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DANGEROUS GOODS PANEL (DGP)

TWENTY-SIXTH MEETING

Montréal, 16 to 27 October 2017

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 2019-2020 Edition

GUIDANCE FOR THE USE OF CABIN CREW CHECKLISTS FOR DANGEROUS GOODS INCIDENTS IN THE PASSENGER CABIN DURING FLIGHT

(Presented by J. Jin)

SUMMARY

This working paper proposes amendments to the cabin crew checklists for dangerous goods incidents in the passenger cabin during flight contained in the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* (Doc 9481). General principles and clear guidance on how to use these checklists are recommended.

Action by the DGP: The DGP is invited to consider amending Section 3 of the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* by (Doc 9481) by adding a flowchart to aid in selecting and using the appropriate checklist, as shown in the appendix to this working paper.

1. INTRODUCTION

1.1 From 1 January 2015, the cabin crew checklist for dangerous goods incidents in Section 3.3 of the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* (Doc 9481, "the Red Book") was divided into six different checklists. Among the six checklists, four are applicable to dangerous goods incidents involving batteries or portable electronic devices (PEDs). The remaining two checklists are applicable to fire and to spillage or leakage involving dangerous goods other than batteries. It appears that dangerous goods incidents are divided into two categories in the Red Book, either those involving lithium batteries/PEDs or those that do not involve lithium batteries/PEDs.

1.2 No clear guidance on how to select and use these multiple checklists was developed when Doc 9481 was revised. It may therefore be difficult for cabin crew to acknowledge, select and properly use these checklists in emergency situations. This may cause misinterpretation and misuse of the

checklists, which may in turn cause severe consequences because of inappropriate emergency response. As an example, whether or not water should be used in a fire incident is dependent on the types of dangerous goods involved. The checklists recommend the use of a water extinguisher for smoke or fire involving batteries or PEDs, and the dousing with water (or other non-flammable liquid) to cool down the battery or device. But the checklist for smoke or fire involving other dangerous goods indicates that water should not be used on a spillage or when fumes are present, since it may spread the spillage or increase the rate of fuming.

1.3 There is a specific case concerning the use of water from the Civil Aviation Administration of China (CAAC). On an A321 Chinese flight, after 15 minutes of departure, smoke was seen to be coming out of a passenger's baggage under the seat with a slightly irritating smell. The cabin crew could not identify the item immediately, because the smoking suitcase was locked and no passenger nearby claimed the baggage. The fire-fighting procedure was applied immediately, and the pilot-in-command was notified by the crew. Then the smoke disappeared rapidly. Since the baggage's zipper handle was too hot to open, water was used to cool down the temperature so that the baggage could be opened. At that moment, the crew was informed by the owner, who was seated in row 57, that there was metal powder inside the baggage. So the crew changed and used a fire blanket to wrap the metal powder package and put out the smoke by isolation with air. An ice bag was also used to cover the blanket for cooling. Then all the suspicious items were taken to the rear toilet under regular inspection. The pilot-in-command decided to land the aircraft to its alternate.

1.4 We have to say that currently most of the dangerous goods incidents involving smoke or fire in the cabin have been caused by batteries or PEDs. If in the case above the cabin crew was not trained properly to acknowledge the checklists and emergency response procedures, they could have misused the "PED Fire" and "Dangerous Goods Fire" checklists. If the crew assumed it was a battery/PED smoke or fire incident, they might have applied water (or other non-flammable liquid) directly during the fire-fighting process, which may have led to a disastrous consequence.

2. ACTION BY THE DGP

2.1 The DGP is invited to consider amending Section 3 of the *Emergency Response Guidance for Aircraft Incidents Involving Dangerous Goods* by (Doc 9481) by adding a flowchart to aid in selecting and using the appropriate checklist, as shown in the appendix to this working paper.

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APPENDIX

PROPOSED AMENDMENT TO THE EMERGENCY RESPONSE GUIDANCE

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Section 3

EXAMPLES OF DANGEROUS GOODS INCIDENTS CHECKLISTS

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3.3 CABIN CREW CHECKLISTS FOR DANGEROUS GOODS INCIDENTS IN THE PASSENGER CABIN DURING FLIGHT

This section consists of cabin crew checklists for dangerous goods incidents in the passenger cabin during flight involving:

. . .

e) fire involving dangerous goods (see 3.3.5); and

f) spillage or leakage of dangerous goods (see 3.3.6)

Guidance on how to classify and select the six checklists is provided in the flowchart in Figure 3-1.

