



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
WORKING GROUP MEETING (DGP-WG/22)**

Montréal, 21 to 25 November 2022

- Agenda Item 2: Managing air-specific safety risks and identifying anomalies (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

REVISIONS TO SPECIAL PROVISION A123 AND A199

(Presented by P. Guo)

SUMMARY

This working paper proposes revisions to Special Provision A123 and A199 in order to allow dry battery or nickel-metal hydride battery powered devices, such as RFID tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, to be transported when intentionally active.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Active temperature loggers should be used during air transport of medicines and vaccines. Lithium batteries, dry batteries or nickel-metal hydride batteries can be used to power these temperature loggers.

1.2 For lithium battery powered temperature loggers, in Section II of Packing Instruction 967 and 970 it reads:

Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active. When active, these devices must meet defined standards for electromagnetic radiation to ensure that the operation of the device does not interfere with aircraft systems. The devices must not be capable of emitting disturbing signals (such as buzzing alarms, strobe lights, etc.) during transport.

1.3 But for dry battery or nickel-metal hydride battery powered temperature loggers, there are no such provisions, which will cause confusion in practice.

1.4 Therefore, it's recommended to revise Special Provision A123 and A199 so that dry battery or nickel-metal hydride battery powered devices, such as RFID tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active.

2. ACTION BY THE DGP-WG

2.1 The DGP is invited to review the proposed revisions to A123 and A199 in the appendix to this paper.

APPENDIX

PROPOSED AMENDMENT TO PART 3 OF THE TECHNICAL INSTRUCTIONS

Part 3

DANGEROUS GOODS LIST,
SPECIAL PROVISIONS AND
LIMITED AND EXCEPTED QUANTITIES

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Chapter 3

SPECIAL PROVISIONS

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Table 3-2. Special provisions

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A123	<p>This entry applies to Batteries, electric storage, not otherwise listed in Table 3-1. Examples of such batteries are: alkali-manganese, zinc-carbon and nickel-cadmium batteries. Any electrical battery or battery-powered device, equipment or vehicle having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent:</p> <ul style="list-style-type: none">a) 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); andb) unintentional activation.
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The words "not restricted" and the special provision number A123 must be provided on the air waybill when an air waybill is issued.

Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active. When active, these devices must meet defined standards for electromagnetic radiation to ensure that the operation of the device does not interfere with aircraft systems. The devices must not be capable of emitting disturbing signals (such as buzzing alarms, strobe lights, etc.) during transport.

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- A199 Nickel-metal hydride batteries or nickel-metal hydride battery-powered devices, equipment or vehicles having the potential of a dangerous evolution of heat are not subject to these Instructions provided they are prepared for transport so as to prevent:
- a) 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); and
 - b) unintentional activation.

The words “not restricted” and the special provision number A199 must be provided on the air waybill when an air waybill is issued.

Devices such as radio frequency identification (RFID) tags, watches and temperature loggers, which are not capable of generating a dangerous evolution of heat, may be transported when intentionally active. When active, these devices must meet defined standards for electromagnetic radiation to ensure that the operation of the device does not interfere with aircraft systems. The devices must not be capable of emitting disturbing signals (such as buzzing alarms, strobe lights, etc.) during transport.

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