

---

# Commercial Space Transportation License

License Number: LLS 11-075 (Rev 1)

---

## ORBITAL SCIENCES CORPORATION

is authorized, subject to the provisions of 51 USC Subtitle V, ch. 509, and the orders, rules, and regulations issued under it, to conduct a launch.

General. Orbital Sciences Corporation is authorized to conduct:

(i) A flight of an Antares launch vehicle from Pad 0A at Wallops Flight Facility (WFF) transporting a Cygnus Visiting Vehicle to low Earth orbit; and

(ii) pre-flight ground operations at WFF associated with the flight identified in paragraph (i) of this license, of an Antares launch vehicle.

**This license is granted subject to the terms, conditions, and limitations set forth in licensing orders A, B, C, and D and any subsequent orders issued by the Office of Commercial Space Transportation.**

**The licensee shall at all times conduct its operations in accordance with the regulations prescribed by the Office of Commercial Space Transportation for the activities authorized by this license.**



US Department  
of Transportation  
Federal Aviation  
Administration

800 Independence Ave., S.W.  
Washington, D.C. 20591

Original Issued on: August 5, 2011  
Revision 1 Issued On: January 27, 2012  
Revision 1 Effective On: January 27, 2012

  
\_\_\_\_\_  
Manager, Licensing and Evaluation Division

**License Order No. LLS 11-075A (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**LAUNCH**

AUTHORIZED BY LICENSE NO. LLS 11-075  
ISSUED TO

Orbital Sciences Corporation

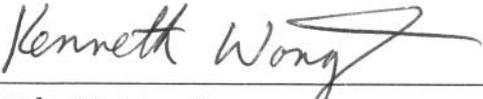
---

1. Authority: This Order is issued to Orbital Sciences Corporation, referred to as Orbital, under 51 U.S.C. subtitle V, chapter 509 and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLS 11-075, issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Orbital to conduct the launch of an Antares launch vehicle; and prescribes as conditions to License No. LLS 11-075 certain requirements applicable to the launch.
3. Definitions: For purposes of License No. LLS 11-075 and any orders issued by the FAA pertaining to activities covered by License No. LLS 11-075:
  - (i) "Flight" shall mean the flight of an Antares launch vehicle commencing with ignition of the first stage from Wallops Flight Facility (WFF) on the same ground track and trajectory as presented in the license application for the purposes of transporting a Cygnus Visiting Vehicle to low Earth orbit. A flight is concluded upon Orbital's last exercise of control over the Antares vehicle, including the safing of Antares vehicle stages or components that reach Earth orbit, following separation of the payloads.
  - (ii) "Pre-flight ground operations" shall mean Orbital's pre-flight preparations of the Antares vehicle at WFF beginning with the arrival of the Antares vehicle at WFF.
4. Flight Safety Data Package Submittal: Orbital shall submit the mission specific final Flight Safety Data Package to the FAA for verification that the ground track and the trajectory is as represented in Orbital's license application.

**License Order No. LLS 11-075A (Rev 1)**

5. License Term: License No. LLS 11-075 terminates upon completion of the launch authorized by the license, or on August 4, 2012, whichever occurs first.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By:   
Kenneth Wong, Manager  
Licensing and Evaluation Division

Issued On: January 27, 2012  
Effective On: January 27, 2012

**Revision History:**

Original License Order - Issued August 5, 2011

Revision 1 - Issued January 27, 2012

- 1) Changed launch vehicle name from "Taurus II" to "Antares"

