VIRGIN ORBIT, 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 reusable launch vehicle (RLV) missions.

General. Virgin Orbit, LLC is authorized to conduct RLV missions to launch LauncherOne (L1) utilizing a Boeing 747-400 carrier aircraft. The RLV missions authorized by this license commence and conclude at either Mojave Air and Space Port, Mojave, California or Andersen Air Force Base, Guam.

This license is granted subject to the terms, conditions, and limitations set forth in licensing orders and any other written stipulations 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.
License Order No. LRLO 21-123A

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

REUSABLE LAUNCH VEHICLE (RLV) MISSIONS

AUTHORIZED BY LICENSE NO. LRLO 21-123
ISSUED TO

VIRGIN ORBIT, LLC

1. Authority: This Order is issued to Virgin Orbit, LLC (referred to as VO) under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.

2. Purpose: This Order modifies License No. LRLO 21-123 issued October 8, 2021, by the Federal Aviation Administration’s Office of Commercial Space Transportation, authorizing VO to conduct RLV missions to launch the LauncherOne (L1) launch vehicle utilizing a Boeing 747-400 (747-400) carrier aircraft; and prescribes as conditions to License No. LRLO 21-123 certain requirements applicable to those missions.

3. Definitions: For purposes of License No. LRLO 21-123 and any orders issued by the FAA pertaining to activities covered by License No. LRLO 21-123:

   (a) “Launch” means pre-flight ground operations, flight, and activities after flight necessary to bring the 747-400 to a safe condition.

   (b) “Pre-flight ground operations” means VO’s pre-flight preparations of LauncherOne (L1) and Boeing 747-400 at either Mojave Air and Space Port or Andersen Air Force Base.

   (c) “Flight” means flight of L1 commencing upon take-off of the 747-400 from either Mojave Air and Space Port or Andersen Air Force Base with the intent to launch L1. Flight ends upon safing of the L1 launch vehicle stages or components that reach Earth orbit following separation of the payload from the L1 launch vehicle or upon wheels stopping after landing of the 747-400 at the departure point.
License Order No. LRLO 21-123A

4. **Authorization:** VO is authorized to conduct flights:

   (a) Using L1, in combination with the 747-400 carrier aircraft that must hold a valid FAA experimental airworthiness certificate and must operate in accordance with the operating limitations of that certificate and the applicable sections of 14 C.F.R. part 91;

   (b) Transporting payloads to low Earth orbit;

   (c) From Mojave Air and Space Port, California;

   (d) From Andersen Air Force Base, Guam.

5. **Anomaly Identification:** VO must identify any anomaly occurring on a flight conducted under this license that could be material to public safety, and must address each anomaly prior to the next flight as necessary to ensure public safety.

6. **Autonomous Flight Safety System (AFSS) Testing:**

   (a) No later than seven days prior to operational flight, unless the FAA agrees to an alternate timeframe, VO must provide the FAA any AFSS final component acceptance/qualification test and HITL test results.

   (b) Prior to operational flight, VO must provide to the FAA any End-to-End test results.

7. **Flight Safety Analysis:** VO must provide the FAA a valid Flight Safety Analysis for each specific trajectory no later than 60 days prior to each launch or otherwise as approved by the FAA.

8. **Foreign Airspace Agreement:** Prior to flights from Andersen Air Force Base, VO must obtain an agreement with Japan for an Aircraft Hazard Area that lies within Fukuoka Flight Information Region.
License Order No. LRLO 21-123A

9. License Term: The term of License LRLO 21-123 authorizing VO to conduct RLV missions is two (2) years from the effective date of this license order.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

JAMES R
REPCHECK
Digitally signed by JAMES R
Date: 2021.10.08 21:09:16 -04'00'

By: ____________________________
Randy Repcheck, Manager
Safety Authorization Division

Issued: October 8, 2021
Effective: October 8, 2021
License Order No. LRLO 21-123B

OFFICE OF
COMMERCIAL SPACE TRANSPORTATION
LICENSE ORDER REGARDING

FINANCIAL RESPONSIBILITY REQUIREMENTS

UNDER LICENSE NO. LRLO 21-123
ISSUED TO

VIRGIN ORBIT, LLC

1. **Authority:** This Order is issued to Virgin Orbit, LLC (referred to as VO), under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. part 440.

2. **Purpose:** This Order modifies License No. LRLO 21-123 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:** VO shall maintain a policy or policies of liability insurance in accordance with 14 C.F.R. § 440.9(b) in the following amounts:

   (a) **Mojave Air and Space Port:**

      (i) Sixty-Four Million Dollars ($64,000,000) for covered claims resulting from a flight, commencing upon take-off of the Boeing 747-400 carrier aircraft from Mojave Air and Space Port.

      (ii) Three Million Dollars ($3,000,000) for covered claims resulting from pre-flight ground operations performed at Mojave Air and Space Port.

   (b) **Andersen Air Force Base:**

      (i) One Hundred Thirty-nine Million Dollars ($139,000,000) for covered claims resulting from a flight, commencing upon take-off of the Boeing
747-400 carrier aircraft from Andersen Air Force Base.

(ii) Three Million Dollars ($3,000,000) for covered claims resulting from pre-flight ground operations performed at Andersen Air Force Base.

5. **US Government Property Insurance:** VO 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 One Million Dollars ($1,000,000) for covered U.S. Government claims resulting from pre-flight ground or flight operations performed at Andersen Air Force Base.

6. Covered property includes all property owned, leased, or occupied by, or within the care, custody, or in control of the United States and agencies, and contractors and subcontractors involved in licensed launch activities at Andersen Air Force Base.

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**OFFICE OF COMMERCIAL SPACE TRANSPORTATION**

**FEDERAL AVIATION ADMINISTRATION**

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**By:**

Randy Repcheck, Manager
Safety Authorization Division

**Issued:** October 8, 2021
**Effective:** October 8, 2021