

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

REVISION TO PROVISIONS FOR BATTERY-POWERED MOBILITY AIDS IN TABLE 8-1

(Presented by Aidong Song)

SUMMARY

This working paper proposes the addition of provisions for mobility aids (e.g. wheelchairs) powered by spillable batteries through Table 8-1, item 4).

Action by the DGP: The DGP is invited to consider the amendment proposed in the appendix to this working paper.

1. **INTRODUCTION**

- 1.1 It is clearly stipulated that dangerous goods cannot be carried by passengers or crew unless they are permitted in accordance with Table 8-1 in Part 8;1.1.1 of the Technical Instructions:
 - "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."
- 1.2 Some revisions have been made to Table 8-1 in the 2019-2020 Edition of the Technical Instructions to facilitate the application. Some provisions for battery-powered mobility aids (e.g. wheelchairs) were moved to Part 7;2.13.
- 1.3 It is very common for passengers to carry mobility aids (e.g. wheelchairs) powered by lithium ion batteries, non-spillable wet batteries or spillable batteries. However, the mobility aids powered by spillable batteries are not listed in Table 8-1, so there are no provisions for passengers when they

present this kind wheelchairs at check-in, though actually passengers should take some protective measures. What's more, the absence of spillable batteries from Table 8-1 may make people think that the spillable batteries cannot be transported.

- 1.4 Spillable battery-powered mobility aids have great risks in transportation. If the mobility aid cannot be always in an upright position, the battery must be removed and then the mobility aid may be carried as checked baggage without restriction. So, it is recommended that the transport of spillable battery-powered mobility aids should be approved by the operator, as in the 2017-2018 Edition the Technical Instructions.
- 1.5 Therefore it is proposed to add spillable batteries to the entry for battery-powered mobility aids (e.g. wheelchairs) (Table 8-1, item 4)) and to require the approval of the operator.

2. **ACTION BY THE DGP**

2.1 The DGP is invited to consider the revision to Table 8-1 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

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

	Table 0-1.	Provisions for dangerous goods				Larried by passengers or crew			
		Location		ЭС					
Dangerous Goods		Checked baggage	Carry-on baggage	Approval of the operator(s) is required		Restrictions			
teries				i.					
	•								
4)	Battery-powered mobility aids (e.g. wheelchairs)	Yes	(see d))	Yes	a)	for use by passengers whose mobility is restricted by either disability, their health or age, or a temporary mobility proble (e.g. broken leg);			
					b)	the passenger should make advance arrangements with ea operator and provide information on the type of batte installed and on the handling of the mobility aid (includi instructions on how to isolate the battery);			
					c)	in the case of a non-spillable wet battery:			
						i) each battery must comply with Special Provision Adand			
						ii) a maximum of one spare battery may be carried $\ensuremath{\mathfrak{p}}$ passenger;			
					d)	in the case of a lithium ion battery:			
						i) each battery must be of a type which meets t requirements of each test in the <i>UN Manual of Tests a Criteria</i> , Part III, subsection 38.3;			
						ii) when the mobility aid does not provide adequation protection to the battery:			
						 the battery must be removed in accordance with t manufacturer's instructions; 			
						 the battery must not exceed 300 Wh; 			
						 the battery terminals must be protected from sh circuit (by insulating the terminals, e.g. by tapi over exposed terminals); 			
						 the battery must be protected from damage (e.g. 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 V or two spare batteries not exceeding 160 Wh each m			

	Location		Je	
Dangerous Goods	Checked baggage	Carry-on baggage	Approval of the operator(s) is required	Restrictions
				be carried. Spare batteries must be carried in the cabin.
				e) in the case of a spillable battery:
				If the mobility aid cannot be loaded, stowed, secured and unloaded always in an upright position, the battery(ies) must be removed and carried in strong, rigid packagings. The mobility aid may then be carried as checked baggage without restriction: the battery should be fitted, where feasible, with spill-resistant vent caps.
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