



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-NINTH MEETING

Montréal, 13 to 17 November 2023

Agenda Item 2: Managing air-specific safety risks and identifying anomalies (Ref: REC A DGS 2025)

2.2: Develop proposals, if necessary, for amendments to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2025-2026 Edition

Agenda Item 3: Facilitating safe transport of dangerous goods by air (Ref: REC-A-DGS-2025)

EXCEPTIONS FOR DANGEROUS GOODS CARRIED BY PASSENGERS AND CREW

(Presented by Eric Gillett)

SUMMARY

The exceptions for articles carried by passengers through the application of a special provision that is not specifically mentioned within Part 8 are often overlooked, leading to passengers' property being unnecessarily denied carriage or confiscated at the airport.

The panel is invited to consider amendments to Part 8 of the Technical Instructions so that it includes the articles which are permitted for carriage by a passenger or crew member through the application of a special provision.

Action by the DGP: The DGP is invited to consider the amendments to Part 8;1 of the Technical Instructions proposed in the appendix to this working paper such that complete information on the dangerous goods which are permitted for carriage by a passenger or crew member is provided.

1. INTRODUCTION

1.1 Part 8 of the Technical Instructions establishes the provisions for dangerous goods carried by passengers and crew and as such is the basis of:

- a) Dangerous goods training provided to personnel responsible for processing passengers and their baggage (Technical Instructions Part 1;4.2.1);

- b) Dangerous goods training provided to security personnel who are involved with the screening of passengers and crew and their baggage (Technical Instructions Part 1;4;1 Note 2);
- c) information made available to passengers by the operator prior to the boarding pass issuance process, on their websites or other sources of information (Technical Instructions Part 7;5.1.3);
- d) information about those dangerous goods which may be carried by passengers, provided to passenger reservations and sales staff and passenger check-in staff (Technical Instructions Part 7;6.1(c)); and
- e) information made available to passengers by States, e.g. on websites.

1.2 Note 2 to Table 8-1 states ‘Exceptions found in these Instructions are not reproduced in Table 8-1, but then lists some of the items concerned. It is not explained within Part 8 where the other exceptions may be found.

1.3 Where a special provision within Table 3-2 is worded ‘... not subject to these Instructions’ without additional text limiting to transport as cargo, it is applicable to the carriage of the item by a passenger.

1.4 Experience has shown that exceptions for articles carried by passengers through the application of a special provision that is not specifically mentioned within Part 8, are often overlooked. This results in passengers having permitted articles unnecessarily denied carriage or confiscated at the airport. It is suggested that these issues occur because Part 8 doesn’t include all the articles which are permitted through a special provision, which in turn results in training programmes and operating procedures excluding this information.

1.5 The panel is invited to consider amendments to Part 8 of the Technical Instructions to include entries for nitrocellulose membrane filters, refrigerating machines, shock absorbers, radiation detectors, radio-pharmaceuticals contained within the body of a person and energy efficient lamps within Table 8-1 with consequential amendments to Part 8;1.1.

1.6 Whilst considering this issue, it was noted that the existing location of Notes 1, 2 and 3 seemingly make them applicable to Part 8;1.1.10 concerning active devices. It is suggested these notes should be associated with 8;1.1.1 and this change is included within the proposal.

2. ACTION BY THE DGP

1.1 The DGP is invited to consider the amendments to Part 8;1 of the Technical Instructions proposed in the appendix to this working paper such that complete information on the dangerous goods which are permitted for carriage by a passenger or crew member is provided.

APPENDIX

PROPOSED AMENDMENT TO PART 8 OF THE TECHNICAL INSTRUCTIONS

Part 8

PROVISIONS CONCERNING
PASSENGERS AND CREW

Chapter 1

PROVISIONS FOR DANGEROUS GOODS
CARRIED BY PASSENGERS OR CREW

...

1.1 DANGEROUS GOODS CARRIED BY PASSENGERS OR CREW

1.1.1 Passengers or crew are forbidden to carry dangerous goods either as or in carry-on baggage, checked baggage or on their person unless the dangerous goods are:

- a) permitted in accordance with Table 8-1; and
- b) for personal use only.

Note 1.— The following dangerous goods may be commonly carried by passengers on other modes of transport, however, they are prohibited either as or in carry-on baggage or checked baggage:

- a) personal medical oxygen devices that utilize liquid oxygen;
- b) electroshock weapons (e.g. tasers) containing dangerous goods such as explosives, compressed gases, lithium batteries, etc.;
- c) “strike anywhere” matches;
- d) lighter fuel and lighter refills;
- e) premixing burner lighter (see the Glossary of Terms in Attachment 2) without a means of protection against unintentional activation; and
- f) battery-powered lighters powered by a lithium ion or lithium metal battery (e.g. laser plasma lighters, tesla coil lighters, flux lighters, arc lighters and double arc lighters) without a safety cap or means of protection against unintentional activation.

Note 2.— States may implement additional restrictions in the interests of aviation security.

