Date & Time Filed: Apr 3 2020 3:13:06:336PM File Number: SES-MOD-INTR2020-00771

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

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu: Modification of FlexGround Authorization, Call Sign E190491

1–8. Legal Name of A	pplicant		
Name:	Intelsat License LLC	Phone Number:	703–559–7848
DBA Name:		Fax Number:	703–559–8539
Street:	c/o Intelsat US LLC	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 US LLC **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: 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

b 13. Amendment to a Pending Database Entry Application

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 (se	e 47 C.F.R.Section 1.1114).		
17d. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station				
18. If this filing is in reference to an existing station, enter:(a) Call sign of station: E190491	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: SESLIC2019061200770		

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide 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
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:
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 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 additional frequencies in an attachment)

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.	
a. Fixed Earth Station	
b. Temporary–Fixed Earth Station	
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:	
"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 (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

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.		RadF	laz			
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronateronautical fixed radio station services are not required to respond to Items 30–34.	autic	al en	rout	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	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

O Yes O No

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

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.	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	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.	• 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	O 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? Permitted List Only	hat administr	ration has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description box, please go to the end of the form to view it in its entirety.) Modification to add antennas to FlexGround license, Call Sign E190491, to add increase the number of existing terminals, and remove a terminal.		

Exhibit A

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.)			
O Individual				
Unincorporated Association Partnership				
Governmental Entity				
Other (please specify)				
45. Name of Person Signing	46. Title of Person Signing			
Cynthia J. Grady	Senior Counsel, Intelsat US LLC			
>				
(U.S. Code, Title 18, Section	DE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION 12(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:	FlexG	E5. Call Sign:	E190491		
E2: Contact Name	Raakesh Parmar	E6. Phone Number:	703–270–4757		
E3. Street:	7900 Tysons One Place	E7. City:	Mclean		
		E8. County:			
E4. State	VA	E9. Zip Code	22102		
E10. Area of Operat	tion:	Nationwide			
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	linates are:	○ NAD-27	● NAD-83	O 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 Yes ● No O N/A
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E16. If the proposed antenna(s) do not operate in the Fixed Satellite S Satellite Service (FSS) with non–geostationary satellites, do(es) the pregain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	○ Yes	O No	⊚ N/A	
E17. Is the facility operated by remote control? If YES, provide the loc point.	cation and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency co	pordination report as	o Yes	•	No
E19. Is coordination with another country required? If YES, attach the 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. have you attached a copy of a completed FCC Form 854 and/or the FA the structure to aviation? Exhibit C FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	A's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION				
Satellite Name: PERMITTED LIST If you selected OTHER, ple	ease 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:
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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 atGHz)
FlexG	Satcube	500	Satcube	Satcube Ku	0.4	30.9 dBi at 12
FlexG	Satcube	500	Satcube	Satcube Ku	0.4	31.7 dBi at 14.25
FlexG	Shadow	500	L3 Harris	Shadow	0.35	32.3 dBi at 12
FlexG	Shadow	500	L3 Harris	Shadow	0.35	32.8 dBi at 14.25
FlexG	Swarm	500	Paradigm	Swarm Ku	0.32	30.8 dBi at 12
FlexG	Swarm	500	Paradigm	Swarm Ku	0.32	31.29 dBi at 14.25
FlexG	Tampa 65cm	500	Tampa Microwave	65 cm Manpack	0.65	36.4 dBi at 11.85
FlexG	Tampa 65cm	500	Tampa Microwave	65 cm Manpack	0.65	38.8 dBi at 14.125
FlexG	Tampa 95cm	500	Tampa Microwave	95 cm Manpack	0.95	38.4 dBi at 11.85

FlexG	Tampa 95cm	500	Tampa Microwave	95 cm Manpack	0.95	41.4 dBi at 14.475	
FlexG	Tampa 1.3M	500	Tampa Microwave	1.3m Sat terminal	1.3	42.5 dBi at 11.85	
FlexG	Tampa 1.3M	500	Tampa Microwave	1.3m Sat terminal	1.3	44.04 dBi at 14.475	

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level(meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at antenna flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	
Satcube	0.4/0.4	0.0	0.0	0.0	30.0	0.0	46.0
Shadow	0.35/0.35	0.0	0.0	0.0	15.8	0.0	43.0
Swarm	0.32/0.32	0.0	0.0	0.0	40.0	0.0	47.0
Tampa 65cm	0.65/0.65	0.0	0.0	0.0	16.0	0.0	49.0
Tampa 95cm	0.95/0.95	0.0	0.0	0.0	16.0	0.0	52.0
Tampa 1.3M	1.3/1.3	0.0	0.0	0.0	16.0	0.0	54.3

