Date & Time Filed: Jul 28 2013 11:26:22:866PM File Number: SES-MFS-20130728-00673

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	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:

Modification of License to add new 3.8m Patriot antenna.

<b>™</b> T			
Name:	HARRIS CORPORATION	Phone Number:	321–727–9234
DBA Name:		Fax Number:	321–727–9125
Street:	4400 S. Sam Houston Pkwy East	E–Mail:	smikuen@harris.com
City:	Houston	State:	TX
Country:	USA	Zipcode:	77048 –
<b>Attention:</b>	Scott T Mikuen Esq		

9–16. Name of Contact Representative

Name: Raul Magallanes Phone Number: 2813171397

**Company:** The Law Office of Raul **Fax Number:** 2812718085

Magallanes

Street: 3824 Cedar Springs Rd E–Mail: raul@rmtelecomlaw.com

# 801 - 2859

City: Dallas State: TX

Country: USA Zipcode: 75219–

Attention: Raul Magallanes Relationship: Other

**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.	(N/A) b1. Application for License of New Station (N/A) b2. Application for Registration of New Domestic Receive—Only Station b3. Amendment to a Pending Application
a1. Earth Station a2. Space Station	<ul> <li>b4. Modification of License or Registration</li> <li>b5. Assignment of License or Registration</li> <li>b6. Transfer of Control of License or Registration</li> <li>b7. Notification of Minor Modification</li> <li>(N/A) b8. Application for License of New Receive—Only Station Using Non—U.S. Licensed Satellite</li> <li>(N/A) b9. Letter of Intent to Use Non—U.S. Licensed Satellite to Provide Service in the United States</li> <li>(N/A) b10. Other (Please specify)</li> <li>(N/A) 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</li> <li>(N/A) b12. Application for Database Entry</li> <li>b13. Amendment to a Pending Database Entry Application</li> </ul>
	b14. Modification of Database Entry
17c. Is a fee submitted with this application of the submitted with	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114). ercial educational licensee
17d.  Fee Classification CGS – Fixed Satellite S Earth Station	Small Transmit/Receive

18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending modification please enter only the file number	If this filing is an amendment to a pending application enter both fields, if this filing is a dification please enter only the file number:			
(a) Call sign of station:	(a) Date pending application was filed:	(b) File number:			
E080150		SESLIC2008062700855			
TYPE OF SERVICE					
20. NATURE OF SERVICE: This filing is fo	or an authorization to provide or use the follow	ring type(s) of service(s): Select all that apply:			
a. Fixed Satellite  b. Mobile Satellite					
c. Radiodetermination Satellite					

21. STATUS: Choose the button next to the applicable status. Choose only one.

Common Carrier Non–Common Carrier

22. If earth station applicant, check all that apply.

Using U.S. licensed satellites

Using Non–U.S. licensed satellites

23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:

d. Earth Exploration Satellite

g. Other (please specify)

e. Direct to Home Fixed Satellite f. Digital Audio Radio Service

Connected to a Public Switched Network

Not connected to 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: (Please specify additional frequencies in an attachment)
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>b.</b> Temporary–Fixed Earth Station
o c. 12/14 GHz VSAT Network
o d. Mobile Earth Station
• e. Geostationary Space Station
f. Non–Geostationary Space Station
g. Other (please specify)
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive Transmit-Only Receive-Only N/A
"For Space Station applications, select 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.)
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 frequency(ies)
h — authorization to add frequency
i — authorization to add Points of Communication (satellites & to countries)
j — authorization to change Points of Communication (satellites & touther)
k — authorization for facilities for which environmental assessment and
radiation hazard reporting is required
1 — authorization to change orbit location
m — authorization to perform fleet management
n — authorization to extend milestones
o — Other (Please specify)

#### **ENVIRONMENTAL POLICY**

under the laws of a foreign country?

