

Licence ref: SR-APP-001002



Space Industry Act 2018

Spaceflight Operator Licence

for

Launch of the Carrier Aircraft

Cosmic Girl

and

Launch of the Launch Vehicle type

LauncherOne

The Civil Aviation Authority

and

Virgin Orbit, LLC

THIS LICENCE IS DATED: 20 December 2022

Licence granted under the Space Industry Act 2018 by

(1) The Civil Aviation Authority, a statutory corporation, whose principal office is located at Civil Aviation Authority, Aviation House, Beehive Ring Road, Crawley, West Sussex, RH6 0YR (“the Regulator”)

to

(2) Virgin Orbit, LLC (Delaware limited liability company with file number 6119618 whose registered office is at 4022 East Conant Street, Long Beach, CA 90808) (“the Licensee”)

1 Terms of Licence

- 1.1 In exercise of the powers conferred by the Space Industry Act 2018 (“the Act”) and the Space Industry Regulations 2021 (“the Regulations”), the Regulator hereby GRANTS the Licensee a licence to carry out the Licensed Activities subject to the terms and conditions contained within this Licence.
- 1.2 The Licence is granted on the date stated at the head of this Licence but the authorisations under this Licence must not be exercised by the Licensee unless the conditions under conditions 3.1 and 3.2 have been met to the satisfaction of the Regulator.
- 1.3 The Licensed Activities are as follows:
 - 1.3.1 launch of the Boeing 747- 400 carrier aircraft registration no. N744VG, known as ‘Cosmic Girl’ (“the Carrier Aircraft”) and the launch vehicle type known as ‘Launcher One’ (“the Launch Vehicle”), by taking off from Spaceport Cornwall, Newquay with the intention of releasing the Launch Vehicle, carrying payloads;
 - 1.3.2 release of the Launch Vehicle from the Carrier Aircraft;
 - 1.3.3 returning the Carrier Aircraft to earth;
 - 1.3.4 operating the Launch Vehicle to carry payloads until the deployment of the payloads from the Launch Vehicle;
 - 1.3.5 carrying out orbital activities in so far as those activities are necessary to comply with Regulation 101.
- 1.4 The Licensee is permitted to carry out two launches by and including 15 January 2023 or such later date as is agreed by the Regulator in writing.
- 1.5 After the launches referred to in term 1.4, the Licensee is permitted to carry out two launches per calendar year but only if the Regulator gives its further permission, having carried out any further reviews it thinks fit, provided however that any launches carried out in accordance with term 1.4 count towards the total number of launches permitted by this term after 15 January 2023.

- 1.6 The Licensee is permitted to load dangerous goods onto the Launch Vehicle and to carry such goods on the Launch Vehicle.
- 1.7 The limit on the amount of the Licensee's liability stipulated at condition 5.1 below will not apply in cases or circumstances where:
 - 1.7.1 the Licensee is liable in respect of gross negligence or wilful misconduct in the performance of its obligations under the Act or the Regulations;
 - 1.7.2 damage or loss is caused as a result of the non-compliance by the Licensee with any condition of this Licence or any requirements under the Act or the Regulations.
- 1.8 The grant of this Licence is not to be construed as a waiver by the Regulator of any failure on the part of the Licensee to comply with any requirement prior to the date of grant.
- 1.9 The grant of this Licence does not in any way imply that the Regulator will grant the Licensee, or any other person, any further licence, or a licence in relation to any other spaceflight activities for which the Licensee may seek a licence in the future.

2 Interpretation

- 2.1 In this Licence:
 - 2.1.1 "Act" means the Space Industry Act 2018;
 - 2.1.2 "launch" has the same meaning as in section 69(1) and (2) of the Act;
 - 2.1.3 "Regulations" means the Space Industry Regulations 2021 and references to a Regulation in this Licence are to be construed accordingly unless otherwise specified;
 - 2.1.4 "Assessment of Environmental Effects" means the Assessment of Environmental Effects prepared by the Licensee in accordance with section 11 of the Act;
 - 2.1.5 "Insurance" means the insurance referred to at conditions 4.1 to 4.3;
 - 2.1.6 "Licence" means this licence;
 - 2.1.7 "Licensed Activities" means the operation of the Carrier Aircraft and Launch Vehicle as defined at Term 1.3 above;
 - 2.1.8 "Oversight and Monitoring Plan" means the Regulator's plan for the oversight and monitoring of the Licensed Activities as provided to the Licensee and as may be updated by the Regulator from time to time;
 - 2.1.9 "Spaceport" means Spaceport Cornwall, Newquay.
- 2.2 Except where the terms are defined in this Licence or context otherwise requires, the words and expressions used in this Licence have the same meaning as they have in the Act or the Regulations.
- 2.3 The Interpretation Act 1978 applies to this Licence as it applies to an Act of Parliament.

