FCC 312

Main Form

FEDERAL COMMUNICATIONS COMMISSION

APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

Approved by OMB 3060-0678	
est. Avg. Burden Hours Per Response: 11 Hrs.	

y OMB 0-0678 i Hours 11 Hrs.	FCC Use Only File Number:
	Call Sign:

Fee Number:

APPLICANT INFORMATION

1. Legal Name of Applicant		2. Voice Telephone N		
Universal Space Network, Inc.		(949) 476 - 3	432	
3. Other Name Used for Doing Business (if any)		4. Fax Telephone Nun	nber	
		(949) 851 - 9	485	
5. Mailing Street Address or P.O. Box	6. City			
1501 Quail Street	Newport Beach			
	7. State/Country (if not U.S.A.)		8. Zip Code	
ATTENTION: JOANNE GREET-SWANK (215) 328-9130	California	92660		
9. Name of Contact Representative (If other than applicant)		10. Voice Telephone Number		
11. Firm or Company Name		12. Fax Telephone Nu	mber	
13. Mailing Street Address or P.O. Box	14. City			
	15. State/Country (if not U.S.A.)		16. Zip Code	
ATTENTION:				

CLASSIFICATION OF FILING

17. Place an "X" in the box next to the classification that applied to this filing for both questions a. and b. Mark only one box for 17a and only one box for 17b.							
a1. Earth Station	b1. Application for License of New Station	b6. Transfer of Control of License or Registration					
a2. Space Station	b2. Application for Registration of New Domestic Receive-Only Station	b7. Notification of Minor Modification					
	b3. Amendment to a Pending Application	b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite					
	b4. Modification of License or Registration	b9. Letter of Intent to Use Non-U.S. Licensed Satellite to provide Service in the United States					
	b5. Assignment of License or Registration	b10. Other (Please Specify): Application to Request STA					
18. If this filing is in reference to an	existing station, enter:	19. If this filing is an amendment to a pending application enter					
Call sign of station:	•	(a) Date pending application was filed: (b) File number of pending application:					

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Place an "X" in the box(es) next to all that apply.									
a. Fixed Satellite c. Radiodetermination Satellite e. Direct to Home Fixed Satellite b. Mobile Satellite d. Earth Exploration Satellite f. Digital Audio Radio Service g. Other (Please Specify) Launch and Early Orbit Support (LEOP)									
21. STATUS: 22. If earth station applicant, place an "X" in the box(es) next to all that apply.									
a. Common Carrier b. Non-Common Carrier a. Using U.S. licensed satellites b. Using Non-U.S. licensed satellites									
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Mark only one box. Are these facilities:									
a. Connected to the Public Switched Network									
24. FREQUENCY BAND(S): Place and "X" in the box(es) next to all applicable frequency band(s).									
a. C-Band (4/6 GHz) b. Ku-Band (12/14 GHz)									
TYPE OF STATION									
25. CLASS OF STATION: Place an "X" in the box next to the class of station that applies. Mark only one box.									
a. Fixed Earth Station b. Temporary-Fixed Earth Station c. 12/14 GHz VSAT Network d. Mobile Earth Station e. Space Station f. Other (Specify) f. Other (Specify) f. Space Station applicant, go to Question 27.									
26. TYPE OF EARTH STATION FACILITY Mark only one box.									
a. Transmit/Receive b. Transmit-Only c. Receive-Only									
PURPOSE OF MODIFICATION OR AMENDMENT									
27. The purpose of this proposed modification or amendment is to: Place and "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 change emission designator and related service									
d – authorization to replace antenna									
e – authorization to add antenna									
f – authorization to relocate fixed station									
g – authorization to change assigned frequency(ies)									
h – authorization to add Points of Communication (satellites & countries)									
i – authorization to change Points of Communication (satellites & countries)									
j – authorization for facilities for which environmental assessment and radiation hazard reporting is required k – Other (Please Specify)									
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 as an exhibit for new transmitting facilities, major modifications, or amendments. Refer to OET Bulletin 65.									

ALIEN OWNERSHIP

ALIENOWNERSHII			
29. Is the applicant a foreign government or the representative of any foreign government?	☐ YES	⊠ NO	
30. Is the applicant an alien or the representative of an alien?	YES	□NO	
31. Is the applicant a corporation organized under the laws of any foreign government?	YES	□ NO	
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 there of or by any corporation organized under the laws of a foreign country?	☐ YES	□ NO	
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?	☐ YES	□NO	
34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit, the 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 exception with supporting documents.	☐ YES	⊠ NO	
36. Has the applicant or any party to this application 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 explanation of the circumstances.	☐ YES	⊠ NO	
37. Has the applicant, or any party to this application, 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 explanation of the 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 radios apparatus, exclusive traffic arrangement or any other mean or unfair method of competition? If Yes, attach as an exhibit, an explanation of the 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 exhibit, 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, addresses, and citizenship of those stockholders owing of record and/ or voting 10 percent or more of the Filer's voting stock and the percentages so help. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directions of the Filer.			
41. By checking Yes, the undersigned certifies, that neither the applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 or 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	□ NO	
42a. Does the applicant intend to use a non-U.S. Licensed satellite to provide service in the United States? If yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R § 25.137, as appropriate. If no, proceed to question 43.	☐ YES	⊠ NO	
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?			

