

**DEPARTMENT OF CIVIL AVIATION
MALAYSIA
AIRWORTHINESS NOTICE**

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Date: 1 July 1997

FLAME RESISTANT FURNISHING MATERIALS

1. Introduction

- 1.1 The Malaysian requirements for compartment design safety precautions are satisfied by demonstrated compliance with the standards equivalent to the relevant sections of BCAR, FAR or JAR. Suitable methods of flame resistance testing of aircraft furnishing materials are described in CAA Specification No. 8. Copies of Specification No. 8 are available from the DCA.
- 1.2 Materials used for carrying out repairs or modifications to aircraft cabin furnishings are also required to have flame resistant properties, which are either at least equal to those of the materials used in the original design, or in compliance with the current DCA requirements.

2. Requirements For Initial Acceptance Of Materials

Wherever possible only inherently flame resistant materials shall be used. However, materials which meet the requirements by the use of a flame retardant process, applied either during or after manufacture, may also be used provided that (since all materials may at some time be dry-cleaned or washed) the material is shown to be flame resistant when tested both before and after being subjected to three representative cleaning processes. (See CAA Specification No. 8, paragraph 3.2.4.)

3. Requirements For Maintenance Of Fire Resistance

- 3.1 Continuance of the flame resistance properties of furnishing materials may depend upon their use in service and the methods used in their cleaning. Experience has shown that :-
- (a) The proprietary flame retardant processes often applied to furnishing materials during or after manufacture, in order to provide the necessary flame resistant properties, may be destroyed or seriously impaired where the incorrect dry cleaning, laundering or proprietary finishing processes which enhance durability and minimise soiling, are used.
 - (b) The application of one flame retardant process on top of another, of a different type may have the effect of inhibiting the properties of both processes.
 - (c) During service, seat covers become contaminated with perspiration which leaves a deposit of body salts etc. These deposits may accumulate, impairing the flame resistance properties of the materials.
 - (d) Disinfectants, etc., are often sprayed from aerosol containers in aircraft cabins. The accumulation of these agents may also affect the long term flame resistant properties of the furnishing materials.
- 3.2 Operators and maintenance organizations are reminded, therefore, that they must have adequate control over the cleaning of aircraft furnishing materials. For this, they need to have a knowledge of the material type, the recommended cleaning or proprietary finishing processing method, the effects of time in service on the flame resistance properties, the flame retardant processes applied, if any, and the method of re-application of such a process, where this is necessary. It is not acceptable to place reliance on unsubstantiated claims concerning the continuance of flame resistant properties of a material after durability or additional flame retarded processes have been applied. Where such processes have been applied, there is a need to prove the continued acceptability of a particular material or process in service, and, thus, further flame resistance test must be conducted accordance with requirements identified in paragraphs 1.1 and 1.2 of this Notice, and where applicable, Notice No. 39.

4. Cancellation

This Notice cancels Airworthiness Notice No. 38 Issue 1 dated 1 April 1987 which should be destroyed.

DIRECTOR GENERAL
DEPARTMENT OF CIVIL AVIATION
MALAYSIA