Approved by OMB 3060–0678

Date & Time Filed: Mar 19 2004 2:13:20:110PM File Number: SES-MOD-INTR2004-00642

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: MOD AK31 and AK32

1–8. Legal Name of Applicant **Phone Number:** Name: DIRECTV Enterprises, LLC 310-726-4993 DBA Fax Number: 310-964-5323 Name: Street: 2230 E. Imperial Hwy E-Mail: salozano@directv.com City: El Segundo State: CA **Country:** USA Zipcode: 90245 _ Attention: Sal Lozano

9–16. Name of Contac	t Representative (If other than a	applicant)	
Name:	James H Barker Esq.	Phone Number:	202-637-2231
Company	: Latham and Watkins	Fax Number:	202-637-2201
Street:	555 11th Street	E-Mail:	jim.barker@lw.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20004-1304
Contact Title:	Attorney at Law	Relationship:	Legal Counsel
The:			

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)
	• (N/A) b10. Other (Please specify)

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.Se	ction 1.1114).
O Governmental Entity O Noncomme	ercial educational licensee	
• Other(please explain):		
17d.		
Fee Classification A CGX – Fixed Satellite Station	e 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 application entermodification please enter only the file number:	both fields, if this filing is a
(a) Call sign of station:	(a) Date pending application was filed: (b) File numbers	ber:
E930229	SESMOD20	03092401325

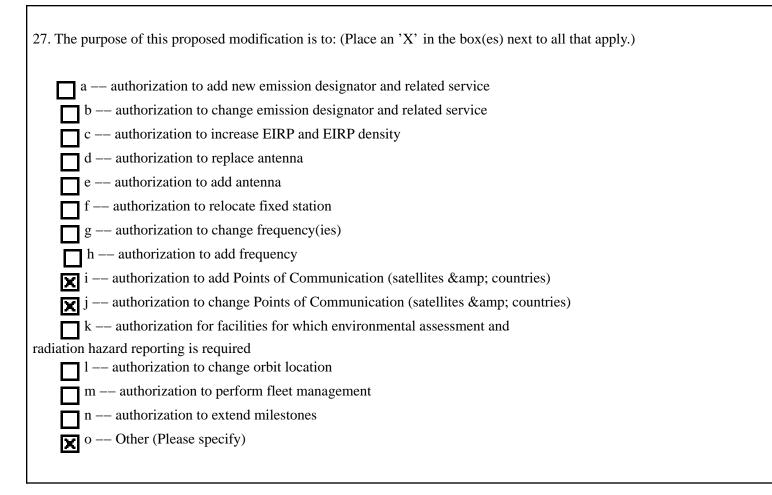
TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provid	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
○ 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: Frequency Upper: (Please specify addition	onal 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	🔿 Yes 👩 No
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	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 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

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?N/A

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 application requests authorization to

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	s a (an): (Choose	the button next to	applicable response.)
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\mathbf{o}	Individual

οu	Jnincorpor	ated Asso	ociation
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- O Partnership
- Corporation
- O Governmental Entity
- Other (please specify)

45. Name of Person Signing James Butterworth		46. Title of Person Sign Senior Vice President	iing		
47.	Please supply any need attachments.				
A	ttachment 1:	Attachment 2:		Attachment 3:	
-					

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 Sta	ation Site				
E1: Site Identifier:	PAS Atlanta	E5. Call Sign:	E930229		
E2: Contact Name	Luis Bonilla	E6. Phone Number:	404-381-2300		
E3. Street:	2857 Fork Creek Church Rd	E7. City:	Ellenwood		
		E8. County:	Dekalb		
E4. State	GA	E9. Zip Code	30294		
E10. Area of Operation	ion:	N/A			
E11. Latitude:	33 °39 '50.0 "N				
E12. Longitude:	84 °16 '24.0 "W				
E13. Lat/Lon Coord	inates are:	ONAD-27	NAD-83	O N/A	
E14. Site Elevation ((AMSL):	236.0 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.	y Yes	O ^{No}	O ^{N/A}
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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?	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.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as AK31AK32MOD	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

