

# Commercial Space Transportation License

**ORBITAL  
SCIENCES,  
LLC**

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

General. Orbital Sciences, LLC is authorized to conduct:

(a) Flights of Minotaur IV launch vehicles from Space Florida Launch Complex 46 at Cape Canaveral Space Force Station (CCSFS), as identified in license orders issued by the Federal Aviation Administration;

(b) Pre-flight ground operations at Space Florida Launch Complex 46 and CCSFS associated with the flights, as identified in paragraph (a) of this license, of the Minotaur IV launch vehicles.

**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: February 10, 2017**  
**Rev 2 Issued: February 09, 2022**  
**Rev 2 Effective: February 10, 2022**

**JAMES R  
REPCHECK**

Digitally signed by JAMES R  
REPCHECK  
Date: 2022.02.09 18:07:50  
-05'00'

**Manager, Safety Authorization Division**

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**Revision History:**

Original License - Issued 12BFebruary 10, 2017

Revision 1 - Issued June 18, 2018

- 1) Removed text ", a wholly owned subsidiary of Orbital ATK, Inc.,"

Revision 2 - Issued February 09, 2022

- 1) Replaced text "Corporation" with ", LLC"
- 2) Inserted "Space Florida" before "Launch Complex 46" throughout
- 3) Replaced text "Air Force Station" with "Space Force Station" and "CAAFS" with "CCSFS"

**License Order No. LLO 17-099A (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**LAUNCH**

AUTHORIZED BY LICENSE NO. LLO 17-099  
ISSUED TO

ORBITAL SCIENCES, LLC

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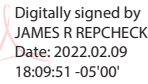
1. Authority: This Order is issued to Orbital Sciences, LLC, referred to as Orbital, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
2. Purpose: This Order modifies License No. LLO 17-099 originally issued on February 10, 2017, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Orbital to conduct launches of Minotaur IV launch vehicles; and prescribes as conditions to License No. LLO 17-099 certain requirements applicable to the launches.
3. Definitions: For purposes of License No. LLO 17-099 and any orders issued by the FAA pertaining to activities covered by License No. LLO 17-099:
  - (a) "Flight" shall mean the flight of a Minotaur IV launch vehicle commencing with ignition of the first stage from Space Florida Launch Complex 46 at Cape Canaveral Space Force Station (CCSFS) and transporting United States government payloads to a low Earth orbit. A flight is concluded upon Orbital's last exercise of control over the Minotaur IV launch vehicle, including the safing of the Minotaur IV launch vehicle stages or components that reach Earth orbit, following separation of the payloads.
  - (b) "Pre-flight ground operations" shall mean Orbital's pre-flight preparations of a Minotaur IV launch

**License Order No. LLO 17-099A (Rev 1)**

vehicle at Space Florida Launch Complex 46 and CCSFS, beginning with the arrival of the Minotaur IV launch vehicle at CCSFS.

4. License Term: License No. LLO 17-099 expires on March 9, 2026.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By: **JAMES R  
REPCHECK**  Digitally signed by  
JAMES R REPCHECK  
Date: 2022.02.09  
18:09:51 -05'00'

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Randy Repcheck, Manager  
Safety Authorization Division

Originally Issued: February 10, 2017  
Rev 1 Issued: February 09, 2022  
Rev 1 Effective: February 10, 2022

**Revision History:**

Original License Order Issued - February 10, 2017

Revision 1 - Issued February 09, 2022

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced text "Air Force Station" with "Space Force Station" and "CCAFS" with "CCSFS"
- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on February 10, 2017."
- 5) In paragraph 3 (a), inserted "Space Florida Launch Complex 46 and" before "Cape Canaveral"
- 6) In paragraph 3 (b) inserted "Space Florida Launch Complex 46 and" before "CCSFS"
- 7) Redesignated License Order No. VOL 22-099A with "(Rev 1)" following.
- 8) Changed Division title of signee from "Manager, Licensing and Evaluation Division" to "Manager, Safety Authorization Division".
- 9) Before "Issued:" inserted "Original ", then below that line, added a new line: "Rev 1 Issued: February 9, 2022"
- 10) Before "Effective:", inserted "Rev 1 ", and change date to "February 10, 2022"

**License Order No. LLO 17-099B (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING


**FLIGHT**

AUTHORIZED BY LICENSE NO. LLO 17-099  
ISSUED TO

ORBITAL SCIENCES, LLC

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1. Authority: This Order is issued to Orbital Sciences, LLC, 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. LLO 17-099 originally issued on February 10, 2017, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Orbital to conduct launches of Minotaur IV launch vehicles; and prescribes as conditions to License No. LLO 17-099 certain requirements applicable to the authorization to conduct flights.
  3. Authorization: Orbital is authorized to conduct flights:
    - (a) Using Minotaur IV launch vehicles;
    - (b) From Space Florida Launch Complex 46 at Cape Canaveral Space Force Station, Florida;
    - (c) On the ground track and trajectory presented in the license application;
    - (d) Transporting U.S. government payloads to a low Earth orbit;
    - (e) 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: **JAMES R  
REPCHECK**  Digitally signed by JAMES  
R REPCHECK  
Date: 2022.02.09 18:10:58  
-05'00'

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Randy Repcheck, Manager  
Safety Authorization Division

