Approved by OMB 3060–0678

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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:

License for a 2.4 meter C-band transmit/receive earth station at San Juan,

1–8. Legal Name of Ap	pplicant		
Name:	UltiSat, Inc.	Phone Number:	240-243-5119
DBA Name:		Fax Number:	
Street:	708 Quince Orchard Rd.	E-Mail:	dbryant@ultisat.com
	Suite 120		
City:	Gaithersburg	State:	MD
Country:	USA	Zipcode:	20878 –
Attention:	Mr David Bryant		

Name:	Hamid Chaudhry	Phone Number:	240 243-5118
Company:	UltiSat, Inc	Fax Number:	
street:	708 Quince Orchard Rd	E-Mail:	HChaudhry@ultisat.com
	Suite 120		
City:	Gaithersburg	State:	MD
Country:	USA	Zipcode:	20878-
Attention:		Relationship:	

CLASSIFICATION OF FILING

17. Choose the button next to the	b.
classification that applies to this filing for	b1. Application for License of New Station
both questions a. and b. Choose only one for 17a and only one for 17b.	 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
a. al. Earth Station (N/A) a2. Space Station	 (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 applicati	
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 Noncomme	rcial educational licensee
• Other(please explain):	
17d.	
Fee Classification BAX – Fixed Satellite T Station	ransmit/Receive Earth

18. If this filing is in reference to an19. If this filing is an amendment to a pending application enter:		oplication enter:
existing station, enter:	(a) Date pending application was filed:	(b) File number of pending application:
(a) Call sign of station:		
Not Applicable	Not Applicable	Not Applicable

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
	Using Non–U.S. licensed satellites
facilities:	ervice, 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 applicable frequency band(s).

x 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:

TYPE OF STATION

a. Fixed Earth S	ation	
b. Temporary–F	xed Earth Station	
c. 12/14 GHz V	AT Network	
d. Mobile Earth	Station	
	tionary Space Station	
g. Other (please	specify)	
YPE OF EARTH ST	ATION FACILITY: Choose only one.	

PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

Not Applicable

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	• Yes	● ^{No}
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	RadHaz	
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?	O Yes ● No
30. Is the applicant an alien or the representative of an alien?	O Yes ● No O N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes ● 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 ● 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?

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 No ■

• Yes • No • N/A

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 attemptiing 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.

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?

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.)

License for a 2.4 meter C-band transmit/receive earth station that will provide support in the collection of remote monitoring data.

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.	О ^В
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 Hamid Chaudhry 46. Title of Person Signing Project Manager 47. Please supply any need attachments. Attachment 1: Attachment 2: Attachment 3:		ise.)	the button next to applicable response.	44. Applicant is a (an): (Choose the bu
 Partnership Corporation Governmental Entity Other (please specify) 45. Name of Person Signing Hamid Chaudhry 46. Title of Person Signing Project Manager 47. Please supply any need attachments. 				• Individual
 Corporation Governmental Entity Other (please specify) 45. Name of Person Signing Hamid Chaudhry 46. Title of Person Signing Project Manager 47. Please supply any need attachments. 			1	• Unincorporated Association
Governmental Entity Other (please specify) 45. Name of Person Signing Hamid Chaudhry 46. Title of Person Signing Project Manager 47. Please supply any need attachments.				• Partnership
Governmental Entity Other (please specify) 45. Name of Person Signing Hamid Chaudhry 46. Title of Person Signing Project Manager 47. Please supply any need attachments.				• Corporation
45. Name of Person Signing Hamid Chaudhry 46. Title of Person Signing Project Manager 47. Please supply any need attachments.				• Governmental Entity
Hamid Chaudhry Project Manager 47. Please supply any need attachments.				Other (please specify)
Hamid Chaudhry Project Manager 47. Please supply any need attachments.				-
Hamid Chaudhry Project Manager 47. Please supply any need attachments.				
Hamid Chaudhry Project Manager 47. Please supply any need attachments.				
47. Please supply any need attachments.		46. Title of Person Signing		45. Name of Person Signing
		Project Manager		Hamid Chaudhry
		· ·		
Attachment 1: Attachment 2: Attachment 3:			hments.	47. Please supply any need attachmen
		Atta	Attachment 2:	Attachment 1:
			I	
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 212(a)(1)), AND/OR EOREETTURE (U.S. Code, Title 47, Section 502)				
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).	лі <i>303)</i> .	/UK FUKFEITUKE (U.S. COde, 1)	$a_{1100} = 47$, Section $512(a_{11})$, AND/OF	(U.S. Code, Title

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:	San Juan	E5. Call Sign:			
E2: Contact Name	Hamid Chaudhry	E6. Phone Number:	240 243–5118		
E3. Street:	Marginal La Ley	E7. City:	San Juan		
		E8. County:	Cayey		
E4. State	PR	E9. Zip Code	00736		
E10. Area of Operat	tion:	Puerto Rico			
E11. Latitude:	18 °6 '37.0 "N				
E12. Longitude:	66 °9 '8.0 "W				
E13. Lat/Lon Coord	linates are:	O ^{NAD−27}	NAD-83	O ^{N/A}	
E14. Site Elevation	(AMSL):	430.0 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 asAntenna Waiver a technical analysis showing compliance with two–degree spacing policy.	O Yes	le 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	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	۲	Yes	O ^N	lo
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	I N	lo
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	● ^N	lo

