Approved by OMB 3060–0678

Date & Time Filed: Oct 8 2004 12:51:03:213PM File Number: SES–MOD–INTR2004–02083

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 of Original License for OCT 04 Submission

1–8. Legal Name of Applicant **Phone Number: Clear Channel Satellite Services** 303-925-1708 x32 Name: DBA **Fax Number:** 303-925-1714 Name: Street: 7042 South Revere Parkway E-Mail: CCSS_Contracts@clearchannel. com Suite 450 Centennial City: State: CO Zipcode: **Country:** USA 80112 _ Attention: Mrs Liz Karr

Name:	Liz Karr	Phone Number:	303-925-1708
Company:	Clear Channel Satellite Services	Fax Number:	303-925-1714
treet:	7042 S Revere Parkway	E–Mail:	lizkarr@clearchannel.com
	Suite 450		
ity:	Centennial	State:	СО
Country:	USA	Zipcode:	80112-
ontact itle:	Office Manager	Relationship:	Same

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)

17c. Is a fee submitted with this applicat							
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 Noncommercial educational licensee							
• Other(please explain):							
17d.							
Fee Classification CGV – Fixed Satellite VSAT System							
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pendin modification please enter only the file number	g application enter both fields, if this filing is a er:					
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:					
E000329		SESMOD2003112401703					

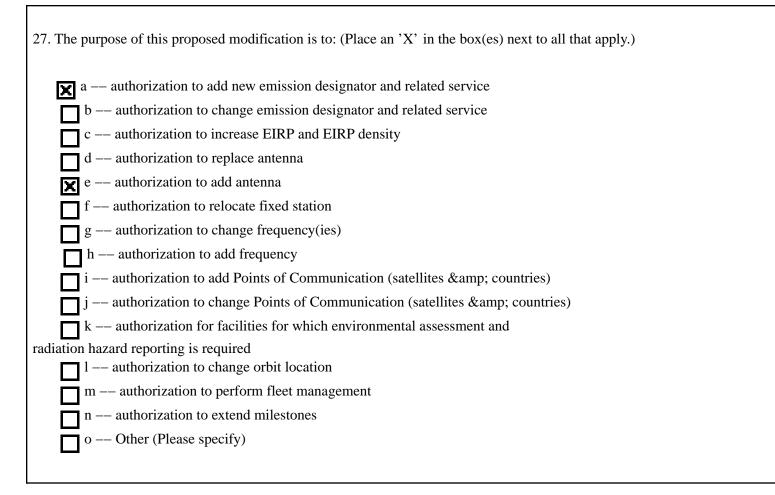
TYPE OF SERVICE

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
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.
o a. Fixed Earth Station
• b. Temporary–Fixed Earth Station
● 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	0	N/A
30. Is the applicant an alien or the representative of an alien?	0	Yes	۲	No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	۲	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?	0	Yes	۲	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?

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}
	FCCLETTER	
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	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.



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.)

Enable the applicant to distribute audio and data to their locations and clients.

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
Liz Karr	Office Manager

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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:	DR 1_8050	E5. Call Sign:	Х			
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708			
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial			
	Suite 450	E8. County:	Arapahoe			
E4. State	СО	E9. Zip Code	80112			
E10. Area of Opera	tion:	ALSAT				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	dinates 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.	O ^{No}	O ^{N/A}
two degree spacing policy.		

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	6	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as DR1_8050SPECPLOT	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: PERMITTED LIST 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: DR 1_8050						

E26. Common Name: E27. Country: USA	
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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)
DR 1_8050	DR1_8050	8	Prodelin	1184	1.8	45.0 dBi at 11.85
						46.5 dBi at 14.25

Id			· · · · ·	Height Above	Input Power at antenna flange	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
DR1_8050	1.8/1.8	0.0	0.0	0.0	50.0	0.0	55.99

FREQUENCY

	E43/44. Frequency Bands (MHz)				EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
DR1_8050	11700 12200	R	Horizontal and Vertical	10M0G1D	55.99	35.96

E50. Modulation entirety.)	on and Services (1	f the complete de	scription does not appear	in this box, please	go to the end of th	ne form to view it in its
QPSK						
DR1_8050	14000 14500	Т	Horizontal and Vertical	10M0G1D	55.99	35.96
entirety.)	on and Services (1	f the complete de	scription does not appear	in this box, please	go to the end of th	ne form to view it in its
QPSK						

