



**WORKING PAPER**

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

**Beijing, China, 25 October to 3 November 2006**

**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**

**2.4: Part 4 — Packing Instructions**

**DANGEROUS GOODS IN NON-PRESSURIZED CARGO HOLDS**

(Presented by U.A. Mikhin)

**SUMMARY**

This paper proposes an amendment to the pressure variation note in the introductory chapter of Part 4 to help distinguish differences in the pressure reduction values in pressurized cargo holds versus non-pressurized cargo holds.

Action by the DGP-WG is in paragraph 2.

**1. INTRODUCTION**

1.1 In the Technical Instructions conditions are set for transport in aircraft. One of the conditions concerns pressure variations as shown in Part 4, Introductory Notes, Note 3. This note sets value, drop to 68 kPa and it covers transportation in pressurized cargo holds only, which equal 3 000 meters flight altitude in a non-pressurized cargo hold. Modern cargo aircraft with non-pressurized cargo holds climb up to 10 000 meters, and in this case the pressure drop in the cargo holds down to 24 kPa. This pressure reduction will tend to cause discharge of liquid contents or bursting of the receptacles or packaging during flight, because the receptacles or packagings are tested for transport in pressurized cargo holds only. To prevent this risk we propose to add this information to Part 4, Introductory Notes, Note 3.

## 2. ACTION PROPOSED

- 2.1 Amend Part 4, Introductory Notes, Note 3 as follows:

*Note 3.—Pressure variations*

Due to altitude, pressure reductions will be encountered under flight conditions which may in extreme conditions for aircraft with pressurized cargo holds be of the order of 68 kPa and be of the order of 24 kPa in aircraft with non-pressurized cargo holds. 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 for transport in pressurized cargo holds. In the case of transport in non-pressurized cargo holds, each receptacle or packaging is to be able to meet its pressure reduction value.

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