



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)**

**TWENTY-SECOND MEETING**

**Montréal, 5 to 16 October 2009**

**Agenda Item 2: Development of recommendations for amendments to the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2011-2012 Edition**

**REQUIREMENTS FOR RADIOACTIVE MATERIAL**

(Presented by M. Rogers)

**SUMMARY**

The paper proposes adding a requirement for operators to provide a method for flight crews to determine that separation requirements for radioactive materials have been applied.

**Action by the DGP:** The DGP is invited to revise 7;4.2 as presented in the appendix.

**1. INTRODUCTION**

1.1 A working paper was submitted at DGP/21 proposing that the height of the tallest package of a radioactive shipment should be included on the NOTOC (DGP/21-WP/86, paragraph 2.8.3 refers). This would have helped the flight crew to determine if the separation requirements from passengers and crewmembers were met. There was insufficient support for the proposal and the paper was withdrawn.

1.2 Among the justifications listed in the report for not supporting the proposal, it was pointed out that flight crews should trust the loading staff to do their jobs properly. IFALPA feels, however, that the verification of the correct separation of radioactive material falls within the responsibility of the flight crew. This view is supported by relevant sections of Annex 6 — *Operation of Aircraft* and Part II — *International General Aviation — Aeroplanes* and the Technical Instructions, including:

- a) ICAO Annex 6 Part I 4.3.1 requires that "A flight shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is **satisfied** that: ... e) any load carried is properly distributed and safely secured."
- b) ICAO T.I. 7;2.9.1.2 reads that "All relevant transport and storage personnel must receive such instructions as are necessary concerning the hazards involved and the precautions to be observed."
- c) ICAO T.I. 7;2.9.1.3 reads "... The separation distances shown in Tables 7-2 and 7-3 are **minimum values** ..."
- d) ICAO T.I. 7;4.2 "An operator must provide such information in the operations manual and/or other appropriate manuals as will enable **flight crews** and other employees to **carry out their responsibilities** with regard to the transport of dangerous goods. ... b) if radioactive material is to be carried, instructions on the **loading of such dangerous goods** based on the requirements of 7;2.9."

This indicates that flight crew must be in a position to verify the correct loading if deemed necessary to be satisfied according the provisions of Annex 6.

1.3 Some passenger-carrying operators already provide the height of the tallest shipment and a separation table to their flight crews for the purpose of determining that minimum requirements have been met. Incidents continue to occur at other operators, however, and the IATA Dangerous Goods Panel has discussed the subject over the last several years.

1.4 IFALPA agrees that the height of the tallest package may not be relevant in all cases, including for loading on the main deck of cargo aircraft where the cockpit is not located above the shipment. IFALPA therefore proposes a more general requirement that would require operators to provide the necessary information to flight crews to determine compliance with separation requirements, but leaves the operator with discretion in how this is accomplished.

-----

**APPENDIX**  
**AMENDMENTS TO THE TECHNICAL INSTRUCTIONS**

**Part 7**

**OPERATOR'S RESPONSIBILITIES**

...

**Chapter 4**

**PROVISION OF INFORMATION**

...

**4.2 INFORMATION TO BE PROVIDED TO EMPLOYEES**

4.2.1 An operator must provide such information in the operations manual and/or other appropriate manuals as will enable flight crews and other employees to carry out their responsibilities with regard to the transport of dangerous goods. This information must include instructions as to the action to be taken in the event of emergencies involving dangerous goods, and details of the location and numbering system of cargo compartments together with:

- a) the maximum quantity of dry ice permitted in each compartment; and
- b) if radioactive material is to be carried, instructions on the loading of such dangerous goods based on the requirements of 7;2.9.

Where applicable, this information must also be provided to ground handling agents.

4.2.2 An operator must provide information in the "Information to the pilot-in-command" according to 7;4.1.1 or in any other way that enables the pilot-in-command to confirm that any radioactive material carried is properly separated from persons on board according Table 7-2 or Table 7-3, as applicable.

— END —