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Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS 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: GX Maritime Terminals 180 EL POC

Name:	Inmarsat Mobile Networks, Inc.	Phone Number:	202-248-5158
DBA Name:		Fax Number:	
Street:	1101 Connecticut Avenue, NW	E-Mail:	chris.murphy@inmarsat.com
	Suite 1200		
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036 –
Attention:	Mr. Chris Murphy		

9–16. Name of Contact Representative

Name: Elizabeth Park Phone Number: 202–637–2200

Company: Latham & Watkins LLP Fax Number: 202–637–2201

Street: 555 Eleventh Street NW E-Mail: elizabeth.park@lw.com

Suite 1000

City: Washington State: DC

Country: USA Zipcode: 20004–

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. a. a. a1. Earth Station (N/A) a2. Space Station	 b. b1. Application for License of New Station b2. Application for Registration of New Domestic Receive—Only Station (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration (N/A) b5. Assignment of License or Registration (N/A) 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 b10. Other (Please specify) 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. b12. Application for Database Entry (N/A) b13. Amendment to a Pending Database Entry Application (N/A) b14. Modifiction 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 (see 47 C.F.R.Section 1.1114).
Ofther(please explain):	rcial educational licensee
17d. Fee Classification BGV – Fixed Satellite V	SAT System

18. If this filing is in reference to an	19. If this filing is an amendment to a pending application enter:			
existing station, enter: (a) Call sign of station:	(a) Date pending application was filed:	(b) File number of pending application:		
Not Applicable	Not Applicable	Not Applicable		

TYPE OF SERVICE

I YPE 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 only one. Common Carrier Non–Common Carrier	22. If earth station applicant, check all that apply. Using U.S. licensed satellites Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER so facilities: Connected to a Public Switched Network Not connected to	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these 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: 19700 Frequency Upper: 30000
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
(N/A) e. Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
g. Other (please specify)Earth Station on fixed/moving platforms
26. TYPE OF EARTH STATION FACILITY: Choose only one.
Transmit/Receive Transmit-Only Receive-Only 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.)
27. The purpose of this proposed modification is to. (Flace all X in the box(es) flext to all that apply.)
Not Applicable
Not Applicable

ENVIRONMENTAL POLICY

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

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 Exhibit C
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	utical en route or
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes O No
30. Is the applicant an alien or the representative of an alien?	O Yes O No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes O No O 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?	O Yes O No O 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?	O Yes O N	lo 👩 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	O No
	Exhibit A	
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

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.	O 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, coordinated or is in the process of coordinating the space station? United Kingdom	what administi	ration has
43. Description. (Summarize the nature of the application and the services to be provided). (If the not appear in this box, please go to the end of the form to view it in its entirety.)	complete desc	ription does
Inmarsat Mobile Networks, Inc. seeks blanket authority to operate earth sta on maritime vessels using the Inmartsat-5 F3 at the nominal 180 E.L. orbita		
GIMS File		

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.

Individual			
Unincorporated Association			
Partnership			
Corporation			
Governmental Entity			
Other (please specify)			
45. Name of Person Signing		46. Title of Person Signing	
Chris Murphy 47. Please supply any need attach		Vice President, Government Affairs	
Chris Murphy	nments. Attachment 2:	Vice President, Government Affairs Attachment 3:	

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: Remote 1 E5. Call Sign:

E2: Contact Name Kevin Baker E6. Phone 808.469.7104

Number:

E3. Street: 6211 Glen Circle E7. City: Lino Lakes

E8. County:

E4. State MN E9. Zip Code 55014

E10. Area of Operation: Pacific Ocean Region, AK, HI, CONUS

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '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.	O Yes	O No	● 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	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	•	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	•	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
POINTS OF COMMUNICATION	1		
Satellite Name:OTHER OTHER If you selected OTHER, please enter the following:			

E21. Common Name: Inmarsat 5 F3	E22. ITU Name: Inmarsat–Ka 180E
E23. Orbit Location: 180 E.L.	E24. Country: United Kingdom

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 GainTransmint and/or Recieve (dBi atGHz)
Remote 1	Remote 1	4000	Cobham-Sea Tel	4012GX	1.0	0.0 dBi at 0
						44.0 dBi at 19.7
						47.1 dBi at 29.5

Id	Diameter	E35. Above Ground Level (meters)	(meters)		Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Remote 1	0.0/0.0	0.0	0.0	0.0	5.0	0.0	54.1

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)
Remote 1	29500 30000	Т	Right Hand Circular	2M30G1W	54.1	26.5
E50. Modulation entirety.) Modulation	n and Services (If the			this box, please go	to the end of the form	to view it in its
Remote 1 E50. Modulation	29500 30000 and Services (If the	T he complete descript	Right Hand Circular tion does not appear in	5M00G1W this box, please go	54.1 o to the end of the form	23.1 to view it in its

