

International Civil Aviation Organization

WORKING PAPER

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

Rio de Janeiro, Brazil, 20 to 24 October 2014

Agenda Item 2:Development of recommendations for amendments to the Technical Instructions<br/>for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in<br/>the 2017-2018 Edition

2.4: Part 4 — Packing Instructions

#### USE OF OVERPACKS FOR SECTION II LITHIUM BATTERIES

(Presented by M. Rogers)

#### REVISED

#### SUMMARY

This working paper proposes that packages containing lithium batteries in Section II of Packing Instructions 965 and 968 not be placed in overpacks.

Action by the DGP-WG: The DGP is invited to amend Packing Instructions 965 and 968 as presented in the appendix to this working paper.

#### 1. **INTRODUCTION**

1.1 At a special meeting of the DGP in 2012 (DGP-WG/LB/1), steps were taken to address the risk of large quantities of lithium batteries being shipped together on aircraft. It was felt that additional provisions of the Technical Instructions should be applied to "pallet-sized" quantities of lithium batteries, whereas exceptions to those provisions should continue to apply to individual packages containing small numbers of lithium batteries.

1.2 In order to distinguish between "pallet-sized" and individual shipments, the DGP established the new category "IB" in the packing instructions for lithium batteries for packages containing more than 8 cells or 2 batteries of otherwise excepted cells and batteries. Individual shipments of these cells and batteries in packages containing eight or fewer cells or two or fewer batteries could continue to be shipped under Section II of those Packing Instructions.

1.3 Since the introduction of Section IB of the packing instructions, however, some shippers have continued to ship large quantities of Section II lithium batteries together by utilizing the overpack provisions of the Technical Instructions. It is suggested that this is not the intended use of Section II of the packing instructions.

#### 2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to consider ending the use of overpacks for Section II lithium batteries in Packing Instructions 965 and 968 as proposed in the appendix to this working paper.

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DGP-WG/14-WP/24 Appendix

#### APPENDIX

#### PROPOSED AMENTDMNET TO PART 4 OF THE TECHINICAL INSTRUCTIONS

## Part 4

# **PACKING INSTRUCTIONS**

## Chapter 11

## CLASS 9 — MISCELLANEOUS DANGEROUS GOODS

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

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Packing Instruction 965 Passenger and cargo aircraft for UN 3480
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II.2 Additional requirements
<ul> <li>Cells and batteries must be packed in inner packagings that completely enclose the cell or battery then placed in a strong outer packaging.</li> <li>Cells and batteries must be protected so as to prevent short circuits. This includes protection against contact with conductive materials within the same packaging that could lead to a short circuit.</li> <li>Each package must be capable of withstanding a 1.2 m drop test in any orientation without:         <ul> <li>damage to cells or batteries contained therein;</li> <li>shifting of the contents so as to allow battery to battery (or cell to cell) contact;</li> <li>release of contents.</li> </ul> </li> <li>Each package must be labelled with a lithium battery handling label (Figure 5-32).</li> <li>Each consignment must be accompanied with a document with an indication that:         <ul> <li>the package contains lithium ion cells or batteries;</li> <li>the package must be handled with care and that a flammability hazard exists if the package is damaged;</li> <li>special procedures must be followed in the event the package is damaged, to include inspection and repacking if necessary; and</li> <li>a telephone number for additional information.</li> </ul> </li> <li>The words "lithium ion batteries, in compliance with Section II of Pl965" must be placed on the air waybill, when an air waybill is used.</li> <li>Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.</li> <li>the package must not be placed in an overpack.</li> </ul>
II.4 Overpacks
When packages are placed in an overpack, the lithium battery handling label required by this packing instruction must either be clearly visible or the label must be affixed on the outside of the overpack and the overpack must be marked with the word "Overpack".
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Cargo aircraft only for UN 3090 II. SECTION II	
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II.2 Additional requirements	
<ul> <li>Cells and batteries must be packed in inner packagings that completely enclose the cell or bat placed in a strong outer packaging.</li> </ul>	-
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<ul> <li>damage to cells or batteries contained therein;</li> <li>shifting of the contents so as to allow battery to battery (or cell to cell) contact;</li> </ul>	
<ul> <li>release of contents.</li> <li>Each package must be labelled with a lithium battery handling label (Figure 5-32) and the cargo air</li> </ul>	rcraft only
label (Figure 5-26). — the cargo aircraft only label must be located on the same surface of the package near the lithiu	
handling label, if the package dimensions are adequate.	mbattery
<ul> <li>Each consignment must be accompanied with a document with an indication that:</li> <li>the package contains lithium metal cells or batteries;</li> </ul>	
<ul> <li>the package must be handled with care and that a flammability hazard exists if the package is c</li> <li>special procedures must be followed in the event the package is damaged, to include insper repacking if necessary; and</li> </ul>	lamaged; ction and
— a telephone number for additional information.	o # "lith:
<ul> <li>The words "lithium metal batteries, in compliance with Section II of PI968 — cargo aircraft only" of metal batteries, in compliance with Section II of PI968 — CAO" must be placed on the air waybill, air waybill is used.</li> </ul>	when an
<ul> <li>Consignments of lithium metal batteries prepared in accordance with the provisions of Section II mu consolidated with other shipments of dangerous goods or non-dangerous goods and must not be lo into a unit load davias before being affered to the apareter.</li> </ul>	
<ul> <li>into a unit load device before being offered to the operator.</li> <li>Any person preparing or offering cells or batteries for transport must receive adequate instruction requirements commensurate with their responsibilities.</li> </ul>	on these
<ul> <li>the package must not be placed in an overpack.</li> </ul>	
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H.4 Overpacks	
When packages are placed in an overpack, the lithium battery handling label and the cargo aircraft	
(Figure 5-26) required by this packing instruction must either be clearly visible or the labels must be the outside of the overpack and the overpack must be marked with the word "Overpack".	affixed on
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