



WORKING PAPER

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

Beijing, China, 25 October to 3 November 2006

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 2009/2010 Edition

2.8: Part 8 — Provisions Concerning Passengers and Crew

PROHIBITION ON LIQUID OXYGEN SYSTEMS

(Presented by D. Brennan)

SUMMARY

This paper proposes an amendment to Part 8 of the Technical Instructions in order to specify that personal liquid oxygen systems are forbidden.

Action proposed is in paragraph 2.

1. INTRODUCTION

1.1 Part 8;1.1.2 specifies a list of items, which although classified as dangerous goods, are permitted in passenger and crew checked and/or carry-on baggage. Listed among these items in paragraph c) is:

...with the approval of the operator, small gaseous oxygen or air cylinders required for medical use.

1.2 Oxygen is widely used by persons suffering from respiratory diseases such as emphysema and many airlines have specific procedures to accommodate passengers who require supplementary oxygen and who have a need to carry cylinders of oxygen when they travel.

1.3 However, for persons with breathing difficulties the weight of the oxygen cylinder can almost outweigh the benefits of the oxygen and for this reason the medical industry is marketing lightweight oxygen systems that utilize liquid oxygen. Several devices are currently on the market, which dispense personal oxygen through the evaporation of liquid oxygen to gaseous oxygen. The devices are

quite small (some less than 25 cm in height) and can provide oxygen service for up to eight hours depending on their volume and flow rate.

1.4 The units utilize liquid oxygen, which is prohibited for transport on both passenger and cargo aircraft. The manufacturers indicate the devices have been tested for home use but have not been tested or approved for transport. Given the risks associated with liquid oxygen it is believed the Part 8 of the Technical Instructions should specifically identify that personal liquid oxygen systems are forbidden.

2. ACTION PROPOSED

2.1 *Add* a new sentence at the end of Part 8;1.1.1 as follows:

1.1 DANGEROUS GOODS CARRIED BY PASSENGERS OR CREW

1.1.1 Except as otherwise provided in 1.1.2, dangerous goods, including excepted packages of radioactive material, must not be carried by passengers or crew members, either as or in carry-on baggage or checked baggage or on their person. Security type equipment such as attaché cases, cash boxes, cash bags, etc., incorporating dangerous goods, for example lithium batteries or pyrotechnic material, are totally forbidden; see entry in Table 3-1. Personal medical oxygen devices that utilize liquid oxygen are prohibited either as or in carry-on baggage or checked baggage or on the person.

2.2 *Add* a Note to 1.1.2 c), which would then read as follows:

1.1.2 The provisions of these Instructions do not apply to the following when carried by passengers or crew members or in baggage, transported by the operator, that has been separated from its owner during transit (e.g. lost baggage or improperly routed baggage):

...

c) with the approval of the operator(s), small gaseous oxygen or air cylinders required for medical use;

Note.— Devices containing liquid oxygen are forbidden as or in carry-on baggage, checked baggage or on the person.

— END —