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)
DR1_8050	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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.	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 S	tation Site					
E1: Site Identifier:	MRV1_8050	E5. Call Sign:	Х			
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708			
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial			
	Suite 450	E8. County:	Arapahoe			
E4. State	СО	E9. Zip Code	80112			
E10. Area of Opera	tion:	ALSAT				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	dinates are:	O NAD-27	ONAD-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 location and telephone number of the control		
point.	• Yes	• No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as MRV1_8050SPEC	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?MRV1_8050RHS 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:	PERMITTED LIST	If you selected OTHER, please enter the following:				
E21. Common Na	ame:		E22. ITU Name:			
E23. Orbit Locati	on:		E24. Country:			

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier: MRV1_8050	
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 at GHz)
MRV1_8050	MRV1_8050	3	AVL Technologies	1.8 SNG	1.8	45.3 dBi at 12.22
						46.7 dBi at 14.25

Id			· · · ·	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
MRV1_8050	1.8/1.8	0.0	0.0	0.0	50.0	0.0	60.69

FREQUENCY

	E43/44. Frequency Bands (MHz)				EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
MRV1_8050	11700 12200	R	Horizontal and Vertical	10M0G1D	60.69	40.64

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

MRV	/1_8050	14000 14500	Т	Horizontal and Vertical	10M0G1D	60.69	40.64
E entir	50. Modulation ety.)	and Services (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
	QPSK						

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)
MRV1_8050	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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.	
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 S	tation Site				
E1: Site Identifier:	TT2_4100	E5. Call Sign:	Х		
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708		
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial		
	Suite 450	E8. County:	Arapahoe		
E4. State	СО	E9. Zip Code	80112		
E10. Area of Opera	tion:	ALSAT			
E11. Latitude:	0 °0 '0.0 "N				
E12. Longitude:	0 °0 '0.0 "W				
E13. Lat/Lon Coord	dinates are:	ONAD-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 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 TT2_4100SPECPLOT	• Yes	● No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	• 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.	O Yes	No

Satellite Name: PERMITTED LIST 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: TT2_4100	
E26. Common Name:	E27. Country: USA

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)
TT2_4100	TT2_4100	15	Suman	SM-T2.4R	2.4	47.77 dBi at 11.85
						49.0 dBi at 14.25

Id	Diameter	E35. Above Ground Level (meters)	· · · ·	Height Above Ground Level	E38. Total Input Power at antenna flange (Watts)	U	EIRP for al
TT2_4100	2.4/2.4	0.0	0.0	0.0	100.0	0.0	68.0

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
TT2_4100	11700 12200	R	Horizontal and Vertical	400KG1D	68.0	47.94

E50. Modulat entirety.)	ion and Services	(If the complete des	cription does not appear	in this box, please	go to the end of t	he form to view it in its
QPSK						
TT2_4100	14000 14500	Т	Horizontal and Vertical	400KG1D	68.0	47.94
E50. Modulat entirety.) QPSK	ion and Services	(If the complete des	cription does not appear	in this box, please	go to the end of t	he form to view it in its

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)
TT2_4100	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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.				
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 S	tation Site					
E1: Site Identifier:	TT3_7150	E5. Call Sign:	Х			
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708			
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial			
	Suite 450	E8. County:	Arapahoe			
E4. State	СО	E9. Zip Code	80112			
E10. Area of Opera	tion:	ALSAT				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	dinates are:	● NAD-27	ONAD-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 location and telephone number of the control point.	• Yes	No No ■

E18. Is frequency coordination required? If YES, attach a frequency coordination report as TT3_7150SPECPLOT	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name:	PERMITTED LIST	If you selected OTHER, please	f you selected OTHER, please enter the following:				
E21. Common Na	ame:		E22. ITU Name:				
E23. Orbit Locati	on:		E24. Country:				

POINTS OF COMMUNICATION (Destination Points)

E25. Site Identifier: TT3_7150	
E26. Common Name:	E27. Country: USA

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer			E41/42. Antenna Gain Transmint and/or Recieve (dBi at GHz)
TT3_7150	TT3_7150	10	Suman	SM-T3.7R	3.7	51.5 dBi at 11.85
						52.3 dBi at 14.25

Id	Diameter		· · · · ·	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
TT3_7150	3.7/3.7	0.0	0.0	0.0	150.0	0.0	72.06

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
TT3_7150	11700 12200	R	Horizontal and Vertical	400KG1D	72.06	52.02

