Date & Time Filed: Mar 9 2007 4:35:56:833PM File Number: SES-AMD-INTR2007-00621

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:

MET earth station application — amend to update technical information (March 2007)

Name:	TerreStar Networks, Inc.	Phone Number:	703–483–7805
DBA Name:		Fax Number:	
Street:	12010 Sunset Hills Road	E-Mail:	alexandra.field@terrestar.com
	6th Floor		
City:	Reston	State:	VA
<b>Country:</b>	USA	Zipcode:	20190 –
<b>Attention:</b>	Ms Alexandra Field		

#### 9–16. Name of Contact Representative

Name: Joseph A. Godles, Esq. Phone Number: 202–429–4900

**Company:** Goldberg Godles Wiener & Wright **Fax Number:** 202–429–4912

Street: 1229 19th Street, NW E-Mail: jgodles@g2w2.com

City: Washington State: DC

**Country:** USA **Zipcode:** 20036–2413

Attention: Attorney 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**3. 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 Noncommercial educational licensee							
Other(please explain):							
17d.							
Fee Classification CGB – Mobile Satellite Earth Stations							
18. If this filing is in reference to an existing station, enter:  19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:							
(a) Call sign of station:	(a) Call sign of station: (a) Date pending application was filed: (b) File number:						
	12/05/2006	SESLIC2006120602100					

# 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     Non–Common Carrier	■ Using Non–U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER se facilities:	rvice, see instructions regarding Sec. 214 filings. Choose one. Are these
Connected to a Public Switched Network Not connected to a P	ublic Switched Network    N/A
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all ap	plicable 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	al 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)
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 (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**

under the laws of a foreign country?

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, aerona aeronautical fixed radio station services are not required to respond to Items 30–34.	autic	al er	ı roı	ıte o	r	
29. Is the applicant a foreign government or the representative of any foreign government?	٥	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	, 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	0	Yes	•	. No	· o	N/A

O Yes No

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental

	<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	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	<b>O</b> 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.	<b>⊘</b> 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.	Cover letter	

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  Schedule S sup	O No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued coordinated or is in the process of coordinating the space station? Canada	, what administr	ation 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.)

Applicant herein amends its pending application to seek authority for the mobile earth terminals (METs) to operate with TerreStar-1. This amendment supplements and clarifies technical information that was provided in the initial application.

Exhibit 6

#### **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 application	able response.)				
0000	Individual Unincorporated Association Partnership Corporation Governmental Entity Other (please specify)	Unincorporated Association Cartnership Corporation Governmental Entity				
	45. Name of Person Signing Alexandra M. Field	46. Title of Person Signing Vice President, 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 Station Site							
E1: Site Identifier:	METs	E5. Call Sign:	E060430				
E2: Contact Name	Jamie Newberry	E6. Phone Number:	703–483–7854				
E3. Street:	12010 Sunset Hills Rd	E7. City:	Reston				
		E8. County:	N/A				
E4. State	VA	E9. Zip Code	20190				
E10. Area of Operation:		CONUS, Hawaii, Puerto Rico, US Virgin Islands, Alaska, Canada					
E11. Latitude:	0 °0 '0.0 "						
E12. Longitude:	0 °0 '0.0 "						
E13. Lat/Lon Coord	linates are:	<b>○</b> 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.
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E16. If the proposed antenna(s) do not operate in the Fixed Satellite S Satellite Service (FSS) with non–geostationary satellites, do(es) the pregain patterns specified in Section 25.209(a2) and (b) as demonstrated measurements?	O Yes	<b>⊚</b> No	O N/A	
E17. Is the facility operated by remote control? If YES, provide the loc point.	cation and telephone number of the control	Yes	٥	No
E18. Is frequency coordination required? If YES, attach a frequency co	oordination report as	o Yes	•	No
E19. Is coordination with another country required? If YES, attach the coordination contours as	name of the country(ies) and plot of	O Yes	•	No
E20. FAA Notification – (See 47 CFR Part 17 and 47 CFR part 25. have you attached a copy of a completed FCC Form 854 and/or the FA the structure to aviation?  FAILURE TO COMPLY WITH 47 CFR PARTS 17 AND 25 WILL APPLICATION.	AA's study regarding the potential hazard of	O Yes	•	No
POINTS OF COMMUNICATION		<u> </u>		
Satellite Name: OTHER   OTHER   If you selected OTHER, please	enter the following:			
E21. Common Name: TerreStar-1	E22. ITU Name: CANSAT-24			
E23. Orbit Location: See Ex. 1	E24. Country: Canada			
POINTS OF COMMUNICATION (Destination Points)				
E25. Site Identifier: METs				

E26. Common Name: TerreStar-1	E27. Country: Canada
E25. Site Identifier: METs	
E26. Common Name: TerreStar-1	E27. Country: Puerto Rico
E25. Site Identifier: METs	
E26. Common Name: TerreStar-1	E27. Country: USA
E25. Site Identifier: METs	
E26. Common Name: TerreStar-1	E27. Country: United States Virgin Islands

