



DANGEROUS GOODS PANEL (DGP)

TWENTY-FIRST MEETING

Montréal, 5 to 16 November 2007

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 2009-2010 Edition

PRESCRIBED CONDITIONS FOR SUBSTANCES AND ARTICLES TO BE CONSIDERED NON-RESTRICTED

(Presented by R. Richard)

SUMMARY

This paper invites the DGP to consider adding a requirement to identify articles or substances transported as non-restricted under conditions authorized by special provisions in the Technical Instructions.

Action by the DGP is in paragraph 2.

1. INTRODUCTION

1.1 At the preceding meeting of the working group of the whole (DGP-WG07), the DGP considered a proposal to require consignors to indicate on the air waybill when a substance or article was exempted from the requirements of the ICAO Technical Instructions by the prescribed conditions of a special provision (see DGP-WG/07-WP/57). A list of special provisions was provided as an appendix and included the substances to which the provisions were assigned.

1.2 Taking into account comments from the panel during DGP-WG07, this proposal addresses only special provisions which require some action on the part of the consignor in order to ensure that the substance or article as prepared for transport meets the prescribed conditions of the Technical Instructions. If the consignor is required to *perform an action* to ensure that prescribed conditions are met, a statement to that effect on the air waybill or other transport document is a reasonable requirement and serves as an additional check and balance to ensure compliance. Substances which are not subject to the Technical Instructions based on their inherent composition (for example, ferrosilicon contains less than 30 per cent or not less than 90 per cent silicon) are not included in this proposal. In addition, the proposal has been revised to clarify that the requirement only applies to substances and articles carried as cargo. This clarification is made by stating that the requirement only applies when an

air waybill is issued. Similar language is currently employed in the Technical Instructions in 1;2.4.7 in relation to the requirements for excepted quantities.

1.3 The proposed requirement would benefit both the consignor and the operator and enhance safety by ensuring that non-restricted substances or articles are prepared appropriately when accepted for transport. By including the statement on the air waybill, the consignor is indicating compliance with the special provision's prescribed requirements that qualify the substance or article for transport as non-restricted. For example, in the case of Special Provision A45, only lithium batteries conforming to certain testing, packaging and marking requirements are considered excepted. A statement on the air waybill increases the likelihood that the batteries meet these conditions, as the consignor will have made a conscious decision that the prescribed conditions of the exception have been met, and will decrease the likelihood of such consignments being rejected or delayed.

2. ACTION BY THE DGP

2.1 The DGP is invited to *add* the following sentence to the end of each special provision as shown in the appendix:

The words "not restricted" and the special provision number **AXX** must be provided on the air waybill when an air waybill is issued.

APPENDIX

LIST OF SPECIAL PROVISIONS

- A32 Air bags or seat-belts installed in conveyances or in completed conveyance components such as steering columns, door panels, seats, etc., which are not capable of inadvertent activation are not subject to these Instructions. The words "not restricted" and the special provision number A32 must be provided on the air waybill when an air waybill is issued.
- A45 Lithium cells and batteries offered for transport are not subject to other provisions of these Instructions if they meet the following:
- a) For a lithium metal or lithium alloy cell, the lithium content is not more than 1 g, and for a lithium ion cell, the lithium-equivalent content is not more than 1.5 g;
 - b) For a lithium metal or lithium alloy battery, the aggregate lithium content is not more than 2 g, and for a lithium ion battery, the aggregate lithium-equivalent content is not more than 8 g;
 - c) Each cell or battery is of the type proved to meet the requirements of each test in the UN *Manual of Tests and Criteria*, Part III, subsection 38.3;
 - d) Cells and batteries are separated so as to prevent short circuits and are packed in strong packagings, except when installed in equipment; and
 - e) Except when installed in equipment, each package containing more than 24 lithium cells or 12 lithium batteries must in addition meet the following requirements:
 - i) Each package must be marked indicating that it contains lithium batteries and that special procedures should be followed in the event that the package is damaged;
 - ii) Each shipment must be accompanied with a document indicating that packages contain lithium batteries and that special procedures should be followed in the event a package is damaged;
 - iii) Each package is capable of withstanding a 1.2 m drop test in any orientation without damage to cells or batteries contained therein, without shifting of the contents so as to allow battery-to-battery (or cell-to-cell) contact and without release of contents; and
 - iv) Except in the case of lithium batteries packed with equipment, packages may not exceed 30 kg gross mass.
- As used above and elsewhere in the Instructions, "lithium content" means the mass of lithium in the anode of a lithium metal or lithium alloy cell, except in the case of a lithium ion cell the "lithium-equivalent content" in grams is calculated to be 0.3 times the rated capacity in ampere-hours. The words "not restricted" and the special provision number A45 must be provided on the air waybill when an air waybill is issued.
- A67 Non-spillable batteries meeting the requirements of Packing Instruction 806 are not subject to these Instructions if, at a temperature of 55°C, the electrolyte will not flow from a ruptured or cracked case. The battery must not contain any free or unabsorbed liquid. When packaged for transport, the terminals must be protected from short circuit such as by the use of non-conductive caps that entirely cover the terminals. The words "not restricted" and the special provision number A67 must be provided on the air waybill when an air waybill is issued.
- A69 Articles, each containing not more than 100 mg of mercury, gallium or inert gas and packaged so that the quantity of mercury, gallium or inert gas per package does not exceed 1 g, are not subject to these Instructions when carried as cargo. The words "not restricted" and the special provision number A69 must be provided on the air waybill when an air waybill is issued.
- A70 Internal combustion engines being shipped either separately or incorporated into a machine or other apparatus, the fuel tank of which has never contained any fuel, the fuel system of which is completely empty of fuel and without batteries or other dangerous goods, are not subject to these Instructions. The words "not restricted" and the special provision number A70 must be provided on the air waybill when an air waybill is issued.
- A93 A heat-producing article is not subject to these Instructions when the heat-producing component or the energy source is removed to prevent unintentional functioning during transport. The words "not restricted" and the special provision number A93 must be provided on the air waybill when an air waybill is issued.

- A98 Aerosols, gas cartridges and receptacles, small, containing gas with a capacity not exceeding 50 ml, containing no constituents subject to these Instructions other than a Division 2.2 gas, are not subject to these Instructions unless their release could cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties. The words "not restricted" and the special provision number A98 must be provided on the air waybill when an air waybill is issued.
- A123 This entry applies to Batteries, electric storage, not otherwise listed in Table 3-1. Examples of such batteries are: alkali-manganese, zinc-carbon, nickel-metal hydride and nickel-cadmium batteries. Any electrical battery or battery-powered device having the potential of dangerous evolution of heat that is not prepared so as to prevent a short circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals) is forbidden from transport. The words "not restricted" and the special provision number A123 must be provided on the air waybill when an air waybill is issued.

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