Date & Time Filed: Nov 1 2005 3:13:43:763PM File Number: SES-MOD-INTR2005-02511

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: E000669, Application to Modify re

Name:	TeleCommunication Systems	Phone Number:	410–263–7616	
DBA Name:		Fax Number:	410–280–1048	
Street:	275 West Street	E-Mail:		
	Suite 400			
City:	Annapolis	State:	MD	
Country:	USA	Zipcode:	21401 –	
<b>Attention:</b>	Bruce White			

9–16. Name of Contact Representative

Name: Mark J. Tauber **Phone Number:** 202-861-3913

Company: DLA Piper Rudnick Gray Cary US Fax Number: 202-223-2085

LLP

1200 Nineteenth Street, N.W. **Street:** E-Mail:

City: Washington DC State:

USA Zipcode: **Country:** 20036 -

**Relationship:** Legal Counsel **Attention:** 

#### **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.

a1. Earth Station

a2. Space Station

(N/A) b1. Application for License of New Station

(N/A) 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

b5. Assignment of License or Registration

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

(N/A) b10. Other (Please specify)

17c. Is a fee submitted with this application?  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 Noncommercial educational licensee					
Other(please explain): See Attached I	Other(please explain): See Attached Exhibit DA 05–2703				
17d.					
Fee Classification CGV – Fixed Satellite VSAT System					
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:	(a) Date pending application was filed:	(b) File number:			
E000669		SESMOD2001113002224			

## 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)	
<del>_</del>	
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 s facilities:	service, see instructions regarding Sec. 214 filings. Choose one. Are these
O 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 a	pplicable 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 addition	nal frequencies in an attachment)

### TYPE OF STATION

25. CLASS OF STATION: Choose the button	next to the class of sta	tion that applies. Choose only	one.	
a. Fixed Earth Station				
o b. Temporary–Fixed Earth Station				
o. 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/Δ		
Transmit/Receive Transmit-Only "For Space Station applications, select N/A."	O Receive—Only	O 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**

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 C

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

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	•	No	0	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	•	No	0	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	•	No	0	N/A

	<del></del>	
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 •	No O 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.	• 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.		

Yes	O No
O Yes	No
hat administr	ration 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.)

Application to modify 12/14 GHz VSAT netork license to add a portable transmit/receive remote terminal.

Exhibit: DA 05–2703

#### **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. A	pplicant is a (an): (Choose the button next to applicable response.)	
<ul> <li>Individual</li> <li>Unincorporated Association</li> <li>Partnership</li> <li>Corporation</li> <li>Governmental Entity</li> <li>Other (please specify)</li> </ul>		
	5. Name of Person Signing ruce White >	46. Title of Person Signing Vice President and General Counsel

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).

## 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:	Manassas Hub-KU	E5. Call Sign:	E000669		
E2: Contact Name	Jerry Hannon	E6. Phone Number:	701–334–2030		
E3. Street:	10211 Piper Lane	E7. City:	Manassas		
		E8. County:	Prince William		
E4. State	VA	E9. Zip Code	22110		
E10. Area of Operat	tion:	Various			
E11. Latitude:	0 °0 '0.0 "				
E12. Longitude:	0 °0 '0.0 "				
E13. Lat/Lon Coord	linates are:	O NAD-27	O NAD-83	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>⊚</b> Yes	O No	O N/A
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E16. If the proposed antenna(s) do not operate in the Fixed Satellite Service (Satellite Service (FSS) with non–geostationary satellites, do(es) the proposed gain patterns specified in Section 25.209(a2) and (b) as demonstrated by the measurements?  E17. Is the facility operated by remote control? If YES, provide the location arpoint.	antenna(s) comply with the antenna anufacturer's qualification  Yes  d telephone number of the control		⊚ N/A
F	O Yes	<b>●</b>	No
E18. Is frequency coordination required? If YES, attach a frequency coordinat	on report as		
1216. Is frequency coordination required? If TES, attach a frequency coordinate	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the name o coordination contours as	f the country(ies) and plot of  Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25.113(c)) have you attached a copy of a completed FCC Form 854 and/or the FAA's study the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL RESULT APPLICATION.	y regarding the potential hazard of Yes	•	No
POINTS OF COMMUNICATION			
Satellite Name: OTHER   OTHER   If you selected OTHER, please enter th	e following:		
E21. Common Name: INTELSAT AMERICAS-8 E22.	ITU Name: INTELSAT AMERICAS-8		
E23. Orbit Location: 89 W.L.	Country:		

Satellite Name: INTELSAT AMERICAS-7 | INTELSAT AMERICAS-7 | 129 W.L. If you selected OTHER, please enter the following:

Manassas Hub- KU	Remote 4A	50	AVL Technologies	1010 iSGN	1.0	39.7 dBi at 12			
	Id		Manufacturer		Size <meters></meters>	Antenna Gain Transmint and/or Recieve (dBi atGHz)			
Site ID	E28. Antenna	E29. Quantity	E30.	E31. Model	E32. Antenna	E41/42.			
ANTENNA				1					
E26. Common N	lame:			E27. Country:					
E25. Site Identifi	ier:								
POINTS OF C	COMMUNICAT	ION (Destination	Points)	-					
E23. Orbit Location: E24. Country:									
E21. Common N	lame:			E22. ITU Name:					
Satellite Name: II	NTELSAT AMER	ICAS–6   INTELS	SAT AMERICAS-	6   93 W.L. If :	you selected OTHE	R, please enter the f	ollowing:		
		_	_						
E23. Orbit Locat	ion:			E24. Country:					
E21. Common N	lame:			E22. ITU Nam	e:				
Satellite Name: S	SATMEX-5   SAT	MEX-5   116.8 W.	L. If you selecte	ed OTHER, pleas	e enter the followin	g:			
E23. Orbit Locat	ion:			E24. Country:					
E21. Common N	lame:			E22. ITU Name:					

1010 iSGN

1.0

41.6 dBi at 14

AVL Technologies

KU

Manassas Hub-

Remote 4A

50

Id			` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
Remote 4A	0.0/0.0	0.0	0.0	0.0	25.0	0.0	55.6

# FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Remote 4A	11700 12200	R	Horizontal and Vertical	30M0G7W	0.0	0.0

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, digital data, video, voice

Rei	mote 4A	14000	T	Horizontal and	2M04G7W	54.0	27.0
		14500		Vertical			

E50. Modulation and Services (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

QPSK, digital data, video, voice

# FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	Limits(MHz)	Range of	Station Azimuth Angle	E57. Antenna Elevation Angle Eastern Limit	Station Azimuth Angle	Antenna Elevation Angle	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Remote 4A	Geostationary	11700 14500	10.0/143.0	104.5	10.0	254.1	10.0	-2.5

# REMOTE CONTROL POINT LOCATION

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

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