DANGEROUS GOODS PANEL (DGP)

TWENTY-SIXTH MEETING

Montréal, 16 to 27 October 2017

- Agenda Item 6: Resolution, where possible, of the non-recurrent work items identified by the Air Navigation Commission or the panel:
 - 6.3: Mitigating risks posed by the carriage of lithium batteries by air (*Job card DGP.003.01*)

CHOOSING BETWEEN LITHIUM BATTERIES SECTION IA AND IB

(Presented by L. Cascardo)

SUMMARY

This working paper invites DGP/26 to amend Packing Instructions 965 and 968 as shown in the appendix in order to allow shippers to be more stringent between Sections IA and IB if they choose to.

Action by the DGP: The DGP is invited to review the introduction part of Packing Instructions 965 and 968.

1. **INTRODUCTION**

- 1.1 At the sixteenth working group meeting of the Dangerous Goods Panel (DGP-WG/16, Montréal, 17 to 21 October 2016), there was a discussion about the applicability of Section IA of Packing Instructions 965 and 968 (see paragraph 3.5.3.12 of the DGP-WG/16 report). At the seventeenth working group meeting of the Dangerous Goods Panel (DGP-WG/17, Montreal, 24 to 28 April 2017), the discussion continued (see paragraph 3.5.3.3 of the DGP-WG/17 report) around the fact that Section IA could be interpreted to mean that shippers would not be permitted to package their cells or batteries in accordance with Section IA if the watt-hour rating or lithium metal content did not exceed the limits established for that section.
- 1.2 The wording used in the Technical Instructions precludes shippers from applying more stringent requirements if they want to. Although the working group had agreed that an anomaly had inadvertently been introduced, no changes were made to the current text, which means the inconsistency still exists.

- 1.3 Paragraph 1 (Introduction) of Packing Instruction 965 establishes that Section IA applies to lithium ion cells with a Watt-hour rating in excess of 20 Wh and lithium ion batteries with a Watt-hour rating in excess of 100 Wh.
- 1.4 As an example, if a shipper wants to send lithium ion batteries with 75 Wh, 5 kg and complying with all provisions of the Technical Instructions, including the provisions of 2;9.3, he cannot choose to be more stringent and use the provisions of <u>Section IA</u>, since that section applies to <u>lithium ion batteries exceeding 100 Wh</u>.
- 1.5 The same foregoing explanation is applicable to lithium metal cells and batteries prepared in accordance with Packing Instruction 968.
- 1.6 For this reason, and following the discussions of DGP-WG/17, this paper presents an option to fix the inconsistency in Packing Instructions 965 and 968 and to allow shippers to be more stringent between Sections IA and IB if they choose to.

2. **ACTION BY THE DGP**

2.1 The DGP is invited to revise Packing Instructions 965 and 968 as shown in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 4 OF THE TECHNICAL INSTRUCTIONS

Part 4

PACKING INSTRUCTIONS

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Chapter 11

CLASS 9 — MISCELLANEOUS DANGEROUS GOODS

Parts of this Chapter are affected by State Variation US 2; see Table A-1

11.1 PACKING INSTRUCTIONS

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Packing Instruction 965

Cargo aircraft only for UN 3480

1. Introduction

This entry applies to lithium ion or lithium polymer batteries. This packing instruction is structured as follows:

- Section IA applies to lithium ion cells with a Watt-hour rating in excess of 20 Wh and lithium ion batteries with a Watt-hour rating in excess of 100 Wh, which must be assigned to Class 9 and are subject to all of the applicable requirements of these Instructions;
- Section IB applies to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities that exceed the allowance permitted in Section II, Table 965-II; and
- Section II applies to lithium ion cells with a Watt-hour rating not exceeding 20 Wh and lithium ion batteries with a Watt-hour rating not exceeding 100 Wh packed in quantities not exceeding the allowance permitted in Section II, Table 965-II.

Note.— Section IA may also be applied to lithium ion cells not exceeding 20 Wh and lithium ion batteries not exceeding 100 Wh, providing all of the applicable requirements of these Instructions are met.

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Packing Instruction 968

Cargo aircraft only for UN 3090

1. Introduction

This entry applies to lithium metal or lithium alloy batteries. This packing instruction is structured as follows:

 Section IA applies to lithium metal cells with a lithium metal content in excess of 1 g and lithium metal batteries with a lithium metal content in excess of 2 g, which must be assigned to Class 9 and are subject to Appendix

all of the applicable requirements of these Instructions;

- Section IB applies to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g packed in quantities that exceed the allowance permitted in Section II, Table 968-II; and
- Section II, Table 968-II; and
 Section II applies to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g packed in quantities not exceeding the allowance permitted in Section II, Table 968-II.

Note.— Section IA may also be applied to lithium metal cells with a lithium metal content not exceeding 1 g and lithium metal batteries with a lithium metal content not exceeding 2 g, providing all of the applicable requirements of these Instructions are met.

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