Date & Time Filed: Jan 24 2007 4:27:25:993PM File Number: SES-AMD-INTR2007-00246

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: January 2007 Amendment to Ka-band VSAT Earth Station Network App.

1–8. Legal Na	ame of App	olicant			
N	lame:	HNS License Sub, LLC	Phone Number:	301-428-5506	
	DBA Vame:		Fax Number:	301–428–2802	
Si	treet:	11717 Exploration Lane	E–Mail:	sdoiron@hns.com	
C	City:	Germantown	State:	MD	
C	Country:	USA	Zipcode:	20876 –	
A	ttention:	Mr. Steven Doiron			

### 9–16. Name of Contact Representative

Name: Stephen D. Baruch, Esq. Phone Number: 202–416–6782

**Company:** Leventhal Senter & Lerman PLLC **Fax Number:** 202–293–7783

Street: 2000 K Street, NW E-Mail: sbaruch@lsl-law.com

Suite 600

City: Washington State: DC

Country: USA Zipcode: 20006–

Attention: 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.

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

**b** b3. Amendment to a Pending Application

**b**4. Modification of License or Registration

b5. Assignment of License or Registration

b6. Transfer of Control of License or Registration

**b**7. 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?  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 Noncomme		or in Ciringection 1.1111).			
Other(please explain):					
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 apmodification please enter only the file number:	oplication enter both fields, if this filing is a			
(a) Call sign of station: E060445	(a) Date pending application was filed:	(b) File number:			
E000 <del>44</del> 3	12/26/2006	SESLIC2006122602232			

### 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)	
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:	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 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: 19700 Frequency Upper: 30000	(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
c. 12/14 GHz VSAT Network
d. Mobile Earth Station
e. Geostationary Space Station
f. Non-Geostationary Space Station
g. Other (please specify) 20/30 GHz VSAT Network
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 & 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**

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 B 8	
ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeron	nautical 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? Yes No 30. Is the applicant an alien or the representative of an alien? O Yes O No O N/A 31. Is the applicant a corporation organized under the laws of any foreign government? 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 O Yes O No O N/A aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?

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.	<b>⊗</b> 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.	O Yes	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 box, please go to the end of the form to view it in its entirety.)  See Exhibit A.  Exhibit A	on does not a	opear in this

### **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.

due, complete and correct to the best of his of her knowledge and ber	ier, and are made in good faith.
44. Applicant is a (an): (Choose the button next to applicable respons	e.)
<ul> <li>Individual</li> <li>Unincorporated Association</li> <li>Partnership</li> <li>Corporation</li> <li>Governmental Entity</li> <li>Other (please specify)</li> </ul>	
45. Name of Person Signing Steven Doiron >	46. Title of Person Signing Senior Director, Regulatory Affairs

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 S	tation Site					
E1: Site Identifier:	TF TR 98CM	E5. Call Sign:	E060445			
E2: Contact Name	Duty Supervisor	E6. Phone Number:	301-601-6471			
E3. Street:		E7. City:				
		E8. County:				
E4. State		E9. Zip Code				
E10. Area of Opera	tion:	CONUS, AK, HI, P	R, VI			
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.

E16. If the proposed antenna(s) do not operate in the Fixed Satellite Ser Satellite Service (FSS) with non–geostationary satellites, do(es) the progain patterns specified in Section 25.209(a2) and (b) as demonstrated by measurements?	O Yes	O No	● N/A	
E17. Is the facility operated by remote control? If YES, provide the loca point.	tion and telephone number of the control	● Yes	٥	No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	O Yes	•	No
E19. Is coordination with another country required? If YES, attach the n 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 25.1 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 I APPLICATION.	a's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		ļ		
Satellite Name: SPACEWAY 2   SPACEWAY 2   99 W.L. If you select	ted OTHER, please enter the following:			
E21. Common Name:	E22. ITU Name:			
E23. Orbit Location:	3. Orbit Location: E24. Country:			
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	nter the following:			

E21. Common Name: SPACEWAY 3	E22. ITU Name: USASAT 70O
E23. Orbit Location: 94.95 W.L.	E24. Country: USA

Satellite Name: SPACEWAY 1   SPACEWAY 1   103 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)
TF TR 98CM	TF TR 98CM	10000	Prodelin	3981–131	0.98	44.6 dBi at 19.95
TF TR 98CM	TF TR 98CM	10000	Prodelin	3981–131	0.98	48.0 dBi at 29.75

