Date & Time Filed: Aug 24 2006 11:01:37:050AM File Number: SES-MOD-INTR2006-02289

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:

Mod to add Ens to Mt. Jackson E020101

gal Name of A	pplicant		
Name:	Loral Skynet Network Services, Inc.	Phone Number:	908–470–3430
DBA Name:		Fax Number:	908–470–2453
Street:	500 Hills Drive	E-Mail:	ndesousa@loralskynet.com
	PO Box 7018		
City:	Bedminster	State:	NJ
Country:	USA	Zipcode:	07921 -7018
Attention:	Mr Nelson De Sousa		

9–16. Name of Contact Representative

Name: Nelson De Sousa Phone Number: 908–470–3430

Company: Loral Skynet Network Services, **Fax Number:** 908–470–2453

Inc.

Street: 500 Hills Drive E–Mail: ndesousa@loralskynet.com

PO Box 7018

City: Bedminster State: NJ

Country: USA **Zipcode:** 07921–7018

Attention: Nelson De Sousa **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) by the classification that applies to this filing for (N/A) by the classification that applies to this filing for the classification that applies to the classification that applies the classification th

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 applicat. If Yes, complete and attach FCC Form	ion? 159. If No, indicate reason for fee exemption	n (see 47 C.F.R.Section 1.1114).
Governmental Entity Noncomme	ercial educational licensee	
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 pendin modification please enter only the file number	g application enter both fields, if this filing is a
(a) Call sign of station: E020101	(a) Date pending application was filed:	(b) File number:
E020101		SESMOD2004080901115

TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide 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
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:
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)

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 (satellites & Doub
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

must accompany all applications for new transmitting facilities, major modifications, or major amendments.		FCC1	adha	ız18k	cu4w	v.doc
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.	autic	al en	rout	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	•	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

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 the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study

		
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.	O 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	O 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.	O 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.		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? Mexico	hat administr	ration 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 a	ppear in this
Modification to add additional antennas to comunicate with existing licensed	HUB stat	ion.

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 respon	ise.)	
 Individual Unincorporated Association Partnership Corporation Governmental Entity Other (please specify) 		
45. Name of Person Signing Nelson De Sousa >	46. Title of Person Signing Manager, Government and 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:	Mt. Jackson HUB	E5. Call Sign:	E020101	
E2: Contact Name	Nelson De Sousa	E6. Phone Number:	908-470-3430	
E3. Street:	1305 Industrial Park Road	E7. City:	Mt. Jackson	
		E8. County:	Shenandoah	
E4. State	VA	E9. Zip Code	22842	
E10. Area of Opera	tion:	Mt. Jackson, Shenar	ndoah Valley Virginia	ı
E11. Latitude:	39 °43 '42.0 "N			
E12. Longitude:	78 °39 '25.0 "W			
E13. Lat/Lon Coord	dinates are:	O NAD-27	● NAD-83	O N/A
E14. Site Elevation	(AMSL):	282.9 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 many of the second of the Eight Country		1		
E16. If the proposed antenna(s) do not operate in the Fixed Satellite Se Satellite Service (FSS) with non–geostationary satellites, do(es) the progain 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 loca point.	ntion and telephone number of the control	O Yes	s 🔞	. No
E18. Is frequency coordination required? If YES, attach a frequency coordination	ordination report as	<u> </u>		
		O Yes	s 🔞	No
E19. Is coordination with another country required? If YES, attach the r coordination contours as	name of the country(ies) and plot of	O Yes	s @	. 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 APPLICATION.	A's study regarding the potential hazard of	O Yes	s 🔞	No No
POINTS OF COMMUNICATION		-		
Satellite Name: ALSAT ALL AUTHORIZED U.S. ALSAT If you s	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)
Mt. Jackson HUB	Ens 1.2 4W	5000	Patriot	TXFLY-120KU	1.2	41.8 dBi at 11.75
Mt. Jackson HUB	Ens 1.2 4W	5000	Patriot	TXFLY-120KU	1.2	43.5 dBi at 14.25
Mt. Jackson HUB	ENS 1.2 2W	5000	Patriot	TXFLY-120KU	1.2	41.8 dBi at 11.75
Mt. Jackson HUB	ENS 1.2 2W	5000	Patriot	TXFLY-120KU	1.2	43.5 dBi at 14.25
Mt. Jackson HUB	ENS 1.8 2W	5000	Patriot	TXFLY-180KU	1.8	45.3 dBi at 11.75
Mt. Jackson HUB	ENS 1.8 2W	5000	Patriot	TXFLY-180KU	1.8	47.0 dBi at 14.25
Mt. Jackson HUB	ENS 1.8 4W	5000	Patriot	TXFLY-180KU	1.8	45.3 dBi at 11.75
Mt. Jackson HUB	ENS 1.8 4W	5000	Patriot	TXFLY-180KU	1.8	47.0 dBi at 14.25

E28. Antenna	E33/34.	E35. Above	E36. Above Sea	E37. Building	E38. Total	E39. Maximum	E40. Total
Id	Diameter	Ground Level	Level(meters)	Height Above	Input Power at	Antenna Height	EIRP for al
	Minor/Major	(meters)		Ground Level	antenna flange	Above Rooftop	carriers(dBW)
	(meters)			(meters)	(Watts)	(meters)	
	(meters)			(meters)	(watts)	(meters)	

Ens 1.2 4W	0.0/0.0	0.0	0.0	0.0	4.0	0.0	48.9
ENS 1.2 2W	0.0/0.0	0.0	0.0	0.0	2.0	0.0	45.9
ENS 1.8 2W	0.0/0.0	0.0	0.0	0.0	2.0	0.0	49.6
ENS 1.8 4W	0.0/0.0	0.0	0.0	0.0	4.0	0.0	52.6

FREQUENCY

	E43/44. Frequency Bands (MHz)	E45. T/R Mode			EIRP per Carrier	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
Ens 1.2 4W	14 14.5	Т	Horizontal and Vertical	356kg7w	52.6	33.9

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.)

