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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:

FCC Form 312 – Permanent Authority – Ajo, AZ

Name: HARRIS CORPORATION **Phone Number:** 321–309–7178

**DBA Fax Number:** 321–309–7530

Name:

Street: 1025 West Nasa Blvd. E-Mail: mfeustel@harris.com

City: Melbourne State: FL

Country: USA Zipcode: 32919 -

**Attention:** Mike Feustel

9–16. Name of Contact Representative

Name: David A. O'Connor Phone Number: 202–828–1889

Company: Holland & Knight LLP Fax Number: 202–955–5564

Street: 2099 Pennsylvania Ave., N.W. E-Mail: david.oconnor@hklaw.com

Suite #100

City: Washington State: DC

**Country:** USA **Zipcode:** 20006–6801

Attention: David A. O'Connor 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.

a1. Earth Station

(N/A) a2. Space Station

b.

**b**1. Application for License of New Station

**6** 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

**b**10. 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.

17c. Is a fee submitted with this applicate If Yes, complete and attach FCC Form Governmental Entity Noncomme Other(please explain):	159. If No, indicate reason for fee exemption (	(see 47 C.F.R.Section 1.1114).
Fee Classification BAX – Fixed Satellite T Station	Transmit/Receive Earth	
<ul><li>18. If this filing is in reference to an existing station, enter:</li><li>(a) Call sign of station:</li><li>Not Applicable</li></ul>	19. If this filing is an amendment to a pending (a) Date pending application was filed: Not Applicable	application enter:  (b) File number of pending application:  Not Applicable
TYPE OF SERVICE  20. NATURE OF SERVICE: This filing is for	or an authorization to provide or use the following	ng 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
Common Carrier Non–Common Carrier	Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER facilities:  Connected to a Public Switched Network  Not connected	service, 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 a  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:	<u> </u>
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	
og. Other (please specify)	
26. TYPE OF EARTH STATION FACILITY: Choose only one.  Transmit/Receive Transmit-Only Receive-Only N/A	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	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 modifications, or major amendments.	RadHaz Letter
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeron aeronautical fixed radio station services are not required to respond to Items 30–34.	autical 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

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?	Yes	O N	lo 🕲	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?	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.	0	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	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	<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.		
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	<b>⊚</b> No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, w coordinated or is in the process of coordinating the space station?	hat administr	ation has

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.)

Harris Corporation is requesting FCC authority to license and operate a 2.4 meter Ku-band earth station in connection with a critical project for the Federal Aviation Authority (FAA). The attached letter from the FAA demonstrates that Harris has been authorized to replace the former vendor for the FAA and use the telecommunications equipment left in

FAA 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.

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): (Choose the button next to applicable response.)
O Individual
Unincorporated Association
Partnership
Corporation
Governmental Entity
Other (please specify)

-

## 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: Ajo, AZ E5. Call Sign: N/A

E2: Contact Name Mark Schwegel E6. Phone 321–309–7082

Number:

E3. Street: FAA ARSR E7. City: Ajo

Building-Childs

Mountain

South Peak E8. County: Pima

E4. State AZ E9. Zip Code 85321

E10. Area of Operation: Vicinity of Ajo, AZ

E11. Latitude: 32 °25 '35.9 "N

E12. Longitude: 112 °56 '25.9 "W

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

E14. Site Elevation (AMSL): 872.3 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.	<b>⊗</b> Yes	O 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.	<b>⊚</b> Yes	s O	No
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: ALSAT   ALL AUTHORIZED U.S.   ALSAT   If you selected OTHER, please enter the following	g:		

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)
Ajo, AZ	1	1	Vertex	2.4 HW	0.0	47.3 dBi at 12
						48.7 dBi at 14

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level  (meters)	(meters)	Height Above Ground	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers  (dBW)
1	0.0/0.0	3.5	872.3	0.0	0.08	0.0	37.22

# FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
1	11700 12200	R	Horizontal	149KG1W	0.0	0.0

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
QPSK						
1	14000 14500	Т	Vertical	149KG1W	39.72	22.72
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
QPSK						

# FREQUENCY COORDINATION

E28. Antenna Id		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		E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
1	Geostationary	11700 12200	67.0/ 146.0	67.0	18.0	146.0	36.0	0.0
	Geostationary	14000 14500	67.0/ 146.0	67.0	18.0	146.0	36.0	-37.78

REMOTE CONTROL POINT LOCATION

E61. Call Sign N/A NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	E65. Phone Number 1–866–477–5002			
E62. Street Address 45 Oser Avenue				
E63. City Hauppauge	E67. County Suffolk		E64/68. State/Country NY/ USA	E66. Zip Code 11788

## FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD–PERM, Paperwork Reduction Project (3060–0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to jboley@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060–0678.

THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104–13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

## 43. Description. (Summarize the nature of the application and the services to be provided).

Harris Corporation is requesting FCC authority to license and operate a 2.4 meter Ku-band earth station in connection with a critical project for the Federal Aviation Authority (FAA). The attached letter from the FAA demonstrates that Harris has been authorized to replace the former vendor for the FAA and use the telecommunications equipment left in place by the fomer vendor. Harris submits that grant of this application will serve the public interest because it will assist the FAA's mission of ensuring flight safety.