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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:

License for a 2.4 meter C-band transmit/receive earth station in Oahu, Hawaii

1-8. Legal Name of Applicant

Name: UltiSat, Inc. Phone Number: 240–243–5119

DBA Fax Number:

Name:

Street: 708 Quince Orchard Rd. E-Mail: dbryant@ultisat.com

Suite 120

City: Gaithersburg State: MD

Country: USA Zipcode: 20878 –

**Attention:** Mr David Bryant

9–16. Name of Contact Representative

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	b2. Application for Registration of New Domestic Receive—Only Station	
for 17a and only one for 17b.		
	(N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration	
a.	(N/A) b5. Assignment of License or Registration	
a1. Earth Station	(N/A) b6. Transfer of Control of License or Registration	
(N/A) a2. Space Station	(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  h 10. Other (Please specify)	
	o 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.	
	(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	on?	
If Yes, complete and attach FCC Form	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).	
Governmental Entity Noncomme	ercial educational licensee	
Other(please explain):		
17d.		
Fee Classification BAX – Fixed Satellite T	ransmit/Receive Earth	
Station		

18. If this filing is in reference to an existing station, enter:  (a) Call sign of station:  Not Applicable  19. If this filing is an amendment to a pending application enter:  (a) Date pending application was filed:  (b) File number of pending application:  Not Applicable  Not Applicable
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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		
O Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites		
23. If applicant is providing INTERNATIONAL COMMON CARRIER sefacilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these		
O Connected to a Public Switched Network Not connected to	o a Public Switched Network		

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:			
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)			
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.)			
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 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.	٥	Yes	No     No	
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.	nutical er	route	or	
29. Is the applicant a foreign government or the representative of any foreign government?	O Yes	<b>●</b> N	o	
30. Is the applicant an alien or the representative of an alien?	• Yes	O N	o 🌘 N/A	`
31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	O N	o <b>()</b> 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 N	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 No	o o 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.	<b>O</b> Yes	<b>⊚</b> 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	<b>⊚</b> 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	<b>⊚</b> 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	<b>⊘</b> 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.		

<b>⊚</b> Yes	O No
O Yes	<b>⊚</b> No
what administi	ration has

(If the complete description does

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.	<b>●</b> 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.	<b>o</b> 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.

O Individual				
Unincorporated Association				
<b>~</b>				
© Corporation				
Governmental Entity				
Other (please specify)				
45. Name of Person Signing Hamid Chaudhry		46. Title of P Project Mana	erson Signing ger	
47. Please supply any need attachm	nents.			
Attachment 1:	Attachment 2:		Attachment 3:	
(U.S. Code,	Title 18, Section 1001), AND/O	R REVOCATION	HABLE BY FINE AND / OR IMPRISO OF ANY STATION AUTHORIZATION E (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 Station Site

E1: Site Identifier: Oahu E5. Call Sign:

E2: Contact Name Hamid Chaudhry E6. Phone 240 243–5118

Number:

E3. Street: UltiSat NOC E7. City: Oahu

E8. County: Honolulu

E4. State HI E9. Zip Code 96701

E10. Area of Operation: Hawaii

E11. Latitude: 21 °31 '22.1 "N

E12. Longitude: 157 °59 '43.2 "W

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

E14. Site Elevation (AMSL): 393.82 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 Antenna Waiver a technical analysis showing compliance with two–degree spacing policy.	O Yes	<b>⊚</b> 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	<b>⊘</b> 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	● 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? 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: NSS 9 (S2756)   NSS 9   177 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 GainTransmint and/or Recieve (dBi atGHz)
Oahu	2.4m	1	Prodelin	1251	2.4	38.0 dBi at 3.95
						42.0 dBi at 6.175

Id	Diameter	E35. Above Ground Level  (meters)	E36. Above Sea 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	396.22	0.0	5.0	0.0	48.98

# FREQUENCY

E28. Antenna Id	E43/44.	E45. T/R Mode	E46. Antenna	E47. Emission	E48. Maximum	E49. Maximum
	Frequency Bands		Polarization(H,V,	Designator	EIRP per Carrier	ERIP Density per
	(MHz)		<b>L</b> , <b>R</b> )		(dBW)	Carrier
						(dBW/4kHz)

2.4m	3700	4200	R	Linear and Circular	100KG7D	0.0	0.0
E50. Modulation entirety.)	and Service	s (If th	ne complete descripti	on does not appear in	this box, please go	to the end of the form	to view it in its
Digital Da	ta Carri	er					
2.4m	3700	4200	R	Linear and Circular	87K0G7D	0.0	0.0
entirety.)  Digital Da	ta Carri	er					
2.4m	5925	5988	Т	Linear and Circular	100KG7D	45.97	32.0
E50. Modulation entirety.)  Digital Da			ne complete descripti	on does not appear in	this box, please go	to the end of the form	to view it in its

2.4m	5925	5988	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modulation entirety.)	and Service	es (If tl	I ne complete descripti	I on does not appear in	this box, please go	to the end of the form	m to view it in its
Digital da	ta carri	er					
2.4m	6028	6047	Т	Linear and Circular	100KG7D	45.97	32.0
entirety.)  Digital Da	ta Carri	er					
2.4m	6028	6047	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modulation entirety.)  Digital Da			ne complete descripti	on does not appear in	this box, please go	to the end of the form	m to view it in its

2.4m	6120	6126	Т	Linear and Circular	100KG7D	45.97	32.0
E50. Modulation entirety.)	and Services	s (If th	L ne complete descripti	on does not appear in	this box, please go t	to the end of the form	to view it in its
Digital Da	ta Carrio	er					
2.4m	6120	6126	Т	Linear and Circular	87K0G7D	45.37	32.0
entirety.)  Digital Da	ta Carrio	er					
2.4m	6179	6366	Т	Linear and Circular	100KG7D	45.97	32.0
E50. Modulation entirety.)  Digital Da			le complete descripti	ion does not appear in	this box, please go	to the end of the form	to view it in its

2.4m	6179	6366	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modu	lation and Servi	ces (If the	he complete d	lescription does not appear in	this box, please	go to the end of th	e form to view it in its
Digita	l Data Carı	rier					
2.4m	6399	6425	Т	Linear and Circular	100KG7D	45.97	32.0
entirety.) Digita	l Data Cari	rier					
2.4m	6399	6425	Т	Linear and Circular	87K0G7D	45.37	32.0
E50. Modu	lation and Servi	ces (If the	he complete d	lescription does not appear in	this box, please	go to the end of th	e form to view it in its
Digita	l Data Carı	rier					

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)
2.4m	Geostationary	3700 4200	177.0/ 177.0	223.2	56.8	223.2	56.8	0.0
	Geostationary	5925 5988	177.0/ 177.0	223.2	56.8	223.2	56.8	-20.0
	Geostationary	6028 6047	177.0/ 177.0	223.2	56.8	223.2	56.8	-20.0
	Geostationary	6120 6126	177.0/ 177.0	223.2	56.8	223.2	56.8	-20.0
	Geostationary	6179 6366	177.0/ 177.0	223.2	56.8	223.2	56.8	-20.0
	Geostationary	6399 6425	177.0/ 177.0	223.2	56.8	223.2	56.8	-20.0

# REMOTE CONTROL POINT LOCATION

E61. Call Sign	E65. Phone Number			
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.				
E62. Street Address				
E63. City	E67. County		E64/68. State/Country	E66. Zip Code

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