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

TT3_	_7150	14000 14500	Т	Horizontal and Vertical	400KG1D	72.06	52.02
	50. Modulation	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
entir	ety.)						
	QPSK						

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)
TT3_7150	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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.	
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 S	tation Site					
E1: Site Identifier:	TT1_8050	E5. Call Sign:	Х			
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708			
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial			
	Suite 450	E8. County:	Arapahoe			
E4. State	СО	E9. Zip Code	80112			
E10. Area of Opera	tion:	ALSAT				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	linates 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 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 TT1_8050SPECPLOT	• Yes	
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	
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.	• Yes	No

Satellite Name: PERMITTED LIST 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: TT1_8050	
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 at GHz)
TT1_8050	TT1_8050	12	Prodelin	1184	1.8	45.0 dBi at 11.85
						46.5 dBi at 14.25

Id	Diameter		· · · ·	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
TT1_8050	1.8/1.8	0.0	0.0	0.0	50.0	0.0	55.99

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
TT1_8050	11700 12200	R	Horizontal and Vertical	400KG1D	55.99	35.96

E50. Modulation entirety.)	n and Services	(If the complete d	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QPSK.						
TT1_8050	14000 14500	Т	Horizontal and Vertical	400KG1D	55.99	35.96
E50. Modulation entirety.)	n and Services	(If the complete d	escription does not appear	in this box, please	go to the end of th	e form to view it in its
QFSR						
	000000000000					

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)
TT1_8050	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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.				
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 St	tation Site					
E1: Site Identifier:	DR3_7150	E5. Call Sign:	Х			
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708			
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial			
	Suite 450	E8. County:	Arapahoe			
E4. State	СО	E9. Zip Code	80112			
E10. Area of Opera	tion:	ALSAT				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	linates are:	ONAD-27	ONAD-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 location and telephone number of the control point.	• Yes	No No ■

E18. Is frequency coordination required? If YES, attach a frequency coordination report as DR3_7150SPECPLOT	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: PE	ERMITTED LIST	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: DR3_7150	
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 at GHz)
DR3_7150	DR3_7150	5	Suman	SM-T3.7R	3.7	51.5 dBi at 11.85
						52.3 dBi at 14.25

Id	Diameter		· · · · ·	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
DR3_7150	3.7/3.7	0.0	0.0	0.0	150.0	0.0	72.06

FREQUENCY

E28. Antenna Id		E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
DR3_7150	11700 12200	R	Horizontal and Vertical	10M0G1D	72.06	52.02

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

DR3	_7150	14000 14500	Т	Horizontal and Vertical	10M0G1D	72.06	52.02
E. entir	50. Modulation ety.)	and Services (If th	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						

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)
DR3_7150	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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.	
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 S	tation Site				 	
E1: Site Identifier:	TT1_2020	E5. Call Sign:	Х			
E2: Contact Name	Liz Karr	E6. Phone Number:	303-925-1708			
E3. Street:	7042 S Revere Parkway	E7. City:	Centennial			
	Suite 450	E8. County:	Arapahoe			
E4. State	СО	E9. Zip Code	80112			
E10. Area of Opera	tion:	ALSAT				
E11. Latitude:	0 °0 '0.0 "N					
E12. Longitude:	0 °0 '0.0 "W					
E13. Lat/Lon Coord	dinates 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 location and telephone number of the control point.	O 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	• Yes	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) Where FAA notification is requir have you attached a copy of a completed FCC Form 854 and/or the FAA's study regarding the potential hazard the structure to aviation?TT1_2020RHS FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.		No

Satellite Name: PERMITTED LIST 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: TT1_2020	
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 at GHz)
TT1_2020	TT1_2020	15	Channel Master	Туре 121	1.2	41.8 dBi at 11.95
						43.3 dBi at 14.25

Id			· · · ·	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
TT1_2020	1.2/1.2	0.0	0.0	0.0	20.0	0.0	48.81

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)				E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
TT1_2020	11700 12200	R	Horizontal and Vertical	6M00G1D	48.81	28.78

E50. Modulation entirety.)	on and Services	(If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
QPSK						
TT1_2020	14000 14500	Т	Horizontal and Vertical	6M00G1D	48.81	28.78
E50. Modulation entirety.)	on and Services	(If the complete de	escription does not appear	in this box, please	go to the end of th	ne form to view it in its
QPSK						
		AT .				

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)
TT1_2020	Geostationary	11700 12200	72.0/139.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	14000 14500	72.0/139.0	0.0	0.0	0.0	0.0	0.0

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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