
DRAFT STATUTORY INSTRUMENTS

2021 No.

**The Spaceflight Activities (Investigation of
Spaceflight Accidents) Regulations 2021**

PART 1

General

Citation, commencement and extent

1.—(1) These Regulations may be cited as the Spaceflight Activities (Investigation of Spaceflight Accidents) Regulations 2021 and come into force on the twenty-first day after the day on which they are made.

(2) These Regulations extend to England and Wales, Scotland and Northern Ireland.

Application of these Regulations

2. These Regulations apply to the investigation of spaceflight accidents⁽¹⁾ occurring—

- (a) in or over the United Kingdom, and
- (b) elsewhere, if the circumstances set out in regulation 16 apply.

Interpretation

3. In these Regulations—

“the 1986 Act” means the Outer Space Act 1986⁽²⁾;

“the 2018 Act” means the Space Industry Act 2018;

“accredited representative” means—

- (a) an inspector who is appointed by the Chief Inspector, on the basis of their qualifications, for the purpose of participating in an investigation conducted by another state, or
- (b) an individual appointed by one or more states, on the basis of their qualifications, for the purpose of participating in a safety investigation conducted by SAIA;

“adviser” means an individual appointed, on the basis of their qualifications—

- (a) by a state to assist an accredited representative in a safety investigation,
- (b) by the Chief Inspector to assist an accredited representative appointed by the United Kingdom to participate in an investigation by another state, or
- (c) by, or at the invitation of, the Chief Inspector to assist an investigator-in-charge to conduct a safety investigation;

(1) The definition of “accident” in section 20(3) (investigation of accidents) of the 2018 Act is wide and includes unexpected events which threaten the safety of any spacecraft or person, whether or not any person is injured or the spacecraft is damaged. Launch vehicles referred to in these Regulations are spacecraft.

(2) 1986 c. 38.

“cabin crew” means individuals who take part in spaceflight activities on board a launch vehicle to perform duties assigned by the spaceflight operator or the pilot in command of the launch vehicle, but who are not members of the flight crew;

“Chief Inspector” means the Chief Inspector of Spaceflight Accidents appointed under regulation 6(2);

“crew” means—

- (a) members of the flight crew, and
- (b) members of the cabin crew;

“fatally injured” means a person sustaining an injury in a spaceflight accident which results in that person’s death within 30 days of the date of the accident;

“flight crew” means individuals who take part in spaceflight activities on board a launch vehicle as a pilot or flight engineer of the launch vehicle;

“injury”—

- (a) except in regulation 9(2), does not include injury from natural causes, self-inflicted injury or injuries inflicted by another individual, and
- (b) in regulation 9(2), includes all injuries;

“Inspector” means an individual appointed as an Inspector of Spaceflight Accidents under regulation 6(1);

“international body” means the European Space Agency or other international body involved with spaceflight activities;

“Investigating Inspector” means the investigator-in-charge and any other Inspector who is assisting the investigator-in-charge with a safety investigation by virtue of regulation 6(6);

“investigation” means a process conducted, by a body other than SAIA, for the purposes of spaceflight accident prevention, which—

- (a) includes—
 - (i) the gathering and analysis of information,
 - (ii) the drawing of conclusions (including the determination of causes and contributing factors), and
 - (iii) when appropriate, the making of recommendations on spaceflight accident prevention, and
- (b) relates to an accident arising out of or in the course of spaceflight activities;

“investigator-in-charge” means an individual charged, on the basis of that individual’s qualifications, with responsibility for the organisation, conduct and control of a safety investigation;

“launch operator licence” means an operator licence⁽³⁾ which authorises a person to carry out spaceflight activities that include launching a launch vehicle or launching a carrier aircraft and a launch vehicle;

“launch vehicle” means—

- (a) a craft to which section 1(5) of the 2018 Act applies and the component parts of that craft, or
- (b) a space object⁽⁴⁾ which is a vehicle and the component parts of that vehicle,

⁽³⁾ See section 3(2) of the Space Industry Act 2018 for the definition of “operator licence”.

⁽⁴⁾ Space object is defined in section 69(1) of the Space Industry Act 2018, by reference to the Outer Space Act 1986 (c. 38). The definition is given in section 13(1) of that Act. It “includes the component parts of a space object, its launch vehicle and the component parts of that”.

that is used for the purpose of the proposed spaceflight activities or the operator’s spaceflight activities, as applicable, but does not include a payload carried by the launch vehicle;

“licensee” means the holder of an operator licence, a spaceport licence or a range control licence regulating the spaceflight activities (which the spaceflight accident arose out of or in the course of) and a person who would be required to hold such a licence but for section 4 or regulations made under section 7(4) of the 2018 Act;

“operation of a launch vehicle” means—

- (a) in the case of a launch vehicle which has a human occupant, operation which takes place between the time a human occupant boards the launch vehicle with the intention of being carried on it during the proposed spaceflight activity until such time as all human occupants have disembarked, or
- (b) in the case of a launch vehicle which does not have a human occupant, operation which takes place between the time the launch vehicle is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the propulsion system is shut down,

and for these purposes, “human occupant” means a member of the crew or a spaceflight participant;

“operator” means the holder of an operator licence;

“operator’s spaceflight activities” means spaceflight activities which are authorised by an operator licence and which are any of—

