Date & Time Filed: Feb 15 2010 2:41:55:710PM File Number: SES-MOD-INTR2010-00568

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 to add emission designators and increase eirp of several antennas

1–8.	Legal	Name	of App	olicant

Name: CapRock Communications, Inc. **Phone Number:** 832–668–2751

DBA Fax Number: 832–668–2780

Name:

Street: 4400 S. Sam Houston Parkway Ea E–Mail: esands@caprock.com

City: Houston State: TX

Country: USA Zipcode: 77048 -

Attention: Ms EllenAnn Sands

9–16. Name of Contact Representative

Name: Raul Magallanes Phone Number: 281 317 1397

Company: The Law Office of Raul **Fax Number:** 281 271 8085

Magallanes, PLLC

Street: PO Box 1213 E-Mail: raul@rmtelecomlaw.com

City: Houston State: TX

Country: USA Zipcode: 77549–

Attention: Raul Magallanes 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.	(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	 b4. Modification of License or Registration b5. Assignment of License or Registration 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 b14. Modification of Database Entry
17c. Is a fee submitted with this application of the submitted with th	159. If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).
17d. Fee Classification CGX – Fixed Satellite T Station	Transmit/Receive Earth

18. If this filing is in reference to an existing station, enter:(a) Call sign of station: E030279	19. If this filing is an amenomodification please enter o (a) Date pending application	nly the file number:	oplication enter both fields, if this filing is a (b) File number: SESMFS2008122301695
TYPE OF SERVICE			
20. NATURE OF SERVICE: This filing is fo	or 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)			
21. STATUS: Choose the button next to the a only one. Common Carrier Non–Common		Using U.S. licen	oplicant, check all that apply. sed satellites . licensed satellites
23. If applicant is providing INTERNATION facilities:	AL COMMON CARRIER s	ervice, see instruction	ns 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 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)
TYDE OF CTATION
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
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 & Double
j — authorization to change Points of Communication (satellites & Double of Communication)
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, aeronatical 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.	o 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	⊚ 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	⊘ 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	O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, who coordinated or is in the process of coordinating the space station? In the Permitted List	hat administr	ation has
43. Description. (Summarize the nature of the application and the services to be provided). (If the complete description box, please go to the end of the form to view it in its entirety.)	on does not ap	ppear in this
Modification to add emission designators and increase eirp of several antenna	as	
Cover Letter		

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.	O B
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.	o 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 response.)	
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
>	
	I ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT EVOCATION OF ANY STATION AUTHORIZATION 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	ation Site				
E1: Site Identifier:	1	E5. Call Sign:	E030279		
E2: Contact Name	EllenAnn Sands	E6. Phone Number:	(832) 668–2700		
E3. Street:	4400 S. Sam Houston Pkwy. E.	E7. City:	Houstoh		
		E8. County:	Harris		
E4. State	TX	E9. Zip Code	77034		
E10. Area of Operat	tion:	Houston			
E11. Latitude:	29 °35 '54.0 "N				
E12. Longitude:	95 °20 '51.7 "W				
E13. Lat/Lon Coordinates are:		O NAD-27	● NAD-83	O N/A	
E14. Site Elevation (AMSL):		16.1 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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the propagain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	posed antenna(s) comply with the antenna	O Yes	O No	● N/A
E17. Is the facility operated by remote control? If YES, provide the local point.	tion and telephone number of the control	O Yes	•	No
E18. Is frequency coordination required? If YES, attach a frequency coo	rdination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the nation 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? FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL FAPPLICATION.	a's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		•		
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you see	elected OTHER, please enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	E24. Country:			
Satellite Name: INTELSAT 707 INTELSAT 707 53 W.L. If you seld	ected 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:
Satellite Name: IS 14 IS 14 45 W.L. If you selected OTHER, please	enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name: SATMEX 6 SATMEX 6 113 W.L. If you selected O	THER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name: OTHER OTHER If you selected OTHER, please en	iter the following:
E21. Common Name: Intelsat AOR	E22. ITU Name:
E23. Orbit Location: 325.5	E24. Country: USA
Satellite Name: SATMEX-5 SATMEX-5 116.8 W.L. If you selected	d OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:
Satellite Name: OTHER OTHER If you selected OTHER, please en	ter the following:

