AWB 25-2 Issue 1 - Inspection and replacement of seat belts and harnesses

AWB 25-2 Issue 1, 4 April 2003

Inspection and replacement of seat belts and harnesses

Effectivity

Inspection and replacement of seat belts and harness webbing, including shoulder harnesses employing inertia reels.

Purpose

To provide advice to maintainers and operators to review the inspection and maintenance requirements for aircraft safety harnesses, to ensure they continue to conform to the original design strength while in service.

Background

A rotorcraft pilot's shoulder harness failed unexpectedly during a crash. Testing on the failed webbing revealed that the shoulder harness strength had reduced to less than 20 percent of its original strength. The manufacturer's date stamped on the harness was March 1973.

The difficulty is, that while seat belt webbing may appear to be free of detrimental fraying, fading from exposure to ultraviolet light, and chemical contamination, the only way of ensuring that seat belt webbing is safe to use, is to test the webbing to destruction. This, of course, renders the belt assembly unusable. To overcome this problem, some rotorcraft manufacturers have implemented a 10-year service life on seat belts and shoulder harnesses.

Recommendation

1. Remove from service and destroy all seat belts and shoulder harness webbing when it reaches 10 years time in service.
2. Implement inspection procedures to ensure that safety belts and shoulder harness assemblies, particularly those in the pilot and co-pilot positions, are maintained during the recommended ten-year service life to a standard that requires prematurely faded, chafed, or otherwise damaged or chemically

contaminated seat belt webbing to be replaced with serviceable assemblies.

Enquiries

Enquiries with regard to the content of Airworthiness Bulletins should be made via the direct link e-mail address included on the Airworthiness Bulletin web site, AirworthinessBulletin@casa.gov.au or in writing to Airworthiness Standards Branch, GPO Box 2005, Canberra, ACT, 2601.