

**FCC 312**

Main Form

**FEDERAL COMMUNICATIONS COMMISSION**Approved by OMB  
3060-0678  
Est. Avg. Burden Hours  
Per Response: 11 Hrs.FCC Use Only  
File Number:

Call Sign:

Fee Number:

**APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS****APPLICANT INFORMATION**

1. Legal Name of Applicant Universal Space Network, Inc.		2. Voice Telephone Number (949) 476 - 3432	
3. Other Name Used for Doing Business (if any)		4. Fax Telephone Number (949) 851 - 9485	
5. Mailing Street Address or P.O. Box  1501 Quail Street		6. City  Newport Beach	
ATTENTION: JOANNE GREET-SWANK (215) 328-9130		7. State/Country (if not U.S.A.) California	8. Zip Code 92660
9. Name of Contact Representative (If other than applicant)		10. Voice Telephone Number	
11. Firm or Company Name		12. Fax Telephone Number	
13. Mailing Street Address or P.O. Box		14. City	
ATTENTION:		15. State/Country (if not U.S.A.)	16. Zip Code

**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.		
<input checked="" type="checkbox"/> a1. Earth Station	<input type="checkbox"/> b1. Application for License of New Station	<input type="checkbox"/> b6. Transfer of Control of License or Registration
<input type="checkbox"/> a2. Space Station	<input type="checkbox"/> b2. Application for Registration of New Domestic Receive-Only Station	<input type="checkbox"/> b7. Notification of Minor Modification
	<input type="checkbox"/> b3. Amendment to a Pending Application	<input type="checkbox"/> b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
	<input type="checkbox"/> b4. Modification of License or Registration	<input type="checkbox"/> b9. Letter of Intent to Use Non-U.S. Licensed Satellite to provide Service in the United States
	<input type="checkbox"/> b5. Assignment of License or Registration	<input type="checkbox"/> b10. Other (Please Specify): <u>Application to Request STA</u>
18. If this filing is in reference to an existing station, enter: Call sign of station:		19. If this filing is an amendment to a pending application enter (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:

- a. Common Carrier       b. Non-Common Carrier

22. If earth station applicant, place an "X" in the box(es) next to all that apply.

- 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       b. Not connected the Public Switched Network      N/A

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)       c. Other (please specify) S-Band

## 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) \_\_\_\_\_  
If 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 increase EIRP and EIRP density  
 d - authorization to replace antenna  
 e - authorization to add antenna  
 f - authorization to relocate fixed station  
 g - authorization to change 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) Application to Request a Special Temporary Authority

## 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.

YES       NO

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

29. Is the applicant a foreign government or the representative of any foreign government?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
30. Is the applicant an alien or the representative of an alien?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> 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.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> 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? <u>International Telecommunication Union</u>		

43. Description. (Summarize 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 Telespazio during the launch and early orbit operation of the COSMO/SkyMed FM-2 spacecraft.

Exhibit No.	Identify all exhibits that are attached to this application.
A	Frequency Coordination Report
B	Society of Broadcast Engineers Acceptance Letter

### CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Place an "X" in the box next to applicable response.)  
 a. Individual     b. Unincorporated Association     c. Partnership     d. Corporation     e. Governmental Entity     e. Other  
(Please specify) \_\_\_\_\_

45. Typed Name of Person Signing Joanne Greet-Swank	46. Title of Person Signing Manager, Contract Administration & Compliance
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47. Signature	48. Date 16 November 2007
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**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 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).**

**FEDERAL COMMUNICATIONS COMMISSION**  
**APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS**  
**Technical and Operational Description)**

(Place an "X" in one of the blocks below)

- License of New Station     Registration of new Domestic Receive-Only Station     Amendment to a Pending Application     Modification of License/Registration     Notification of Minor Modification

**B1. Location of Earth Station Site.** If temporary-fixed, mobile, or VSAT remote facility, specify area of operation and point of contact. If VSAT hub station, give its location. For VSAT networks attach individual Schedule B, Page 1 sheets for each hub station and each remote station. Individually provide the Location, Points of Communications, and Destination Points for each hub and remote station.