43. Description. (Summarize	e the nature of the application and the services to be provided).							
Universal Space Network's ground station near North Pole, Alaska will be used to assist CNES during the launch and early orbit phase (LEOP) of the Helios-2B spacecraft. The LEOP operations shall consist of a period of 14 days in the nominal case.								
phase (LEO	2) of the Helios-2B spacecraft. The LEOP operations shall	I consist of a period of 14 days in the nominal case.						
Exhibit No.	Identify all exhibits that are attached to this application.							
Α	Frequency Coordination Report							
	CEDEVIC	ATTION						
The Applicant waives a	CERTIFICA	ATTON tic 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 is	n accordance with this application. The applicant certifies that grant of this						
		in 47 CFR Part 20. All statements made in exhibits are a material part hereof						
	erein as it set out in full in this application. The undersigned, individual tached exhibits are true, complete and correct to the best of his or her	ally and for the applicant, hereby certifies that all statements made in this knowledge and belief, and are made in good faith						
44. Applicant is a (an):	*	knowledge und benef, and are made in good farai.						
a. Individual	b. Unincorporated Association c. Partnership	— · · · —						
		(Please specify)						
45. Typed Name of Person S Joanne Greet-Sw		46. Title of Person Signing Manager Contract Administration and Compliance						
Joanne Greet-Sw	rank	Manager, Contract Administration and Compliance						
47. Signature		48. Date 9 November 2009						
WILLFUL	FALSE STATEMENTS MADE ON THIS FORM AR	E PUNISHABLE BY FINE AND/OR IMPRISONMENT						
		ANY STATION AUTHORIZATION (U.S. Code, Title 47,						
Section 312	(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, S	Section 503).						

FCC 312 Schedule B		FE	DERAL COMMUNICA	ATIONS (COMMISSIO	N				Page	e 1: Location
	PPLIC	ATION FOR	SATELLITE SPACE A	ND FAR'	TH STATION	ATITI	HOR	217.A7	TIONS		
A	III LICA	ATION FOR				AUI			IONS		
	Technical and Operational Description) (Place an "X" in one of the blocks below)										
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License of New Station F	•	of new Domestic ve-Only Station	Amendment to a Pending A	pplication	_ Modification of L	acense/R	egistra	ation	Notification o	I Minor I	VIOdification
B1. Location of Earth Station S	For '	VSAT networks a	nobile, or VSAT remote facility attach individual Schedule B, lommunications, and Destinations.	Page 1 sheets	s for each hub stat	ion and	each 1				
		(HUB, REMOTE1, o	etc.) B1c. Teleph	one Number 490-3064		B1j. G	eograpl	hic Coord Min.	linates N/S, - Sec E/W		B1k. Lat./Lon. Coordinates are:
B1d. Mailing Street Address of Station of	or Area of Op	eration	B1e. Name of Contact Person			1					
1465 North Bradway Roa	ıd		Joanne Greet-Swank			Lat. Lon.	<u>64°</u> 147°		<u>15.3"</u> N <u>0.8"</u> W		NAD-27 NAD-83
B1f. City	B1g. Coun			B1h. State	B1i. Zip Code			B11. Site	Elevation (AMSL)		
North Pole	Nor	th Star Borough	n - Fairbanks	Alaska	99705					140.7	meters
B2. Points of Communications			bit locations of all satellites wons of all satellite facilities lice								
Satellite Name and Orbit Loca			Satellite Name and Orbit Location			Satellite Name and Orbit Location			,		
Helios-2B											
B3. Destination points for com point(s) (countries) where the ser										, specify	the destination
Satellite Name		List of Destina	tion Points								
Helios-2B		CNES (France	e)								

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

FCC Form 312 - Schedule B: (Technical and Operational Description)

B4. Earth Station Antenna Facilities: Use additional pages as needed.

