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DRAFT STATUTORY INSTRUMENTS

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**2021 No.**

**The Space Industry Regulations 2021**

**PART 7**

Training, qualifications and medical fitness

CHAPTER 1

General

**Interpretation**

**55.** In this Part—

“competence assessment” has the meaning given in regulation 69(3)(c)(iii);

“ICAO compliant”, in relation to a licence, means a licence which complies with Annex 1 to the Convention on International Civil Aviation signed on behalf of the Government of the United Kingdom at Chicago on 7th December 1944, and is issued by the licensing authority in a country which is a party to that Convention;

“licensee” means a person who holds a launch operator licence, a return operator licence, a spaceport licence or a range control licence under the Act;

“medical assessment” has the meaning given in regulation 72(5);

“medical examination” has the meaning given in regulation 72(5);

“normal conditions” in relation to a flight means conditions in which—

- (a) all launch vehicle aerodynamic parameters are as expected,
- (b) all the internal and external systems of the launch vehicle perform exactly as planned, and
- (c) there are no external perturbing influences other than atmospheric drag and gravity;

“relevant individual” has the meaning given in regulation 58(1);

“relevant requirement” has the meaning given in regulation 65(3);

“safety-critical function” means any function the performance of which is essential for preventing serious or fatal injuries as a result of the operator’s spaceflight activities;

“simulated training device” has the meaning given in regulation 71(2);

“specified capacity” means a capacity which is specified for the purposes of section 18(4)(a) by regulation 57(1);

“specified role” means a role which is specified for the purposes of section 18(4)(b) by regulation 56(1);

“sub-orbital aircraft” means a craft to which section 1(5) applies which can derive support in the atmosphere from the reactions of the air other than reactions of the air against the earth’s surface.

### Specified roles and criteria

56.—(1) The following roles are specified for the purposes of section 18(4)(b)—

- (a) the launch director;
- (b) the flight termination personnel;
- (c) the flight crew and remote pilots;
- (d) the sub-orbital aircraft engineer;
- (e) the range operations manager;
- (f) the range safety manager.

(2) The criteria set out in Part 1 of Schedule 3 are specified criteria for the purposes of section 18(4) as follows—

- (a) the criteria in paragraphs 1 to 6 are specified for the role of launch director;
- (b) the criteria in paragraphs 8 to 12 are specified for the role of flight termination personnel;
- (c) the criteria in paragraphs 13 to 20 are specified for the role of flight crew and remote pilots;
- (d) the criteria in paragraph 21 are specified for the role of sub-orbital aircraft engineer;
- (e) the criteria in paragraphs 22 to 24 are specified for the role of range operations manager;
- (f) the criteria in paragraphs 25 to 29 are specified for the role of range safety manager.

### Specified capacities and criteria

57.—(1) “Spaceflight participant” is a specified capacity for the purposes of section 18(4)(a).

(2) The criteria in paragraph 52 of Schedule 3 are specified criteria in relation to spaceflight participants for the purposes of section 18(4).

### Responsibility of licensees

58.—(1) The licensee must ensure that—

- (a) individuals who perform any specified role or have a specified capacity (“relevant individuals”) satisfy—
  - (i) the conditions set out in paragraph (2), or
  - (ii) if paragraph (4) applies in relation to the individual concerned, the conditions set out in paragraph (5);
- (b) individuals who participate in, or are otherwise engaged in connection with, the licensed activities but do not perform a specified role or have a specified capacity, satisfy the conditions set out in paragraph (3).

(2) An individual (“A”) satisfies the conditions in this paragraph if A—

- (a) has the qualifications, skills, experience and competencies required by this Part,
- (b) has received training appropriate to A’s role or capacity which—
  - (i) enables A to satisfy any criteria specified for that role by regulation 56(2) or for that capacity by regulation 57(2), and
  - (ii) otherwise complies with the requirements set out in this Part, and
- (c) is medically fit to perform any duties assigned to A.

