General Counsel

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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	tation Site				 
E1: Site Identifier:	GD2	E5. Call Sign:	E020306		
E2: Contact Name	Silas Cole	E6. Phone Number:	307-633-5225		
E3. Street:	801 North American Sky Blvd.	E7. City:	Gilbert		
		E8. County:	Maricopa		
E4. State	AZ	E9. Zip Code	85233		
E10. Area of Operation:		United States and C	Central America		
E11. Latitude:	33 °21 '59.8 "N				
E12. Longitude:	111 °48 '52.3 "W				
E13. Lat/Lon Coordinates are:		ONAD-27	<b>NAD-83</b>	O <sup>N/A</sup>	
E14. Site Elevation (AMSL):		371.8 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	<b>O</b> <sup>No</sup>	O <sup>N/A</sup>
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	<b>O</b> <sup>No</sup>	● <sup>N/A</sup>
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	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	● 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	

Satellite Name: OTHER | OTHER | If you selected OTHER, please enter the following:

E21. Common Name: EchoStar 4	E22. ITU Name: USABSS 10
E23. Orbit Location: 77 W.L.	E24. Country: Mexico

Satellite Name: ECHOSTAR 6   USABSS 6   110 W.L.	If you selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: ECHOSTAR 4   USABSS 10   157 W.L.	If you selected	d OTHER, please enter the following:
E21. Common Name:		E22. ITU Name:
E23. Orbit Location:		E24. Country:

Satellite Name: ECHOSTAR 2   ECHOSTAR 2   148 W.L. If you sele	cted OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: ECHOSTAR 8   USABSS 8   110 W.L.	If you 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 | USABSS 5 | 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 3   USABSS 8   61.5 W.L. If	f you selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: OTHER   OTHER   If you	CHER   OTHER         If you selected OTHER, please enter the following:	
E21. Common Name: EchoStar 1	E22. ITU Name: USABSS 3	
E23. Orbit Location: 148 W.L.	E24. Country: USA	
POINTS OF COMMUNICATION (Destination Points)		

E25. Site Identifier:	
E26. Common Name:	E27. Country:

## ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer		Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
GD2	GD2	1	Vertex	9M	9.0	58 dBi at 12
GD2	GD2	1	Vertex	9M	9.0	62 dBi at 17

E28. Antenna	E33/34.	E35. Above	E36. Above Sea	E37. Building	E38. Total	E39. Maximum	E40. Total
Id	Diameter	Ground Level	Level(meters)	Height Above	Input Power at	Antenna Height	EIRP for al
	Minor/Major	(meters)		Ground Level	antenna flange	Above Rooftop	carriers(dBW)
	(meters)			(meters)	(Watts)	(meters)	
	(meters)			(meters)	(Watts)	(meters)	

GD2	0.0/0.0	9.0		380.84	ŀ	0.0		275.5		0.0	87.4	
FREQUENCY											!	
E28. Antenna Id	E43/44. Frequency Ba (MHz)	ands	E45. T/R M	ode	E46. Anto Polarizat L,R)		E47. E Design	mission ator		Maximum P per Carrier W)		
GD2	12200.0000 12700.0000		R		Left and I Circular	Right	24M00	31F	0.0		0.0	
E50. Modulation entirety.)	on and Services	(If tl	he complete d	lescripti	on does no	t appear ir	n this boz	x, please go	to the	end of the form	to view i	t in its
Digital (	Carrier											
GD2	17300 17800		Т		Left and I Circular	Right	24M00	31F	85.7	8	48.0	
E50. Modulation entirety.)	on and Services	(If tl	he complete d	lescripti	on does no	t appear ir	n this bo	x, please go	to the	end of the form	to view i	t in its
Digital (	Carrier											
GD2	12202.0000 12202.0000		Т		Left and I Circular	Right	300KG	62D	0.0		0.0	

and Services (If t	the complete descript	ion does not appear	in this box, please	go to the end of the	he form to view it in its
Beacon (TT&C)					
12698.0000 12698.0000	R	Left and Right Circular	300KG2D	0.0	0.0
Beacon (TT&C)	ne complete descript	ion does not appear	in this box, please	go to the end of t	
17308.0000 17309.0000	Т	Left and Right Circular	1M50G2D	73.7	48.0
and Services (If t Beacon (TT&C)	the complete descript	ion does not appear	in this box, please	go to the end of t	he form to view it in its
	Beacon (TT&C) 12698.0000 12698.0000 and Services (If the second se	Beacon (TT&C)         12698.0000       R         12698.0000       R         and Services (If the complete descript         Beacon (TT&C)         17308.0000       T         17309.0000       T         and Services (If the complete descript         and Services (If the complete descript	Beacon (TT&C)         12698.0000       R         12698.0000       R         Left and Right         Circular         and Services (If the complete description does not appear         Beacon (TT&C)         17308.0000       T         Left and Right         Circular         and Services (If the complete description does not appear         Index (Structure)         Index (Structure)         Beacon (TT&C)         Index (Structure)         Index (Structure)	Beacon (TT&C)         12698.0000       R       Left and Right Circular       300KG2D         and Services (If the complete description does not appear in this box, please         Beacon (TT&C)         17308.0000       T       Left and Right Circular       1M50G2D         17308.0000       T       Left and Right Circular       1M50G2D         and Services (If the complete description does not appear in this box, please	Beacon (TT&C)         12698.0000       R       Left and Right       300KG2D       0.0         12698.0000       R       Left and Right       300KG2D       0.0         and Services       (If the complete description does not appear in this box, please go to the end of t         Beacon (TT&C)         17308.0000       T       Left and Right       1M50G2D       73.7         and Services       (If the complete description does not appear in this box, please go to the end of t         Graduation       T       Left and Right       1M50G2D       73.7         and Services       (If the complete description does not appear in this box, please go to the end of t

FREQUENCY COORDINATION

E28. Antenna Id		- ·	Range of Satellite Arc Eastern/West	Station Azimuth Angle		Station Azimuth Angle	Antenna Elevation Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
GD2	Geostationary	12200 17800	58.0/155.0	111.9	21.5	239.6	30.0	-14.8

## 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

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD–PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060–0678.

# 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.

#### 43. Description. (Summarize the nature of the application and the services to be provided).

This modification requests to add EchoStar 4 at 77W as point of communication for E020306. The requested operation of this earth station with EchoStar 4 will serve the public interest because it will allow EchoStar to improve the efficiency of its satellite fleet deployment and would enable EchoStar, in the future, to provide additional services into the United States from this Mexican oribital location. See SAT-STA-20050321-00068. Further, 77W is within the satellite arc for which E020306 has already been frequency coordinated.