# 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)	
METs	P1	2000000	Various	N/A	0.03	0.0 dBi at 2.01	
METs	P2	2000000	Various	N/A	0.03	0.0 dBi at 2.01	
METs	Р3	2000000	Various	N/A	0.03	0.0 dBi at 2.01	
METs	P4	2000000	Various	N/A	0.03	0.0 dBi at 2.01	

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	` ′	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at antenna flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
P1	0.0/0.0	0.0	0.0	0.0	0.25	0.0	-6.0
P2	0.0/0.0	0.0	0.0	0.0	0.25	0.0	-6.0
P3	0.0/0.0	0.0	0.0	0.0	0.25	0.0	-6.0
P4	0.0/0.0	0.0	0.0	0.0	0.25	0.0	-6.0

# FREQUENCY

	E43/44. Frequency Bands (MHz)				E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
P1	2180 2200	R	Horizontal and Vertical	200KG7W	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.)

16QAM, 8PSK, QPSK - voice, data

P1   2000   2020   T   Horizontal and Vertical   50K0G7W   0.0   -11.0	2020 T Horizontal and $50K0G/W$ $0.0$ $-11.0$
--	---

E50. Modentirety.)	dulation	and Services	(If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
16QAN	1, 8PS	K, QPSK -	- voic	e, data				
P1		2000	2020	Т	Horizontal and Vertical	200K0G7W	0.0	-17.0
E50. Modentirety.)	dulation	and Services	(If th	ne complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
16QAN	1, 8PS	K, QPSK -	- voic	e, data				
P2		2180	2200	R	Horizontal and Vertical	313KG7W	0.0	0.0
E50. Modentirety.)	dulation	and Services	(If th	ne complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
16QAN	1, 8PS	K, QPSK -	- voic	e, data				
P2		2180	2200	R	Horizontal and Vertical	31K3G7W	0.0	0.0

E50. Modulation entirety.)	and Service	s (If th	ne complete description	on does not appear in	this box, please go t	o the end of the form	to view it in its
16QAM, 8PS	SK, QPSK	- voic	e, data				
P2	2000	2020	Т	Horizontal and Vertical	156KG7W	0.0	-15.9
E50. Modulation entirety.)				on does not appear in	this box, please go t	o the end of the form	to view it in its
P2	2000	2020	Т	Horizontal and Vertical	31K3G7W	0.0	-8.9
E50. Modulation entirety.)				on does not appear in	this box, please go t	o the end of the form	to view it in its
P3	2180	2200	R	Horizontal and Vertical	1M25G7W	0.0	0.0

E50. Modulation entirety.)	and Services	(If th	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
16QAM, 8PS	K, QPSK -	voic	e, data				
P3	2000	2020	Т	Horizontal and Vertical	26K0G7W	-6.0	-14.1
E50. Modulation entirety.)			e complete description	on does not appear in	this box, please go to	o the end of the form	to view it in its
P3	2000	2020	Т	Horizontal and Vertical	6K50G7W	-6.0	-8.1
E50. Modulation entirety.)	and Services	(If th	e complete description	on does not appear in	this box, please go to	the end of the form	to view it in its
16QAM, 8PS	K, QPSK -	voic	e, data				
P4	2180	2200	R	Horizontal and Vertical	1M25G7W	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.)

16QAM, 8PSK, QPSK - voice, data

P4	2000	2020	Т	Horizontal and	54K7G7W	0.0	-11.3
				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.)

16QAM, 8PSK, QPSK - voice, data

# FREQUENCY COORDINATION

E28. Antenna Id	E51. Satellite Orbit Type	E52/53. Frequency Limits(MHz)	Range of Satellite Arc Eastern/West	E56. Earth Station Azimuth Angle Eastern Limit	E57. Antenna Elevation Angle Eastern Limit	E58. Earth Station Azimuth Angle Western Limit	Elevation	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
P1	Geostationary	2000 2020	111.1/111.1	252.4	60.0	108.4	5.0	-16.9
	Geostationary	2180 2200	111.1/111.1	252.4	60.0	108.4	5.0	0.0

P2	Geostationary	2000 2020	111.1/111.1	252.4	60.0	108.4	5.0	-14.9
	Geostationary	2180 2200	111.1/111.1	252.4	60.0	108.4	5.0	0.0
P3	Geostationary	2000 2020	111.1/111.1	252.4	60.0	108.4	5.0	-8.1
	Geostationary	2180 2200	111.1/111.1	252.4	60.0	108.4	5.0	0.0
P4	Geostationary	2000 2020	111.1/111.1	252.4	60.0	108.4	5.0	-11.3
	Geostationary	2180 2200	111.1/111.1	252.4	60.0	108.4	5.0	0.0

# REMOTE CONTROL POINT LOCATION

E61. Call Sign EXHIBIT 6 NOTE: Please enter the callsign of the contro callsign for which this application is being filed.	_	E66. Phone Number Exhibit 6					
E62. Street Address Exhibit 6							
E63. City Exhibit 6	E68. County X		E67/68. State/Country / USA	E64. Zip Code X			

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

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