STATUTORY INSTRUMENTS

2021 No. 792

The Space Industry Regulations 2021

PART 7

Training, qualifications and medical fitness

CHAPTER 5

Medical Fitness

Medical obligations

- 72.—(1) The licensee must ensure that—
 - (a) all the crew of the launch vehicle, and remote pilots taking part in spaceflight activities, hold a valid medical certificate as required by regulation 73(1);
 - (b) none of the crew has suffered a decrease in fitness due to illness or injury since the date of issue of their medical certificate which might affect their ability to—
 - (i) withstand the physical and mental rigours of spaceflight;
 - (ii) perform safety-critical functions reliably during the spaceflight activities;
 - (iii) carry out any emergency procedures which may be required during the spaceflight activities, including the evacuation of the launch vehicle;
 - (c) no person takes part in spaceflight activities, either as a crew member or a spaceflight participant, if that person is not medically fit to fly;
 - (d) no person participates in the licensed activities if they are not fit to do so.
- (2) The procedures established by the licensee to ensure that it satisfies its obligations under paragraph (1) may include—
 - (a) medical examinations and medical assessments by an approved aeromedical examiner,
 - (b) requirements for the crew and remote pilots who hold valid medical certificates to complete self-declarations of fitness, and
 - (c) requirements for individuals who do not perform a specified role to report to the licensee on any occasion when they are not fit to perform their duties.
- (3) For the purposes of paragraph (2), every crew member and remote pilot must submit to such a medical examination or medical assessment when required by the spaceflight operator to do so.
 - (4) The procedures referred to in paragraph (2) must be completed before—
 - (a) a crew member performs any duty on board a launch vehicle, and
 - (b) a remote pilot takes control of a launch vehicle.
 - (5) In this Chapter—
 - "approved aeromedical examiner" means an individual who—

- (a) is qualified and holds a valid licence to practise medicine from the General Medical Council,
- (b) has qualifications in aviation or space medicine, and
- (c) has been approved by the regulator for the purposes of carrying out medical assessments or medical examinations for the purposes of these Regulations;
- "approved medical assessor" means an individual employed by the regulator who—
- (a) is qualified and holds a valid licence to practise medicine from the General Medical Council,
- (b) has qualifications in aviation or space medicine, and
- (c) has been authorised by the regulator for the purposes of regulations 73(5) and 74(5);
- "medical assessment" means the conclusion on the medical fitness of an individual based on evaluation of that individual's medical history, medical examinations and medical tests;
- "medical examination" means a physical inspection, palpation, percussion, auscultation or other means of investigation, especially for determining medical fitness or diagnosing disease.

Certificates and confirmation of medical fitness

- 73.—(1) No individual may take part in any spaceflight activities on board a launch vehicle, or training for spaceflight activities which takes place on board a launch vehicle, unless that individual—
 - (a) in the case of a crew member or remote pilot, holds a valid medical certificate issued by an approved aeromedical examiner;
 - (b) in the case of a spaceflight participant, has been confirmed as being medically fit to fly by an approved aeromedical examiner.
- (2) An approved aeromedical examiner may only issue a medical certificate under paragraph (1), or confirm that a spaceflight participant is medically fit to fly, if—
 - (a) the examiner has carried out a medical examination of the applicant and an assessment of that individual's medical history, and
 - (b) following that assessment and examination, the examiner is satisfied that the individual concerned is medically fit—
 - (i) to participate in the spaceflight activities proposed for that individual, and
 - (ii) to carry out that individual's duties, if any, in relation to those activities.
- (3) In determining whether an individual is medically fit for the purposes of paragraph (2)(b), the approved aeromedical examiner must take into account any operational or environmental conditions which—
 - (a) the spaceflight operator has identified as being likely to apply in relation to the spaceflight activities in which the individual would be participating or acting as a crew member, and
 - (b) are relevant to the individual's state of fitness.
- (4) An approved aeromedical examiner must not determine that a crew member or remote pilot is medically fit for the purposes of paragraph (2)(b), unless—
 - (a) that individual meets—
 - (i) in the case of a member of the flight crew, other than a balloon pilot, or a remote pilot, the requirements for a Class 1 certificate for single pilot commercial air transport operations carrying passengers set out in section 2 of Sub-Part B of Annex IV to the Aircrew Regulation,

- (ii) in the case of a member of the cabin crew or a balloon pilot, the requirements for a Class 2 certificate set out in that section of Sub-Part B of Annex IV to the Aircrew Regulation, and
- (iii) any medical requirements imposed by the regulator in conditions on the spaceflight operator's licence, or
- (b) paragraph (5) applies.
- (5) This paragraph applies if—
 - (a) the individual concerned has been assessed by an approved medical assessor, and
 - (b) the assessor is satisfied that the individual's condition—
 - (i) will not compromise the safety of any spaceflight activities in which the individual will be participating or of any other individual on board the launch vehicle, and
 - (ii) will not prevent the individual from performing the tasks assigned by the licensee to the individual's role.
- (6) An approved aeromedical examiner may—
 - (a) issue a medical certificate, or
 - (b) confirm that an individual is medically fit to fly,

subject to any conditions which the examiner reasonably considers must be satisfied for the individual concerned to be considered to be medically fit to fly.

