## SCHEDULE 3

## Training and qualification

## PART 3

## Training for specified roles and capacities

- **48.** Every member of the crew and remote pilot must have received the training described in paragraphs 49 and 50 before they are assigned duties on board a launch vehicle or, in the case of a remote pilot, permitted to pilot a launch vehicle remotely.
- **49.** Every member of the crew and remote pilot must receive theoretical and practical training on—
  - (a) all matters where coordination between members of the crew, remote piloting staff and spaceflight participants is critical to dealing effectively with normal and abnormal situations, including emergency situations, and
  - (b) the location and use of the launch vehicle's emergency equipment including the procedures for evacuating the launch vehicle, and for these purposes, "emergency equipment" has the same meaning as in regulation 112(3).
- **50.** Every member of the crew and spaceflight participant must receive training in withstanding the stresses of spaceflight activities, including training on—
  - (a) the causes of disorientation, and what effects of disorientation may be experienced by crew and spaceflight participants during the various phases of flight,
  - (b) what physical effects may be experienced as a result of—
    - (i) gradual or instantaneous acceleration, and
    - (ii) free-falling in circumstances equivalent to reduced gravity, and

how those effects may be mitigated,

- (c) how to reduce the effects of excessive noise and vibration, including the methods and equipment available for this purpose,
- (d) techniques available for countering anxiety, claustrophobia and other conditions which may be caused by restrictions on individual mobility or reduced ability to use the senses during spaceflight,
- (e) procedures for a loss of launch vehicle pressurisation, or a reduction in the level of launch vehicle pressurisation, including how to deal with depleted levels of oxygen and decompression sickness,
- (f) procedures for dealing with fires, smoke or other emergencies on board the launch vehicle when the supply of oxygen becomes contaminated, and
- (g) survival techniques following an evacuation, including basic first aid, so far as relevant to the operator's intended spaceflight activities.
- **51.** Every member of the crew and remote pilot must receive training in—
  - (a) co-ordination of the crew,
  - (b) the extent to which human error may affect the safety and efficiency of spaceflight activities, and how this may be mitigated, and
  - (c) the identification and carriage of hazardous material or dangerous goods.
- **52.** Every spaceflight participant must receive training in—

- (a) what functions, if any, they are directly responsible for,
- (b) how these functions relate to the functions of others on board the launch vehicle, particularly during abnormal or emergency conditions,
- (c) entering and leaving the launch vehicle and the actions to be taken on board the launch vehicle during all phases of the flight,
- (d) the instructions to be complied with in relation to any direction from the crew,
- (e) what hazardous forms of activity are forbidden during training and during the spaceflight activities,
- (f) the use of any personal protective equipment,
- (g) the location and use of the launch vehicle's emergency equipment, and
- (h) the procedures for evacuating the launch vehicle.