(3) An individual (“B”) satisfies the conditions in this paragraph if B—

- (a) has participated in a training programme, including instruction on safety, appropriate to B’s role,

- (b) has been assessed as being competent to perform B’s duties, and
  - (c) is medically fit to perform B’s duties.
- (4) This paragraph applies to an individual who is taking part in licensed activities as a remote pilot for a spaceflight operator who holds a return operator licence but no other licence under the Act.
- (5) An individual (“C”) satisfies the conditions in this paragraph if C—
- (a) has been assessed by a competent authority in the United Kingdom, or in a jurisdiction outside the United Kingdom, as being competent to perform the duties of a remote pilot in relation to the type of launch vehicle for which C has that role, and
  - (b) is medically fit to perform those duties.
- (6) For these purposes, subject to paragraph (9), the licensee must—
- (a) establish and maintain a training programme which complies with the requirements in regulation 69,
  - (b) prepare and maintain a training manual which complies with the requirements in regulation 66, and
  - (c) ensure that relevant individuals are medically fit to perform their duties in accordance with regulation 72(1).
- (7) The licensee may satisfy the obligation in paragraph (1), in relation to any relevant individuals who are not its employees or spaceflight participants, by checking that—
- (a) the individual concerned (“RI”)—
    - (i) satisfies the condition in paragraph (2)(a), and
    - (ii) has received any training required to ensure that RI satisfies the conditions in paragraph (2)(a), from RI’s employer, and
  - (b) RI is medically fit to perform RI’s duties and, where regulation 72 applies, has been certified as medically fit in accordance with that regulation.
- (8) The licensee must have in place a training management system which—
- (a) is proportionate to the scale, nature and complexity of the licensed activities and the training programme;
  - (b) sets out clearly defined lines of responsibility and accountability for training, including—
    - (i) a direct accountability for training on the part of senior management of the licensee, and
    - (ii) the persons to whom and for whom the training manager is accountable;
  - (c) includes the means of measuring and verifying the effectiveness of the training programme;
  - (d) provides the means of monitoring the provision of any services or equipment by a third party contractor under regulation 59.
- (9) A return operator licensee is not required to appoint a training manager or comply with paragraph (6)(a) or (b), or regulations 66 and 68 to 71.

### **Training resources**

**59.**—(1) A licensee must ensure that it has adequate personnel, facilities and equipment to satisfy its obligations under this Part.

(2) If the conditions set out in paragraph (4) are satisfied, a licensee may enter into arrangements with a third party—

- (a) to provide personnel, facilities or equipment for use in the licensee’s training programme,

- (b) to perform any part of its training programme, or
  - (c) to carry out medical assessments and medical examinations.
- (3) Before entering into any such arrangements with a third party, the licensee must satisfy itself that the personnel, services, equipment or other facilities to be provided by the third party satisfy the requirements of this Part.
- (4) The conditions referred to in paragraph (2) are that—
- (a) the arrangements between the licensee and the third party ensure that the licensee retains full control over—
    - (i) the content of any service provided by the third party, and the way in which that service is provided, and
    - (ii) what equipment or facilities are to be provided by the third party, and the condition of that equipment or those facilities;
  - (b) the arrangements between the licensee and the third party enable the licensee to provide access to the regulator, or any person authorised by the regulator, to any records or other material held by the third party which relates to the licensed activities;
  - (c) the arrangements between the licensee and the third party are set out in full in a contract between them.
- (5) The use by the licensee of a third party to provide services to the licensee for the purpose of the licensee's obligations under the Act, these Regulations and its licence does not relieve the licensee from any liability in relation to those obligations.

## Records

**60.**—(1) The licensee must keep the records specified in paragraph (2) for a period of at least two years beginning on the first day of the calendar year following the year in which the records were created.

- (2) The records are—
- (a) the training manual, including any previous versions of the training manual, and all associated documents, including all documents referred to in the training manual;
  - (b) records relating to individual participants in the training, including results of competence assessments, and details of the training received by each individual participant;
  - (c) records relating to any mission rehearsals carried out;
  - (d) details of the training equipment used;
  - (e) records of the instructors employed on the training programme;
  - (f) records of any arrangements made with a third party to provide services or equipment to the licensee under regulation 59(2);
  - (g) a record of any mission rehearsal which took place in accordance with regulation 70(5), including details of every person who participated in the rehearsal, and of any problems which arose during the rehearsal;
  - (h) the records kept under regulation 77 in relation to medical examinations and medical assessments;
  - (i) records of the training given to spaceflight participants;
  - (j) copies of any consent form signed by all crew members and spaceflight participants in accordance with section 17(2);

- (k) any other records needed for the licensee to demonstrate that its training activity has been conducted in accordance with the training manual, any conditions on its licence, and these Regulations.