Date & Time Filed: Apr 14 2017 3:07:27:200PM File Number: SES-MOD-INTR2017-01030

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MA	AIN FORM FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:

Modification of Castle Rock, CO Earth Station KL92 License to add SKY-B1 (S2922) as a Point of Communications

Name:	Intelsat License LLC	Phone Number:	703–559–7848
DBA Name:		Fax Number:	703–559–8539
Street:	c/o Intelsat Corporation	E-Mail:	susan.crandall@intelsat.com
	7900 Tysons One Place		
City:	McLean	State:	VA
Country:	USA	Zipcode:	22102 -5972
Attention:	Susan H. Crandall		

9–16. Name of Contact Representative

Name: Cynthia J. Grady Phone Number: 703–559–6949

Company: Intelsat Corporation **Fax Number:** 703–559–8539

Street: 7900 Tysons One Place E–Mail: cynthia.grady@intelsat.com

City: McLean State: VA

Country: USA **Zipcode:** 22102–5972

Attention: Cynthia J. Grady 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

b3. 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 Governmental Entity Other(please explain): 	159. If No, indicate reason for fee exemption (see	e 47 C.F.R.Section 1.1114).
17d. Fee Classification CGX – Fixed Satellite Testation	Transmit/Receive Earth	
18. If this filing is in reference to an existing station, enter:(a) Call sign of station: KL92	19. If this filing is an amendment to a pending apmodification please enter only the file number: (a) Date pending application was filed:	oplication enter both fields, if this filing is a (b) File number: SESMOD2014103000834

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 station that applies. Choose only one.	
a. Fixed Earth Station	
• b. Temporary–Fixed Earth Station	
c. 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/A	
"For Space Station applications, select 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)
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

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, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	ı rou	ite or		
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	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	•	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	•	N/A

 $lackbox{ Yes } lackbox{ No}$

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental

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?	O Yes O	No 🌘 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.		
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.	○ Yes	No
	Exhibit B	
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
	Exhibit C	
1		

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.	• 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	• 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	⊘ 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.	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	⊚ No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, w coordinated or is in the process of coordinating the space station?	hat administr	ation has

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.)

Intelsat License LLC, herein seeks to modify the authorization of its Castle Rock, Colorado earth station license, Call Sign KL92, to add SKY-B1 as a point of communications.

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.

	plicable response.)
o Individual	
Unincorporated Association	
• Partnership	
O Corporation	
O Governmental Entity	
Other (please specify)	
45. Name of Person Signing	46. Title of Person Signing
45. Name of Person Signing Cynthia J. Grady	46. Title of Person Signing Regulatory Counsel, Intelsat Corporation
Cynthia J. Grady	
Cynthia J. Grady >	

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: Castle Rock E5. Call Sign: KL92

Teleport

E2: Contact Name Scott James E6. Phone 303–660–0606

Number:

E3. Street: 5281 East Garton E7. City: Castle Rock

Road

E8. County: Douglass

E4. State CO E9. Zip Code 80104

E10. Area of Operation: Castle Rock, CO

E11. Latitude: 39 °16 '38.0 "N

E12. Longitude: 104 °48 '25.0 "W

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

E14. Site Elevation (AMSL): 2087.9 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	s 💿	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as Exhibit A	● Yes	s o	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	O Yes	s 💿	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? Exhibit D FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION.	O Yes	s 🔞	No
POINTS OF COMMUNICATION	-		
Satellite Name: SKY-B1 SKY-B1 43.15 W.L. If you selected OTHER, please enter the following:			

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

POINTS OF COMMUNICATION (Destination Points)

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

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)	
Castle Rock Teleport	CF-1-12.5	1	NEC	12.5M	12.5	62.0 dBi at 12	
Castle Rock Teleport	CF-1-12.5	1	NEC	12.5M	12.5	64.0 dBi at 14	
Castle Rock Teleport	CF-1-12.5	1	NEC	12.5M	12.5	64.0 dBi at 13.25	

Id	Diameter		, ,	Height Above	Input Power at antenna flange		EIRP for al
CF-1-12.5	12.5/12.5	14.0	2101.9	0.0	125.9	0.0	85.0

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
CF-1-12.5	11443 11443	R	Vertical	500KG7D	0.0	0.0
E50. Modulation entirety.)	and Services (If the	ne complete descrip	tion does not appear in	this box, please go	to the end of the form	to view it in its
TT&C						
CF-1-12.5	11447 11447	R	Vertical	500KG7D	0.0	0.0
E50. Modulation entirety.)	and Services (If the	ne complete descrip	otion does not appear in	this box, please go	to the end of the form	to view it in its
TT&C						
CF-1-12.5	11443.5 11443.5	R	Vertical	500KG7D	0.0	0.0

E50. Modulation entirety.)	ion and Services (If the complete de	escription does not appo	ear in this box, please	go to the end of t	he form to view it in its
TT&C						
CF-1-12.5	11446.5 11446.5	R	Vertical	500KG7D	0.0	0.0
E50. Modulati entirety.)	ion and Services (If the complete do	escription does not appo	ear in this box, please	go to the end of t	he form to view it in its
CF-1-12.5	14498 14498	Т	Horizontal	950KG7D	73.0	49.5
E50. Modulation entirety.)	ion and Services (If the complete de	escription does not appo	ear in this box, please	go to the end of t	he form to view it in its
CF-1-12.5	13249.5 13249.5	Т	Vertical	950KG7D	85.0	61.5

Е	50. 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	
entii	rety.)		
	TT&C		
			_
FRE	EQUENCY COORDINATION)N	

E28. Antenna Id	1	Limits(MHz)	Range of Satellite Arc Eastern/West	Station Azimuth Angle	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)
CF-1-12.5	Geostationary	13249.5 13249.5	33.0/177.0	101.8	5.3	258.5	5.0	11.77

REMOTE CONTROL POINT LOCATION

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