



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

2.3 : Part 3 — Dangerous Goods List, Special Provisions and Limited and Excepted Quantities

**DANGEROUS GOODS LIST — UN 3072 LIFE-SAVING APPLIANCES,
NOT SELF-INFLATING**

(Presented by Adrian Tušek)

SUMMARY

This paper proposes amendment to Table 3-1 for UN 3072, **Life-saving appliances, not self-inflating**.

The proper shipping name, **Life-saving appliances, not self-inflating** is being used by some shippers of emergency locator equipment (ELT, EPIRB, etc.) containing lithium metal batteries.

It is proposed to add Special Provision A182 to this entry.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Some shippers of battery-powered emergency locating equipment such as an ELT (emergency locator transmitter) or EPIRB (emergency position indicating radio beacon) are using the proper shipping name of **Life-saving appliances, not self-inflating** (UN 3072) when consigning their products. These items can contain lithium metal batteries.

1.2 Other shippers use the proper shipping name of **Battery-powered equipment** (UN 3171) to which Special Provision A182 applies.

1.3 Special Provision A182 states “Equipment containing only lithium batteries must be classified as either UN 3091 or UN 3481.”

1.4 Items that might be able to be shipped as UN 3072 but for which contain only battery-powered equipment/appliances with lithium metal or lithium ion batteries would be better shipped as UN 3091 or UN 3481 for reasons of safety.

1.5 If the change is agreed, it is also appropriate to consider amending the wording of Packing Instruction 955 to require the same considerations for packaging and marking of packages as required for the UN 3091 and UN 3481.

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

2.1 The DGP is invited to consider:

- a) assigning Special Provision A182 to the entry for UN 3072 in Table 3-1; and
- b) amending the additional packing requirements of Packing Instruction 955 to have regard for the presence of lithium ion and/or lithium metal batteries

as shown in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PART 3 OF THE TECHNICAL INSTRUCTIONS

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Part 3

DANGEROUS GOODS LIST,
SPECIAL PROVISIONS AND
LIMITED AND EXCEPTED QUANTITIES

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Chapter 2

ARRANGEMENT OF THE
DANGEROUS GOODS LIST (TABLE 3-1)

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Table 3-1. Dangerous Goods List

Name <i>1</i>	UN No. <i>2</i>	Class or division <i>3</i>	Subsidiary risk <i>4</i>	Labels <i>5</i>	State variations <i>6</i>	Special provisions <i>7</i>	UN packing group <i>8</i>	Excepted quantity <i>9</i>	Passenger aircraft		Cargo aircraft	
									Packing instruction <i>10</i>	Max. net quantity per package <i>11</i>	Packing instruction <i>12</i>	Max. net quantity per package <i>13</i>
Life-saving appliances, not self-inflating containing dangerous goods as equipment	3072	9		Miscellaneous		A48 A87 A182			See 955	No limit	See 955	No limit
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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

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Packing Instruction 955

Passenger and cargo aircraft for UN 2990 and UN 3072 only

General requirements

Part 4, Chapter 1 requirements must be met, including:

1) **Compatibility requirements**

- Substances must be compatible with their packagings as required by 4;1.1.3.

2) **Closure requirements**

- Closures must meet the requirements of 4;1.1.4.

<i>UN number and proper shipping name</i>	<i>Quantity — passenger</i>	<i>Quantity — cargo</i>
UN 2990 Life-saving appliances, self-inflating UN 3072 Life-saving appliances, not self-inflating containing dangerous goods as equipment	No limit	No limit

ADDITIONAL PACKING REQUIREMENTS

The description “Life-saving appliances, self-inflating” (UN 2990) is intended to apply to life-saving appliances that present a hazard if the self-inflating device is activated accidentally.

Life-saving appliances, such as life rafts, life vests, aircraft survival kits or aircraft evacuation slides, may only contain the dangerous goods listed below:

- Division 2.2 gases, must be contained in cylinders which conform to the requirements of the appropriate national authority of the country in which they are approved and filled. Such cylinders may be connected to the life-saving appliance. These cylinders may include installed actuating cartridges (cartridges, power device of Division 1.4C and 1.4S) provided the aggregate quantity of deflagrating (propellant) explosives does not exceed 3.2 grams per unit. When the cylinders are shipped separately, they must be classified as appropriate for the Division 2.2 gas contained and need not be marked, labelled or described as explosive articles;
- signal devices (Class 1), which may include smoke and illumination signal flares; signal devices must be packed in plastic or fibreboard inner packagings;
- small quantities of flammable substances, corrosive solids and organic peroxides (Class 3, Class 8, Division 4.1 and 5.2), which may include a repair kit and not more than 30 strike-anywhere matches. The organic peroxide may only be a component of a repair kit and the kit must be packed in strong inner packaging. The strike-anywhere matches must be packed in a cylindrical metal or composition packaging with a screw-type closure and be cushioned to prevent movement;
- electric storage batteries (Class 8) and lithium batteries (Class 9); and
- first aid kits which may include flammable, corrosive and toxic articles or substances.

The appliances must be packed, so that they cannot be accidentally activated, in strong outer packagings and, except for life vests, the dangerous goods must be in inner packagings packed so as to prevent movement. The dangerous goods must be an integral part of the appliance without which it would not be operational and in quantities which do not exceed those appropriate for the actual appliance when in use.

Passenger restraint systems consisting of a cylinder charged with a non-liquefied, non-flammable compressed gas and no more than two actuating cartridges per passenger restraint system that meet the requirements of the State of Manufacture must be packed in strong outer packagings so they cannot be accidentally activated.

Life-saving appliances packed in strong rigid outer packagings with a total maximum gross mass of 40 kg, containing no dangerous goods other than Division 2.2 compressed or liquefied gases with no subsidiary risk in receptacles with a capacity not exceeding 120 mL, installed solely for the purpose of the activation of the appliance, are not subject to these Instructions when carried as cargo.

Life-saving appliances may also include articles and substances not subject to these Instructions which are an integral part of the appliance.

Life-saving appliances containing lithium metal batteries or lithium ion batteries must also meet the packing requirements for the entries UN 3091 **Lithium metal batteries contained in equipment** or UN 3091 **Lithium metal batteries packed with equipment** or UN 3481 **Lithium ion batteries contained in equipment** or UN 3481 **Lithium ion batteries packed with equipment**, as appropriate.

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