**License Order No. LLS 11-075B (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**FLIGHT**

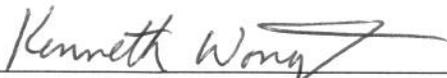
AUTHORIZED BY LICENSE NO. LLS 11-075  
ISSUED TO

ORBITAL SCIENCES CORPORATION

---

1. Authority: This Order is issued to Orbital Sciences Corporation, referred to as Orbital, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLS 11-075, issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Orbital to conduct the launch of an Antares launch vehicle; and prescribes as conditions to License No. LLS 11-075 certain requirements applicable to the authorization to conduct the flight of a launch vehicle.
3. Authorization: Orbital is authorized to conduct the flight of an Antares launch vehicle:
  - a) From Wallops Flight Facility (WFF), Virginia;
  - b) On the ground track and trajectory presented in the license application;
  - c) Transporting to low Earth orbit a Cygnus Visiting Vehicle; and
  - d) According to the launch vehicle, launch vehicle systems, and safety management program represented in the Orbital application as of the date of this order, and any amendments to the license application approved by the FAA, in writing.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By:   
Kenneth Wong, Manager  
Licensing and Evaluation Division

Issued On: January 27, 2012  
Effective On: January 27, 2012

**Revision History:**

Original License Order - Issued August 5, 2011

Revision 1 - Issued January 27, 2012

2) Changed launch vehicle name from "Taurus II" to "Antares"

License Order No. LLS 11-075C (Rev 1)

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**PRE-FLIGHT GROUND OPERATIONS**

AUTHORIZED BY LICENSE NO. LLS 11-075  
ISSUED TO

ORBITAL SCIENCES CORPORATION

---

1. Authority: This Order is issued to Orbital Sciences Corporation, referred to as Orbital, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLS 11-075, issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Orbital to conduct the launch of an Antares launch vehicle; and prescribes as conditions to License No. LLS 11-075 certain requirements applicable to the authorization to conduct pre-flight ground operations.
3. Authorization: Orbital is authorized to conduct pre-flight ground operations at WFF associated with the launch of a Cygnus Visiting Vehicle on an Antares launch vehicle.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By:   
Kenneth Wong, Manager  
Licensing and Evaluation Division

Issued On: January 27, 2012  
Effective On: January 27, 2012

**Revision History:**

Original License Order - Issued August 5, 2011

Revision 1 - Issued January 27, 2012

- 1) Changed launch vehicle name from "Taurus II" to "Antares"

License Order No. LLS 11-075D (Rev 1)

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**FINANCIAL RESPONSIBILITY REQUIREMENTS**

Under License No. LLS 11-075  
Issued to

ORBITAL SCIENCES CORPORATION

---

1. Authority: This Order is issued to Orbital Sciences Corporation, referred to as Orbital, under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. part 440.
2. Purpose: This Order modifies License No. LLS 11-075, issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, by prescribing financial responsibility requirements for licensed launch activities in accordance with 14 C.F.R. part 440.
3. Definitions: For purposes of this Order, "licensed launch activities" shall mean activities authorized by the License. Other terms used in this Order are defined in accordance with 14 C.F.R. § 440.3.
4. Liability Insurance: Orbital shall maintain a policy or policies of liability insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R. § 440.9(b) in the amount of:
  - (a) Thirteen Million Five Hundred Thousand Dollars (\$13,500,000) for covered claims resulting from flight of the Antares launch vehicle from Wallops Flight Facility (WFF).
  - (b) Nine Million Dollars (\$9,000,000) for covered claims resulting from pre-flight operations performed at WFF.

License Order No. LLS 11-075D (Rev 1)

5. Government Property Insurance: Orbital shall maintain a policy or policies of insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R § 440.9(d) in the amount of:
- (a) Forty Four Million Dollars (\$44,000,000) for covered claims resulting from flight of the Antares launch vehicle from WFF.
  - (b) One Million Dollars (\$1,000,000) for covered claims resulting from pre-flight operations performed at WFF.
6. Covered property includes all property owned, leased, or occupied by, or within the care, custody, or control of, the United States and its agencies, and its contractors and subcontractors involved in licensed launch activities, at WFF.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By:   
Kenneth Wong, Manager  
Licensing and Evaluation Division

Issued On: January 27, 2012  
Effective On: January 27, 2012

**Revision History:**

Original License Order - Issued August 5, 2011

Revision 1 - Issued January 27, 2012

- 1) Changed launch vehicle name from "Taurus II" to "Antares"