Approved by OMB 3060–0678

Date & Time Filed: Jan 26 2012 3:51:07:300PM File Number: SES–MOD–INTR2012–00403

FCC APPLICATION	N FOR SPACE AND EARTH STATI	ON:MOD OR AMD – MAIN FORM	I FCC Use Only
	FCC 312 MAIN FORM FOR OFFIC	CIAL USE ONLY	
1	MATION this application to identify it on th orbtir 7108 and 7108 C–band ESV		
1–8. Legal Name of Ap	plicant		
Name:	Harris CapRock Communications, Inc.	Phone Number:	832–668–2751
DBA Name:		Fax Number:	832-668-2780
Street:	4400 S. Sam Houston Parkway Ea	E–Mail:	esands@caprock.com
City:	Houston	State:	TX
Country:	USA	Zipcode:	77048 –
Attention:	Ms EllenAnn Sands		

Name:	Raul Magallanes	Phone Number:	281.317.1397
Company:	The Law Office of Raul Magallanes, PLLC	Fax Number:	281.271.8085
Street:	PO Box 1213	E-Mail:	raul@rmtelecomlaw.com
City:	Houston	State:	TX
<b>Country:</b>	USA	Zipcode:	77549-
Attention:	Raul Magallanes	<b>Relationship:</b>	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the	
classification that applies to this filing for	(N/A) b1. Application for License of New Station
both questions a. and b. Choose only one	(N/A) b2. Application for Registration of New Domestic Receive–Only Station
for 17a and only one for 17b.	• b3. Amendment to a Pending Application
a1. Earth Station	• b4. Modification of License or Registration
	b5. Assignment of License or Registration
• a2. Space Station	b6. Transfer of Control of License or Registration
	• 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
	(N/A) b10. Other (Please specify)
	(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
	(N/A) b12. Application for Database Entry
	b13. Amendment to a Pending Database Entry Application
	<b>b</b> 14. Modification of Database Entry
17c. Is a fee submitted with this application	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 O Noncomme	ercial educational licensee
T	
• Other(please explain):	
17d.	
Fee Classification CGX – Fixed Satellite	Fransmit/Receive Earth
Station	

18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending ap modification please enter only the file number:	pplication enter both fields, if this filing is a
(a) Call sign of station: E090176	(a) Date pending application was filed:	(b) File number: SESLIC2009101201312

### TYPE OF SERVICE

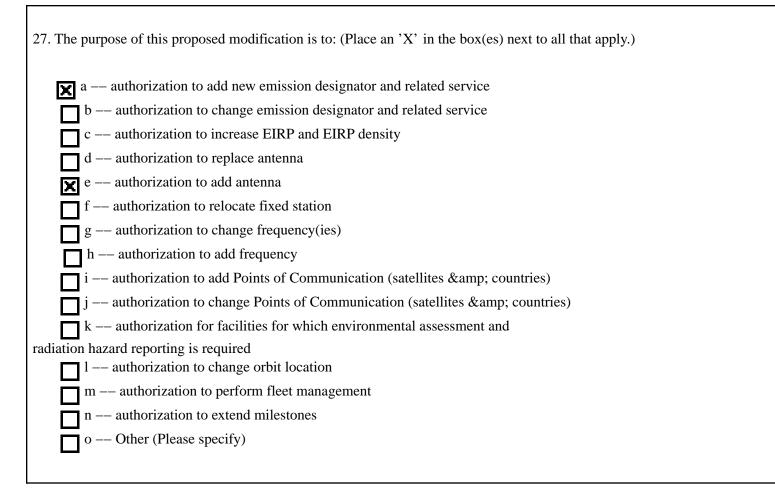
20. NATURE OF SERVICE: This filing is for an authorization to provide	e or use the following type(s) of service(s): Select all that apply:
a. Fixed Satellite	
b. Mobile Satellite	
c. Radiodetermination Satellite	
d. Earth Exploration Satellite	
e. Direct to Home Fixed Satellite	
f. Digital Audio Radio Service	
g. Other (please specify) ESV	
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
	▼ Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER s facilities:	ervice, see instructions regarding Sec. 214 filings. Choose one. Are these
• Connected to a Public Switched Network • Not connected to a	Public Switched Network 👩 N/A

24. FREQUENCY BANE	O(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. Temporary–Fixed Earth Station
• c. 12/14 GHz VSAT Network
O d. Mobile Earth Station
• e. Geostationary Space Station
o f. Non–Geostationary Space Station
• g. Other (please specify) ESV
26. TYPE OF EARTH STATION FACILITY:
Transmit/Receive  Transmit-Only Receive-Only N/A
"For Space Station applications, select N/A."

