

**Permission Ref: HIT/ANO/SR75Rocket**



**Air Navigation Order 2016**

**ANO Large Rocket Permission**

for

**Hylmpulse Technologies GmbH**

**The Civil Aviation Authority**

and

**Hylmpulse Technologies GmbH**

**Large Rocket Permission under Articles 96(8) and 269 of the Air Navigation Order 2016**

**UK Civil Aviation Authority**

**HIT/ANO/SR75Rocket**



[REDACTED]	Email: [REDACTED] [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Date: 28 July 2023

**AIR NAVIGATION ORDER 2016**

The Civil Aviation Authority (“CAA”), in exercise of its powers under Articles 96(8) and 269 of the Air Navigation Order 2016 (‘the Order’) (as amended), and subject to the conditions referred to in this permission, grants permission to **Hylmpulse Technologies GmbH** (“the launch operator”) to enable a rocket to be launched from the United Kingdom by that person once, between and during the dates, and during the times, referred to in paragraph 6.

***This permission is for one launch only.***

**1. Interpretation**

In this permission the following terms have the following meanings:

- a) *accident* - includes any fortuitous or unexpected event by which the safety of the rocket or any person or property is threatened, or actually occurs;
- b) *application* – means the application submitted by the launch operator to the CAA for a large rocket permission under article 96(8) of the Order, relating to this permission;
- c) *flight characteristics* – means the actual apogee, launch azimuth, downrange distance and impact point of the rocket;
- d) *launch* – means the launch of the rocket;

- e) *launch site* – means the **SaxaVord** launch site for the rocket, as identified by the launch operator in the application;
- f) *occurrence* – means any fortuitous or unexpected event arising out of, or in the course of, the activities, or preparation for those activities, permitted by this permission and occurring in or over the United Kingdom, which, if not corrected or addressed, could result in an accident;
- g) *occurrence report* – means a report complying with paragraph 5;
- h) *rocket* – means the **large suborbital sounding rocket SR75**, the details of which are identified by the launch operator in its application safety case;
- i) *safety case* – means the safety case report submitted by the launch operator in support of, and as required by, its application to the CAA under article 96(8) of the Order for this permission, and as accepted by the CAA;
- j) *working day* – means any Monday to Friday in any week other than a bank holiday.

## **2. Conditions Precedent to the Exercise of the Privileges of this Permission**

2.1 Before the launch operator is entitled to perform the launch in accordance with this Permission, the launch operator must ensure that:

### ***Prior to launch***

2.1.1 it has taken out the insurance specified at conditions 4.1 to 4.4 below;

2.1.2 there are airspace arrangements for the launch for:

- (a) warning other airspace users of the launch, and
- (b) containing the launch within a defined area,

which have been accepted by the CAA and implemented by the relevant Air Navigation Service Provider for that airspace;

2.1.3 the arrangements for maritime warnings to vessels proposed by the launch operator in the safety case for the launch have been implemented by the relevant marine authority;

2.1.4 that if the launch operator proposes any changes to the safety case after the permission was granted, these changes must have been accepted by the CAA in writing. If such written acceptance has not been received, the launch operator must not proceed with the launch;

2.1.5 it notifies the CAA in writing of the planned launch date at least 14 working days (or within any alternative timeframe as agreed in writing by the CAA) in advance of the planned launch date, and of any changes to that date; and

2.1.6 it notifies the CAA in writing that all conditions precedent in this permission have been met and must not launch the rocket unless and until the CAA has confirmed in writing that it is satisfied that all such conditions have been met.

