



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
MEETING OF THE WORKING GROUP OF THE WHOLE**

Atlantic City, United States, 4 to 8 April 2011

Agenda Item 4: Development of recommendations for amendments to the *Emergency Response Guidance for Aircraft Incidents involving Dangerous Goods (Doc 9481)* for incorporation in the 2013-2014 Edition

ADDITIONAL DRILL LETTER FOR LITHIUM BATTERIES

(Presented by Adrian Tušek)

SUMMARY

This paper proposes amendment to Table 4-1 and all entries in Table 4-2 and Table 4-3 to include a new Drill Letter applicable to incidents involving lithium batteries.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 In the 2009-2010 Edition of the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods (Doc 9481)* changes were made to recommend the use of 'water' as a fire fighting agent in cases of fire in the cabin involving a portable electronic device.

1.2 These changes were as a result of the heat produced in fires involving lithium batteries contained in portable electronic devices.

1.3 Other changes relating to the transport of spare lithium batteries by passengers or crew have also been made to ensure they are in carry-on baggage rather than in checked baggage so that any fire involving these batteries can be more readily controlled in the aircraft cabin where a fire may be more readily detected and access to water as a fire fighting agent is probable.

1.4 Federal Aviation Administration (FAA) fire testing involving lithium batteries demonstrates that cargo hold fire suppression may not be sufficient to contain lithium battery fires due the amount and type of fire suppression agent.

1.5 It is therefore proposed to reinforce the use of water as a fire fighting agent in relation to incidents involving lithium batteries not only in the cabin but also on cargo aircraft.

1.6 However, the overriding General Consideration of Section 2.1 1) should become an immediate action with fires involving lithium batteries and that should be “Landing immediately”. This is because a fire involving lithium batteries may be beyond the limit of current aircraft cargo fire suppression systems.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to:

- a) consider introducing a new Drill Code “Z” for use in Tables 4-1, 4-2 and 4-3 for use in association with UN 3480, UN 3481, UN 3090 and UN 3091. Currently these items appear as Drill Code 9F but would become 9FZ.

Proposed change for consideration:

Table 4-1. Aircraft Emergency Response Drills						
1. COMPLETE APPROPRIATE AIRCRAFT EMERGENCY PROCEDURES. 2. CONSIDER LANDING AS SOON AS PRACTICABLE. 3. USE DRILL FROM THE CHART BELOW.						
DRILL NO.	INHERENT RISK	RISK TO AIRCRAFT	RISK TO OCCUPANTS	SPILL OR LEAK PROCEDURE	FIREFIGHTING PROCEDURE	ADDITIONAL CONSIDERATIONS
9	No general inherent risk	As indicated by the drill letter	As indicated by the drill letter	Use 100% oxygen; establish and maintain maximum ventilation if “A” drill letter	All agents according to availability; <u>Use water on “Z” drill letter</u> no water on “W” drill letter	None <u>If “Z” drill letter, consider landing immediately.</u>
DRILL LETTER ADDITIONAL RISK			DRILL LETTER	ADDITIONAL RISK		
			Z	Aircraft cargo fire suppression system may not extinguish or contain the fire. Consider landing immediately.		