



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-FIRST MEETING

Montréal, 5 to 16 November 2007

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

PASSENGER'S EXPOSURE DOSE LIMIT

(Presented by U.A. Mikhin)

SUMMARY

This working paper presents an amendment to 7;2.9.1.3 of the Technical Instructions relating to limitation of exposure of persons to radiation.

Action by the DGP is in paragraph 2.

1. INTRODUCTION

1.1 At DGP-WG07, a potential problem of passengers using portable dosimeters on board aircraft, which has radioactive material in the cargo hold, was raised. It was suggested that when such passengers see a reading greater than background on the meter, they might panic. It was proposed to add text relating to the maximum acceptable dose rate to 7;2.9.1.

1.2 The representative of the International Atomic Energy Agency (IAEA) explained at the meeting that the tables of separation distances contained as requirements in the Technical Instructions were presented as guidance by the Agency as one means to limit dose rate. He further noted that the table is based on radiation dose rate criterion of 0.02 mSv/h to a passenger. The representative of IAEA suggested that a note could be drafted to explain that the separation distances are based on aforementioned criterion. This value could be used as a check to ensure that the proper separation distances in the hold of aircraft are maintained.

2. ACTION BY THE DGP

2.1 The DGP is invited to *amend* 7;2.9.1.3 by adding the following note:

2.9.1.3 The practice should be followed of keeping exposure to radiation as low as reasonably achievable. The separation distances shown in Tables 7-5 and 7-6 are minimum values, and greater distances should be used where feasible. As far as possible, packages of radioactive materials stowed in underfloor cargo compartments of passenger aircraft should be placed on the compartment floor.

Note.— The separation distances from packages of radioactive material to passengers specified in Tables 7-5 and 7-6 are based on a radiation dose rate criterion of 0.02 mSv/h to a passenger, excluding background radiation, when measured on the passenger seat. (see Advisory Material for the IAEA Regulation for the Safe Transportation of Radioactive material (1996 Edition), Safety Standard Series No. TS-G-1.1 (ST-2), IAEA, Vienna).

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