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.		Exhi	bit A			
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical fixed radio station services are not required to respond to Items 30–34.	autio	cal en	rou	te or	,	
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	•	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	٥	Yes	0	No	•	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	0	Yes	0	No	•	N/A

O Yes O No

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

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 👩 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.	<b>o</b> 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

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	<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	• 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.	• 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 Exhibit C	O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, coordinated or is in the process of coordinating the space station? In the permitted list	what administr	ration has
43 Description (Summarize the nature of the application and the services to be provided). (If the complete description are complete description).	tion does not a	nnear in this
box, please go to the end of the form to view it in its entirety.)		ppeur in uns
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete descrip	tion does not a	ppear in this

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 <sub>B</sub>
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
	Pointing Error

#### **CERTIFICATION**

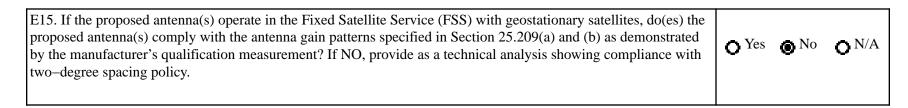
The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The 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		
Partnership		
Corporation		
Governmental Entity		
Other (please specify)		
-		
45. Name of Person Signing	46. Title of Person Signing	
EllenAnn Sands	Senior Counsel	
	·	
>		

(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (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 St	tation Site			
71 01 11 17		7. 6 11 61		
E1: Site Identifier:	3.8m Patriot	E5. Call Sign:		
E2: Contact Name	Tom Piehl	E6. Phone Number:	312–726–5555	
E3. Street:	1025 West NASA Blvd	E7. City:	Melbourne	
		E8. County:	Brevarde	
E4. State	FL	E9. Zip Code	32919	
		-		
E10. Area of Opera	tion:	Melbourne, FL		
E11. Latitude:	28 °5 '23.0 "N			
E12. Longitude:	80 °38 '20.0 "W			
E13. Lat/Lon Coord	dinates are:	O NAD-27	NAD-83	O N/A
E14. Site Elevation	E14. Site Elevation (AMSL):			



E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the prop gain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	osed antenna(s) comply with the antenna	O Yes	O No	● N/A
E17. Is the facility operated by remote control? If YES, provide the locat point.	ion and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	rdination report as Freq, Cord	Yes	0	No
E19. Is coordination with another country required? If YES, attach the na coordination contours as	ame of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.11 have you attached a copy of a completed FCC Form 854 and/or the FAA the structure to aviation? Exhibit B FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RAPPLICATION.	's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		1		
Satellite Name: ESTRELA DO SUL 2   ESTRELA DO SUL 2   63 W.L.	If you selected OTHER, please enter the	following:		
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			

Satellite Name: AMC 9 | AMC 9 | 83 W.L. If you selected OTHER, please enter the following:

E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: ALSAT   ALL AUTHORIZED U.S.   ALSAT	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: 3.8m Patriot	
E26. Common Name:	E27. Country: USA

# ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size <meters></meters>	E41/42. Antenna Gain Transmint and/or Recieve (dBi atGHz)	
3.8m Patriot	3.8 mPatri	1	Patriot	TXINT-380	3.8	41.4 dBi at 4	
3.8m Patriot	3.8 mPatri	1	Patriot	TXINT-380	3.8	45.4 dBi at 6	

Id	Diameter		, ,	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
3.8 mPatri	0.0/0.0	4.0	13.2	0.0	40.0	0.0	61.42

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
3.8 mPatri	3700 4200	R	Horizontal and Vertical	1M18G7W	0.0	0.0
E50. Modulation entirety.)  Digital se		ne complete descrip	non does not appear n	Tuns box, please ge	to the end of the form	to view it in its
3.8 mPatri	3700 4200 an and Services (If t	R he complete descrip	Horizontal and Vertical	4M75G7W this box, please go	0.0 to the end of the form	0.0 to view it in its
E50. Modulation						

E50. Modula entirety.)	tion and Servi	ces (If the	he complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Digital	services						
3.8 mPatri	5925	6425	Т	Horizontal and Vertical	1M18G7W	46.8	22.1
entirety.)	services	ces (If the	ne complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
3.8 mPatri	5925	6425	Т	Horizontal and Vertical	4M75G7W	52.8	22.1
entirety.)	tion and Servi	ces (If the	he complete d	escription does not appear	in this box, please	go to the end of t	he 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 Eastern/West ern Limit	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	Antenna Elevation	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
3.8 mPatri	Geostationary	3700 4200	74.0/139.0	166.12	56.41	253.82	19.38	0.0
	Geostationary	5925 6425	74.0/139.0	166.12	56.41	253.82	19.38	-33.3

# REMOTE CONTROL POINT LOCATION

E61. Call Sign		E66. Phone Number		
NOTE: Please enter the callsign of the contro callsign for which this application is being filed.				
E62. Street Address				
E63. City	E68. County		E67/68. State/Country	E64. Zip Code

#### FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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