(a) Site ID*	(b) Antenna ID**	(c) Quantity	(d) Manufacturer	(e) Model	(f) Antenna Size (meters)	(g) Antenna Gain Transmit and/or Receive (dBi atGHz)
USAK01	AK-13M	1	Datron	1453	13.0	46.9 dBi at 2.200 GHz 45.9 dBi at 2.100 GHz

B5. Antenna Heights and Maximum Power Limits: (The corresponding Antenna ID in tables B4 and B5 applies to the same antenna)

		Maximum An	Maximum Antenna Height		(f) Maximum	(g) Total Input	
(a)	(b) Antenna Structure	(c) Above	(d) Above	Height Above	Antenna Height	Power at	(h) Total EIRP
Antenna	Registration No.	Ground Level	Mean Sea Level	Ground Level	Above Rooftop	antenna flange	for all carriers
ID**		(meters)	(meters)	(meters)***	(meters)***	(Watts)	(dBW)
AK-13M		20.0	160.7			200.0	68.9

Notes

- * If this is an application for a VSAT network, identify the site (Item B1b, Schedule B, Page 1) where each antenna is located. Also include this Site-ID on Schedule B, Page 5.
- ** Identify each antenna in VSAT network or multi-antenna station with a unique identifier, such as HUB, REMOTE1, A1, A2, 10M, 12M, 7M, etc. Use this same antenna ID throughout tables B4, B5, B6, and B7 when referring to the same antenna.
- *** Attach sketch of site or exemption, See 47 CFR Part 17.

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

FCC Form 312 - Schedule B: (Technical and Operational Description)

B6. Frequency Coordination Limits: Use additional pages as needed.

(a) Antenna ID*	(b) Frequency Limits (MHz)	(c) Range of Satellite Arc Eastern Limit**	(d) Range of Satellite Arc Western Limit**	(e) Antenna Elevation Angle Eastern Limit	(f) Antenna Elevation Angle Western Limit	(g) Earth Station Azimuth Angle Eastern Limit	(h) Earth Station Azimuth Angle Western Limit	(i) Maximum EIRP Density toward the Horizon (dBW/4kHz)
AK-13M	2206.529	0.0° W.L.	360.0° W.L.	5.0°	5.0°			
AK-13M	2031.846	0.0° W.L.	360.0° W.L.	5.0°	5.0°			9.6

Notes:

^{*} Provide the ANTENNA-ID from table B4 to identify the antenna to which each frequency band and orbital arc range is associated.

^{**} If operating with geostationary satellites, give the orbital arc limits and the associated elevation and azimuth angles. If operating with non-geostationary satellites, give the notation "NON-GEO" for the satellite arc and give the minimum operational elevation angle and the maximum azimuth angle range.

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

FCC Form 312 - Schedule B: (Technical and Operational Description)

B7. Particulars of Operation (Full particulars are required for each r.f. carrier): Use additional pages as needed.

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(a) Antenna ID*	(b) Frequency Limits (MHz)	(c) T/R Mode **	(d) Antenna Polarization (H,V,L,R)	(e) Emission Designator	(f) Maximum EIRP per Carrier (dBW)	(g) Maximum EIRP Density per Carrier (dBW/4kHz)	(h) Description of Modulation and Services
AK-13M	2206.529	R	L, R	200KG2D			16 Kbps PCM B10-L/PM modulated on carrier
AIX TOW	2200.323	- 1	L, 1X	2001(02D			To thopo I of the Et in modulated on earner
AK-13M	2031.846	Т	L, R	200KG2D	68.0	51.0	4000 bps is BPSK on 16 kHz Subcarrier
	<u> </u>						

Notes: * Provide the ANTENNA-ID from table B4 to identify the antenna to which each frequency band and emission is associated. For VSAT networks, include frequencies and emissions for all HUB and REMOTE units.

^{**} Indicate whether the earth station transmits or receives in each frequency band.

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

FCC Form 312 - Schedule B: (Technical and Operational Description)

If VSAT Network, provide the SITE-ID (Item B1b) of the station that B8-B13 are in response to (HUB, REMOTE1, etc.):

B8. 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 measurements? If NO, provide as an exhibit, a technical analysis showing compliance with two-degree spacing policy.						YES	□ NO	N/A
B9. 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					\boxtimes	YES	∐ NO	
Section 25.209(a2) and (b) as demonstrated by the manufacturer's qualification measurement?								
B10. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.							_	
					\boxtimes	YES	∐ NO	
Remote Control Point Location:								
B10a. Street Address 417 Corodoon Drivo, Suito A								
417 Caredean Drive, Suite A						P10 7' C 1		
	B10b. City	B10c. County	B10.d. State/Country			B10e. Zip Code		
-	Horsham	Montgomery PA				19044		
	B10f. Telephone Number B10g. Call Sign of Control Station (if appropriate)							
215-328-9130								
B11. Is frequency coordination required? If YES, attach a frequency coordination report as an exhibit.						*******		
					\boxtimes	YES	NO	
B12. Is coordination with another country required? If YES, attach the name of the country(ies)					_			
and plot of coordination contours as an exhibit.						YES	\boxtimes NO	
B13. FAA Notification - (See 47 CFT Part 17and 47 CFT Part 25.113(c))								
Where FAA notification is required, have you attached a copy of a completed FCC Form 854						YES	\bowtie NO	
	and/or the FAA's study regarding the potential hazard of the structure to aviation?							
FAILURE TO COMPLY WITH 47 CFT PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION								