Date & Time Filed: Dec 5 2003 9:37:00:046AM File Number: SES-LIC-INTR2003-02447 Callsign/Satellite ID:

APPLICATION FOR EARTH STATION AUTHORIZATIONS	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:

South Jordan

1–8. Legal	Name of App	plicant		
	Name:	Lyman Bros., Inc.	Phone Number:	801-501-9090
	DBA Name:		Fax Number:	801–501–7338
	Street:	10288 S. Jordan Gateway # K	E-Mail:	mat@lymanbros.com
	City:	South Jordan	State:	UT
	Country:	USA	Zipcode:	84095 -3911
	Attention:	Mr. Mathew J. Lyman		

Name:	Mr. Mathew J. Lyman	Phone Number:	801-501-9090
Company:	Lyman Bros., Inc	Fax Number:	801–501–7338
Street:	10288 S. Jordan Gateway # K	E-Mail:	mat@lymanbros.com
City:	South Jordan	State:	UT
Country:	USA	Zipcode:	84095-3911
Contact	President/CFO	Relationship:	Same

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.	 b. b1. Application for License of New Station b2. Application for Registration of New Domestic Receive–Only Station
a. al. Earth Station (N/A) a2. Space Station	 (N/A) b3. Amendment to a Pending Application (N/A) b4. Modification of License or Registration (N/A) b5. Assignment of License or Registration (N/A) 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 b10. Other (Please specify) 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.

 17c. Is a fee submitted with this applicat If Yes, complete and attach FCC Form Governmental Entity Other(please explain): 	159. If No, indicate reason for fee exemption (s	ee 47 C.F.R.Section 1.1114).
17d. Fee Classification BAX – Fixed Satellite T	Fransmit/Receive Earth	
Station	1	
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a(a) Date pending application was filed:	pplication enter: (b) File number of pending application:
(a) Call sign of station: Not Applicable	Not Applicable	Not Applicable

TYPE OF SERVICE

$\mathbf{F}_{\mathbf{r}}$ = $\mathbf{F}_{\mathbf{r}}$ = $1 \mathbf{G}_{\mathbf{r}}$ = $1 \mathbf{G}_{\mathbf{r}}$
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
O 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
• 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:	

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
(N/A) e. Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
(N/A) f. Non–Geostationary Space Station
g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY: Choose only one.

Transmit/Receive
Transmit–Only
Receive–Only
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.)

Not Applicable

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.

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?	O Yes ⊚ No O N/A
30. Is the applicant an alien or the representative of an alien?	O Yes ⊗ No O N/A

No No

• Yes

В

31. Is the applicant a corporation organized under the laws of any foreign government?	O Yes	● 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 aliens or 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
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 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.	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.	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 attemptiing 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	lo No

 a. By checking Yes, the undersigned certifies, that neither applicant nor any other party to the application is abject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 7 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. 	• Yes	O No
2a. Does the applicant intend to use a non–U.S. licensed satellite to provide service in the United States? If Yes, nswer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, roceed to question 43.	O Yes	● No
nswer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No,		

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.)

Transmission and reception of satellite signals for various client's and various services.

D

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.)

Individual

• Unincorporated Association

- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing Mr. Rodger Lyman		46. Title of Person Signing Vice President/General Manager		
7. Please supply any need attachment	s.			
Attachment 1:	Attachment 2:	Attachment 3:		
(U.S. Code, Tit	le 18, Section 1001), AND/OR F	ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT VOCATION 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	tation Site				
E1: Site Identifier:	South Jordan	E5. Call Sign:			
E2: Contact Name	Andre Finlinson	E6. Phone Number:	801-501-9090		
E3. Street:	10288 S. Jordan Gateway #K	E7. City:	South Jordan		
		E8. County:	Salt Lake		
E4. State	UT	E9. Zip Code	84095		
E10. Area of Opera	tion:	South Jordan Earth	Stations		
E11. Latitude:	40 °33 '54.0 "N				
E12. Longitude:	111 °54 '14.0 "W				
E13. Lat/Lon Coord	linates are:	O ^{NAD-27}	● NAD-83	O N/A	
E14. Site Elevation	(AMSL):	1319.78 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	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?	O Yes	• No	O ^{N/A}
E17. Is the facility operated by remote control? If YES, provide the location and telephone number of the control point.	O Yes	۲	No