E50. Modulation	and Services (If the	ne complete descripti	on does not appea	r in this box, please	go to the end of the	ne form to view it in its
entirety.)						
Various Mo	dulations up t	o 32APSK; Digi	tal Data Lir	ık		
Remote 1	29500 30000	Т	Right Hand Circular	600KG7W	46.5	24.7
Various Mo	dulations up t	o 32APSK; Digi	ital Data Lir	ık		
Remote 1	29500 30000	Т	Right Hand Circular	6M96G7W	54.1	21.7
E50. Modulation entirety.) Various Mo		ne complete descripti			go to the end of the	ne 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 E/W 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)
Remote 1	Geostationary	19700 20200	0.0/ 360.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	29500 30000	0.0/ 360.0	0.0	5.0	0.0	5.0	-9.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E65. Phone Number 808.469.7104			
E62. Street Address 6211 Glen Circle				
E63. City Lino Lakes	E67. County Anoka		E64/68. State/Country MN/ USA	E66. Zip Code 55014

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: Remote 2 E5. Call Sign:

E2: Contact Name Kevin Baker E6. Phone 808.469.7104

Number:

E3. Street: 6211 Glen Circle E7. City: Lino Lakes

E8. County:

E4. State MN E9. Zip Code 55014

E10. Area of Operation: Pacific Ocean Region, AK, HI, CONUS

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '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.	O Yes	o No	● 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	s o	No
T10 I. f			
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	s 💿	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? 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:OTHER OTHER If you selected OTHER, please enter the following:			

E21. Common Name: Inmarsat 5 F3	E22. ITU Name: Inmarsat–Ka 180E
E23. Orbit Location: 180 E.L.	E24. Country: United Kingdom

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 GainTransmint and/or Recieve (dBi atGHz)
Remote 2	Remote 2	4000	Cobham-Sea Tel	GX60	0.65	0.0 dBi at 0
						40.4 dBi at 20.2
						43.3 dBi at 29.5

Id	Diameter	Ground	(meters)	Height Above Ground Level 	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Remote 2	0.0/0.0	0.0	0.0	0.0	5.0	0.0	50.3

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)
Remote 2	29500 30000	Т	Right Hand Circular	2M70G1W	50.3	22.0
E50. Modulation entirety.) Modulation	and Services (If the			uns oox, piease go	to the end of the form	to view it in its
Remote 2	29500 30000	Т	Right Hand Circular	5M00G1W	50.3	19.3
E50. Modulation entirety.) Modulation	and Services (If the and Services			this box, please go	to the end of the form	to view it in its
Remote 2	19700 20200	R	Left Hand Circular	32M0G7W	0.0	0.0

E50. Modulation entirety.)	and Services (If the	ne complete descripti	on does not appea	r in this box, please	go to the end of th	ne form to view it in its
	dulations up t	co 32APSK; Digi	tal Data Lir	ık		
Remote 2	29500 30000	Т	Right Hand Circular	600KG7W	43.3	21.5
Various Mo	dulations up t	to 32APSK; Digi	tal Data Lir	ık		
Remote 2	29500 30000	Т	Right Hand Circular	6M96G7W	50.3	17.9
E50. Modulation entirety.) Various Mo		he complete descripti			go to the end of th	ne 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 E/W 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)
Remote 2	Geostationary	19700 20200	0.0/ 360.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	29500 30000	0.0/ 360.0	0.0	5.0	0.0	5.0	-9.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E65. Phone Number 808.469.7104		
E62. Street Address 6211 Glen Circle				
E63. City Lino Lakes	E67. County Anoka		E64/68. State/Country MN/ USA	E66. Zip Code 55014

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: Remote 3 E5. Call Sign:

E2: Contact Name Kevin Baker E6. Phone 808.469.7104

Number:

E3. Street: 6211 Glen Circle E7. City: Lino Lakes

E8. County:

E4. State MN E9. Zip Code 55014

E10. Area of Operation: Pacific Ocean Region, AK, HI, CONUS

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '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.	O Yes	O No	⊚ 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	0	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	•	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	•	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
POINTS OF COMMUNICATION	1		
Satellite Name:OTHER OTHER If you selected OTHER, please enter the following:			

E21. Common Name: Inmarsat 5 F3	E22. ITU Name: Inmarsat–Ka 180E
E23. Orbit Location: 180 E.L.	E24. Country: United Kingdom

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 GainTransmint and/or Recieve (dBi atGHz)
Remote 3	Remote 3	4000	Cobham SatCom	Sailor 100 GX	1.03	47.2 dBi at 30
						43.5 dBi at 19.7
						44.1 dBi at 20.2
						47.4 dBi at 29.5
						43.9 dBi at 19.95
						47.5 dBi at 29.75