E21. Common Name: Amazonas I	E22. ITU Name:
E23. Orbit Location: 61 W.L.	E24. Country: Brazil

Satellite Name: INTEL 903 INTELSAT 903 34.5 W.L.	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 atGHz)
1	12.1	1	Vertex	13.1KPK	13.1	62.6 dBi at 12
1	12.1	1	Vertex	13.1KPK	13.1	63.9 dBi at 14
1	6.1M	1	Viasat	8060	6.1	56.1 dBi at 12
1	6.1M	1	Viasat	8060	6.1	57.3 dBi at 14
1	6.1M Verte	1	Vertex	6.1KPK	6.1	55.7 dBi at 11.95

1	6.1M Verte	1		Vertex		6.1KPK		6.1		57.1 dBi at 14.25		
E28. Antenna Id	E33/34. Diameter Minor/Major (meters)		Above und Level ers)	nd Level Level(meters)		l l		ove Input Power at		E39. Maximun Antenna Heigh Above Rooftop (meters)	t EIRP for al	
12.1	0.0/0.0	16.1		13.1		0.0 500.0		0.0		90.88		
6.1M	0.0/0.0	16.1		6.1		0.0	110.0		0.0		77.7	
6.1M Verte	0.0/0.0	16.1		6.1		0.0		200.0		0.0	80.1	
FREQUENCY	Y					•					-	
E28. Antenna Id		ands	E45. T/R Mode				E47. Emission Designator		EIRP per Carrier (dBW)		E49. Maximum ERIP Density per Carrier (dBW/4kHz)	
12.1	11450 12200		R	Horizontal a Vertical		al and	nd 3M30G7W		0.0		0.0	
E50. Modula entirety.)	ation and Services	(If th	e complete o	description	on does no	t appear in	this bo	x, please go to	the o	end of the form t	o view it in its	
12.1	11450 12200		R		Horizonta Vertical	al and	4M000	G7W	0.0		0.0	

E50. Modulation entirety.)	on and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Digital						
12.1	14000 14500	Т	Horizontal and Vertical	27M0G7W	83.7	45.21
E50. Modulation entirety.)	on and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of t	he form to view it in its
Digital						
6.1M	11450 12200	R	Horizontal and Vertical	2M00G7W	0.0	0.0
E50. Modulation entirety.)	on and Services (I	f the complete de	escription does not appear	in this box, please	go to the end of t	the form to view it in its
Digital						
6.1M	14000 14500	Т	Horizontal and Vertical	8M25G7W	70.1	35.96

E50. Modulation entirety.)	n and Services (If t	he complete descript	ion does not appear	in this box, please §	go to the end of t	the form to view it in its
Digital						
6.1M Verte	11450 12200	R	Horizontal and Vertical	3M30G7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If t	he complete descript	ion does not appear	in this box, please §	go to the end of t	the form to view it in its
Digital						
6.1M Verte	11450 12200	R	Horizontal and Vertical	4M00G7W	0.0	0.0
E50. Modulation entirety.)	n and Services (If t	he complete descript	ion does not appear	in this box, please §	go to the end of t	the form to view it in its
2131001						
6.1M Verte	14000 14500	Т	Horizontal and Vertical	27M0G7W	77.7	39.21

	ation and Service	es (If the comp	plete description	does not appear	in this box, plea	se go to the end	of the fo	rm to vi	ew it in its
entirety.)									
Digital									
FREQUENCY	COORDINA	ΓΙΟΝ							
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. Antenn Elevatic Angle Wester Limit	on	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
			/						
REMOTE CO	NTROL POIN	T LOCATION		•	•	•	•		•
	se enter the calls	sign of the contro			. Phone Number				
E62. Street A	Address			I					
E63. City			E68. County	,		E67/68. State/Country		E64	. Zip Code

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