Regulation (EU) No. 2018/1139

Commission Regulation (EU) No. 965/2012

Air Navigation Order 2016

Air Navigation (Dangerous Goods) Regulations 2002

The ICAO Technical Instructions

Exemption E XXXX

Carriage of Dangerous Goods - Dry Ice

1. The Civil Aviation Authority ("the CAA"), pursuant to Article 71(1) of Regulation (EU) No. 2018/1139, exempts XXXX ("the Operator") together with the pilot in command of any helicopter/type/registration ("the helicopter") operated by the Operator for the purposes of commercial air transport flights within the UK, from the requirements of Commission Regulation (EU) No. 965/2012 specified in paragraph 2, subject to the conditions in paragraph 5.

2. The Operator is exempt from the requirements at CAT.GEN.MPA.200 that Dangerous Goods shall only be transported by an operator approved in accordance with Annex V (Part-SPA), Subpart G.

3. The CAA, pursuant to Article 266 of the Air Navigation Order 2016, exempts the Operator together with the pilot in command, any agent acting on behalf of the Operator and all other persons from the requirements of Air Navigation (Dangerous Goods) Regulations 2002 (AN(DG)Rs) only to the extent necessary to permit the carriage of dangerous goods in the form of Dry ice ("the said goods"), subject to the conditions in paragraph 5.

4. The CAA, pursuant to Part 1, Chapter 1, 1.1.3 of the ICAO Technical Instructions (TI), exempts the Operator together with the pilot in command, any agent acting on behalf of the Operator and all other persons from the provisions of the TIs only to the extent necessary to permit the carriage of the said goods either inside the helicopter cabin or in the baggage compartment, subject to the conditions in paragraph 5.

5. This Exemption is granted subject to the following conditions:

   (a) the only dangerous goods ("the said goods") permitted for carriage by this exemption are quantities of Dry ice carried for the purpose of transporting Covid-19 vaccine;

   (b) the Dry ice shall be contained within thermal shipping containers designed for the transport of Covid-19 vaccine. Such containers and their accompanying documentation shall be marked "UN 1845 - Carbon Dioxide - Solid, As Coolant";

   (c) the carriage of the Dry ice shall be in accordance with the Operator's risk assessment XXXXXX, dated XX XXXX XXXX, which shall be accepted by the CAA;

   (d) the Operator shall develop procedures for the loading and carriage of the said goods and ensure that all persons engaged in carrying or loading and unloading the said goods are trained or briefed commensurate with their responsibilities. This shall include training in recognising the effects of potential carbon dioxide (CO^2) asphyxiation. The procedures and training shall be detailed in the operations manual and approved by the CAA;

   (e) The Operator's risk assessment, procedures and training programme shall consider those elements of the current issue of the EASA Guidelines for the Transportation of Vaccines using Dry Ice and AN(DG)Rs that are relevant to this operation

together with the exposure limits and guidance given in the Health and Safety Executive (HSE) document EH40/2005 (Workplace exposure limits) (Fourth Edition 2020), the Control of Substances Hazardous to Health Regulations 2002 (as amended); and the European Agreement for the International Carriage of Goods by Road (ADR) (1 January 2019) Volume II Section 5.5.3;

(f) the pilot in command shall be satisfied before flight that the said goods are stowed and will remain secured in accordance with the procedures in the operations manual;

(g) the said goods shall only be carried in the helicopter cabin or baggage compartments that vent into the helicopter cabin if:

(i) the cabin is well ventilated to prevent a build-up of CO^2. Fresh air vents/blowers shall be serviceable and selected to maximum and cabin windows must be opened where possible. Cockpit and cabin heating must be selected “Off”;

(ii) the crew are equipped with at least two CO^2 detectors capable of measuring the concentration of CO^2 in parts per million and the Operator shall set out, in their operations manual, training and procedures for monitoring exposure to CO^2 in flight and during loading and unloading. The CO^2 concentration during flight shall not exceed 0.5 % by volume (5000 ppm);

(iii) the cargo is secured in the helicopter cabin or baggage compartment in a manner that will prevent any movement and are protected from being damaged, including by the movement of other cargo or baggage; and

(iv) no passengers other than a person associated with and accompanying the said goods consignment, are carried onboard the helicopter whilst carrying Dry ice;

(h) the said goods shall only be carried in external baggage compartments that do not vent into the helicopter cabin if:

(i) before unloading the said goods, the baggage compartment is vented before unloading commences or the air within the baggage compartment is tested using a CO^2 detector using procedures set out by the Operator in their operations manual; and

(ii) the cargo shall be secured in the baggage compartment in a manner that will prevent any movement and are protected from being damaged, including by the movement of other cargo or baggage;

(i) if the packages containing the said goods are equipped with data loggers these are to be evaluated for compliance with AMC1 CAT.GEN.MPA.140 as described in the EASA Guidelines for the Use of Cargo Tracking Devices in relation to the Covid-19 pandemic. The required CO^2 detectors are also considered to be Portable Electronic Devices and should be evaluated in the same way;

(j) the Operator shall ensure that any dangerous goods occurrence in respect of this Exemption is reported to the CAA in accordance with Regulation 19 of the AN(DG)Rs; and

(k) a copy of this Exemption shall be carried on board the helicopter whenever the said goods are carried.

