



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-SEVENTH MEETING

Montréal, 16 to 20 September 2019

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

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 2021-2022 Edition

**SPARE DRY BATTERIES OR NICKEL-METAL HYDRIDE BATTERIES
FOR MOBILITY AIDS**

(Presented by D. Brennan)

SUMMARY

This working paper proposes a revision to the provisions for battery-powered mobility aids in Table 8-1 to permit a passenger to carry a spare dry battery or nickel-metal hydride (NiMh) battery for a mobility aid.

Action by the DGP: The DGP is invited to consider the revisions to Table 8-1, item 4) to permit a passenger to carry a spare dry battery or a NiMh battery for a mobility aid as shown in the appendix to this working paper.

1. INTRODUCTION

1.1 The number of persons with reduced mobility utilising air transport to travel for business and personal reasons continues to increase. This requires operators to implement procedures to ensure that these persons are able to travel by air, including with their mobility aids in a consistent manner.

1.2 As different States adopt new legislation to protect the rights of persons with reduced mobility, operators are forced to permit the carriage of mobility aids, including those powered by batteries of all types.

1.3 In looking at the current provisions for battery-powered mobility aids in Table 8-1, item 4), there are provisions to permit a passenger to carry a spare battery for mobility aids powered by wet non-spillable batteries and for lithium ion batteries, subject to defined Watt-hour limits. There is

¹ All language versions provided by the International Air Transport Association (IATA).

however no allowance for a passenger to carry a spare dry or NiMh battery for a mobility aid, which is causing issues for operators where passengers have such spare batteries.

1.4 As the numbers of persons with reduced mobility increases, the type of mobility aids being offered as part of passenger baggage is changing. Traditionally persons with reduced mobility were those who required a wheelchair with those battery-powered wheelchairs using large wet cell or non-spillable batteries. However, more and more passengers are travelling with lightweight powered scooters that use a variety of battery types, including nickel cadmium (NiCad), nickel-metal hydride (NiMH) and of course lithium ion batteries.

1.5 While there is an allowance for a passenger to carry a spare non-spillable battery or a lithium ion battery for a mobility aid, there is no such allowance for batteries that meet Special Provision A123, dry batteries, typically NiCad, or Special Provision A199, NiMh batteries.

1.6 To address this, it is proposed to revise item 4) of Table 8-1 to include the allowance for a passenger to carry a spare NiCad, or other dry battery, or a NiMh battery for a mobility aid.

1.7 It is also proposed that the allowance for these spare batteries be adopted into the current edition of the Technical Instructions as there is a need for passengers to be permitted to carry these spare batteries now. At DGP-WG/19 it was agreed that the provisions in item 4) of Table 8-1 be amended through a corrigendum to the 2019-2020 Edition of the Technical Instructions to include allowance for a spare non-spillable battery for a mobility aid to correct an oversight.

1.8 It is recognized that including an allowance for a spare NiCad and NiMh battery is a new issue, which would normally not be included until the next edition of the Technical Instructions effective 1 January 2021. However, in accordance with the UN Convention on the Rights of Persons with Disabilities and the Standards and Recommended Practices in Annex 9 – *Facilitation*, the panel is requested to consider this amendment as one that while not safety-related, it supports the objectives of the UN Convention and Annex 9 in facilitating the carriage of persons with reduced mobility.

2. ACTION BY THE DGP

2.1 The DGP is invited to consider the proposed amendments to Table 8-1 as shown in the appendix to this working paper. Note, the text shown in the appendix includes the changes proposed in working paper DGP-WG/19-WP/6 and which were agreed at DGP-WG/19.

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

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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		
Batteries				
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4) Mobility aids (e.g. wheelchairs) powered by: <ul style="list-style-type: none"> — spillable batteries; — non-spillable wet batteries; — dry batteries; — nickel-metal hydride batteries; or — lithium ion batteries 	Yes	(see d))	Yes	<ul style="list-style-type: none"> a) for use by passengers whose mobility is restricted by either a disability, their health or age, or a temporary mobility problem (e.g. broken leg); b) the passenger should make advance arrangements with each operator and provide information on the type of battery installed and on the handling of the mobility aid (including instructions on how to isolate the battery); c) in the case of a dry battery or nickel-metal hydride battery: <ul style="list-style-type: none"> i) each battery must comply with Special Provision A123 or A199, respectively; <u>and</u> ii) <u>a maximum of one spare battery may be carried per passenger;</u> d) in the case of a non-spillable wet battery: <ul style="list-style-type: none"> i) each battery must comply with Special Provision A67; and ii) a maximum of one spare battery may be carried per passenger. e) in the case of a lithium ion battery:

<i>Dangerous Goods</i>	<i>Location</i>		<i>Approval of the operator(s) is required</i>	<i>Restrictions</i>
	<i>Checked baggage</i>	<i>Carry-on baggage</i>		
				<ul style="list-style-type: none"> i) each battery must be of a type which meets the requirements of each test in the UN Manual of Test and Criteria, Part III, subsection 38.3; ii) when the mobility aid does not provide adequate protection to the battery: <ul style="list-style-type: none"> — the battery must be removed in accordance with the manufacturer's instructions; — the battery must not exceed 300 Wh; — the battery terminals must be protected from short circuit (by insulating the terminals, e.g. by taping over exposed terminals); — the battery must be protected from damage (e.g. by placing each battery in a protective pouch); and — the battery must be carried in the cabin; iii) a maximum of one spare battery not exceeding 300 Wh or two spare batteries not exceeding 160 Wh each may be carried.
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