2021 No. 792

The Space Industry Regulations 2021

PART 9

Cosmic radiation requirements: crew of a launch vehicle and crew of a carrier aircraft

CHAPTER 2

Generally applicable provisions

Risk of exposure of crew members to cosmic radiation

136.—(1) Subject to paragraph (2), a spaceflight operator must ensure that a suitable and sufficient assessment of the magnitude of the risk to crew members from exposure to cosmic radiation in the course of performing their duties on board a launch vehicle or a carrier aircraft (an "exposure assessment") is conducted before carrying out the operator's spaceflight activities.

(2) Where a spaceflight operator has completed an exposure assessment (the "previous exposure assessment") in relation to the operator's spaceflight activities involving the launch vehicle or carrier aircraft, no further exposure assessment needs to be conducted in relation to those activities, but a further assessment must be conducted if—

- (a) the spaceflight operator has reason to suspect that the previous exposure assessment is no longer valid,
- (b) there has been a material change to the matters to which the previous exposure assessment relates, or
- (c) the spaceflight operator has reasonable cause to believe that a crew member has received an overexposure while performing duties for the spaceflight operator on board the launch vehicle or the carrier aircraft.

(3) The spaceflight operator must take into account the results of the most recent exposure assessments it has conducted in relation to the operator's spaceflight activities when managing the operation of the launch vehicle or carrier aircraft, with a view to minimising as far as reasonably possible the exposure of crew members to cosmic radiation.

(4) In carrying out an exposure assessment the spaceflight operator must take into account any existing legal requirements relating to safety.