GeoEye™

2009 ANNUAL REPORT

October 30, 2009

Marlene H. Dortch, Esq.
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

> **Re: OrbView Satellite System, Call Sign S2348**
> **Annual Report, September 30, 2008 through September 30, 2009**
> **ORBIMAGE License Corp.**

Dear Ms. Dortch:

ORBIMAGE License Corp., a wholly owned subsidiary of GeoEye, Inc. ("ORBIMAGE") and the licensee of the OrbView and IKONOS remote-sensing satellite system ("OrbView system"), hereby submits this report on the operation of the OrbView system for the annual period ending September 30, 2009. This report is being filed pursuant to Section 25.210(l) of the Commission's rules.

I. STATUS OF THE ORBVIEW SYSTEM

The OrbView license originally authorized the launch and operation of two non-geostationary satellite orbit ("NGSO") EESS satellites, OrbView-3 and OrbView-4, in low-Earth orbit.[1] As the Commission is aware, OrbView-4 failed to reach its intended orbit and was never put into operation.[2] However, OrbView-3 was successfully launched on June 26, 2003 and ORBIMAGE thereafter notified the Commission that the operation of OrbView-3 conformed to the terms and conditions of the OrbView system license.[3] Subsequently, the OrbView license was modified to authorize the launch and operation of the OrbView-5 NGSO satellite.[4] OrbView-5 (renamed GeoEye-1) was successfully launched September 6, 2008, and commenced commercial operations February 5, 2009.

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[1]   *See Orbital Imaging Corporation*, Order and Authorization, DA 99-353 (rel. Feb. 17, 1999) (File No. SAT-LOA-19980203-00012).

[2]   *See* Letter from Armand Mancini, Executive Vice President and Chief Financial Officer, Orbital Imaging Corporation, to Magalie Roman Salas, Secretary, Federal Communications Commission (Jan. 16, 2002) (File No. SAT-LOA-19980203-00012).

[3]   *See* Letter from Daniel J. Connors, Acting General Counsel, Orbital Imaging Corporation, to Marlene H. Dortch, Secretary, Federal Communications Commission (July 3, 2003) (File No. SAT-LOA-19980203-00012).

[4]   *See ORBIMAGE Inc.*, Authorization Modification Order (Jan. 9, 2006) (File No. SAT-MOD-2005051100097).

On May 7, 2007, ORBIMAGE notified the Commission that the remote-sensing camera on board OrbView-3 had permanently ceased to produce usable imagery.[5] Since that time, ORBIMAGE has been using the satellite for training purposes and intends to do so until ORBIMAGE is confident that the satellite can safely be deorbited, which ORBIMAGE expects to occur within the next year. ORBIMAGE continues to have positive command and control of OrbView-3 and communicates with the satellite on a regular basis.

II.   NON-SCHEDULED OUTAGES

The OrbView-3 satellite operates in the 402-403 MHz and 2025-2110 MHz frequency bands for uplink TT&C, the 401-402 MHz band for downlink telemetry, and the 8025-8400 MHz frequency band for downlink transmissions to FCC-licensed earth stations in Barrow, Alaska and Dulles, Virginia, and to other earth stations licensed by foreign administrations. In addition to the March 4, 2007 anomaly which caused the permanent failure of OrbView-3's imaging camera, the OrbView-3 anomalies listed in the attached Appendix A also occurred.

The GeoEye-1 satellite operates in: the X-band centered at 8210 MHz, with a 370 MHz bandwidth for data downlink and with a 150 MHz bandwidth for EESS service; a 128 KHz channel at 2092.6 center frequency for uplink tracking, telemetry and control ("TT&C"); and a 59.7 KHz channel at 8394 MHz center frequency for downlink TT&C. The GeoEye-1 anomalies listed in the attached Appendix B occurred during the reporting period.