#### PURPOSE OF MODIFICATION



### 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.			♥ Yes ● No Exhibit A			
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.	iutic	al en	rou	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	0	Yes	۲	No		
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	۲	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	۲	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?	0	Yes	0	No	۲	N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more t	than O Yes O No O N/A
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?	,

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	Exhibit B
foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.	

# BASIC QUALIFICATIONS

s the Applicant request any waivers or exemptions from any of the Commission's Rules? ttach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.	O Yes	le No
	Exhibit C	
the applicant or any party to this application or amendment had any FCC station authorization or license or had any application for an initial, modification or renewal of FCC station authorization, license, or tion permit denied by the Commission? If Yes, attach as an exhibit, an explination of circumstances.	O Yes	
	Exhibit D	

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	O No
	Exhibit E	
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	O Yes	🙆 No
means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances	Exhibit F	
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	O 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.

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.



O No

Yes

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? In the Permitted List

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.)

Modification to add Orbtir 7108 and 7108 C-band ESV antennas

Report

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.	● 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.	<b>О</b> <sup>В</sup>
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.

44. Applicant is a (an): (Choose the button next to applicable re	esponse.)
O Individual	
• Unincorporated Association	
• Partnership	
• Corporation	
• Governmental Entity	
• Other (please specify)	
45. Name of Person Signing	46. Title of Person Signing
EllenAnn Sands	Corporate Counsel
>	
(U.S. Code, Title 18, Section 1001), AN	IS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT ID/OR REVOCATION OF ANY STATION AUTHORIZATION 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				
E1: Site Identifier:	Orbit 7108	E5. Call Sign:			
E2: Contact Name	EllenAnn Sands	E6. Phone Number:	8326682753		
E3. Street:	Oceans	E7. City:			
		E8. County:			
E4. State	LA	E9. Zip Code			
E10. Area of Opera	tion:	Gulf of Mexico, US Oceans	channels and watery	ways, Caribbean Sea, Atlantic and Pacific	
E11. Latitude:	0 °0 '0.0 "N				
E12. Longitude:	0 °0 '0.0 "W				
E13. Lat/Lon Coord	dinates are:	O NAD-27	● NAD-83	O N/A	
E14. Site Elevation	(AMSL):	0.0 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>O</b> <sup>Yes</sup>	● <sup>No</sup>	O <sup>N/A</sup>
two degree spacing poney.			

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 <sup>№</sup>	N/A
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	• Yes	0	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	۲	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	۲	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: INTELSAT 605   INTELSAT 605   332.5 E.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:	
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 Gain Transmint and/or Recieve (dBi at GHz)
Orbit 7108	Orbit–7108	250	Orbit	7108	2.4	39.93 dBi at 6.4
Orbit 7108	Orbit–7108	250	Orbit	7108	2.4	39.0 dBi at 3.95

Id	E33/34. Diameter Minor/Major (meters)		· · · ·	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Orbit-7108	0.0/0.0	0.0	0.0	0.0	50.0	0.0	56.92
FREQUENCY	•			•	•	-	

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

Orbit–7108	3700	4200	R	Horizontal and Vertical	1M85G7D	0.0	0.0
E50. Modulation entirety.)	on and Servic	es (If th	he complete descript	ion does not appear	in this box, pleas	e go to the end	of the form to view it in its
Digital							
Orbit–7108	5925	6425	Т	Horizontal and Vertical	1M85G7D	56.7	30.05
E50. Modulation entirety.)	on and Servic	es (If th	he complete descript	ion does not appear	in this box, pleas	e go to the end	of the form to view it in its
Digital							
FREQUENCY C	COORDINA	ΓION					
E28. E	51. Satellite	E52/53.	E54/55.	E56. Earth	<b>E57.</b>	E58. Earth	E59. E60.