1.1.2 Except for the reporting provisions of 7;4.4 and 7;4.5, the provisions of these Instructions do not apply to the dangerous goods permitted by Table 8-1 when those dangerous goods are:

- a) carried by passengers or crew for personal use only;
- b) contained in baggage that has been separated from its owner during transit (e.g. lost baggage or improperly routed baggage); or
- c) contained within items of excess baggage sent as cargo as permitted by 1;1.1.5.1 h).

...

1.1.10 Active devices must meet defined standards for electromagnetic radiation to ensure that the operation of the devices does not interfere with aircraft systems.

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~~———— Note 2. — Exceptions found in these Instructions are not reproduced in Table 8-1. The following dangerous goods are not subject to these Instructions:~~

~~———— Radio-pharmaceuticals contained within the body of a person as the result of medical treatment; and~~

~~———— Energy efficient lamps when in retail packaging and intended for personal or home use (see 1;2.6).~~

~~———— Note 3. — States may implement additional restrictions in the interests of aviation security.~~

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Table 8-1. Provisions for dangerous goods carried by passengers or crew

Dangerous Goods	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
...				
Flames and fuel sources				
...				
8) Fuel cells containing fuel	No	Yes	No	a) fuel cell cartridges may only contain flammable liquids, corrosive substances, liquefied flammable gas, water reactive substances or hydrogen in metal hydride;
Spare fuel cell cartridges	Yes	Yes	No	b) refuelling of fuel cells on board an aircraft is not permitted except that the installation of a spare cartridge is allowed; c) the maximum quantity of fuel in any fuel cell or fuel cell cartridge must not exceed: — for liquids 200 mL; — for solids 200 grams; — for liquefied gases, 120 mL for non-metallic fuel cell cartridges or 200 mL for metal fuel cell or fuel cell cartridges; and — for hydrogen in metal hydride, the fuel cell or fuel cell cartridges must have a water capacity of 120 mL or less; d) each fuel cell and each fuel cell cartridge must conform to IEC 62282-6-100 Ed. 1, including Amendment 1, and must be marked with a manufacturer's certification that it conforms to the specification. In addition, each fuel cell cartridge must be marked with the maximum quantity and type of fuel in the cartridge; e) fuel cell cartridges containing hydrogen in metal hydride must comply with the requirements in Special Provision A162; f) no more than two spare fuel cell cartridges may be carried by a passenger;
				g) fuel cells containing fuel are permitted in carry-on baggage only; h) interaction between fuel cells and integrated batteries in a device must conform to IEC 62282-6-100 Ed. 1, including Amendment 1. Fuel cells whose sole function is to charge a battery in the device are not permitted; i) fuel cells must be of a type that will not charge batteries when the portable electronic device is not in use and must be durably marked by the manufacturer: "APPROVED FOR CARRIAGE IN AIRCRAFT CABIN ONLY" to so indicate; and j) in addition to the languages which may be required by the State of Origin for the markings specified above, English should be used.

Dangerous Goods	Location		Approval of the operator(s) is required	Restrictions
	Checked baggage	Carry-on baggage		
9) <u>Nitrocellulose membrane filters</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	a) <u>no more than 0.5 g per nitrocellulose membrane filter; and</u> b) <u>must be contained individually in an article or a sealed packet.</u>
Gases in cylinders and cartridges				
...				
44) Cartridges and cylinders of Division 2.2 with no subsidiary hazard contained in an avalanche rescue backpack	Yes	Yes	Yes	a) no more than one avalanche rescue backpack per person; b) the backpack must be packed in such a manner that it cannot be accidentally activated; c) may contain a pyrotechnic trigger mechanism which must not contain more than 200 mg net of Division 1.4S; and d) the airbags within the backpack must be fitted with pressure relief valves.
16) <u>Refrigerating machines containing ammonia solution or a gas of Divisions 2.1 or 2.2</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>No more than 12 L of ammonia solution, 100 g of gas in Division 2.1 and 12 kg of a gas in Division 2.2.</u>
17) <u>Shock absorbers</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Must comply with Special Provision A114.</u>
18) <u>Radiation detectors containing a gas of Division 2.2 with no subsidiary hazard</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Must comply with Special Provision A202 a) to f) and the capacity of detector cylinders must not exceed 50 mL.</u>
Radioactive material				
45) Radioisotopic cardiac pacemakers or other medical devices	n/a (see restrictions)	n/a (see restrictions)	No	Must be implanted into a person or fitted externally as the result of medical treatment.
20) <u>Radio-pharmaceuticals contained within or on the body of a person</u>	<u>n/a (see restrictions)</u>	<u>n/a (see restrictions)</u>	<u>Yes</u>	<u>See 1:6.1.4.</u>
Mercury				
46) Small medical or clinical thermometer which contains mercury	Yes	No	No	a) no more than one per person; and b) must be in its protective case.
Other dangerous goods				
...				
23) Dangerous goods incorporated in security-type equipment, such as attaché cases, cash boxes, cash bags, etc.	Yes	No	Yes	The security-type equipment must be equipped with an effective means of preventing accidental activation and the dangerous goods incorporated in the equipment must meet the conditions of Special Provision A178.
29) <u>Energy efficient lamps</u>	<u>Yes</u>	<u>Yes</u>	<u>No</u>	<u>Must be in retail packaging and intended for personal or home use (see 1:2.6).</u>
...				