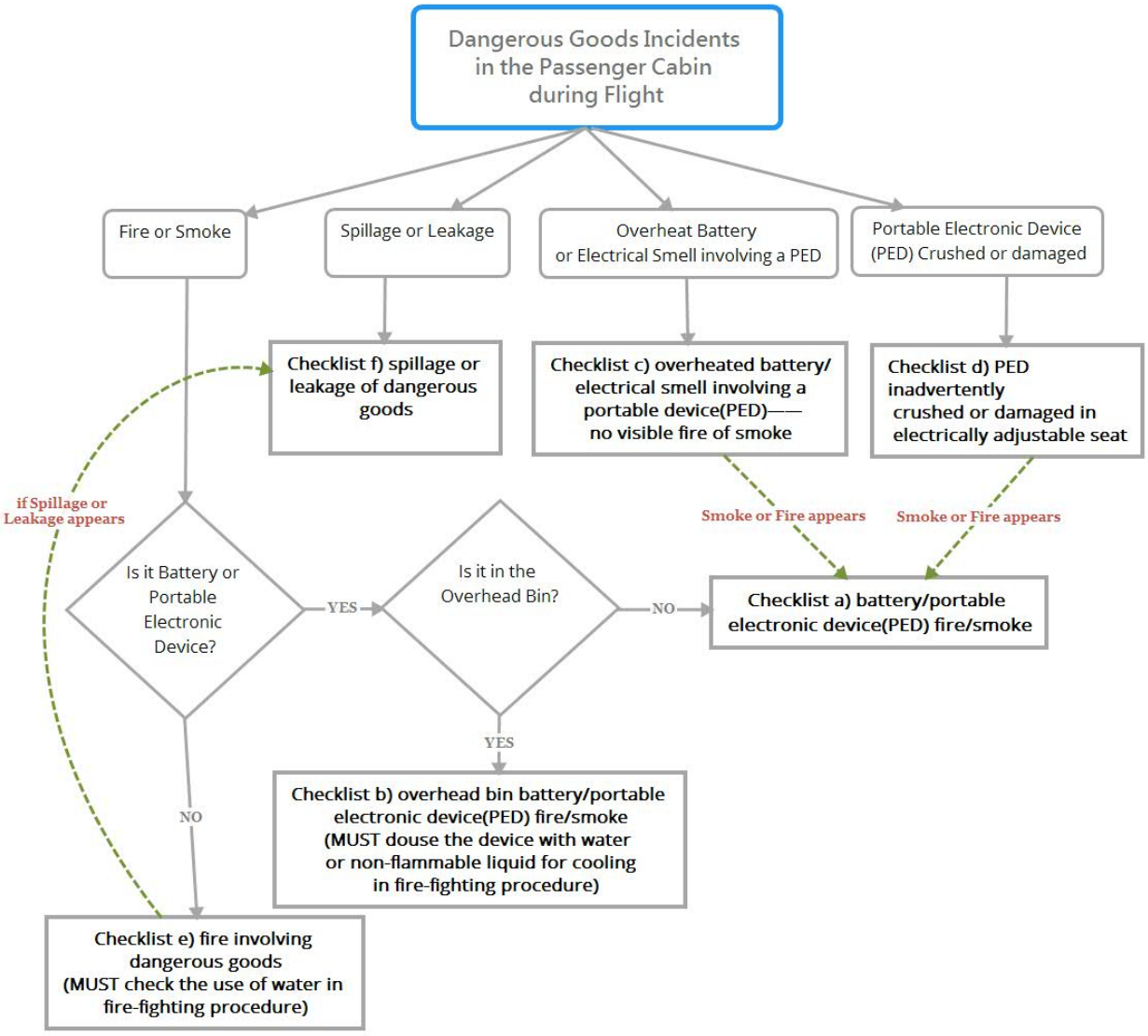


Figure 3-1. Flowchart for the proper selection and use of the checklists

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