POINTS OF COMMUNICATION

Satellite Name:SES-4 (S2828) | New Skies | 22.0 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		E32. Antenna Size <meters></meters>	E41/42. Antenna GainTransmint and/or Recieve (dBi at GHz)
San Juan	2.4m	1	Prodelin	1251	2.4	38.0 dBi at 3.950
						42.0 dBi at 6.175

Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)		0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
2.4m	0.0/0.0	2.4	432.4	0.0	5.0	0.0	48.98

FREQUENCY

 E43/44. Frequency Bands		E48. Maximum EIRP per Carrier	E49. Maximum ERIP Density per
(MHz)	L,R)		Carrier (dBW/4kHz)
			(UD W/4KHZ)

3700	4200	R	Linear and Circular	100KG7D	0.0	0.0
and Service	es (If tl	he complete descr	ription does not appear in	this box, please	go to the end of th	ne form to view it in its
ita Carri	ler					
3700	4200	R	Linear and Circular	87K0G7D	0.0	0.0
ita Carri	ler					
5925	6047	Т	Linear and Circular	100KG7D	45.97	32.0
		l ne complete descr	ription does not appear in	this box, please	go to the end of th	ne form to view it in its
	an and Service ata Carri 3700 ata Carri ata Carri 5925 an and Service	n and Services (If th ata Carrier 3700 4200 n and Services (If th ata Carrier 5925 6047	an and Services (If the complete description of the complete descripticomplete description of the complete description of th	an and Services (If the complete description does not appear in ata Carrier 3700 4200 R Linear and Circular an and Services (If the complete description does not appear in ata Carrier 5925 6047 T Linear and Circular an and Services (If the complete description does not appear in ata Carrier	an and Services (If the complete description does not appear in this box, please ata Carrier 3700 4200 R Linear and Circular 87K0G7D an and Services (If the complete description does not appear in this box, please ata Carrier 5925 6047 T Linear and Circular 100KG7D an and Services (If the complete description does not appear in this box, please ata Carrier 5925 6047 T Linear and Circular 100KG7D	an and Services (If the complete description does not appear in this box, please go to the end of the ata Carrier 3700 4200 R Linear and Circular 87K0G7D 0.0 and Services (If the complete description does not appear in this box, please go to the end of the ata Carrier 5925 6047 T Linear and Circular 100KG7D 45.97 and Services (If the complete description does not appear in this box, please go to the end of the ata Carrier

2.4m	5925	6047	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modulatio entirety.)	n and Servic	es (If the	he complete descript	tion does not appear in	this box, please;	go to the end of th	e form to view it in its
Digital D	ata Carr	ier					
2.4m	6080	6171	Т	Linear and Circular	100KG7D	45.97	32.0
entirety.) Digital D	ata Carr	ier					
2.4m	6080	6171	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modulatio entirety.) Digital D			he complete descript	tion does not appear in	this box, please	go to the end of th	e form to view it in its

2.4m	6243	6270	Т	Linear and Circular	100KG7D	45.97	32.0
E50. Modulatio entirety.)	n and Service	es (If th	he complete descript	tion does not appear in	this box, please	go to the end of th	e form to view it in its
Digital D	ata Carri	ier					
2.4m	6243	6270	Т	Linear and Circular	87K0G7D	45.37	32.0
Digital D	ata Carri	ler					
2.4m	6303	6319	Т	Linear and Circular	100KG7D	45.97	32.0
E50. Modulatio entirety.) Digital D			l ie complete descript	tion does not appear in	this box, please	go to the end of th	e form to view it in its

2.4m	6303	6319	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modulation entirety.)	and Service	es (If th	l ne complete descriptio	l on does not appear in	this box, please go t	o the end of the form	to view it in its
Digital Da	ta Carri	.er					
2.4m	6372	6425	Т	Linear and Circular	100KG7D	45.97	32.0
entirety.) Digital Da	ta Carri	.er					
2.4m	6372	6425	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modulation entirety.) Digital Da			ne complete descriptio	on does not appear in	this box, please go t	o the end of the form	to view it in its

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	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 Elevatio Angle Western Limit	on EIRP Density toward the
2.4m	Geostationary	3700 4200	22.0/ 22.0	107.8	36.0	107.8	36.0	0.0
	Geostationary	5925 6047	22.0/ 22.0	107.8	36.0	107.8	36.0	-14.08
	Geostationary	6080 6171	22.0/ 22.0	107.8	36.0	107.8	36.0	-14.08
	Geostationary	6243 6270	22.0/ 22.0	107.8	36.0	107.8	36.0	-14.08
	Geostationary	6303 6319	22.0/ 22.0	107.8	36.0	107.8	36.0	-14.08
	Geostationary	6372 6425	22.0/ 22.0	107.8	36.0	107.8	36.0	-14.08
REMOTE CO	ONTROL POIN	T LOCATION		1	1			
	ase enter the calls hich this application	•	•		. Phone Number			
E63. City			E67. Count	у		E64/68.		E66. Zip Code

E63. City	E67. County	E64/68.	E66. Zip Code
		State/Country	
		/	

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