



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
WORKING GROUP MEETING (DGP-WG/17)**

**Montreal, 24 to 28 April 2017**

**Agenda Item 5: Specific work items identified by the Air Navigation Commission:**

**5.3: Mitigating risks posed by the carriage of lithium batteries by air (ANC job card  
DGP.003.01)**

**DANGEROUS GOODS TRAINING FOR SHIPPERS OF SECTION II LITHIUM BATTERIES**

(Presented by D. Brennan)

**SUMMARY**

This working paper proposes that the provisions of Section II of the lithium battery packing instructions be revised to remove the exception from dangerous goods training for shippers of Section II lithium batteries, UN 3090 and UN 3480.

**Action by the DGP-WG:** The DGP-WG is invited to revise Section II of Packing Instructions 965 and 968 as shown in the appendix to this working paper.

**1. INTRODUCTION**

1.1 Shippers of lithium batteries that meet the provisions set out in Section II of the lithium battery packing instructions are currently excepted from the provisions of dangerous goods training as set out in Part 1;4 of the Technical Instructions. Instead Section II of the lithium battery packing instructions require that “Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.”

1.2 The exception from formal dangerous goods training and the alternative requirement for “adequate instruction” for persons preparing or offering Section II lithium battery consignments was developed at DGP/21 in 2007 and adopted into the 2009-2010 Edition of the Technical Instructions.

1.3 Much of the basis for the exception was around a belief that “full” dangerous goods training for these shippers was overly onerous given that Section II lithium batteries are excepted from most of the provisions in the Technical Instructions. At the time there was also the view that many of these shippers of Section II lithium batteries were individuals shipping occasional consignments of

lithium batteries and requiring dangerous goods training, training records and the other elements in Part 1;4 was excessive.

1.4 However, in the intervening ten years the volumes of lithium batteries being shipped under the Section II provisions has increased significantly. We have also seen significant growth in e-commerce with significant volumes of lithium batteries being offered for sale through e-commerce platforms, largely under the provisions of Section II of the lithium battery packing instructions.

1.5 Changes that have been made to Packing Instructions 965 and 968 to restrict transport to cargo aircraft, to limit the number of packages in a consignment, and for lithium ion batteries to require that they be shipped at a state of charge not exceeding 30% of their rated capacity all bring in a level of detailed requirements that really beg the question as to whether “adequate instruction” is appropriate and instead that Part 1;4 should apply to shippers of UN 3090 and UN 3480.

1.6 There has also been a significant amount of work done on considerations for competency-based dangerous goods training. This approach recognizes that the content of dangerous goods should focus on the actual function being performed by the individual and not a generic “one size fits all” approach to dangerous goods training.

1.7 Taking a function based approach to dangerous goods training for shippers of Section II lithium batteries allows a course to be very specific to the actual tasks performed and could reasonably be delivered, including final assessment in one to two days.

1.8 It is therefore proposed to revise Section II of Packing Instructions 965 and 968 to include Part 1;4 — Training as being applicable.

## 2. ACTION BY THE DGP-WG

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

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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

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<p style="text-align: center;">Packing Instruction 965 Cargo aircraft only for UN 3480</p> <p>...</p> <p><b>II. SECTION II</b></p> <p>≠ Lithium ion cells and batteries, when complying with Section II of this packing instruction, are only subject to the following additional provisions of these Instructions:</p> <ul style="list-style-type: none"><li>— Part 1;2.3 (General — Transport of dangerous goods by post);</li><li>— <del>Part 1;4 (General — Training);</del></li><li>— Part 5;1.1 g) and j) (Shipper's responsibilities — General requirements);</li><li>+ — Part 7;2.1 (Operator's responsibilities — Loading restrictions on the flight deck and for passenger aircraft);</li><li>+ — Part 7;2.4.1 (Operator's responsibilities — Loading of cargo aircraft);</li><li>— Part 7;4.4 (Operator's responsibilities — Reporting of dangerous goods accidents and incidents);</li><li>— Part 8;1.1 (Provisions concerning passengers and crew — Dangerous goods carried by passengers or crew); and</li><li>— Paragraphs 1 and 2 of this packing instruction.</li></ul> <p>...</p> <p><b>II.2 Additional requirements</b></p> <ul style="list-style-type: none"><li>— <del>Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.</del> <u>Any person preparing or offering cells or batteries for transport must have received dangerous goods training commensurate with their responsibilities.</u></li></ul> <p>...</p>
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**Packing Instruction 968**  
Cargo aircraft only for UN 3090

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**II. SECTION II**

Lithium metal or lithium alloy cells and batteries, when complying with Section II of this packing instruction, are only subject to the following additional provisions of these Instructions:

- Part 1;2.3 (General — Transport of dangerous goods by post);
- ~~Part 1;4 (General — Training);~~
- Part 5;1.1 g) and j) (Shipper's responsibilities — General requirements);
- Part 7;2.1 (Operator's responsibilities — Loading restrictions on the flight deck and for passenger aircraft);
- Part 7;2.4.1 (Operator's responsibilities — Loading of cargo aircraft);
- Part 7;4.4 (Operator's responsibilities — Reporting of dangerous goods accidents and incidents);
- Part 8;1.1 (Provisions concerning passengers and crew — Dangerous goods carried by passengers or crew); and
- Paragraphs 1 and 2 of this packing instruction.

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**II.2 Additional requirements**

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- ~~Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.~~ Any person preparing or offering cells or batteries for transport must have received dangerous goods training commensurate with their responsibilities.

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