III.   TRANSPONDER UTILIZATION

All OrbView system transponder capacity is used to download remote sensing imagery directly to GeoEye or its foreign customers for process into imagery products. In turn, GeoEye and its foreign customers distribute imagery products to their customers. As noted in Section II above, OrbView-3 satellite imaging operations permanently failed March 4, 2007.
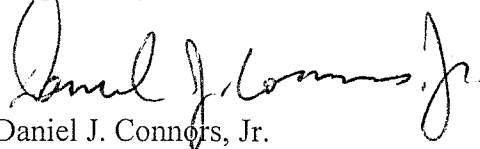
GeoEye-1 satellite imaging commenced commercial operations February 5, 2009 after the successful completion of on-orbit testing. GeoEye-1 downloads remote sensing imagery for distribution to government and commercial customers.

IV.   TRANSPONDER FUNCTIONING

The OrbView-3 satellite has ceased all imaging operations. The GeoEye-1 satellite is performing to specification.

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[5]   *See* Letter from William Warren, Sr. Vice President General Counsel, ORBIMAGE License Corp., to Robert Nelson, Chief, Engineering Branch, Satellite Division, International Bureau, Federal Communications Commission (May 7, 2007) (File No. SAT-MOD-20050511-00097).

Respectfully submitted,

Daniel J. Connors, Jr.
Vice President and Associate General Counsel

cc: FCC Columbia Operations Center
       Fern Jarmulnek
       Karl Kensinger
       Robert Nelson
       Kathyrn Medley
       Sylvia Lam

Appendix A

Summary of OrbView-3 Anomalies
(defined as Safeholds, Processor Resets)
and Status since June 26, 2003

Summary of OrbView-3 Anomalies
(defined as Safeholds, Processor Resets)
and Status since June 26, 2003

Date Occurred	Subsystem	Anomaly Description & Probable Cause
2004 January 30th	ADACS	ADACS ("Altitude Determination and Control Subsystem") A-side processor failed over to B side.
2004 February 20th	ADACS	ACS ("Altitude Control System") entered Safehold mode.
2004 February 29th	ADACS	ADACS A side processor failed over to B side.
2004 March 29th	ADACS	ADACS A side processor failed over to B side.
2004 April 8th	ADACS	ADACS Failover from B to A side.
2004 April 25th	PIP	ACS entered into Safehold mode.
2004 June 1st	PIP	PIP ("Payload Interface Processor") entered Safehold mode.
2004 June 18th	ADACS	ADACS failed over to side B.
2004 July 21st	PIP	PIP entered Safehold mode.
2004 August 22nd	ADACS	ADACS failed over to Side B.
2004 October 10th	ADACS	ADACS failed over to Side B.
2004 October 12th	ADACS	ACS Entered Safehold mode.
2004 October 12	Payload	Camera Door did not close during Image. Abort and subsequent ACS Safehold at 20 deg/sec fast rate.
Dec 31, 2004 thru Jan 1, 2005	PIP	PIP entered into Safehold mode.
2005 January 12,	ADACS	PIP entered Safehold mode. ACS entered Safehold mode.
2005 January 22	PIP	PIP entered Safehold mode
2005 January 28	ADACS	Trip attitude error and/or rate error thresholds while driving at high rates
2005 September 24	PIP	PIP safe and Default Schedule loaded, due to on-board commands expiring
2006 May 30	ADACS	PIP safe and ACS safehold due to CSS ("Core Sun Sun Disagreement Last occurrence was October 12, 2005.
2007 March 4	Payload	Optical images saturated.

Appendix B

Summary of GeoEye-1 Anomalies
(defined as Safeholds, Processor Resets)
and Status since Commencement of Commercial
Operations on February 5, 2009

Summary of GeoEye-1 Anomalies
(defined as Safeholds, Processor Resets)
and Status since Commencement of Commercial
Operations on February 5, 2009

Date Occurred	Subsystem	Anomaly Description & Probable Cause
2009 April 30	Sensor	Intermittent imaging anomaly in a single Multispectral Sensor Subarray characterized by a black stripe extending throughout the image in the in-track direction during forward scanning operations only.