395	5 Ç	QPSK											

Ens 1.2 4W	14	14.5	T	Horizontal and	693kg7w	52.6	31.0
				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.)

770 QPSK			

Ens 1.2 4W	11.7	12.2	R	Horizontal and Vertical	356kg7w	0.0	0.0
E50. Modulation entirety.)	on and Servi	ces (If t	he complete d	escription does not appear	in this box, please	e go to the end of t	he form to view it in its
395 QPSK							
Ens 1.2 4W	11.7	12.2	R	Horizontal and Vertical	693kg7w	0.0	0.0
770 QPSK							
ENS 1.2 2W	14	14.5	Т	Horizontal and Vertical	356kg7w	52.6	33.9
E50. Modulation entirety.)	n and Servi	ces (If t	he complete d	escription does not appear	in this box, please	e go to the end of t	he form to view it in its

ENS 1.2 2W	14	14.5	Т	Horizontal and Vertical	693kg7w	52.6	31.0
E50. Modulation entirety.)	and Service	es (If t	he complete descrip	tion does not appear	in this box, please	go to the end of the	he form to view it in its
770 QPSK							
ENS 1.2 2W	11.7	12.2	R	Horizontal and Vertical	356kg7w	0.0	0.0
antirety.) 395 QPSK							
ENS 1.2 2W	11.7	12.2	R	Horizontal and Vertical	693kg7w	0.0	0.0
E50. Modulation entirety.) 770 QPSK	and Service	es (If t	he complete descrip	tion does not appear	in this box, please	go to the end of the	he form to view it in its

ENS 1.8 2W	14	14.5	Т	Horizontal and Vertical	356kg7w	52.6	33.9
E50. Modulation entirety.)	and Service	es (If t	he complete descr	ription does not appear	in this box, please	go to the end of the	ne form to view it in its
395 QPSK							
ENS 1.8 2W	14	14.5	Т	Horizontal and Vertical	693kg7w	52.6	31.0
770 QPSK							
ENS 1.8 2W	11.7	12.2	R	Horizontal and Vertical	356kg7w	0.0	0.0
E50. Modulation entirety.) 395 OPSK	and Service	es (If t	he complete descr	ription does not appear	in this box, please	go to the end of the	ne form to view it in its

ENS 1.8 2W	11.7	12.2	R	Horizontal and Vertical	639KG7W	0.0	0.0
E50. Modulation entirety.)	and Service	es (If t	he complete descr	ription does not appear	in this box, please	go to the end of the	ne form to view it in its
770 qpsk							
ENS 1.8 4W	14	14.5	Т	Horizontal and Vertical	356kg7w	52.6	33.9
antirety.) 395 QPSK							
ENS 1.8 4W	14	14.5	Т	Horizontal and Vertical	695kg7w	52.6	31.0
E50. Modulation entirety.) 770 QPSK	and Service	s (If t	he complete desci	ription does not appear	in this box, please	go to the end of the	he form to view it in its

ENS 1.8 4W	11.7	12.2	R	Horizontal and Vertical	356kg7w	0.0	0.0
E50. Modulation entirety.)	and Service	es (If the	he complete descript	ion does not appear in	n this box, please g	o to the end of t	the form to view it in its
395 QPSK							
ENS 1.8 4W	11.7	12.2	R	Horizontal and Vertical	695kg7w	0.0	0.0
E50. Modulation entirety.) 770 QPSK	and Service	es (If tl	ne complete descript	ion does not appear in	n this box, please g	o to the end of t	the form to view it in its

FREQUENCY COORDINATION

E28. Antenna Id		Frequency Limits(MHz)	Range of Satellite Arc Eastern/West	Station Azimuth Angle		E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
Ens 1.2 4W	Geostationary	14 14.5	68.0/168.0	248.0	10.8	134.0	19.3	-10.1

	Geostationary	11.7 12.2	68.0/168.0	248.0	10.8	134.0	19.3	0.0
ENS 1.2 2W	Geostationary	14 14.5	68.0/168.0	248.0	10.8	134.0	19.3	-13.1
	Geostationary	11.7 12.2	68.0/168.0	248.0	10.8	134.0	19.3	0.0
ENS 1.8 2W	Geostationary	14 14.5	68.0/168.0	248.0	10.8	134.0	19.3	-13.1
	Geostationary	11.7 12.2	68.0/168.0	248.0	10.8	134.0	19.3	0.0
ENS 1.8 4W	Geostationary	14 14.5	68.0/168.0	248.0	10.8	134.0	19.3	-10.1
	Geostationary	11.7 122	68.0/168.0	248.0	10.8	134.0	19.3	0.0

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

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