International Civil Aviation Organization

DGP-WG/08-WP/55
22/10/08

WORKING PAPER

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

The Hague, 3 to 7 November 2008

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 2011/2012 Edition
2.8: Part 8 — Provisions Concerning Passengers and Crew

BATTERY-POWERED DEVICES

(Presented by D. Brennan)

SUMMARY

This paper proposes discussion on the carriage and use of battery-powered medical devices carried by passengers and the possible addition of provisions in Part 8 of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284).

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Part 8;1.1.2 e) of the Technical Instructions sets out the provisions for battery-powered mobility aids with non-spillable batteries when part of passenger baggage. These same batteries are also addressed in Special Provision A67 and Packing Instruction 806, except that according to A67 the batteries are "…not subject to these Instructions…" provided the batteries meet the requirements set out in A67 and PI 806.

1.2 While Part 8;1.1.2 e) sets out provisions for mobility aids, there are an increasing number of other health-care products on the market that also contain non-spillable batteries. These include devices such as portable oxygen concentrators (POC), continuous positive airway pressure (CPAP) respirators, etc. The other significant issue associated with these devices is that passengers want to not only have the device as part of their carry-on baggage, but they also need to use the device during flight, unlike electric wheelchairs, which are not in use and are carried in the cargo compartment.

1.3 As identified by the panel member nominated by the United Kingdom in DGP-WG/08-WP/49 there appears to be some ambiguity on the status of non-spillable batteries that meet the requirements of Special Provision A67. According to A67 non-spillable batteries are "not subject to these Instructions", however Part 8;1.1.2 contains very specific requirements for the carriage of non-spillable batteries when part of a mobility aid.

1.4 This ambiguity needs to be resolved to provide a clear statement of requirements so that passengers and operators understand what may be carried and under what conditions.

1.5 The other important issue that needs to be addressed is the use of battery-powered devices for health care purposes. These devices are different from consumer type devices such as MP3 players, laptops, etc., which may only be used after the seat belt sign has been turned off, as permitted by the flight and cabin crew. Health care devices such as POC are required to be in use throughout the flight. This requires formal approval for their usage and there must be some certification of compliance to identify that the device does not emit electromagnetic radiation that will interfere with aircraft systems.

1.6 One interpretation regarding the use of POC and other medical devices is that the passenger could be considered a "patient" and the operator could then approve the carriage and use of the device under the provisions of Part 1;1.1.3.1 a). While passengers using POC and other devices will have a medical certificate attesting to the passenger's need for the device, the passengers are not truly "patients" under direct medical care being transported for the purposes of receiving, or having received medical treatment. Use of Part 1;1.1.3.1 a) is therefore believed to be a misuse of the provisions of the Technical Instructions.

1.7 It is believed that a better approach is to formally recognize the carriage and use of battery-powered medical devices, subject to defined conditions. Placing clear requirements for the carriage and use of battery-powered medical devices would assist the manufacturers of the devices to meet aviation specifications and would also ensure that operators and passengers with disabilities had a clear set of requirements under which the devices could be carried and used.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to consider the addition of text into Part 8;1.1.2 permitting the carriage and use of battery-powered medical devices that utilize non-spillable batteries as well as "dry" batteries such as nickel cadmium (Ni Cad), nickel metal hydride (Ni Mh), etc. Some specific items that the DGP-WG may want to consider are:

a) is it appropriate to permit a general statement of carriage subject to approval by the operator provided the manufacturer of the device certifies that the device meets an ISO, IEC, or other recognized standard with respect electromagnetic interference and compatibility with aircraft systems;

b) should there be approval that the device may be connected to aircraft power, subject to a statement of compliance by the manufacturer of the device that the device is compatible with the aircraft systems;

c) should there be a requirement that the pilot-in-command and/or cabin crew be advised of the location of the passenger and that the device will be used during the entire duration of the flight.

2.2 Based on the comments and recommendations by the DGP-WG a paper will be prepared for DGP-WG09.

— END —