B1a. Station Call Sign		B1b. Site identifier (HUB, REMOTE1, etc.)		B1c. Telephone Number		B1j. Geographic Coordinates N/S, Deg. - Min. - Sec. - E/W		B1k. Lat./Lon. Coordinates are:	
		USAK01		(907) 490-3064		Lat. 64° 48' 15.3" N		<input type="checkbox"/> NAD-27	
B1d. Mailing Street Address of Station or Area of Operation		B1e. Name of Contact Person							
1465 North Bradway Road		Joanne Greet-Swank							
B1f. City		B1g. County		B1h. State	B1i. Zip Code		B1l. Site Elevation (AMSL)		
North Pole		North Star Borough - Fairbanks		Alaska	99705		140.7 meters		

**B2. Points of Communications:** List the names and orbit locations of all satellites with which this earth station will communicate. The entry "ALSAT" is sufficient to identify the names and locations of all satellite facilities licensed by the U.S. All non-U.S. licensed satellites must be listed individually.

Satellite Name and Orbit Location	Satellite Name and Orbit Location	Satellite Name and Orbit Location
COSMO/SkyMed FM-2		

**B3. Destination points for communications using non-U.S. licensed satellites.** For each non-U.S. licensed satellite facility identified in section B2 above, specify the destination point(s) (countries) where the services will be provided by this earth station via each non-U.S. license satellite system. Use additional sheets as needed.

Satellite Name	List of Destination Points
COSMO/SkyMed	Italy

**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 at ___GHz)
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)**

(a) Antenna ID**	(b) Antenna Structure Registration No.	Maximum Antenna Height		(e) Building Height Above Ground Level (meters)***	(f) Maximum Antenna Height Above Rooftop (meters)***	(g) Total Input Power at antenna flange (Watts)	(h) Total EIRP for all carriers (dBW)
		(c) Above Ground Level (meters)	(d) Above Mean Sea Level (meters)				
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**  
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**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	2230.000	0.0° W.L.	360.0° W.L.	5.0°	5.0°			
AK-13M	2053.458	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.**

(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	2230.000	R	L, R	200KG2D			16 kbps PCM B10-L/PM modulated on Carrer
	2053.458	T	L, R	200KG2D	68.0	51.0	4000 bps is BPSK on 16 kHz Subcarrier

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 <b>geostationary</b> 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.	<input type="checkbox"/>	<b>YES</b>	<input type="checkbox"/>	<b>NO</b>	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 <b>non-geostationary</b> 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 measurement?	<input checked="" type="checkbox"/>	<b>YES</b>	<input type="checkbox"/>	<b>NO</b>																			
B10. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	<input checked="" type="checkbox"/>	<b>YES</b>	<input type="checkbox"/>	<b>NO</b>																			
<b>Remote Control Point Location:</b>																							
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="6" style="padding: 2px;">B10a. Street Address <b>417 Caredean Drive Suite A</b></td> </tr> <tr> <td style="width:33%; padding: 2px;">B10b. City <b>Horsham</b></td> <td style="width:20%; padding: 2px;">B10c. County <b>Montgomery</b></td> <td style="width:20%; padding: 2px;">B10.d. State/Country <b>PA</b></td> <td colspan="3" style="padding: 2px;">B10e. Zip Code <b>19044</b></td> </tr> <tr> <td colspan="3" style="padding: 2px;">B10f. Telephone Number <b>215-328-9130</b></td> <td colspan="3" style="padding: 2px;">B10g. Call Sign of Control Station (if appropriate)</td> </tr> </table>						B10a. Street Address <b>417 Caredean Drive Suite A</b>						B10b. City <b>Horsham</b>	B10c. County <b>Montgomery</b>	B10.d. State/Country <b>PA</b>	B10e. Zip Code <b>19044</b>			B10f. Telephone Number <b>215-328-9130</b>			B10g. Call Sign of Control Station (if appropriate)		
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B10f. Telephone Number <b>215-328-9130</b>			B10g. Call Sign of Control Station (if appropriate)																				
B11. Is frequency coordination required? If YES, attach a frequency coordination report as an exhibit.	<input checked="" type="checkbox"/>	<b>YES</b>	<input type="checkbox"/>	<b>NO</b>																			
B12. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as an exhibit.	<input type="checkbox"/>	<b>YES</b>	<input checked="" type="checkbox"/>	<b>NO</b>																			
<b>B13. FAA Notification - (See 47 CFT Part 17 and 47 CFT Part 25.113(c))</b> <b>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?</b> <b>FAILURE TO COMPLY WITH 47 CFT PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION</b>	<input type="checkbox"/>	<b>YES</b>	<input checked="" type="checkbox"/>	<b>NO</b>																			