



WORKING PAPER

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

Montréal, 15 to 19 April 2013

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 2015-2016 Edition

2.8 : Part 8 — Provisions Concerning Passengers and Crew

MEDICAL DEVICES CONTAINING LITHIUM BATTERIES

(Presented by J. McLaughlin)

SUMMARY

This proposes revisions to the carriage of medical devices containing lithium batteries in Part 8 of *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284).

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Table 8-1 outlines provisions for dangerous goods carried by passengers and crew, including medical devices containing lithium batteries and separately consumer articles containing lithium batteries.

1.2 An inconsistency exists in the provisions for portable medical devices containing lithium batteries compared to the provisions for consumer articles containing lithium batteries. Specifically, the lithium battery authorization for consumer articles does not limit the number of spare lithium batteries with a lithium content of not more than 2 grams for lithium metal batteries or a watt-hour rating of not more than 100 Wh for lithium ion batteries. While for portable medical devices a passenger is limited to two spare batteries. We see no logical reason for more stringent requirements on devices carried by a passenger for a medical need compared to portable electronic devices used for convenience or entertainment.

1.3 On this basis it is recommended that the working group amend the provisions for portable medical electronic devices containing lithium batteries consistent with the provisions for all other portable electronic devices. Proposal 1 to this paper provides a comprehensive amendment to Table 8-1

incorporating the provisions from item 19 of the table (portable electronic devices) into the provisions in item 8 of the table (portable medical electronic devices).

1.4 Taking into account the critical need to ensure the accessibility of air travel to passengers who require medical devices, it is illogical to wait until the 2015-2016 edition of the Technical Instructions to correct this inconsistency. Proposal 2 to this paper provides a simple amendment to Table 8-1 that could be considered for a corrigendum to the 2013-2014 Technical Instructions.

2. ACTION BY THE DGP-WG

2.1 The DGP is invited to consider both proposals to address the issue of lithium batteries in medical aids, as presented in the appendix of this working paper.

APPENDIX

AMENDMENTS TO PART 8 OF THE TECHNICAL INSTRUCTIONS

...

PROPOSAL 1

Part 8

PROVISIONS CONCERNING
PASSENGERS AND CREW

...

Table 8-1. Provisions for dangerous goods carried by passengers or crew

Items or articles	Location			Approval of the operator(s) is required	The pilot-in-command must be informed	Restrictions
	Checked Baggage	Carry-on baggage	On the person			
Medical necessities						
8) Portable medical electronic devices (automated external defibrillators (AED), nebulizer, continuous positive airway pressure (CPAP), etc.) containing lithium metal or lithium ion cells or batteries						
<u>Portable medical electronic devices containing lithium metal cells or batteries not exceeding 2 grams or lithium ion cells or batteries not exceeding 100 Wh</u>	No <u>Yes</u>	Yes	Yes	Yes <u>No</u>	No	a) carried by passengers for medical use; b) no more than two spare batteries <u>exceeding 2 grams lithium content for lithium metal or a watt-hour rating of 100 Wh for lithium ion</u> may be carried <u>by a passenger</u> .
<u>Spare batteries for portable medical electronic devices containing lithium metal cells or batteries not exceeding 2 grams or lithium ion cells or batteries not exceeding 100 Wh</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	c) S spare batteries must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); and
<u>Portable medical electronic devices containing lithium metal batteries exceeding 2 grams but not exceeding 8 grams or lithium ion batteries exceeding 100 Wh but not exceeding 160 Wh</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	e) each installed or spare battery: _____ must be of a type which meets the requirements of each test in the UN <i>Manual of Tests and Criteria</i> , Part III, subsection 38.3; and
<u>Spare batteries for portable medical electronic devices containing lithium metal batteries exceeding 2 grams but not exceeding 8 grams or lithium ion batteries exceeding 100 Wh but not exceeding 160 Wh</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	_____ must not exceed the following: _____ for lithium metal batteries, a lithium content of not more than 8 grams; or _____ for lithium ion batteries, a Watt hour rating of not more than 160 Wh d) <u>spare batteries must be carried either on the person or in carry-on baggage; and</u> .

PROPOSAL 2

Part 8

PROVISIONS CONCERNING
PASSENGERS AND CREW

...

Table 8-1. Provisions for dangerous goods carried by passengers or crew

Items or articles	Location			Approval of the operator(s) is required	The pilot-in-command must be informed	Restrictions
	Checked baggage	Carry-on baggage	On the person			
Medical necessities						
8) Portable medical electronic devices (automated external defibrillators (AED), nebulizer, continuous positive airway pressure (CPAP), etc.) containing lithium metal or lithium ion cells or batteries in addition to the authorizations in item 19	No	Yes	Yes	Yes	No	<ul style="list-style-type: none"> a) carried by passengers for medical use; b) no more than two spare batteries may be carried. Spare batteries must be individually protected so as to prevent short circuits (by placement in original retail packaging or by otherwise insulating terminals, e.g. by taping over exposed terminals or placing each battery in a separate plastic bag or protective pouch); and c) each installed or spare battery: <ul style="list-style-type: none"> — must be of a type which meets the requirements of each test in the UN <i>Manual of Tests and Criteria</i>, Part III, subsection 38.3; and — must not exceed the following: <ul style="list-style-type: none"> — for lithium metal batteries, a lithium content of not more than 8 grams; or — for lithium ion batteries, a Watt-hour rating of not more than 160 Wh.

— END —