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Satcube	11700 12200	R	Linear and Circular	12M7G7W	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
Digital da	ta					
Satcube	11700 12200	R	Linear and Circular	15M0G7W	0.0	0.0
Digital da	ta					
Satcube	14000 14500	Т	Linear and Circular	2M10G7W	39.4	12.2
E50. Modulation entirety.) Digital Da	`	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Satcube	14000 14500	Т	Linear and Circular	780KG7W	35.1	12.2

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
Digital da	ta					
Shadow	11700 12200	R	Linear and Circular	12M7G7W	0.0	0.0
E50. Modulation entirety.) Digital da	·	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Shadow	11700 12200	R	Linear and Circular	15M0G7W	0.0	0.0
E50. Modulation entirety.) Digital da	`	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Shadow	14000 14500	Т	Linear and Circular	2M10G7W	39.0	11.8

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
Digital da	ta					
Shadow	14000 14500	Т	Linear and Circular	780KG7W	34.7	11.8
E50. Modulation entirety.) Digital da	·	ic complete description	on does not appear in	uns box, picase go u	o the end of the form	to view it in its
Swarm	11700 12200	R	Linear and Circular	12M7G7W	0.0	0.0
E50. Modulation entirety.) Digital da	`	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Swarm	11700 12200	R	Linear and Circular	15M0G7W	0.0	0.0

E50. Modulation entirety.)	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
Digital da	ta					
Swarm	14000 14500	Т	Linear and Circular	2M10G7W	38.7	11.5
E50. Modulation entirety.) Digital da		e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Swarm	14000 14500	Т	Linear and Circular	780KG7W	34.4	11.5
E50. Modulation entirety.) Digital da	`	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Tampa 65cm	11700 12200	R	Linear and Circular	12M7G7W	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
Digital da	ta					
Tampa 65cm	11700 12200	R	Linear and Circular	15M0G7W	0.0	0.0
Digital da	ta					
Tampa 65cm	14000 14500	Т	Linear and Circular	2M10G7W	42.0	14.8
E50. Modulation entirety.) Digital da	ta				o the end of the form	
Tampa 65cm	14000 14500	Т	Linear and Circular	780KG7W	37.7	14.8

E50. Modulation entirety.)	and Services (If the	ne complete description	on does not appear in	this box, please go t	o the end of the form	to view it in its
Digital da	nta					
Tampa 95cm	11700 12200	R	Linear and Circular	12M7G7W	0.0	0.0
E50. Modulation entirety.) Digital da		ic complete description	on does not appear in	tins oon, prouse go t	o the end of the form	
Tampa 95cm	11700 12200	R	Linear and Circular	15M0G7W	0.0	0.0
E50. Modulation entirety.) Digital da Tampa 95cm	`	he complete description	on does not appear in		o the end of the form 42.0	to view it in its
Tumpu 75cm	14500		Zincur und Circular	2.111007 11	12.0	11.0

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
Digital da	ta					
Tampa 95cm	14000 14500	Т	Linear and Circular	780KG7W	37.7	14.8
E50. Modulation entirety.) Digital da		ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Tampa 1.3M	11700 12200	R	Linear and Circular	12M7G7W	0.0	0.0
E50. Modulation entirety.) Digital da		ne complete description			o the end of the form	
Tampa 1.3M	11700 12200	R	Linear and Circular	15M0G7W	0.0	0.0

E50. Modulation entirety.)	and Services (If t	he complete descripti	on does not appear in	this box, please g	go to the end of the	form to view it in its
Digital da	ta					
Tampa 1.3M	14000 14500	Т	Linear and Circular	2M10G7W	42.0	14.8
E50. Modulation entirety.) Digital da		he complete descripti	on does not appear in	this box, please g	go to the end of the f	form to view it in its
Tampa 1.3M	14000 14500	Т	Linear and Circular	780KG7W	37.7	14.8
E50. Modulation entirety.) Digital da		he complete descripti	on does not appear in	this box, please g	go to the end of the	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)
Satcube	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
Shadow	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
Swarm	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
Tampa 65cm	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
Tampa 95cm	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0
Tampa 1.3M	Geostationary	11700 12200	0.0/0.0	0.0	5.0	0.0	5.0	0.0

	Geostationary	14000 14500	0.0/0.0	0.0	5.0	0.0	5.0	0.0		
REMOTE CONTROL POINT LOCATION										
E61. Call Si	gn				E66. Phone Number					
	NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.									
E62. Street A	E62. Street Address									
E63. City			E68. Cou	inty		E67/68. State/Count	try	E64. Zip Code		

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