### **3. General Conditions**

3.1 The launch operator must comply with the following general conditions when carrying out the launch authorised by this permission:

#### ***Launch operations***

3.1.1 the rocket must only be launched in accordance with the launch operator's safety case as accepted by the CAA for this purpose of this permission;

3.1.2 the launch operator must make and keep the following records:

- (a) records of any tests, rehearsals and safety reviews set out in the operator's safety case that are necessary to confirm that the rocket is ready to launch;
- (b) records of key events during the countdown on the day of the launch, including those relating to meeting the launch operator's criteria for launch and the final authorisation for launch;
- (c) records made during the launch and flight of the rocket, particularly those relating to data and transmissions received from the rocket;

3.1.3 the launch operator must continue to co-operate with the CAA and its representatives in terms of the following:

- (a) information sharing, at the request of the CAA, between the CAA and the launch operator, including technical, safety and operational information and records;
- (b) on notification from the CAA, arranging access at reasonable times to authorised representatives of the CAA to the launch operator's safety and technical staff and equipment and facilities at the launch site;

3.1.4 As necessary, the launch operator must report any occurrence in accordance with the conditions at paragraph 5;

#### ***Post-launch and recovery***

3.1.5 the launch operator is to notify the CAA of the date and time when the launch took place and when it was concluded;

3.1.6 within a reasonable time following the launch, the launch operator is to submit a post launch report to the CAA summarising:

- (a) What is known about the actual flight path of the rocket, its performance and flight characteristics during the flight;
- (b) a description, as far as it is known from the flight data and other results, of the rocket's conformance to the trajectory as modelled in the launch operator's pre-launch flight safety analysis;
- (c) the effectiveness of any remote monitoring (tracking, telemetry etc.) of the rocket during its launch, flight and recovery;

(d) any anomalies on the large rocket that arose during the launch activity, whether or not they caused an adverse safety outcome;

(f) any information apparent to the launch operator or the provider of the launch site involving exposure to risk of members of the public (including airspace and marine users) greater than that envisaged in the safety case or the launch operator's flight safety analysis;

(g) the results of the launch operator's activity to locate and recover parts of the rocket that fell to the surface.

#### **4. Insurance Conditions**

4.1 The launch operator must insure and continue to insure itself for third-party claims resulting from injury and damage to property in connection with the launch and flight of the rocket. The minimum amount of insurance to be held is [REDACTED]

4.2 The launch operator must provide copies of the insurance documents to the CAA upon demand at any point during the term of the permission together with evidence of payment of the premiums in respect of the insurance.

4.3 The launch operator must not, without the prior written consent of the CAA from the time that the large rocket is in the UK at the launch site in preparation for the carrying out of the permissioned launch activity, vary any provisions, terms and conditions of the Insurance or any part of it relating to the launch or cancel the insurance without the CAA's consent, or do anything that would enable the insurers to void the insurance during such period.

4.4 The launch operator must immediately notify the CAA in writing of any event or other circumstance which may give rise to a claim under the insurance.

#### **5. Occurrence Reporting**

5.1 The launch operator must report any accident or occurrence promptly to the CAA, to the CAA's email address referred to below, or such other email address as the CAA may notify to the operator, and in any event within 72 hours of the time at which the operator became aware of the accident or occurrence, by making an occurrence report in writing.

5.2 The occurrence report must include—

- (i) the name and address of the operator;
- (ii) the role of the person within the operator's organisation who has prepared the occurrence report on the operator's behalf;
- (iii) the date of the occurrence report and the time when it was made;
- (iv) the date and time of the accident or occurrence and where it took place;
- (v) if any person has died or sustained an injury as a result of the accident or occurrence, information as to—
  - (a) the number of such persons who have died;
  - (b) the number of such persons who are injured;
  - (c) a description of the injuries of such persons, if known, including any injuries which resulted in death;

(vi) a description the role or capacity of the person(s) referred to in (v) or whether the person(s) is a member of the public; and

(vii) a short description of the occurrence and the circumstances in which it happened.

## 6. Term of the permission

6.1 This Permission is valid for one launch only, on one of the following dates (inclusive), unless suspended or revoked, and during the following times on each such day, except as otherwise approved or as otherwise directed by the CAA:

**From 01 December 2023 to 30 November 2024**

**Between 00:00 hours and 23:59 hours on each such day**

**Role** Policy Manager Space Regulation

**Name** Rosemary Whitbread



**Signed**

**Date** 28<sup>th</sup> July 2023

**Civil Aviation Authority**

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