



WORKING PAPER

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

Auckland, New Zealand, 4 to 8 May 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

Agenda Item 2.4: Part 4 — Packing Instructions

TRANSPORT OF DANGEROUS GOODS IN NON-PRESSURIZED CARGO HOLDS

(Presented by D. Mirko)

SUMMARY

This paper proposes to delete the words “in extreme conditions” in Part 4; Introductory Notes; *Note 3 — Pressure variations*.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 In 2004, an incident occurred while transporting explosives in a non-pressurised cargo hold.

1.2 A pressure drop in a non-pressurised cargo hold caused the inner and outer packagings of explosives to rupture in flight. An example of the effect is shown in the following diagram:



1.3 The incident investigation was not able to address non-compliance to Part 4;3.3.1, packing provisions and shippers responsibility.

1.4 There were no provisions in the Technical Instructions to address operators' responsibilities for the transport of dangerous goods in non-pressurized cargo holds.

1.5 During DGP/21, it was confirmed that the introductory notes of Part 4 relate to transport in pressurised cargo holds only. For transportation in non-pressurised cargo holds, a note to Part 7, 2.4.1 was introduced, addressing this duty to the responsibility of the operator.

1.6 A proposal was made at DGP-WG/08 (DGP-WG/08-W/21) to amend the text of Part 4; Introductory Notes, *Note 3. — Pressure variations* and to add a specific pressure differential value to the note in Part 7;2.4.1. During the discussion it was suggested that the words “in extreme conditions” in Note 3 were not the appropriate words for pressurised transport. It relates to the decompression of the aircraft which makes requirements equal in pressure value to non-pressurised transport, and that is in conflict to the decision at DGP/21.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to amend Note 3 of the Introductory Notes to Part 4 as follows:

Part 4

PACKING INSTRUCTIONS

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INTRODUCTORY NOTES

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Note 3.— Pressure variations

Due to altitude, pressure reductions will be encountered under flight conditions which may ~~in extreme conditions~~ be of the order of 68 kPa. Since receptacles or packagings will generally be filled at normal atmospheric pressure of approximately 100 kPa, these pressure reductions will tend to cause discharge of liquid contents or bursting of the receptacles or packagings during flight, unless each receptacle or packaging and its closures meet the packaging test requirements.

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