POINTS OF COMMUNICATION

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:		
E21. Common Name: DIRECTV 1R	E22. ITU Name: USABSS1R		
E23. Orbit Location: 101 W	E24. Country: USA		

Satellite Name: OTHER If you selected OTHER, please enter the following:	
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E21. Common Name: DIRECTV 3	E22. ITU Name: USABSS2A
E23. Orbit Location: 101 W	E24. Country: USA

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:		
E21. Common Name: DIRECTV7S	E22. ITU Name: USABSS18		
E23. Orbit Location: 119 W	E24. Country: USA		

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:		
E21. Common Name: DIRECTV 5	E22. ITU Name: USABSS7A		
E23. Orbit Location: 119 W	E24. Country: USA		

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:	
E21. Common Name: DIRECTV 3	E22. ITU Name: USABSS2A	
E23. Orbit Location: 82 W	E24. Country: USA	

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:		
E21. Common Name: DIRECTV 6	E22. ITU Name: USABSS11		
E23. Orbit Location: 110 W	E24. Country: USA		

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:		
E21. Common Name: DIRECTV 2	E22. ITU Name: USABSS2		
E23. Orbit Location: 101 W	E24. Country: USA		

Satellite Name:		elected OTHER, please enter the following:
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E21. Common Name: DIRECTV5	E22. ITU Name: USABSS7A
E23. Orbit Location: 72.5 W	E24. Country: USA

Satellite Name: OTHER If you selected OTHER, please enter the fe	If you selected OTHER, please enter the following:		
E21. Common Name: DIRECTV 1	E22. ITU Name: USABSSIM		
E23. Orbit Location: 101 W	E24. Country: USA		

Satellite Name: OTHER If you selected OTHER, please enter the following:					
E21. Common Name: DIRECTV 4S	E22. ITU Name: USABSS13				
E23. Orbit Location: 101 W	E24. Country: USA				
POINTS OF COMMUNICATION (Destination Points)					
F25 Site Identifier					

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

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
PAS Atlanta	AK31	1	VERTEX	8.1KPK	8.1	58.5 dBi at 12.5
						61.6 dBi at 17.5
	AK32					58.5 dBi at 12.5

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
AK31	8.1/8.1	9.0	245.0	0.0	631.0	0.0	89.6
AK32	8.1/8.1	9.0	245.0	0.0	631.0	0.0	89.6

FREQUENCY

	E43/44. Frequency Bands (MHz)				E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
AK31	12200 12700	R	Left and Right Circular	750KF2D	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.)

750 KHz FM Command data carrier

AK31	12200 12700	R	Left and Right Circular	25M0M1F	0.0	0.0

entirety.)						1
25MHz I	Phase Modulated	d Digital Vid	leo Carrier			
AK31	17300 17800	Т	Left and Right Circular	750KF2D	86.7	64.0
E50. Modul 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
750 KH2	z FM Command da	ata carrier				
AK31	17300 17800	Т	Left and Right Circular	25M0M1F	89.6	51.6
E50. Modul 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
25MHz H	Phase Modulated	d Digital Vid	leo Carrier			

E50. Modulation	and Services (If the	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its			
entirety.)									
750 KHz FM	I Command Data	Carrier							
AK32	12200 12700	R	Left and Right Circular	25M0M1F	0.0	0.0			
E50. Modulation entirety.)	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.)								
25MHz Phas	e Modulated Di	igital Video Ca	arrier						
AK32	17300 17800	Т	Left and Right Circular	750KF2D	86.7	64.0			
E50. Modulation entirety.)	and Services (If the	he complete descripti	on does not appear in	n this box, please go	to the end of the form	to view it in its			
750 KHz FM	I Command Data	Carrier							
AK32	17300 17800	Т	Left and Right Circular	25M0M1F	89.6	51.6			

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.)

25MHz Phase Modulated Digital Video Carrier

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc Eastern/West ern 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)
AK31	Geostationary	17300 17800	58.0/139.0	138.3	41.8	248.6	20.6	1.7
AK32	Geostationary	17300 17800	58.0/139.0	138.3	41.8	248.6	20.6	1.7

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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