



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
WORKING GROUP MEETING (DGP-WG/16)**

**Montreal, 17 to 21 October 2016**

**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 2019-2020 Edition**

**2.8: Part 8 — Provisions Concerning Passengers and Crew**

**ACTIVE BAGGAGE TAGS FITTED WITH LITHIUM BATTERIES**

(Presented by D. Brennan)

**SUMMARY**

This working paper proposes revision to Part 8, Table 8-1, Item 20) to make allowance for active baggage tags fitted with lithium batteries subject to the baggage tags meeting defined standards for electromagnetic radiation.

**Action by the DGP-WG:** The DGP-WG is invited to revise Part 8, Table 8-1, Item 20) as shown in the appendix to this working paper.

**1. INTRODUCTION**

1.1 A paper was presented to the twenty-fifth meeting of the Dangerous Goods Panel (DGP/25, Montreal, 19 to 30 October 2015) that proposed revision to Part 8, Table 8-1, Item 20), to include provisions for electronic baggage tags that are powered by lithium batteries (DGP/25-WP/31 refers).

1.2 The DGP supported the proposal in the working paper with some minor revisions, which was then adopted into the report of DGP/25 (DGP/25-WP/52, paragraph 5.9 and proposed amendments to Part 8 of the Technical Instructions provided in Appendix A to the report on Agenda Item 5).

1.3 Subsequent to DGP/25, DGP/25-WP/31 was provided to the third meeting of the Airworthiness Panel (AIRP/3, Montreal, 7 to 11 December 2015) for its consideration and comment. AIRP/3 agreed the subject of active electronic baggage tags merited further consideration but needed

more information and more time to consider the issue and to review any existing national and international standards before forming any conclusions.

1.4 Based on the comments from AIRP, the Air Navigation Commission concluded that the review by AIRP on the potential for electromagnetic interference with aircraft systems needed to be complete before the provision could be considered for inclusion in Part 8. As such the proposal agreed at DGP/25 was not incorporated into the final agreed text for the 2017-2018 Edition of the Technical Instructions.

1.5 As there is still a need to make provisions for electronic baggage tags this paper has been brought back for the DGP-WG's consideration.

1.6 In parallel with this working paper, a paper has been submitted to AIRP proposing that AIRP develop recommendations on the carriage of active devices. The proposal to AIRP is not limited to e-bag tags, but addresses all active battery-powered devices carried in the cargo compartment.

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

2.1 The DGP-WG is invited to revise Part 8, Table 8-1, Item 20) as shown in the appendix to this working paper.

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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

Parts of this Chapter are affected by State Variations US 15, VE 9, VE 10; see Table A-1

1.1 DANGEROUS GOODS CARRIED BY PASSENGERS OR CREW

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

Items or articles	Location			Approval of the operator(s) is required	The pilot-in-command must be informed	Restrictions
	Checked baggage	Carry-on baggage	On the person			
...						
Consumer articles						
...						
20) Portable electronic devices (such as watches, calculating machines, cameras, cellular phones, laptop computers, camcorders, <a href="#">electronic baggage tags</a> )						
Portable electronic devices containing lithium metal or lithium ion cells or batteries (articles containing lithium metal or lithium ion cells or batteries the primary purpose of which is to provide power to another device must be carried as spare batteries in accordance with the item below)	Yes	Yes	Yes	No	No	a) carried by passengers or crew for personal use; b) should be carried as carry-on baggage; c) each battery must not exceed the following: <ul style="list-style-type: none"> <li>— for lithium metal batteries, a lithium content of 2 grams; or</li> <li>— for lithium ion batteries, a Watt-hour rating of 100 Wh;</li> </ul>

Items or articles	Location			Approval of the operator(s) is required	The pilot-in-command must be informed	Restrictions
	Checked baggage	Carry-on baggage	On the person			
...						<p>d) if devices are carried in checked baggage, measures must be taken to prevent unintentional activation; <del>and</del></p> <p>e) <u>if devices are carried outside the baggage, e.g. electronic baggage tags, the device must provide adequate protection for the battery fitted inside the device;</u></p> <p>f) <u>electronic baggage tags, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active. Active devices must meet defined standards for electromagnetic radiation to ensure that the operation of the devices does not interfere with aircraft systems. The device must not be capable of emitting disturbing signals (such as buzzing alarms, strobe lights, etc.) during transport. Active devices in or on checked baggage must be designed with a minimum of two independent means to turn off completely, turn off cellular or mobile functions, or a combination of both when airborne.</u></p> <p>g) <u>the electronic baggage tag may only contain one lithium battery, which must not exceed the following:</u></p> <ul style="list-style-type: none"> <li><u>— for lithium metal batteries, a lithium metal content of 1 gram; or</u></li> <li><u>— for lithium ion batteries, a Watt-hour rating of 2.7 Wh; and</u></li> </ul> <p>eh) batteries and cells must be of a type which meets the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.</p>
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