

**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
WORKING GROUP MEETING (DGP-WG/24)**

**Montreal, 21 to 25 October 2024**

- Agenda Item 2: Managing air-specific safety risks and identifying anomalies (REC-A-DGS-2027)**  
**2.2: Develop proposals, if necessary, for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2027-2028 Edition**

**CLARIFICATION OF A ULD WITH FIRE DETECTION/SUPPRESSION SYSTEM**

(Presented by B. Firkins)

**SUMMARY**

The Technical Instructions provides for the carriage of dangerous goods bearing a “cargo aircraft only” label to be carried in a unit load device (ULD) which has a fire detection/suppression system. The observation has been raised that there is an ambiguity in how “fire detection/suppression” could (or should) be determined.

Action by the DGP-WG is in paragraph 2.

**1. INTRODUCTION**

1.1 Currently, at Part 7;2.4.1.1(b) the Technical Instructions provides for

“b) in a unit load device equipped with a fire detection/suppression system equivalent to that required by the certification requirements of a Class C aircraft cargo compartment as determined by the appropriate national authority (a ULD that is determined by the appropriate national authority to meet the Class C aircraft cargo compartment standards must include “Class C compartment” on the ULD tag);”

1.2 There is a lack of clarity as to whether a “unit load device” (ULD) means a ULD in a traditional sense (i.e. an aircraft container) or if it also includes a combination of an aircraft pallet and a net/cover. Objectively, it ought to be considered in the context of a performance-based outcome, i.e. a pallet with open webbing, clearly would not meet the desired outcome; whilst there is a potential that a fire containment cover designed with a complementary pallet and other “fire detection/suppression systems”, could objectively meet the certification requirements for a Class C compartment.

1.3 It is also unclear as to whether the ‘/’ between “detection” and “suppression” is to be interpreted as an ‘or’ or an ‘and’

1.4 It has also been asked as to whether the text of 7;4.2.1.1 b) should be amended to remain consistent with Class C cargo compartments. The challenge is in recognizing that this ought to be an objective assessment of a ULD for equivalency to Class C cargo compartment standards, rather than a literal assessment as a Class C cargo compartment).

1.5 The requirement to put “Class C compartment” on the ULD tag is regarded as being unnecessarily prescriptive; and there is a preference to remove the ULD tag as a specific requirement; in part, because it may not be the best solution to advise employees that the ULD contains an (active) fire suppression device.

1.6 Finally, questions have been raised with respect to the criteria by which operators, ULD manufacturers and regulators ought to consider when developing, and assessing an application for such a ‘ULD’.

## 2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to provide commentary on the questions raised in paragraph 1.

2.2 The following straw-man proposal for amendment to the existing text is provided, in order to stimulate consideration of the matter.

2.4.1.1 Packages or overpacks of dangerous goods bearing the “Cargo aircraft only” label must be loaded for carriage by a cargo aircraft in accordance with one of the following provisions:

- a) in a Class C aircraft cargo compartment; or
- b) in a unit load device equipped with a smoke detector or fire detector system and a fire-extinguishing or suppression system equivalent to that required by the certification requirements of a Class C aircraft cargo compartment as determined by the appropriate national authority; or

*Note.— For ULDs that are determined by the appropriate national authority to meet the Class C aircraft cargo compartment standards, the operator should include the identification of such ULDs and necessary handling guidance in the Operations Manual.*

- c) in such a manner that in the event of an emergency involving such packages or overpacks, a crew member or other authorized person can access those packages or overpacks, and can handle and, where size and mass permit, separate such packages or overpacks from other cargo; or
- d) external carriage by a helicopter; or
- e) with the approval of the State of the Operator, for helicopter operations, in the cabin (see Part S-7;2.4 of the Supplement).

— END —