



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTIETH MEETING

Montréal, 24 October to 04 November 2005

Agenda Item 2: Development of recommendations for amendments to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2007-2008 Edition

NON-SPILLABLE BATTERIES: AMENDMENT TO SPECIAL PROVISION A67

(Presented by R. Richard)

SUMMARY

Currently the Technical Instructions except certain wet non-spillable electric storage batteries from regulation provided they meet certain conditions. This paper proposes to clarify the conditions under which such batteries may be excepted and to require a marking to ensure operators may easily distinguish which batteries are excepted.

1. INTRODUCTION

1.1 Batteries, wet, non-spillable *electric storage* (UN 2800), are currently subject to Packing Instruction 806 and A67. PI 806 requires that in order to be considered non-spillable, the batteries must pass a vibration test and a pressure test, be protected against short circuits, and be securely packed in strong outer packagings. Special Provision A67 provides an exception for batteries meeting the conditions of PI 806 if, “at a temperature of 55 °C, the electrolyte will not flow from a ruptured or cracked case and *there is no free liquid to flow* and if, when packaged for transport, the terminals are protected from short circuit.” The wording of A67 has prompted several requests for interpretations from shippers attempting to determine whether certain batteries meet the conditions of SP A67. In particular the wording “and there is no free liquid to flow” has caused confusion. Some batteries are designed to contain free liquid within an absorbent material. As such the liquid will not flow from a ruptured or cracked case, because it is fully absorbed. Questions periodically are received with respect to whether fully absorbed liquid is considered “free” liquid. It is suggested that such liquid is not “free” because it is absorbed. It is proposed that A67 be revised to clarify the intent.

Currently the TI does not require non-spillable batteries to be marked to indicate that they meet the conditions of A67 . Electric storage batteries have been the source of numerous incidents aboard aircraft and a number of enforcement actions have been taken in response to batteries that were offered for transport as non-spillable batteries but did not meet the conditions A67. On this basis, it is proposed that batteries meeting the conditions of A67 be marked with the words “NONSPILLABLE” or “NONSPILLABLE BATTERY”.

2. PROPOSAL

2.1 Amend Special Provision A67 as follows:

Non-spillable batteries meeting the requirements of Packing Instruction 806 are not subject to these Instructions if, at a temperature of 55 °C, the electrolyte will not flow from a ruptured or cracked case, ~~and there is no free liquid to flow and if,~~ The battery must not contain any free or unabsorbed liquid. ~~When packaged for transport, the terminals are~~ must be adequately protected from short circuit, such as by the use of non-conductive caps that entirely cover the terminals. The battery and the outer packaging must be plainly and durably marked “NONSPILLABLE” or “NONSPILLABLE BATTERY”.

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