3 Conditions Precedent to the Exercise of the Privileges of this Licence

- 3.1 Before each occasion upon which the Licensee is entitled to perform the Licensed Activities in accordance with this Licence, the Licensee must demonstrate to the satisfaction of the Regulator that:
- 3.1.1 it has taken out the insurance specified at conditions 4.1 to 4.3 below;
 - 3.1.2 it has appointed an individual, or individuals, to undertake the roles of accountable manager, launch director, safety manager, security manager and training manager;
 - 3.1.3 it or another licensee has made a proposal to the Secretary of State for the designation of a space site security restricted area and controlled area in accordance with Regulation 174 and that the areas have been so designated by the Secretary of State in accordance with that Regulation;
 - 3.1.4 it has made a proposal to the Secretary of State and the US Government for an area to be designated as a segregated area in accordance with Regulation 192 and that the area has been designated in accordance with that Regulation;
 - 3.1.5 the airspace arrangements proposed by the Licensee (and the subject of the Regulator's airspace change decision for each launch) have been implemented by the relevant air navigation service provider for that airspace;
 - 3.1.6 the Licensee has all necessary authorisations from the Federal Aviation Administration for the Licensed Activities and that they remain valid whilst those activities are being carried out;
 - 3.1.7 the Licensee has informed the Regulator in writing of its final plans for the range, including the identification of any hazard areas, and that they are consistent with the Licensee's safety case.
- 3.2 Before each occasion upon which the Licensed Activities can be carried out, the Regulator must be satisfied that any arrangements with other countries that the Secretary of State considers necessary in order for the Regulator to be satisfied that the Licensed Activities remain not contrary to the national interest, have been concluded.
- 3.3 The Regulator is not to be taken to be satisfied as to the matters set out in term 1.5 and in conditions 3.1 and 3.2 unless it has confirmed so to the Licensee in writing.

4 Insurance Conditions

- 4.1 The Licensee must insure and continue to insure itself and, as additional named insureds, His Majesty's Government in the United Kingdom and the Regulator for the amount stipulated by the Regulator in condition 5.1 below, against all liabilities that may arise in respect of death, personal injury, damage or loss suffered by third parties in the United Kingdom or elsewhere as a result of or in

connection with those parts of the Licensed Activities referred to in terms 1.3.1 to 1.3.4 inclusive.

- 4.2 The Licensee must insure and continue to insure itself for claims resulting from pre-flight ground operations occurring at the Spaceport, or at any other aerodrome in the UK, in connection with, or for the purpose of, making preparations for a launch. The amount of the insurance must be for \$US 3,000,000 or such other sum as is agreed by the Regulator.
- 4.3 The insurance referred to in conditions 4.1 and 4.2 must also provide the same cover for:
 - 4.3.1 Cornwall Airport Limited, any person procuring the launch of a payload on the Launch Vehicle, and the respective governments of the persons procuring those launches as additional named insureds except as otherwise agreed by the Regulator as a result of any persons having contractually agreed otherwise; and
 - 4.3.2 As additional insureds, the persons or bodies listed in section 36(2) of the Act, the Licensee's contractors and subcontractors, any persons covered by cross-waiver agreements with the Licensee, and any range control service providers contracted by the Licensee except as otherwise agreed by the Regulator as a result of any persons having contractually agreed otherwise.
- 4.4 The insurance referred to in conditions 4.1 to 4.3 above must be in place for a period of at least 30 days after the launch or for a period of at least 30 days after deployment of the payloads from the Launch Vehicle, whichever is the later.
- 4.5 The Licensee must provide copies of the Insurance to the Regulator upon demand at any point during the Licensed Activities together with evidence of payment of the premiums in respect of the Insurance.
- 4.6 The Licensee agrees that the Secretary of State or the Regulator may at any time consult advisers in relation to the Insurance on a confidential basis either within His Majesty's Government or external to His Majesty's Government or both, and the Licensee agrees that such advice may be sought by the Secretary of State or the Regulator without the need for the Secretary of State or the Regulator or such advisers to agree a non-disclosure agreement with the Licensee provided that all external advisers are subject to confidentiality requirements owed to either the Regulator or the Secretary of State.
- 4.7 The Licensee must not, without the prior written consent of the Regulator and between the time that the Carrier Aircraft and Launch Vehicle are in the UK in preparation for the carrying out of the Licensed Activities until the periods referred to in Condition 4.4 have expired, vary any provisions, terms and conditions of the Insurance or any part of it relating to the Licensed Activities or cancel the Insurance, or do anything that would enable the insurers to avoid the Insurance during such period.
- 4.8 The Licensee must immediately notify the Regulator in writing of any event or other circumstance which may give rise to a claim under the Insurance.

