Date & Time Filed: Mar 2 2010 10:47:25:493AM File Number: SES-MOD-INTR2010-00756

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:

Rocklin Hub Modification – 2010 02

8. Legal Name of	Applicant		
Name:	Educational Media Foundation	Phone Number:	916-251-1600
DBA Name:		Fax Number:	916–251–1650
Street:	5700 West Oaks Blvd.	E-Mail:	efile@emfbroadcasting.com
City:	Rocklin	State:	CA
Country	y: USA	Zipcode:	95765 –
Attentio	on: Mike Novak		

9–16. Name of Contact Representative

Name: David Oxenford Phone Number: 202–973–4200

Company: Davis Wright Tremain LLP **Fax Number:** 202–973–4499

Street: 1919 Pennsylvania Ave, N.W. E–Mail:

City: Washington State: DC

Country: USA Zipcode: 20006–

Attention: David D. Oxenford, Esq. 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.

a1. Earth Station

a2. Space Station

(N/A) b1. Application for License of New Station

(N/A) b2. Application for Registration of New Domestic Receive-Only Station

b 3. Amendment to a Pending Application

b4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

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) 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

(N/A) b12. Application for Database Entry

b13. Amendment to a Pending Database Entry Application

o b14. Modification of Database Entry

17c. Is a fee submitted with this application If Yes, complete and attach FCC Form	on? 159. If No, indicate reason for fee exemption (s	ee 47 C.F.R.Section 1.1114).
Governmental Entity Noncomme	rcial educational licensee	
Other(please explain):		
17d.		
Fee Classification		
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a modification please enter only the file number:	pplication enter both fields, if this filing is a
(a) Call sign of station: E920417	(a) Date pending application was filed:	(b) File number:
E720417		SESMOD2008061200765

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for 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 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 s facilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
O 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	pplicable 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	nal frequencies in an attachment)

TYPE OF STATION

25. CLASS OF STATION: Choose the button	next to the class of sta	tion that applies. Choose only	one.	
a. Fixed Earth Station				
o b. Temporary–Fixed Earth Station				
oc. 12/14 GHz VSAT Network				
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/Δ		
Transmit/Receive Transmit-Only "For Space Station applications, select N/A."	O Receive—Only	O 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

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.	Yes No Attachment 2	

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	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	•	No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	•	No	0	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?	٥	Yes	•	No	0	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?	○ Yes ⑤ 1	No O 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.	Attachment 3	
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
	Attachment 4	
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.	Yes	O No
	Attachment 5	

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
	Attachment 6	
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	O Yes	No
means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	Attachment 7	
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.	O Yes	No
	Attachment 8	
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.	Attachment 9	

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.	Yes Attachment 10	No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, coordinated or is in the process of coordinating the space station?	what administra	ation has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description, please go to the end of the form to view it in its entirety.)		
See Exhibit - 'Item43_Description.pdf' See Exhibit - 'Item43_SES_MOD_20080 Attachment 11	1612 <u>_</u> 00765.	pai'

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.	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.	o 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 a	oplicable response.)	
Individual		
Unincorporated Association		
Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
~		
45. Name of Person Signing	46. Title of Person Signing	
Mike Novak	President/CEO	
>		
WILLFUL FALSE STATEMENTS MAI	DE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMEN	JТ

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:	HUB-RCKCA	E5. Call Sign:	E920417			
E2: Contact Name	Alan Guthrie	E6. Phone Number:	916-251-1600			
E3. Street:	5700 West Oaks Blvd	E7. City:	Rocklin			
		E8. County:	Placer			
E4. State	CA	E9. Zip Code	95765			
E10. Area of Operat	tion:	ALSAT				
E11. Latitude:	38 °48 '54.0 "N					
E12. Longitude:	121 °16 '40.0 "W					
E13. Lat/Lon Coord	linates are:	● NAD-27	O NAD-83	O N/A		
E14. Site Elevation	(AMSL):	61.6 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?	posed antenna(s) comply with the antenna	O Yes	O No	⊚ 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 a 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	Yes	0	No
POINTS OF COMMUNICATION		<u> </u>		
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you s	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: HUB-RCKCA				

E26. Common Name:	E27. Country: USA

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)
HUB-RCKCA	HUB1	1	ASC Signal	ES56-1	5.6	55.5 dBi at 11.95
HUB-RCKCA	HUB1	1	ASC Signal	ES56-1	5.6	57.0 dBi at 14.25
HUB-RCKCA	HUB1A	1	Prodelin	1383	3.8	51.7 dBi at 11.85
HUB-RCKCA	HUB1A	1	Prodelin	1383	3.8	53.2 dBi at 14.13