E18. Is frequency coordination required? If YES, attach a frequency coordination report as		Yes	0	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, ha 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	۲	No

Satellite Name: PERMITTED LIST If you selected OTHER, please enter the following:

E21. Common Name: NSS 5 fro 9.3 Meter	E22. ITU Name:
E23. Orbit Location: 177 W	E24. Country:

Satellite Name: PERMITTED LIST If you selected OTHER, please	e enter the following:		
E21. Common Name: ALSAT for 5.6 Meter	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 GainTransmint and/or Recieve (dBi at GHz)
South Jordan	9.3	1	Andrew Corp.	ESA93-46	9.3	50.7 dBi at 3.950
						53.9 dBi at 6.175
	5.6			ESA56-124	5.6	55.3 dBi at 11.95
						56.7 dBi at 14.250

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	0	Input Power at antenna flange 	Maximum Antenna Height	E40. Total EIRP for al carriers (dBW)
9.3	0.0/0.0	10.0	1329.78	0.0	150.0	0.0	75.7
5.6	0.0/0.0	6.0	1325.78	0.0	300.0	0.0	81.5

FREQUENCY

E28. Antenna Id	E43/44. Frequency (MHz)	y Bands	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)
9.3	6262	6271	Т	Linear and Circular	5M40G7W	75.7	44.4
E50. Modulation entirety.)	and Service	es (lf ti	ne complete descrip	tion does not appear in	this box, please g	o to the end of the form	to view it in its
NULL							

9	9.3	3700	4200	R	Linear and Circular	102KG7W	0.0	0.0

ntirety.)							
Digita	al Data, Var	ious Ir	formation,	Various FEC.			
.3	3700	4200	R	Linear and Circular	5M40G7W	0.0	0.0
E50. Moduntirety.)	ulation and Servio	ces (If the	l ne complete descr	ription does not appear in	this box, please	go to the end of t	he form to view it in its
Digita	al Data, Var	ious Ir	formation, '	Various FEC.			
Digita	al Data, Var	ious Ir	formation,	Various FEC.			
	al Data, Var	6330	T	Various FEC.	5M4G7W	75.7	44.4
3 E50. Modu		6330	Т				
3 E50. Modu ntirety.)	6302 ulation and Servio	6330 ces (If tl	T ne complete descr	Linear and Circular			

E50. Modulatio entirety.)	n and Servio	ces (If th	ne complete descripti	on does not appear in	this box, please go t	to the end of the form	to view it in its
Digital D	ata, Var	ious In	formation, Var	rious FEC.			
9.3	5925	6182	Т	Linear and Circular	5M40G7W	75.7	44.4
E50. Modulatio	n and Servio	ces (If th	l ne complete descripti	I on does not appear in	this box, please go t	to the end of the form	to view it in its
Digital D	ata, Var	lous In	formation, Var	rious FEC.			
.3	6213	6251	Т	Linear and Circular	102KG7W	58.5	44.4
E50. Modulatio	n and Servio	ces (If th	ne complete descripti	on does not appear in	this box, please go t	to the end of the form	to view it in its
Digital D	ata, Var	ious In	formation, Var	rious FEC.			
9.3	6213	6251	Т	Linear and Circular	5M40G7W	75.7	44.4