Id	Diameter		, ,	Height Above Ground Level	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
TF TR 98CM	0.0/0.0	0.0	0.0	0.0	3.5	0.0	53.4

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)
TF TR 98CM	19700.0000 20200.0000	R	Left and Right Circular	500MG7W	0.0	0.0
E50. Modulation entirety.)  500 MHz W	n and Services (If the IDE, PSK, DIGIT		tion does not appear in	this box, please go	to the end of the form	to view it in its
TF TR 98CM E50. Modulation	29500.0000 30000.0000 a and Services (If the	T ne complete descrip	Left and Right Circular tion does not appear in	650KG7W	42.0 to the end of the form	19.9 to view it in its
entirety.) 512 KBPS,	PSK, DIGITAL C			,		
TF TR 98CM	29500.0000 30000.0000	Т	Left and Right Circular	2M61G7W	48.0	19.9

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.)

2.048 MBPS, PSK, DIGITAL CARRIER

## 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	Station Azimuth Angle	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
TF TR 98CM	Geostationary	19700.0000 20200.0000	94.95/103.0	172.2	43.4	184.7	43.6	0.0
	Geostationary	29500.0000 30000.0000	94.95/103.0	172.2	43.4	184.7	43.6	-20.0

## REMOTE CONTROL POINT LOCATION

E61. Call Sign  NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	E66. Phone Number 301–601–6471
E62. Street Address 11717 Exploration Lane	

E63. City	E68. County	E67/68.	E64. Zip Code
Germantown	Montgomery	State/Country	20876
Germantown	Wionegomery	MD/ USA	20070

### 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: TR 98CM E5. Call Sign: E060445

E2: Contact Name Duty Supervisor E6. Phone 301–601–6471

Number:

E3. Street: E7. City:

E8. County:

E4. State E9. Zip Code

E10. Area of Operation: CONUS, AK, HI, PR, VI

E11. Latitude: 0 °0 '0.0 "N

E12. Longitude: 0 °0 '0.0 "W

E13. Lat/Lon Coordinates are: NAD-27 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
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> 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.		· •	No
E18. Is frequency coordination required? If YES, attach a frequency coordination report as	O Yes	· •	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 <b>©</b>	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	· •	No
POINTS OF COMMUNICATION	•		
Satellite Name: OTHER   OTHER   If you selected OTHER, please enter the following:			

E21. Common Name: SPACEWAY 3	E22. ITU Name: USASAT 70O
E23. Orbit Location: 94.95 W.L.	E24. Country: USA

Satellite Name: SPACEWAY 1   SPACEWAY 1   103 W.L. If y	ou selected OTHER, please enter the following:
E21. Common Name:	E22. ITU Name:
E23. Orbit Location:	E24. Country:

Satellite Name: SPACEWAY 2   SPACEWAY 2   99 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)	
TR 98CM	TR 98CM	250000	Prodelin	3981–131	0.98	44.6 dBi at 19.95	
TR 98CM	TR 98CM	250000	Prodelin	3981–131	0.98	48.0 dBi at 29.75	

Id	Diameter		` ′	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
TR 98CM	0.0/0.0	0.0	0.0	0.0	3.5	0.0	53.4

### FREQUENCY

	E43/44. Frequency Bands (MHz)				EIRP per Carrier	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
TR 98CM	19700.0000 20200.0000	R	Left and Right Circular	500MG7W	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.)

500 MHz WIDE, PSK, DIGITAL CARRIER

TR 98CM	29500.0000	Т	Left and Right	650KG7W	42.0	19.9
	30000.0000		Circular			

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.)

512 KBPS, PSK, DIGITAL CARRIER

TR 98CM	29500.0000 30000.0000	Т	Left and Right Circular	2M61G7W	48.0	19.9
E50. Modulation entirety.)			on does not appear in	this box, please go to	o the end of the form	to view it in its
2.048 MBPS, PSK, DIGITAL CARRIER						

# 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)
TR 98CM	Geostationary	19700.0000 20200.0000	94.95/103.0	172.2	43.4	184.7	43.6	0.0
	Geostationary	29500.0000 30000.0000	94.95/103.0	172.2	43.4	184.7	43.6	-20.0

# REMOTE CONTROL POINT LOCATION

E61. Call Sign	E66. Phone Number 301–601–6471
NOTE: Please enter the callsign of the controlling station, not the callsign for which this application is being filed.	

E62. Street Address 11717 Exploration Lane			
E63. City Germantown	E68. County Montgomery	E67/68. State/Country MD/ USA	E64. Zip Code 20876

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

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