

Commercial Space Transportation License

License Number: LLO 16-094 (Rev 2)

**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:

Pre-flight ground operations at Vandenberg Space Force Base (VSFB) associated with the conduct of Minotaur IV launch vehicle flights that require a Federal Aviation Administration license.

This license is granted subject to the terms, conditions, and limitations set forth in licensing orders A, 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: November 10, 2016
Rev 2 Issued: November 08, 2021
Rev 2 Effective: November 10, 2021

**JAMES R
REPCHECK**

Digitally signed by JAMES R
REPCHECK
Date: 2021.11.08 17:34:14
-05'00'

Manager, Licensing and Evaluation Division

Revision History:

Original License - Issued November 10, 2016

Revision 1 - Issued November 10, 2016

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

Revision 2 - Issued November 08, 2021

- 1) Replaced text "Corporation" with ", LLC"
- 2) Replaced text "Air Force Base" with "Space Force Base" and "VAFB" with "VSFB"

License Order No. LLO 16-094A (Rev 1)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

LAUNCH

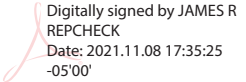
AUTHORIZED BY LICENSE NO. LLO 16-094
ISSUED TO

ORBITAL SCIENCES, LLC

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 16-094 originally issued on November 10, 2016, 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 16-094 certain requirements applicable to the launches.
3. Definitions: For purposes of License No. LLO 16-094 and any orders issued by the FAA pertaining to activities covered by License No. LLO 16-094:
 - (a) "Launch" means pre-flight ground operations only, as defined in this section.
 - (b) "Pre-flight ground operations" shall mean Orbital's pre-flight preparations of a Minotaur IV launch vehicle at VSFb associated with the conduct of any flights requiring an FAA license, beginning with the arrival of the Minotaur IV launch vehicle components at VSFb, and concluding with the departure of such components from VSFb.

4. License Term: License No. LLO 16-094 expires on March 9, 2026.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: JAMES R
REPCHECK  Digitally signed by JAMES R
REPCHECK
Date: 2021.11.08 17:35:25
-05'00'

Randy Repcheck, Manager
Safety Authorization Division

Original Issued: November 10, 2016
Rev 1 Issued: November 08, 2021
Rev 1 Effective: November 10, 2021

Revision History:

Original License Order Issued - November 10, 2016

Revision 1 - Issued November 08, 2021

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced "VAFB" with "VSFB"
- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on November 10, 2016."
- 5) Redesignated License Order No. LLO 01-059A with "(Rev 1)" following.
- 6) In paragraph (4), after "License Term:" replaced entire sentence with "License No. LLO 16-094 expires on March 9, 2026."
- 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: November 8, 2021"
- 9) Before "Effective:", inserted "Rev 1 ", and change date to "November 10, 2021"

License Order No. LLO 16-094C (Rev 1)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING


PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLO 16-094
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 16-094 originally issued on November 10, 2016, 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 16-094 certain requirements applicable to the authorization to conduct pre-flight ground operations.
 3. Authorization: Orbital is authorized to conduct pre-flight ground operations at Vandenberg Space Force Base (VSFB) associated with the conduct of any flights for which an FAA license is required, beginning with the arrival of the Minotaur IV launch vehicle at VSFB, and concluding with the departure of such components from VSFB.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: **JAMES R
REPCHECK**  Digitally signed by JAMES R
REPCHECK
Date: 2021.11.08 17:36:04
-05'00'

Randy Repcheck, Manager
Safety Authorization Division

Original Issued: November 10, 2016
Rev 1 Issued: November 08, 2021
Rev 1 Effective: November 10, 2021

Revision History:

Original License Order Issued - November 10, 2016

Revision 1 - Issued November 08, 2021

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced "Air" with "Space" and "VAFB" with "VSFB".
- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on November 10, 2016".
- 5) Redesignated License Order No. LLO 01-059C with "(Rev 1)" following.
- 6) Changed Division title of signee from "Manager, Licensing and Evaluation Division" to "Manager, Safety Authorization Division".
- 7) Before "Issued:" inserted "Original ", then below that line, added a new line:
"Rev 1 Issued: November 08, 2021"
- 8) Before "Effective:", inserted "Rev 1 ", and change date to "November 10, 2021"

License Order No. LLO 16-094D (Rev 1)

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

UNDER LICENSE NO. LLO 16-094
ISSUED TO

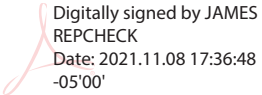
ORBITAL SCIENCES, LLC

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 16-094 originally issued on November 10, 2016, 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 Twenty-Seven Million Dollars (\$27,000,000) for covered claims resulting from pre-flight operations performed at Vandenberg Space Force Base (VSFB).
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 Forty-Two Million Dollars (\$42,000,000) for covered claims resulting from pre-flight operations performed at VSFB.

License Order No. LLS 16-094D (Rev 1)

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 VSF.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

By: **JAMES R
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REPCHECK
Date: 2021.11.08 17:36:48
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Randy Repcheck, Manager
Safety Authorization Division

Original Issued: November 10, 2016
Rev 1 Issued: November 08, 2021
Rev 1 Effective: November 10, 2021

Revision History:

Original License Order Issued - November 10, 2016

Revision 1 - Issued November 08, 2021

- 1) Changed "Orbital Sciences Corporation" to "Orbital Sciences, LLC".
- 2) Replaced "OSC" with "Orbital".
- 3) Replaced "Air" with "Space" and "VAFB" with VSF
- 4) In paragraph 2, replaced "issued concurrently" with "originally issued on November 10, 2016".
- 5) Redesignated License Order No. LLO 01-059C with "(Rev 1)" following.
- 6) Changed Division title of signee from "Manager, Licensing and Evaluation Division" to "Manager, Safety Authorization Division".
- 7) Before "Issued:" inserted "Original ", then below that line, added a new line: "Rev 1 Issued: November 08, 2021"
- 8) Before "Effective:", inserted "Rev 1 ", and change date to "November 10, 2021"