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)	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Remote 3	0.0/0.0	0.0	0.0	0.0	5.0	0.0	54.5

FREQUENCY

Remote 3	29500 30000	Т	Right Hand Circular	2M70G1W	54.3	26.0
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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			
	and Services	Digital Data S	ignaling						
Remote 3	29500 30000	Т	Right Hand Circular	5M00G1W	54.5	23.5			
E50. Modulation entirety.) Modulation	and Services (If the and Services			this box, please go to	o the end of the form	to view it in its			
Remote 3	19700 20200	R	Left Hand Circular	32M0G7W	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.) Various Modulations up to 32APSK; Digital Data Link									
Remote 3	29500 30000	Т	Right Hand Circular	600KG7W	47.8	26.0			

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.)

Various Modulations up to 32APSK; Digital Data Link

Remote 3	29500	T	Right Hand	6M96G7W	54.5	22.1
	30000		Circular			

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.)

Various Modulations up to 32APSK; Digital Data Link

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W 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)
Remote 3	Geostationary	19700 20200	0.0/ 360.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	29500 30000	0.0/ 360.0	0.0	5.0	0.0	5.0	-9.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E65. Phone Number 808.469.7104			
E62. Street Address 6211 Glen Circle				
E63. City Lino Lakes	E67. County Anoka		E64/68. State/Country MN/ USA	E66. Zip Code 55014

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: Remote 4 E5. Call Sign:

E2: Contact Name Kevin Baker E6. Phone 808.469.7104

Number:

E3. Street: 6211 Glen Circle E7. City: Lino Lakes

E8. County:

E4. State MN E9. Zip Code 55014

E10. Area of Operation: Pacific Ocean Region, AK, HI, CONUS

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '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 Exhibit G a technical analysis showing compliance with two-degree spacing policy.	O Yes	O No	⊚ 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	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	•	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	•	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
POINTS OF COMMUNICATION			
Satellite Name:OTHER OTHER If you selected OTHER, please enter the following:			

E21. Common Name: Inmarsat 5 F3	E22. ITU Name: Inmarsat–Ka 180E
E23. Orbit Location: 180 E.L.	E24. Country: United Kingdom

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 GainTransmint and/or Recieve (dBi atGHz)
Remote 4	Remote 4	4000	JRC	JUE-60GX	0.65	39.6 dBi at 19.7
						39.9 dBi at 20.2
						43.9 dBi at 29.5
						43.9 dBi at 30.0
						39.9 dBi at 19.95
						43.9 dBi at 29.75

Id	Diameter		(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Remote 4	0.0/0.0	0.0	0.0	0.0	5.0	0.0	50.9

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote 4	29500 30000	Т	Right Hand Circular	2M70G1W	50.5	22.2

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.)

Modulation and Services Digital Data Signaling

Remote 4	29500	Т	a. 1	5M00G1W	50.9	19.9
	30000		Circular			

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its			
	and Services	Digital Data S	ignaling						
Remote 4	19700 20200	R	Left Hand Circular	32M0G7W	0.0	0.0			
E50. Modulation entirety.) Various Mo	and Services (If the			this box, please go to	o the end of the form	to view it in its			
Remote 4	29500 30000	Т	Right Hand Circular	600KG7W	44.0	22.2			
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.) Various Modulations up to 32APSK; Digital Data Link									
Remote 4	29500 30000	Т	Right Hand Circular	6M96G7W	50.9	18.5			

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.)

Various Modulations up to 32APSK; Digital Data Link

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle Western	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Remote 4	Geostationary	19700 20200	0.0/ 360.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	29500 30000	0.0/ 360.0	0.0	5.0	0.0	5.0	-9.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the contro callsign for which this application is being filed.		E65. Phone Number 808.469.7104				
E62. Street Address 6211 Glen Circle						
E63. City Lino Lakes	E67. County Anoka		E64/68. State/Country MN/ USA	E66. Zip Code 55014		

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: Remote 5 E5. Call Sign:

E2: Contact Name Kevin Baker E6. Phone 808.469.7104

Number:

E3. Street: 6211 Glen Circle E7. City: Lino Lakes

E8. County:

E4. State MN E9. Zip Code 55014

E10. Area of Operation: Pacific Ocean Region, AK, HI, CONUS

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '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 Exhibit F a technical analysis showing compliance with two-degree spacing policy.	O Yes	O No	⊚ 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	O Yes	•	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	•	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	0	No
POINTS OF COMMUNICATION			
Satellite Name:OTHER OTHER If you selected OTHER, please enter the following:			