E28. Antenna Id		E35. Above Ground Level (meters)	` ′	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
HUB1	0.0/0.0	7.4	61.6	0.0	12.7	0.0	68.0
HUB1A	0.0/0.0	4.6	61.6	0.0	12.7	0.0	62.0

FREQUENCY

E43/44. Frequency Bands				E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	1/K\bi>ivioue	L,R)	Designator	(dBW)	Carrier
					(dBW/4kHz)

HUB1	11700 12200	R	Horizontal and Vertical	540KG7D	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete description	on does not appear	in this box, please go	to the end of the form	m to view it in its
QPSK, Digi	tal					
HUB1	14000 14500	Т	Horizontal and Vertical	4M20G7D	58.9	30.0
QPSK, Digi	tal					
HUB1A	11700 12200	R	Horizontal and Vertical	540KG7D	0.0	0.0
E50. Modulation entirety.)	and Services (If	the complete description	on does not appear	in this box, please go	to the end of the form	n to view it in its
QPSK, Digi	tal					

HUB1A	14000 14500	Т	Horizontal and Vertical	4M20G7D	58.9	30.0
E50. Modulation	and Services (If th	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
entirety.)						
QPSK, Digi	tal					

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)
HUB1	Geostationary	14000 14500	79.0/143.0	124.6	27.56	212.5	39.7	4.4
HUB1A	Geostationary	14000 14500	79.0/143.0	124.6	27.56	212.5	39.7	8.1

REMOTE CONTROL POINT LOCATION

REMOTE CONTINUE FOR TECHNION	
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.	
eunsign for which this application is being filed.	
E62. Street Address	

E63. City	E68. County	E67/68.	E64. Zip Code
		State/Country	
		/	

SATELLITE EARTH STATION AUTHORIZATIONS FCC Form 312 – Schedule B:(Technical and Operational Description) FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier: REMOTES1_2 E5. Call Sign: E920417

E2: Contact Name Alan Guthrie E6. Phone Number:

E3. Street: 5700 West Oaks Blvd

E8. County: Placer

E4. State CA E9. Zip Code 95765

E10. Area of Operation: CONUS, ALASKA, HAWAII

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: $0 \circ 0 \circ 0.0$ "

E13. Lat/Lon Coordinates are: NAD-27 NAD-83 N/A

E14. Site Elevation (AMSL): 0.0 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.	⊚ Yes	s O No	O 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?	O Yes	s 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 Ye	es 🧯) No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Ye	es 🍎	N o
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Ye	es 🧯	No 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.		es C) No
POINTS OF COMMUNICATION	-		
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT 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: REMOTES1_2						
E26. Common Name:	E27. Country: USA					

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)	
REMOTES1_2	REMOTES1_2	25	ASC Signal	Type 123	1.2	41.8 dBi at 12.0	
REMOTES1_2	REMOTES1_2	25	ASC Signal	Type 123	1.2	43.3 dBi at 14.3	

Id	Diameter		, ,	Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
REMOTES1_2	0.0/0.0	2.2	0.0	0.0	3.0	0.0	48.1

FREQUENCY

E28. Antenna Id	E43/44.	E45.	E46. Antenna	E47. Emission	E48. Maximum	E49. Maximum
	Frequency Bands	T/R Mode	Polarization(H,V,	Designator	EIRP per Carrier	ERIP Density per
	(MHz)		L , R)		(dBW)	Carrier
						(dBW/4kHz)

REMOTES1_2	11700 12200	R	Horizontal and Vertical	4M2G7D	0.0	0.0
E50. Modulation entirety.)	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
QPSK, Digi	tal					
REMOTES1_2	14000 14500	Т	Horizontal and Vertical	540KG7D	47.1	28.1
E50. Modulation entirety.) QPSK, Digi		ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	Range of Satellite Arc Eastern/West	Station Azimuth	Antenna Elevation Angle	Station Azimuth Angle	Elevation Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
REMOTES1_2	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	5.6

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
			<u> </u>	

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:	REMOTES1_8	E5. Call Sign:	E920417		
E2: Contact Name	Alan Guthrie	E6. Phone Number:	916–251–1600		
E3. Street:	5700 West Oaks Blvd	E7. City:	Rocklin		
		E8. County:	Placer		
E4. State	CA	E9. Zip Code	95765		
E10. Area of Operat	tion:	CONUS, ALASKA	, HAWAII		
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coordinates are:		O NAD-27	O NAD-83	N/A	
E14. Site Elevation	(AMSL):	0.0 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.	⊚ Yes	O No	O 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?	O Yes	O No	● N/A