6. In this exemption "Technical Instructions" (TI) means the latest effective edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284), including the Supplement and any Addendum, approved and published by decision of the Council of the International Civil Aviation Organization.

7. In accordance with the European Union (Withdrawal) Act 2018 references in this Exemption to EU regulations are now references to the UK law of the same name. That is, Retained EU Law as amended by UK law.

8. This Exemption is issued to meet urgent unforeseeable circumstances of a limited duration as a result of the COVID-19 virus.

9. This Exemption has effect from the **date of signature** until **XX XXXX XXXX** unless revoked.

Signed.....

for the UK Civil Aviation Authority

Date:

Explanatory Notes:

1. UK and EU legislation requires that dangerous goods be carried in accordance with the ICAO Annex 18 'The Safe Transport of Dangerous Goods by Air', amplified by the detailed specifications of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284). The carriage of dangerous goods must either comply with the specific requirements applicable to the particular dangerous goods or be carried in accordance with an exemption permitted by that document.

2. This is such an exemption, authorising the carriage of the specified dangerous goods without complying with the specific applicable requirements.

Useful Links:

FAA SAFO - Transportation of COVID-19 Vaccines Requiring Large Quantities of Dry Ice

FAA Report - The Sublimation Rate of Dry Ice Packaged in Commonly Used Quantities by the Air Cargo Industry

IATA Acceptance Checklist for transpo

FOI Dry ice RA & OM Review Checklist

The following points are a guide to the considerations that should be made by FOIs when reviewing an operator's Risk Assessment and OM entry for the carriage of Dry ice for the transport of Covid-19 vaccine. Further information is given in the links at the bottom of the page which should be read in conjunction with this checklist and the draft exemption.

1. **Training**
   Crew/Ground handling trained/briefed on hazards associated with Dry ice, indications and effects of excessive levels of carbon dioxide and handling/loading of packages.

2. **Packages**
   Recording number of packages, quantity of Dry ice.
   Checking for damage/leakage.
   Handling/loading/unloading, stowage and security in flight.
   Venting external baggage compartments if not tested.

3. **Occupants**
   Restrictions iaw the Exemption.
   Occupants should be kept to a minimum to minimise risk and to reduce the amount of naturally produced carbon dioxide in the cabin.

4. **Marking**
   Packages/paperwork appropriately marked by the shipper, (DG category is UN1845, “Carbon Dioxide, Solid”/”Dry ice”, as coolant).

5. **Paperwork**
   Requirement for appropriate documents to be supplied to crew to accompany packages.
   Acceptance checklist provided. (See IATA Acceptance checklist as baseline example).
   Documents to be retained for at least 3 months.

6. **Equipment**
   At least two appropriate carbon dioxide detectors provided to crew.
   Crew trained in operation of detectors including any calibration and testing requirements.

7. **Limits**
   Relevant staff briefed on maximum acceptable limits of carbon dioxide.
   5000 ppm in the aircraft cabin/cockpit, 15 minutes exposure limit of 15000 ppm in external baggage compartments when loading/unloading.

8. **Aircraft**
   Aircraft specified by type/reg, specified on exemption if required.
   No MEL items to impact ventilation and cabin prepared to give maximum ventilation.
   Crew instructed on in flight normal and emergency procedures.

9. **Detectors & Data loggers**
   The packages are likely to be equipped with data loggers, these and carbon dioxide detectors are classed as PEDs, operators should assess the risks associated with these iaw AMC1 CAT.GEN.MPA.140 and the EASA Guidelines. Both are likely to be Lithium battery powered so associated risk awareness required.

10. **Emergencies**
    Handling of in-flight emergencies, particularly excessive levels of carbon dioxide.
    Reporting of DG incidents/accidents.

11. **Exemption**
    Copy to be carried in aircraft.

Useful Links:

EASA Guidelines for the Transportation of Vaccines using Dry Ice

EASA Guidelines for the Use of Cargo Tracking Devices in relation to the Covid-19 pandemic

Air Navigation (Dangerous Goods) Regulations 2002

Health & Safety Executive EH40/2005 - Workplace exposure limits

Control of Substances Hazardous to Health Regulations 2002 (as amended);

European Agreement for the International Carriage of Goods by Road (ADR) (1 January 2019) Vol II Section 5.5.3

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