Date & Time Filed: May 11 2005 7:29:17:176PM File Number: SES-MOD-INTR2005-01016

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:

#### EARTH2

Legal Name of Ap	pplicant		
Name:	ORBIMAGE Inc.	Phone Number:	703–480–7500
DBA Name:		Fax Number:	703–480–7544
Street:	21700 Atlantic Boulevard	E–Mail:	warren.william@orbimage.com
City:	Dulles	State:	VA
<b>Country:</b>	USA	Zipcode:	20166 –
Attention:	Mr William L Warren		

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

Name: William S. Carnell Phone Number: 202–637–2244

Company: Latham & Watkins Fax Number: 202–637–2201

Street: 555 Eleventh St NW E-Mail: william.carnell@lw.com

Suite 1000

City: Washington State: DC

**Country:** USA **Zipcode:** 20004–1304

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

 $\ \ \, \bigcirc \ \, (N/A)$  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	on? 159. If No, indicate reason for fee exemption (s	ee 47 C.F.R.Section 1.1114).			
Governmental Entity Noncomme	rcial educational licensee				
Other(please explain):					
17d.					
Fee Classification CGW – Space Station M Geostationary)	Modification(Non–				
18. If this filing is in reference to an existing station, enter:	19. If this filing is an amendment to a pending a modification please enter only the file number:	pplication enter both fields, if this filing is a			
(a) Call sign of station: (b) File number:					
E980375		SESMOD1999102201867			

## 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: 8025 Frequency Upper: 8395	(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. 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**

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 en	rout	te or		
29. Is the applicant a foreign government or the representative of any foreign government?	٥	Yes	•	No	0	N/A
30. Is the applicant an alien or the representative of an alien?	0	Yes	0	No	•	N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	0	Yes	0	No	•	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?	٥	Yes	0	No	•	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

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.	O Yes	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	<b>⊚</b> No
42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, we 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 does not appear in this box, please go to the end of the form to view it in its entirety.)

This application is a request to modify the existing Earth Station, call sign E980375, in Dulles, VA, for use with the OrbView-5 satellite in addition to the existing OrbView-3 satellite.

Exhibit 1

#### **CERTIFICATION**

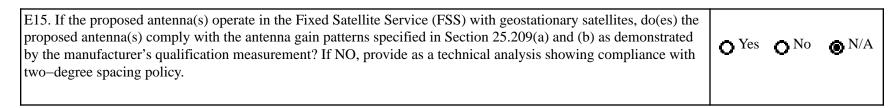
The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The 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 res	sponse.)	
<ul> <li>Individual</li> <li>Unincorporated Association</li> <li>Partnership</li> <li>Corporation</li> <li>Governmental Entity</li> </ul>		
Other (please specify)		
45. Name of Person Signing William L. Warren	46. Title of Person Signing Legal 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	ation Site				
E1: Site Identifier:	Station 2	E5. Call Sign:	E980375		
E2: Contact Name	William Warren	E6. Phone Number:	703–480–5672		
E3. Street:	21700 Atlantic Blvd	E7. City:	Dulles		
		E8. County:	Loudoun		
E4. State	VA	E9. Zip Code	20166		
E10. Area of Operat	tion:	Dulles, VA			
E11. Latitude:	39 °0 '56.0 "N				
E12. Longitude:	77 °25 '42.0 "W				
E13. Lat/Lon Coord	linates are:	<b>●</b> NAD-27	O NAD-83	O N/A	
E14. Site Elevation	(AMSL):	79.38 meters			



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	<b>⊚</b> N/A
E17. Is the facility operated by remote control? If YES, provide the loca point.	ation and telephone number of the control	O Yes	•	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 recoordination 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 25.1 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	•	No
POINTS OF COMMUNICATION		!		
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	enter the following:			
E21. Common Name: ORBVIEW-3	E22. ITU Name:			
E23. Orbit Location: 470 KM	E24. Country: USA			
Satellite Name: OTHER   OTHER   If you selected OTHER, please e	enter the following:			

E21. Common Name: ORBVIEW-5	E22. ITU Name:
E23. Orbit Location: 684 KM	E24. Country: USA

# 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)
Station 2	8 GHz-2A	1	ViaSat (Scientific Atlanta)	V8x-Y Pedestal	5.4	51.9 dBi at 8.2100
	8 GHz-2B					51.9 dBi at 8.2100
	8GHz-2C			v8x-Y Pedestal		52.12 dBi at 8.394
	S-Band-2A			V8x-Y Pedestal		38.0 dBi at 2.0926

E28. Antenna Id	Diameter	E35. Above Ground Level (meters)	E36. Above Sea Level(meters)	Height Above	Input Power at	E39. Maximum Antenna Height Above Rooftop (meters)	EIRP for al
8 GHz-2A	5.4/5.4	20.23	99.61	0.0	0.0	0.0	0.0
8 GHz-2B	5.4/5.4	20.23	99.61	0.0	0.0	0.0	0.0
8GHz-2C	5.4/5.4	20.23	99.61	0.0	0.0	0.0	0.0

S-Band-2A	5.4/5.4	20.2	23	99.61	0.0	50.0	0.0	55.0
FREQUENCY	!	-		•	!	ļ .	!	· ·
E28. Antenna Id	E43/44. Frequency B (MHz)	ands	E45. T/R M	ode	E46. Antenna Polarization(H,V, L,R)	E47. Emission Designator	E48. Maximum EIRP per Carr (dBW)	
8 GHz–2A	8210	8210	R		Right Hand Circular	150MG1D	28.2	-145.3
E50. Modulati	on and Services	(If tl	he complete o	descripti	on does not appear in	this box, please g	o to the end of the fo	orm to view it in its
3 GHz–2B	8210	8210	R		Left Hand Circular	370MG1D	28.2	-149.2
E50. Modulati	8210 8 on and Services			lescripti	Left Hand Circular on does not appear in			
E50. Modulati entirety.)	on and Services			descripti				

E50. Modulation entirety.)	and Services (	If the complete de	escription does not appea	r in this box, please	go to the end of t	he form to view it in its
OQPSK, Tel	emetry					
S-Band-2A	2092.6 2092.6	Т	Right Hand Circular	128KG1D	53.0	-88.6
E50. Modulation entirety.)	and Services (	If the complete de	escription does not appea	r in this box, please	go to the end of t	he form to view it in its
BPSK, Comm	and					

# 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		E58. Earth Station Azimuth Angle Western Limit	E59. Antenna Elevation Angle Western Limit	E60. Maximum EIRP Density toward the Horizon (dBW/4kHz)
8 GHz-2A	Non– Geostationary	8210 8219	0.0/0.0	360.0	3.0	360.0	3.0	0.0

8 GHz-2B	Non- Geostationary	8210 8210	0.0/0.0	360.0	3.0	360.0	3.0	0.0
8GHz-2C	Non– Geostationary	8394 8394	0.0/0.0	360.0	3.0	360.0	3.0	0.0
S-Band-2A	Non– Geostationary	2092.6 2092.6	0.0/0.0	360.0	3.0	360.0	3.0	39.95

## 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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