



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-SECOND MEETING

Montréal, 5 to 16 October 2009

Agenda Item 5: Resolution, where possible, of the non-recurrent work items identified by the Air Navigation Commission or the panel:

5.3: Review of provisions for dangerous goods relating to batteries:

- a) **lithium batteries**
- b) **battery-powered devices**
- c) **battery-powered mobility aids**

CLASS 9 LITHIUM ION BATTERY SHIPMENTS

(Presented by M. Rogers)

SUMMARY

This paper would introduce a quantity limitation per cargo compartment for Class 9 shipments of lithium ion batteries.

Action by the DGP: The DGP is invited to adopt a new paragraph to Part 7, Chapter 2 as shown in the appendix to this working paper.

1. INTRODUCTION

1.1 At the twenty-first meeting of the Dangerous Goods Panel, a number of proposals relating to the transport of lithium batteries were adopted. Since the January 1, 2009 effective date of the new provisions, there have continued to be lithium battery incidents involving fire aboard aircraft, including a near catastrophic hull loss of a widebody cargo aircraft on August 14, 2009 involving lithium ion batteries.

1.2 Research by the United States Federal Aviation Administration (FAA) has shown that a fire involving a single battery will likely spread to all batteries in a shipment, increasing the severity of a fire. Furthermore, the United States National Transportation Safety Board (NTSB) has recommended that the quantity of lithium batteries be limited at any single location.

1.3 It is therefore proposed that the quantity of lithium ion batteries assigned to Class 9 be limited in a single cargo compartment. A separate working paper addressing lithium metal batteries has been prepared.

APPENDIX

PROPOSED AMENDMENT TO THE TECHNICAL INSTRUCTIONS

Part 7

OPERATOR'S RESPONSIBILITIES

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Chapter 2

STORAGE AND LOADING

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**2.14 LOADING OF LITHIUM ION ASSIGNED TO CLASS 9, INCLUDING
LITHIUM ION BATTERIES PACKED IN OR WITH EQUIPMENT**

For lithium ion batteries assigned to Class 9, including lithium ion batteries packed in or with equipment, a total of no more than 35 kg net mass of lithium ion batteries may be carried in any cargo compartment on any aircraft.

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