Originally Issued: February 10, 2017  
Rev 1 Issued: February 09, 2022  
Rev 1 Effective: February 10, 2022

**Revision History:**

Original License Order Issued - February 10, 2017

Revision 1 - Issued February 09, 2022

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced text "Air Force Station" with "Space Force Station"
- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on February 10, 2017."
- 5) In paragraph 3 (b) inserted "Space Florida Launch Complex 46 at" before "Cape".
- 6) Redesignated License Order No. LLO 17-099B with "(Rev 1)" following.
- 7) Changed Division title of signee from "Manager, Licensing and Evaluation Division" to "Manager, Safety Authorization Division".
- 8) Before "Issued:" inserted "Original ", then below that line, added a new line: "Rev 1 Issued: February 9, 2022"
- 9) Before "Effective:", inserted "Rev 1 ", and change date to "February 10, 2022"

**License Order No. LLO 17-099C (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**PRE-FLIGHT GROUND OPERATIONS**

AUTHORIZED BY LICENSE NO. LLO 17-099  
ISSUED TO

ORBITAL SCIENCES, LLC

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1. Authority: This Order is issued to Orbital Sciences, LLC, 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. LLO 17-099 originally issued on February 10, 2017, by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Orbital to conduct launches of Minotaur IV launch vehicles; and prescribes as conditions to License No. LLO 17-099 certain requirements applicable to the authorization to conduct pre-flight ground operations.
  3. Authorization: Orbital is authorized to conduct pre-flight ground operations at Space Florida Launch Complex 46 and Cape Canaveral Space Force Station associated with the launches of U.S. government payloads on Minotaur IV launch vehicles.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By: JAMES R  
REPCHECK Digitally signed by  
JAMES R REPCHECK  
Date: 2022.02.09  
18:12:21 -05'00'

Randy Repcheck, Manager  
Safety Authorization Division

Originally Issued: February 10, 2017  
Rev 1 Issued: February 09, 2022  
Rev 1 Effective: February 10, 2022

**Revision History:**

Original License Order Issued - February 10, 2017

Revision 1 - Issued February 09, 2022

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced text "Air Force Station" with "Space Force Station"
- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on February 10, 2017."
- 5) In paragraph 3, inserted "Space Florida Launch Complex 46 and" before "Cape Canaveral"
- 6) Redesignated License Order No. LLO 17-099C with "(Rev 1)" following.
- 7) Changed Division title of signee from "Manager, Licensing and Evaluation Division" to "Manager, Safety Authorization Division".
- 8) Before "Issued:" inserted "Original ", then below that line, added a new line: "Rev 1 Issued: February 9, 2022"
- 9) Before "Effective:", inserted "Rev 1 ", and change date to "February 10, 2022"



**License Order No. LLO 17-099D (Rev 1)**

OFFICE OF  
COMMERCIAL SPACE TRANSPORTATION  
LICENSE ORDER REGARDING

**FINANCIAL RESPONSIBILITY REQUIREMENTS**

UNDER LICENSE NO. LLO 17-099  
ISSUED TO

ORBITAL SCIENCES, LLC

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1. Authority: This Order is issued to Orbital Sciences, LLC, 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. LLO 17-099 originally issued on February 10, 2017, 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) One Hundred Fifty Million Dollars (\$150,000,000) for covered claims resulting from flight of the Minotaur IV launch vehicle from Space Florida Launch Complex 46 at Cape Canaveral Space Force Station (CCSFS).
  - (b) Twenty-Seven Million Dollars (\$27,000,000) for covered claims resulting from pre-flight operations performed at Space Florida Launch Complex 46 and CCSFS.

**License Order No. LLS 16-099D (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) Thirty Million Dollars (\$30,000,000) for covered claims resulting from flight of the Minotaur IV launch vehicle from Space Florida Launch Complex 46 at CCSFS.
  - (b) Twenty-One Million Dollars (\$21,000,000) for covered claims resulting from pre-flight operations performed at Space Florida Launch Complex 46 and CCSFS.
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 CCSFS.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

By: JAMES R REPCHCK  
Randy Repcheck, Manager  
Safety Authorization Division

Digitally signed by  
JAMES R REPCHCK  
Date: 2022.02.09  
18:13:27 -05'00'

Originally Issued: February 10, 2017  
Rev 1 Issued: February 09, 2022  
Rev 1 Effective: February 10, 2022

**Revision History:**

Original License Order Issued - February 10, 2017

Revision 1 - Issued February 09, 2022

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced text "Air Force Station" with "Space Force Station" and "CCAFS" with "CCSFS"

**License Order No. LLS 16-099D (Rev 1)**

- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on February 10, 2017."
- 5) In paragraphs 4 and 5, inserted "Space Florida Launch Complex 46" before "Cape Canaveral" and "CCSFS"
- 6) Redesignated License Order No. LLO 17-099D with "(Rev 1)" following.
- 7) Changed Division title of signee from "Manager, Licensing and Evaluation Division" to "Manager, Safety Authorization Division".
- 8) Before "Issued:" inserted "Original ", then below that line, added a new line: "Rev 1 Issued: February 9, 2022"
- 9) Before "Effective:", inserted "Rev 1 ", and change date to "February 10, 2022"