E17. Is the facility operated by remote control? If YES, provide the locat point.	ion and telephone number of the control	O Yes	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	rdination report as	O Yes	No
E19. Is coordination with another country required? If YES, attach the na coordination contours as	ame of the country(ies) and plot of	O Yes	⊘ No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.11 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RAPPLICATION.	⊗ Yes	O No	
POINTS OF COMMUNICATION			
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you se	elected OTHER, please enter the following:		
E21. Common Name:	E22. ITU Name:		
E23. Orbit Location:	E24. Country:		
POINTS OF COMMUNICATION (Destination Points)			
E25. Site Identifier: REMOTES1_8			
E26. Common Name: ANTENNA	E27. Country: USA		

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)	
REMOTES1_8	REMOTES1_8	550	ASC Signal	Type 18(0/3)Tx	1.8	45.3 dBi at 12.0	
REMOTES1_8	REMOTES1_8	550	ASC Signal	Type 18(0/3)Tx	1.8	46.8 dBi at 14.3	

Id	Diameter			Height Above Ground Level	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
REMOTES1_8	0.0/0.0	2.8	0.0	0.0	3.0	0.0	51.6

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
REMOTES1_8	11700 12200	R	Horizontal and Vertical	4M2G7D	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.)

QPSK, Digital

		i e e e e e e e e e e e e e e e e e e e				1
REMOTES1 8	14000	lт	Horizontal and	540KG7D	50.6	31.6
1221101221_0		-		0.012072	20.0	
	14500		Vertical			

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.)

QPSK, Digital

FREQUENCY COORDINATION

E28. Antenna Id		Frequency	Range of Satellite Arc Eastern/West	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	Antenna Elevation Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
REMOTES1_ 8	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	1.5

REMOTE CONTROL POINT LOCATION

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

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:	REMOTES2_4	E5. Call Sign:	E920417		
E2: Contact Name	Alan Guthrie	E6. Phone Number:	916–251–1600		
E3. Street:	5700 West Oaks Blvd	E7. City:	Rocklin		
		E8. County:	Placer		
E4. State	CA	E9. Zip Code	95765		
E10. Area of Operat	tion:	CONUS, ALASKA	, HAWAII		
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	linates are:	○ NAD-27	O NAD-83	● N/A	
E14. Site Elevation	(AMSL):	0.0 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.	● Yes	O No	O 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 No	⊚ N/A

E17. Is the facility operated by remote control? If YES, provide the locat point.	tion and telephone number of the control	O Yes	No
E18. Is frequency coordination required? If YES, attach a frequency coordinate	rdination report as	O Yes	No
E19. Is coordination with another country required? If YES, attach the na coordination contours as	ame of the country(ies) and plot of	O Yes	⊘ No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.11 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RAPPLICATION.	's study regarding the potential hazard of	⊘ Yes	O No
POINTS OF COMMUNICATION			
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you se	elected OTHER, please enter the following:		
E21. Common Name:	E22. ITU Name:		
E23. Orbit Location:	E24. Country:		
POINTS OF COMMUNICATION (Destination Points)			
E25. Site Identifier: REMOTES2_4			
E26. Common Name: ANTENNA	E27. Country: USA		

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)	
REMOTES2_4	REMOTES2_4	25	ASC Signal	Type 243	2.4	47.4 dBi at 12.0	
REMOTES2_4	REMOTES2_4	25	ASC Signal	Type 243	2.4	48.9 dBi at 14.3	

Id	Diameter	` ′	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
	/					

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
REMOTES2_4	11700 12200	R	Horizontal and Vertical	4M2G7D	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.)

QPSK, Digital

REMOTES2_4	14000	Т	Horizontal and	540KG7D	52.7	33.7
	14500		Vertical			

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.)

QPSK, Digital

FREQUENCY COORDINATION

E28. Antenna Id		E52/53. Frequency Limits(MHz)	Range of Satellite Arc Eastern/West	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	Antenna Elevation Angle Western	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
REMOTES2_ 4	Geostationary	14400 14500	0.0/0.0	0.0	5.0	0.0	5.0	3.3

REMOTE CONTROL POINT LOCATION

E61. Call Sign	E66. Phone Number								
NOTE: Please enter the callsign of the controcallsign 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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