E50. Modulation entirety.)	on and Servic	es (If the	he complete descript	ion does not appear in	this box, please	go to the end of t	he form to view it in its
Digital I	oata, Var:	ious Ir	nformation, Va	rious FEC.			
9.3	6262	6271	Т	Linear and Circular	102KG7W	58.5	44.4
E50. Modulation entirety.)			he complete descript		this box, please	go to the end of t	he form to view it in its
9.3	6302	6330	Т	Linear and Circular	102KG7W	58.5	44.4
E50. Modulation E50. Modulation E50. Modulation E50. Modulation E50. E50. E50. E50. E50. E50. E50. E50.	on and Servic	es (If the	he complete descript	ion does not appear in	this box, please	go to the end of t	he form to view it in its
Digital I	oata, Var:	ious Ir	nformation, Va	rious FEC.			
9.3	6361	6399	Т	Linear and Circular	102KG7W	58.5	44.4

	tion and Services	(If the c	omplete descripti	on does not appear in	this box, please go	to the end of the	form to view it in its
entirety.)							
Digital	Data, Vario	us Info:	rmation, Var	ious FEC.			
9.3	6361	6399 T		Linear and Circular	5M40G7W	75.7	44.4
E50. Modulat entirety.)	tion and Services	(If the c	omplete description	on does not appear in	this box, please go	to the end of the	form to view it in its
Digital	Data, Vario	us Info:	rmation, Var	ious FEC.			
5.6	11700 12200	R		Horizontal and Vertical	102KG7W	0.0	0.0
E50. Modulat entirety.)	tion and Services	(If the c	omplete description	on does not appear in	this box, please go	to the end of the	form to view it in its
Digital	data, Vario	us FEC,	Various Inf	Formation			
5.6	11700 12200	R		Horizontal and Vertical	36M0G7W	0.0	0.0

lation and Services	(If the complete d	escription does not appear	in this box, please	go to the end of t	he form to view it in its
l data, Various	s FEC, Variou	as information			
14000 14500	Т	Horizontal and Vertical	102KG7W	56.3	42.2
14000	Т	Horizontal and	36M0G7W	81.7	42.2
lation and Services		escription does not appear	in this box, please	go to the end of t	he form to view it in its
	14000 14500 Ilation and Services Il data, Various 14000 14500 Ilation and Services	14000 T 14500 T alation and Services (If the complete d al data, Various FEC, Variou 14500 1 data, Various FEC, Variou 14500 14500 I data, Various FEC, Variou I data, Various FEC, Variou I data (I f the complete d) I data (I f the complete d)	14000 T Horizontal and Vertical 14000 T Horizontal and Vertical Ilation and Services (If the complete description does not appear Il data, Various FEC, Various Information 14000 T Horizontal and Vertical	14000 T Horizontal and Vertical 102KG7W 14500 T Horizontal and Vertical 102KG7W Ilation and Services (If the complete description does not appear in this box, please Il data, Various FEC, Various Information 14000 T Horizontal and Vertical Ilation and Services (If the complete description does not appear in this box, please	14000 T Horizontal and Vertical 102KG7W 56.3 14500 T Horizontal and Vertical 102KG7W 56.3 Ilation and Services (If the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in this box, please go to the end of the complete description does not appear in the complete descriptin does not appear in the complete descriptin does not appear in t

FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	E54/55. Range of Satellite Arc E/W 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)
9.3	Geostationary	3700 4200	177.0/ 177.0	253.2	10.1	253.2	10.1	0.0
	Geostationary	5925 6182	177.0/ 177.0	253.2	10.1	253.2	10.1	-4.33
	Geostationary	6213 6251	177.0/ 177.0	253.2	10.1	253.2	10.1	-4.33
	Geostationary	6262 6271	177.0/ 177.0	253.2	10.1	253.2	10.1	-4.33
	Geostationary	6302 6330	177.0/ 177.0	253.2	10.1	253.2	10.1	-4.33
	Geostationary	6361 6399	177.0/ 177.0	253.2	10.1	253.2	10.1	-4.33
5.6	Geostationary	11700 12200	43.0/ 139.0	104.1	7.2	218.2	35.5	0.0
	Geostationary	14000 14500	43.0/ 139.0	104.1	7.2	218.2	35.5	-0.9
REMOTE CO	ONTROL POIN	T LOCATION		1				I
	Sign case enter the calls hich this applicati	0	0		. Phone Number			

E62. Street Address			
E63. City	E67. County	E64/68. State/Country /	E66. Zip Code

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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