E21. Common Name: Inmarsat 5 F3	E22. ITU Name: Inmarsat–Ka 180E
E23. Orbit Location: 180 E.L.	E24. Country: United Kingdom

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 GainTransmint and/or Recieve (dBi atGHz)
Remote 5	Remote 5	4000	Intellian	GX100	1.03	47.6 dBi at 30
						43.8 dBi at 19.7
						44.3 dBi at 20.2
						47.7 dBi at 29.5
						43.9 dBi at 19.95
						47.6 dBi at 29.75

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	(meters)	Height Above Ground Level 	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Remote 5	0.0/0.0	0.0	0.0	0.0	5.0	0.0	54.6

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote 5	29500 30000	Т	Right Hand Circular	1M79G1W	54.6	28.1

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.)

Modulation and Services Digital Data Signaling

Remote 5	29500	T	U	5M00G1W	54.5	23.5
	30000		Circular			

E50. Modulation entirety.)	and Services (If the	e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
Modulation	and Services	Digital Data S	ignaling			
Remote 5	19700 20200	R	Left Hand Circular	32M0G7W	0.0	0.0
E50. Modulation entirety.) Various Mo	and Services (If the			this box, please go to	o the end of the form	to view it in its
Remote 5	29500 30000	Т	Right Hand Circular	600KG7W	47.8	26.0
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.) Various Modulations up to 32APSK; Digital Data Link						
Remote 5	29500 30000	Т	Right Hand Circular	6M96G7W	54.5	22.1

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.)

Various Modulations up to 32APSK; Digital Data Link

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Remote 5	Geostationary	19700 20200	0.0/ 360.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	29500 30000	0.0/ 360.0	0.0	5.0	0.0	5.0	-9.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.		E65. Phone Number 808.469.7104		
E62. Street Address 6211 Glen Circle				
E63. City Lino Lakes	E67. County Anoka		E64/68. State/Country MN/ USA	E66. Zip Code 55014

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: Remote 6 E5. Call Sign:

E2: Contact Name Kevin Baker E6. Phone 808.469.7104

Number:

E3. Street: 6211 Glen Circle E7. City: Lino Lakes

E8. County:

E4. State MN E9. Zip Code 55014

E10. Area of Operation: Pacific Ocean Region, AK, HI, CONUS

E11. Latitude: 0 °0 '0.0 "

E12. Longitude: 0 °0 '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 Exhibit B a technical analysis showing compliance with two-degree spacing policy.	O Yes	O No	⊚ 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	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	•	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	•	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
POINTS OF COMMUNICATION			-
Satellite Name:OTHER OTHER If you selected OTHER, please enter the following:			

E21. Common Name: Inmarsat 5 F3	E22. ITU Name: Inmarsat–Ka 180 E
E23. Orbit Location: 180 E.L.	E24. Country: United Kingdom

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 GainTransmint and/or Recieve (dBi atGHz)
Remote 6	Remote 6	4000	Intellian	GX60	0.65	39.7 dBi at 19.7
						41.1 dBi at 20.2
						43.8 dBi at 30.0
						44.2 dBi at 29.5
						40.5 dBi at 19.95
						43.8 dBi at 29.75

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)		(meters)	Height Above Ground Level 	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
Remote 6	0.0/0.0	0.0	0.0	0.0	5.0	0.0	50.8

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote 6	29500 30000	Т	Right Hand Circular	2M20G1W	50.5	23.1

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.)

Modulation and Services Digital Data Signaling

Remote 6	29500 30000	Т	Right Hand Circular	5M00G1W	50.9	19.9

E50. Modulation	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
Modulation	and Services	Digital Data S	ignaling			
Remote 6	19700 20200	R	Left Hand Circular	32M0G7W	0.0	0.0
E50. Modulation entirety.)			••	this box, please go t	o the end of the form	to view it in its
Various Mc	odulations up t	o 32APSK; Digi	tal Data Link			
Remote 6	29500 30000	Т	Right Hand Circular	492KG7W	44.0	23.1
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
Various Mc	dulations up t	o 32APSK; Digi	tal Data Link			
Remote 6	29500 30000	Т	Right Hand Circular	6M96G7W	50.9	18.5

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.)

Various Modulations up to 32APSK; Digital Data Link

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle Western	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Remote 6	Geostationary	19700 20200	0.0/ 360.0	0.0	5.0	0.0	5.0	0.0
	Geostationary	29500 30000	0.0/ 360.0	0.0	5.0	0.0	5.0	-9.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign NOTE: Please enter the callsign of the contro callsign for which this application is being filed.		E65. Phone Number 808.469.7104		
E62. Street Address 6211 Glen Circle				
E63. City Lino Lakes	E67. County Anoka		E64/68. State/Country MN/ USA	E66. Zip Code 55014

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