- (a) launching a launch vehicle;
- (b) launching a carrier aircraft;
- (c) operating the launch vehicle or a carrier aircraft whose launch is authorised by the operator licence, in so far as necessary for one or more of the following assignments—
 - (i) to carry a spaceflight participant,
 - (ii) to carry a payload until its release or separation from the launch vehicle,
 - (iii) to carry out sub-orbital activities, or
 - (iv) to return to earth and complete its flight,including orbital activities only in so far as they are necessary to complete such an assignment;
- (d) operating a launch vehicle whose launch is not authorised by the operator licence, in order to cause that vehicle to land in the United Kingdom;

“orbital activities” means spaceflight activities using a launch vehicle which has reached a stable orbit;

“person involved” means—

- (a) a licensee;
- (b) the owner of the launch vehicle;
- (c) a person who designed the launch vehicle;
- (d) a person who manufactured the launch vehicle;
- (e) a person responsible for the maintenance of the launch vehicle;
- (f) a person responsible for training the crew;
- (g) a person responsible for the provision of air traffic control, flight information or range control services who has provided services for the launch vehicle;
- (h) a person responsible in any way for the launch or operation of the launch vehicle;

- (i) a member of the crew;
- (j) a spaceflight participant;
- (k) the regulator;
- (l) any international body or national body involved with the spaceflight activities which gave rise to the spaceflight accident or in the course of which the spaceflight accident occurred;

“pilot in command” means the pilot who—

- (a) takes part in the operator’s spaceflight activities on board the launch vehicle, and
- (b) is designated by the spaceflight operator as being in command and charged with the safe conduct of its flight, without being under the direction of any other pilot;

“police officer” means any person who is a member of—

- (a) a police force,
- (b) the Police Service of Northern Ireland, or
- (c) the Police Service of Northern Ireland Reserve;

“property” means a launch vehicle, its contents or wreckage;

“proposed spaceflight activities” means any of the spaceflight activities mentioned in paragraphs (a) to (d) of the definition of “operator’s spaceflight activities” which would be authorised by the operator licence that the applicant is applying for, if granted;

“relatives” includes—

- (a) a spouse or civil partner, or a person whose relationship with the victim has the characteristics of the relationship between spouses;
- (b) a person related to the victim by blood or by adoption;

“return operator licence” means an operator licence which is not a launch operator licence and which authorises a person to operate a launch vehicle, launched elsewhere than the United Kingdom, in order to cause that vehicle to land in the United Kingdom;

“safety investigation” means a process conducted by SAIA for the purposes of spaceflight accident prevention, which—

- (a) includes the gathering and analysis of information,
- (b) the drawing of conclusions, including the determination of causes and contributing factors, and
- (c) when appropriate, the making of safety recommendations;

“safety recommendation” means a proposal of SAIA, based on information derived from a safety investigation or other sources such as safety studies, made with the intention of preventing spaceflight accidents;

“SAIA” means the space accident investigation authority nominated by the Secretary of State under regulation 5;

“sensitive safety information” has the meaning given in regulation 29;

“serious injury” means an injury which is sustained by an individual in a spaceflight accident which involves—

- (a) hospitalisation for more than 48 hours, commencing within 7 days beginning with the day after the day on which the injury was received;
- (b) lacerations which cause severe haemorrhage, nerve, muscle or tendon damage;
- (c) injury to any internal organ;

- (d) second or third degree burns, or any burns affecting more than 5 per cent of the body surface;
- (e) exposure to infectious substances or harmful radiation, which has been verified by a medical doctor;

“serious spaceflight accident” means—

- (a) a spaceflight accident occurring in the course of the operation of a launch vehicle in which an individual is fatally or seriously injured, or
- (b) a spaceflight accident occurring during the course of spaceflight activities where there was a high probability that such injury would occur, as a result of that accident;

“spaceflight accident” means an accident—

- (a) arising out of, or in the course of, spaceflight activities, and
- (b) occurring—
 - (i) in or over the United Kingdom, or
 - (ii) elsewhere, if any of the circumstances referred to in regulation 16 apply;

“spaceflight operator” means the holder of a launch operator licence or return operator licence;

“spaceflight participant” means an individual, other than a member of the crew, who is to be carried on board the launch vehicle with the spaceflight operator’s permission;

“stable orbit” means an orbit where a launch vehicle—

- (a) has started to travel in an orbit of a minimum perigee of 130 kilometres taking account of any natural influences such as the forces of drag acting on that vehicle, and
- (b) is capable of continuing to travel in that orbit for at least one orbit of the earth;

“state” includes any territory, region or other place;

“training” means training provided to an individual in accordance with training regulations.

Service of notices and other documents

4.—(1) Any notice or other document required or authorised by these Regulations to be served on any person may be served by—

- (a) delivering it to that person in person,
- (b) leaving it at that person’s proper address, or
- (c) sending it by post or by electronic means to that person’s proper address.

(2) In the case of a body corporate, any such notice or document may be served on a director of that body or on any other officer or employee of that body (“authorised person”) who is authorised to accept service of such notices or documents on its behalf.

(3) For the purposes of this regulation, “proper address” means—

- (a) in the case of a body corporate or its director or authorised person—
 - (i) the registered or principal office of that body, or
 - (ii) the email address of the secretary or clerk of that body, the director or the authorised person;
- (b) in any other case, a person’s last known address, which includes an email address.

(4) In this regulation references to an email address are to an email address which has not been withdrawn for the purposes of service.

Draft Legislation: This is a draft item of legislation. This draft has since been made as a UK Statutory Instrument: *The Spaceflight Activities (Investigation of Spaceflight Accidents) Regulations 2021 No. 793*
