

Commercial Space Transportation License

License No. VOL 23-129 Rev. 2

**Space Exploration
Technologies,
Corp.**

is authorized, subject to the provisions of 51 U.S.C. Subtitle V, chapter 509, and the orders, rules, and regulations issued under it, to conduct launches of the Starship-Super Heavy vehicle.

This license is granted subject to the terms, conditions, and limitations set forth in licensing orders A and B, and any subsequent orders or other written stipulations, issued by the Office of Commercial Space Transportation, which are hereby incorporated by reference.

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 the license.

Original Issue Date:	April 14, 2023
VOL 23-129 Rev. 2 Issued:	March 13, 2024
VOL 23-129 Rev. 2 Effective:	March 13, 2024



US Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., SW
Washington, D.C. 20591

A handwritten signature in black ink that reads "Katie L. Cranor".

Digitally signed by
Katie Lynne Cranor
Date: 2024.03.13
15:46:19 -04'00'

Katie L. Cranor
Manager, Safety Authorization Division

LICENSE AND ORDERS REVISION HISTORY

Rev No.	Date	Section	Description
0	April 14, 2023		Original Issuance
1	November 15, 2023	All Sections	Added Rev. 1 to all instances of License No. VOL 23-129.
		Order A-1	<ol style="list-style-type: none"> 1. Removed “concurrently” from paragraph 2. 2. Replaced “Space Exploration Technologies, Corp.” with “the Starship-Super Heavy” in paragraph 3(b). 3. Changed paragraph 4(b)(iv) from “first flight” to “Orbital Flight Test 2 mission.” 4. Added paragraph 6, “Additional Measures: SpaceX must comply with the conditions in the November 15, 2023 Written Re-evaluation of the 2022 Programmatic Environmental Assessment (PEA) for the SpaceX Starship/Super Heavy Launch Vehicle Program at the Boca Chica Launch Site in Cameron County, Texas.” 5. Original paragraphs 6, 7, 8, and 9 were renumbered to paragraphs 7, 8, 9, and 10, respectively, with the addition of new paragraph 6. 6. Changed paragraph 9(a) from "expended first stage vehicle stages" to "expended vehicle stages."
		Order B-1	<ol style="list-style-type: none"> 1. Removed “concurrently” from paragraph 2. 2. Removed duplicative sentence from paragraph 2.
2	March 13, 2024	All Sections	Added Rev. 2 to all instances of License No. VOL 23-129.
		Order A-1	<ol style="list-style-type: none"> 1. Changed paragraph 4(b)(iii) from “Pacific Ocean” to “Indian Ocean.” 2. Added “, excluding Starship entry contingency landing locations.” to paragraph 4(b)(iii) 3. Changed paragraph 4(b)(iv) from “Orbital Flight Test 2” to “Flight 3.” 4. Moved paragraph 6(a) to paragraph 6(b). 5. Added new paragraph 6(a) to “SpaceX must comply with the measures listed in the Conditions section in the April 14, 2023 <i>Written Re-evaluation of the 2022 Programmatic Environmental Assessment for the SpaceX Starship/Super Heavy Launch Vehicle Program at the Boca Chica Launch Site in Cameron County, Texas.</i>” 6. Added paragraph 6(c), “SpaceX must comply with the measures listed in the Conditions section of the <i>Finding of No Significant Impact and Record of Decision for the Tiered Environmental Assessment for SpaceX Starship Indian Ocean Landings</i>, issued March 12, 2024.”

**Office of Commercial
Space Transportation
License Order A-1
Regarding**

Launch

AUTHORIZED BY LICENSE NO. VOL 23-129 Rev. 2
ISSUED TO:
Space Exploration Technologies, Corp.

License No. VOL 23-129 Rev. 2 Order A-1 establishes the orders regarding the launch of Space Exploration Technologies, Corp.'s Starship-Super Heavy vehicle from SpaceX Boca Chica Launch Complex, Boca Chica, Texas.