E28. Antenna Id	E51. Satellite Orbit Type	Limits(MHz)	Range of Satellite Arc Eastern/West	Station Azimuth	Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	Elevation Angle	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Orbit-7108	Geostationary	3700 4200	0.0/0.0	0.0	0.0	0.0	0.0	0.0

	Geostationary	5925 6425	0.0/0.0	0.0		0.0	0.0	0.0		0.0
REMOTE CO	NTROL POIN	T LOCATION		•			•	•		•
E61. Call SignE66. Phone NumberE0302538326682753NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.E66. Phone Number										
	E62. Street Address 4400 Sam Houston Pkwy									
E63. City Houston			E68. County USA	1			E67/68 State/Cour TX/		E64 7704	. Zip Code 48

SATELLITE E	ARTH STATION AUTHORIZATIONS
FCC Form 312 – Sch	edule B:(Technical and Operational Description)
H	OR OFFICIAL USE ONLY

Location of Earth St	tation Site						
E1: Site Identifier:	Orbit 7109	E5. Call Sign:					
E2: Contact Name	EllenAnn Sands	E6. Phone Number:	8326682753				
E3. Street:		E7. City:					
		E8. County:					
E4. State	LA	E9. Zip Code					
E10. Area of Opera	tion:	Atlantic and Pacific Oceans, Caribbean Sea, Gulf of Mexico, US waterways					
E11. Latitude: E12. Longitude:	0 °0 '0.0 "N 0 °0 '0.0 "W						
E13. Lat/Lon Coord	linates are:	ONAD-27	🙆 NAD-83	<b>O</b> N/A			
E14. Site Elevation	(AMSL):	0.0 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.	• Yes	● <sup>No</sup>	O <sup>N/A</sup>
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?	<b>O</b> <sup>Yes</sup>	<b>O</b> <sup>No</sup>	● N/A

E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control		
point.	• Yes	O No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as	0	Yes	۲	No
E19. Is coordination with another country required? If YES, attach the name of the country(ies) and plot of coordination contours as	0	Yes	۲	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.	0	Yes	۲	No

POINTS OF COMMUNICATION

Satellite Name: ALSAT   ALL AUTHORIZED U.S.   ALSAT If y	you selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: INTELSAT 605   INTELSAT 605   332.5 E.L. If you s	elected 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:
	127. County.

### 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 at GHz)
Orbit 7109	Orbit 7109	250	Orbit	7109	2.8	41.0 dBi at 6.4
Orbit 7109	Orbit 7109	250	Orbit	7109	2.8	38.5 dBi at 3.95

Id	Diameter		E36. Above Sea Level(meters)	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Orbit 7109	0.0/0.0	0.0	0.0	0.0	50.0	0.0	57.99

# FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)				EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Orbit 7109	3700 4200	R	Horizontal and Vertical	1M85G7D	0.0	0.0

E50. Modulation entirety.)	n and Services	s (If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
Digital							
Orbit 7109	5925	6425	Т	Horizontal and Vertical	1M85G7D	56.7	30.05
E50. Modulatio entirety.) Digital	n and Services	s (If th	ne complete description	on does not appear in	this box, please go to	the end of the 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	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)
Orbit 7109	Geostationary	3700 4200	0.0/0.0	0.0	0.0	0.0	0.0	0.0
	Geostationary	5925 6425	0.0/0.0	0.0	0.0	0.0	0.0	0.0

REMOTE CONTROL POINT LOCATION

E61. Call Sign E030253 NOTE: Please enter the callsign of the contro callsign for which this application is being filed.		E66. Phone Number 8326682753		
E62. Street Address 4400 S. Sam Houston Pkwy				
E63. City Houston	E68. County Harris		E67/68. State/Country TX/ USA	E64. Zip Code 77048

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