(7) Where an approved aeromedical examiner has issued a medical certificate, or confirmed that the individual concerned is medically fit to fly subject to conditions under paragraph (6), that individual does not meet the requirement in paragraph (1) unless those conditions are satisfied.

Illness, injury and related conditions

- 74.—(1) An individual ("P") may not act as a member of the crew of a launch vehicle or as a remote pilot if P knows or suspects that P's physical or mental condition renders P temporarily or permanently unfit to perform those functions, including unfitness by reason of—
 - (a) injury or sickness,
 - (b) taking or using any prescribed or non-prescribed medication which is likely to interfere with the ability to perform such functions,
 - (c) receipt of any medical, surgical or other treatment that is likely to interfere with the ability to perform such functions,
 - (d) the effects of any psychoactive substance, or
 - (e) fatigue.
- (2) If paragraph (3) applies, an individual ("P") who holds a medical certificate issued under regulation 73(1) must inform the licensee's approved aeromedical examiner as soon as possible about P's condition and seek medical advice.
 - (3) This paragraph applies if—
 - (a) the individual concerned ("P") suffers any personal injury which means that P is not capable of undertaking P's functions as a member of the crew or a remote pilot,
 - (b) P suffers any significant illness which means that P is not capable of undertaking P's functions as a member of the crew or a remote pilot,
 - (c) P has reason to think that P is pregnant,
 - (d) P has undergone a surgical operation or invasive procedure,
 - (e) P has commenced or changed the regular use of any medication,

- (f) P is admitted to a hospital or medical clinic, or
- (g) P first requires correcting glasses or contact lenses.
- (4) P must receive a medical assessment by the spaceflight operator's approved aeromedical examiner to confirm whether P is fit to take part in spaceflight activities—
 - (a) once P has recovered from—
 - (i) an injury or illness within paragraph (3)(a) or (b), or
 - (ii) an operation or procedure referred to in paragraph (3)(d);
 - (b) once P has been discharged from the hospital or clinic referred to in paragraph (3)(f);
 - (c) once P is no longer pregnant;
 - (d) when the condition referred to in paragraph (3)(e) or (f) applies.
- (5) The spaceflight operator's approved aeromedical examiner must consult an approved medical assessor appointed by the regulator in relation to that assessment, and may only determine that P is fit for the purposes of paragraph (4) if the approved medical assessor agrees.
- (6) A person who fails to comply with a requirement in paragraph (1), (2) or (4) commits an offence.
 - (7) A person who is guilty of an offence under paragraph (6) is liable—
 - (a) on summary conviction in England and Wales, to a fine;
 - (b) on summary conviction in Scotland or Northern Ireland, to a fine not exceeding level 5 on the standard scale.

Disability

- 75. If a spaceflight participant with a disability or reduced mobility has been certified as being fit to fly under regulation 73(1), the spaceflight operator may make arrangements for that participant to take part in a spaceflight if—
 - (a) doing so would not compromise the safety of the flight;
 - (b) the presence of an individual with that disability or reduced mobility would not impede or obstruct any member of the crew or spaceflight participant in carrying out their functions during the course of the flight, including executing emergency procedures or leaving the launch vehicle.

Validity of medical certificate

- **76.**—(1) Subject to paragraph (3), a medical certificate is valid for the period which is stated in the certificate.
 - (2) The period referred to in paragraph (1) may not be more than 12 months.
 - (3) The medical certificate is suspended—
 - (a) if the subject of the certificate ("S") suffers a personal injury which means that S is not capable of undertaking S's functions as a member of the crew, from the date on which the injury occurred,
 - (b) if S suffers any significant illness which means that S is not capable of undertaking S's functions as a member of the crew, during the period of S's illness, or
 - (c) if S becomes pregnant, from the confirmation of the pregnancy.
- (4) In the case of injury or illness the suspension ceases upon S being medically assessed under arrangements made by the spaceflight operator and pronounced fit to resume S's functions as a member of the crew.

- (5) In the case of a pregnancy, the suspension—
 - (a) may be lifted by the regulator or an approved aeromedical examiner for such period, and subject to such conditions as the regulator or the approved aeromedical examiner thinks fit, and
 - (b) ceases upon S being medically assessed under arrangements made by the licensee after the pregnancy has ended and pronounced fit to resume S's functions as a member of the crew.

Medical records

- 77.—(1) Every medical assessment or examination of an individual who intends to be carried on board a launch vehicle during the operator's spaceflight activities, and of a remote pilot, must be recorded by the approved aeromedical examiner who carried out that assessment or examination on behalf of the spaceflight operator, and the result of that assessment or examination reported to the individual concerned and to the spaceflight operator.
- (2) The aeromedical examiner must send copies of records of medical assessments and examinations carried out in relation to members of the flight crew to the regulator.
- (3) The licensee and aeromedical examiner must make the records of other medical assessments and examinations carried out available to the regulator on request.
- (4) The licensee and aeromedical examiner must take measures to ensure that all medical records are protected as confidential information, and not disclosed otherwise than in accordance with this regulation.