1. **Authority:** This Order is issued to Space Exploration Technologies, Corp. (SpaceX) under 51 U.S.C. Subtitle V, chapter 509, and 14 CFR chapter III.
2. **Purpose:** This Order modifies License No. VOL 23-129 Rev. 2 issued by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing Space Exploration Technologies, Corp. to conduct the launch of its Starship-Super Heavy vehicle as identified in the license application; and prescribes as conditions to License No. VOL 23-129 Rev. 2 certain requirements applicable to launch.
3. **Definitions:** For purposes of License No. VOL 23-129 Rev. 2 and any orders issued by the FAA pertaining to activities covered by License No. VOL 23-129 Rev. 2:
 - a. "Pre-flight ground operations" shall mean Space Exploration Technologies, Corp.'s pre-flight preparations of the Starship-Super Heavy vehicle at Boca Chica, Texas, beginning at the start of Autonomous Flight Termination System ordnance installation for the Starship upper stage vehicle or Super Heavy booster vehicle, whichever occurs first.
 - b. "Flight" shall commence with the ignition of the first stage with the intention of liftoff of a Space Exploration Technologies, Corp. Starship-Super Heavy vehicle from SpaceX Boca Chica Launch Complex, Boca Chica, Texas. A flight ends upon the Starship-Super Heavy Space Exploration Technologies, Corp. vehicle or vehicle component impact or landing on Earth, after activities necessary to return the vehicle or vehicle component to a safe condition on the ground after impact or landing, or after activities necessary to return the site to a safe condition, whichever occurs latest.
4. **Authorization:** In accordance with the representations in the Space Exploration Technologies, Corp. application as of the date of this license, and any amendments to the license application or waivers approved by the FAA, in writing, Space Exploration Technologies, Corp. is authorized to conduct:
 - a. Pre-flight ground operations
 - i. Using the Starship-Super Heavy vehicle.
 - ii. At SpaceX Boca Chica Launch Complex, Boca Chica, Texas.
 - b. Flights:
 - i. Using the Starship-Super Heavy vehicle.
 - ii. From SpaceX Boca Chica Launch Complex, Boca Chica, Texas.
 - iii. To Gulf of Mexico and Indian Ocean locations specified in its application, excluding Starship entry contingency landing locations.

- iv. For the Flight 3 mission only, unless this license is modified to remove this term.
5. **Environmental Mitigations:** SpaceX must comply with the measures listed in the Conditions and Mitigation section of the *Mitigated Finding of No Significant Impact and Record of Decision for the SpaceX Starship/Super Heavy Launch Vehicle Program at the SpaceX Boca Chica Launch Site in Cameron County, Texas*, issued June 13, 2022.
6. **Additional Measures:**
 - a. SpaceX must comply with the measures listed in the Conditions section in the April 14, 2023 *Written Re-evaluation of the 2022 Programmatic Environmental Assessment for the SpaceX Starship/Super Heavy Launch Vehicle Program at the Boca Chica Launch Site in Cameron County, Texas*.
 - b. SpaceX must comply with the measures listed in the Conditions section in the November 15, 2023 *Written Re-evaluation of the 2022 Programmatic Environmental Assessment for the SpaceX Starship/Super Heavy Launch Vehicle Program at the Boca Chica Launch Site in Cameron County, Texas*.
 - c. SpaceX must comply with the measures listed in the Conditions section of the *Finding of No Significant Impact and Record of Decision for the Tiered Environmental Assessment for SpaceX Starship Indian Ocean Landings*, issued March 12, 2024.
7. **Compliance Monitoring:** An FAA Safety Inspector must be present at SpaceX's Boca Chica Launch Complex for flight operations.
8. **Verification of Hazard Area Publication:** SpaceX must confirm, no later than 24 hours prior to flight, that maritime warnings have been issued.
9. **Special Reporting Requirement:**
 - a. SpaceX must provide FAA with the location and fate of the expended vehicle stages within 30 days of each launch using an approved plan that is submitted to the FAA at least 7 days prior to launch.
 - b. SpaceX must identify and report any anomaly during any pre-flight ground operations of the vehicle that could be material to public health and safety and the safety of property within 90 days.
10. **License Term:** License No. VOL 23-129 Rev. 2 terminates five (5) years from April 14, 2023.

**Office of Commercial
Space Transportation
License Order B-1
Regarding**

**Financial Responsibility
Requirements**

AUTHORIZED BY LICENSE NO. VOL 23-129 Rev. 2
ISSUED TO:
Space Exploration Technologies, Corp.

License No. VOL 23-129 Rev. 2 Order B-1 establishes the orders regarding the financial responsibility requirements of Space Exploration Technologies, Corp.'s Starship-Super Heavy vehicle launch from SpaceX Boca Chica Launch Complex, Boca Chica, Texas.

1. **Authority:** This Order is issued to Space Exploration Technologies, Corp. (SpaceX) under 51 U.S.C. Subtitle V, chapter 509, and 14 CFR part 440.
2. **Purpose:** This Order modifies License No. VOL 23-129 Rev. 2 issued by the Federal Aviation Administration's Office of Commercial Space Transportation, by prescribing financial responsibility requirements for licensed launch activities in accordance with 14 CFR 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 CFR § 440.3.
4. **Liability Insurance:** Space Exploration Technologies, Corp. shall maintain a policy or policies of liability insurance in accordance with 14 CFR § 440.9(b) in the amount of:
 - a. Forty-Eight Million Dollars (\$48,000,000) for covered claims resulting from pre-flight ground operations performed from SpaceX Boca Chica Launch Complex, Boca Chica, Texas; and
 - b. Five Hundred Million Dollars (\$500,000,000) for covered claims resulting from the flight of the Starship-Super Heavy launch vehicle from SpaceX Boca Chica Launch Complex, Boca Chica, Texas.

**OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**