



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
MEETING OF THE WORKING GROUP OF THE WHOLE**

Memphis, 30 April to 4 May 2007

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 2009/2010 Edition

2.5: Part 5 — Shipper's Responsibilities

2.7: Part 7 — Operator's Responsibilities

RECENT INCIDENTS INVOLVING RADIOACTIVE MATERIALS

(Presented by G. Branscombe)

SUMMARY

This working paper seeks to identify if two recent incidents involving radioactive materials, indicating potential issues with the Technical Instructions, are unique or a common occurrence.

Action by the DGP-WG is in paragraph 4.

1. INTRODUCTION

1.1 Two recent incidents involving radioactive materials have indicated potential issues with the Technical Instructions. The aim of the paper is to identify if the incident involved are unique or a common occurrence.

2. FIRST INCIDENT — HEAT FLUX FROM A PACKAGE

2.1 In February 2007, an incident took place where a consignment of radioactive material, which was generating heat flux, was transferred from one air operator to another. The consignment was then placed in a soft overpack, which resulted in an accumulation of heat, which once realized by the ground crews, resulted in a call to emergency services.

2.2 In the 2007/2008 Technical Instructions, paragraph 5;4.1.5.7.2 requires the shipper to provide on the shipping document, a statement regarding special stowage provisions for the safe dissipation of heat.

2.3 Paragraph 7;2.9.3.2 also states that provided that package average surface heat flux does not exceed 15 W/m^2 and that the immediately surrounding cargo is not in sacks or bags, a package or overpack may be carried or stored among packaged general cargo without any special stowage provisions except as may be specifically required by the competent authority in an applicable approval certificate.

2.4 While the information for consignment generating heat flux is required to be available on the shipping document, no such indication, to alert the ground handling staff, is required to be present on the package.

3. **SECOND INCIDENT — DESCRIPTION OF NOBLE GAS**

3.1 In the 2007/2008 Technical Instructions, paragraph 5;4.1.5.7.1(b) requires on the shipping document, for a consignment of radioactive material other than in special form, a description of the physical and chemical form of the material.

3.2 We had a recent situation where the radioactive material was a noble gas, Krypton 85 (i.e. Kr-85), for which no chemical form is available. This situation has resulted in the cargo acceptance staff refusing the shipment due to an incomplete description.

3.3 Note that a noble gas, previously referred to as an inert gas, is a stable gas that rarely reacts with other elements.

4. **ACTION BY THE DGP-WG**

4.1 While no change to the Technical Instructions is proposed at this time, members are invited to discuss and advise if similar incidents have been experienced in their State and whether or not they feel this is an issue should which should be addressed.

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