5 Indemnity Conditions

- 5.1 The amount of the Licensee's liability in respect of:
- 5.1.1 injury or damage arising out of spaceflight activities under section 34(2) of the Act;
 - 5.1.2 any third party liability arising out of spaceflight activities which may be incurred by the Licensee in respect of the death of or bodily injury to any person or damage to property not covered by section 34(2) of the Act; and
 - 5.1.3 the indemnity in favour of His Majesty's Government in the United Kingdom or the other specified persons or bodies contained in section 36 of the Act in respect of the Licensed Activities,

is limited to the sum of **\$US 250,000,000** (or such other sum as may be stipulated in writing by the Regulator from time to time).

- 5.2 Where, as a result of a breach of a condition, or of the Act or Regulations by the Licensee, the Regulator incurs costs and expenses in connection with remedying the breach or enforcing compliance by the Licensee with the Act or Regulations or the condition, the Licensee must indemnify the Regulator in respect of any such costs and expenses, including legal costs (calculated on a full indemnity basis), court costs, fees and expenses and all other professional costs, fees and expenses, subject to a maximum limit of **\$US 250,000,000**.

6 General Conditions

- 6.1 The Licensee must comply with the requirements set out within the Oversight and Monitoring Plan.
- 6.2 In the event of an aborted launch, whereby the Launch Vehicle is not released from the Carrier Aircraft, the Licensee must use all reasonable endeavours to land the Carrier Aircraft at the Spaceport or, if that is not possible, at MOD Boscombe Down aerodrome (or at such other aerodrome as may be identified in its safety case as an alternate aerodrome for such an event).
- 6.3 The Licensee must inform the Regulator in writing as soon as reasonably practicable if the Federal Aviation Administration suspends, varies or revokes any of the authorisations it has issued in relation to the Licensed Activities and referred to in condition 3.1.6.
- 6.4 The Licensee must afford all reasonable assistance, co-operation and compliance as may be requested or required by the Regulator in the exercise of the Regulator's functions under this Licence, the Regulations or the Act.

7 Environmental Conditions

- 7.1 Before the end of each calendar year (or other date agreed in writing by the Regulator), the Licensee must purchase credits from a recognised offset provider for projects that have been independently verified as meeting an accredited carbon offsetting code in the United Kingdom and are sufficient to offset the calculated greenhouse gas emissions attributable to the carrying out of the

Licensed Activities (with the exception of the activities in term 1.3.5) in that year. The Licensee must provide the Regulator with such information as it may reasonably require to ensure compliance with this condition.

7.2 The Regulator may require the Licensee to carry out a new or revised Assessment of Environmental Effects where there has been or will be any material change in any of the information provided to the Regulator by or on behalf of the Licensee, whether in or with the application for the Licence or after the Licence has been granted.

8 Termination, revocation, variation and suspension terms

8.1 The Regulator may revoke, vary or suspend the Licence (including any conditions attached to the Licence) where, it appears to the Regulator:

8.1.1 there has been any material change in any of the information provided to the Regulator by or on behalf of the Licensee, whether in or with the application for the Licence or after the Licence has been granted; or

8.1.2 the Licensee has breached a condition of this Licence.

8.2 The termination of this Licence for whatever reason will not affect the obligations of the Licensee (or former Licensee) under its provisions.

Signed for and on behalf of the Regulator:

Signed: Colin Macleod

Name: Colin Macleod

Position: Head of UK Space Regulation

Attachments

Oversight and Monitoring Plan