



WORKING PAPER

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*)

APPLICABILITY OF SECTION IA

(Presented by L. Cascardo)

SUMMARY

This working paper invites DGP/26 to amend Packing Instructions 965 and 968 as shown in the appendix to this working paper in order to solve a classification issue between Sections IA and IB identified at DGP-WG/16 and discussed at DGP-WG/17.

Action by the DGP: The DGP is invited to review the applicability of Section IA in the introductory part of Packing Instructions 965 and 968 and to revise the packing instructions as proposed in the appendix to this working paper.

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) and a working paper was presented proposing two different options to solve the issues presented. One of the options was supported in principle but was not approved since some members expressed concerns about the other issues not solved by this option. The proposal presented at the last meeting (see paragraph 3.5.3.3 of the DGP-WG/17 report) tried to solve multiple issues simultaneously.

1.2 This working paper presents an option to solve exclusively the issue explained below.

1.3 Section IB of Packing Instruction 965 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.

1.4 Despite not being explicitly stated in Section IA, 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.

1.5 Considering that the weight limit for Section IB is 10 kg and for Section IA is 35 kg, it is reasonable to assume that a package containing lithium ion batteries with a Watt-hour rating not exceeding 100 Wh but weighing more than 10 kg could be prepared in accordance with Section IA. However, the applicability of Section IA in this case would be in contradiction to the introductory text of Packing Instruction 965 since it states that Section IA applies to lithium ion batteries with a Watt-hour rating in excess of 100 Wh.

1.6 For example, a lithium ion battery with 80 Wh and 20 kg has unclear requirements to fit under Section IA, since it does not exceed 100 Wh. At the same time, the same battery cannot fit under Section IB, since it exceeds the maximum weight of 10 kg.

1.7 The same foregoing explanation is applicable to lithium metal cells and batteries prepared in accordance with Packing Instruction 968.

1.8 For this reason, and following the discussion at DGP-WG/17, this paper presents an option to fix the inconsistency in Packing Instructions 965 and 968.

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

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 or lithium ion cells and batteries packed in quantities that exceed the allowance permitted in Section IB, Table 965-IB, 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.

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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 or lithium metal cells and batteries packed in quantities that exceed the allowance permitted in Section IB, Table 968-IB, which must be assigned to Class 9 and are subject to 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 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.

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