AWB 25-1 Issue 1 - Aircraft seats

AWB 25-1 Issue 1, 23 November 2001

Aircraft seats

Applicability

All aircraft.

Purpose

The objective of this bulletin is to highlight to the maintainers, flight crew and operators the importance of meticulous inspection and maintenance of seats and seat adjustment mechanisms to prevent inadvertent operation of the seat, particularly during critical phases of flight such as take-off.

Background

There have been numerous tragic accidents, several fatal, that have occurred due to inadequate inspection and maintenance practices on seat assemblies, particularly with Cessna aircraft, including incorrect placement of seat stops, worn seat adjustment mechanisms, seat latch locating holes and the installation of unapproved parts. Despite ample Instructions for Continued Airworthiness (ICA) issued from both the manufacturer and CASA, attentiveness towards maintenance of seats (and associated adjustment mechanisms) is by and large, unsatisfactory. It is essential that aircraft seats, their adjustment mechanisms and any attaching systems, such as safety harnesses, be in good condition to ensure secure and safe operation for the flight crew and passengers.

Recommendations

Maintenance

Removal, installation and inspection of seats are frequently performed by unlicenced maintenance staff during maintenance events. It is essential that certifying staff ensure that all maintenance personnel undertaking any maintenance task is aware of all inspection requirements, including special inspections and Airworthiness Directives (AD's). The content of the ICA should be familiar to the maintainer and constantly reviewed to ensure the maintainer is using up-to-date data.

Another factor required for correct operation of seat mechanisms is the use of appropriate components and parts. The maintainer should always refer to the aircraft's Illustrated Parts Catalogue (IPC) to identify that the correct seat stops, cotter pins, etc are utilised. Do not accept that the parts previously used are genuine or correct. Verify yourself.

Although removal and installation of seats may seem a mundane task, the importance to ensure correct positioning of seat stops cannot be overstated. Maintenance personnel should check that the seat operates correctly throughout its entire range of movement (forward/aft, recline and height). Seats should be verified both visually and operationally for the functionality of the adjustment mechanism, particularly at the extreme positions of the seat travel. Inspection should also extend to any approved supplemental or secondary seat stop devices to ensure correct operation.

Flight Crew

The checking of seat adjustment and locking is as much a part of the pre-flight inspection as that of checking the flight controls or aircraft fluids and as such should be carried out with diligence.

Seat adjustment should occur before the aircraft is started. Operation of the seat for adjustment should be smooth and deliberate, with movement slow enough to allow the locking mechanism to engage correctly. Ensure that any flight bags, headset cables, etc do not foul the seat actuating mechanism, causing inadvertent seat movement.

Any discovered defects must be noted in the maintenance release (refer CAR 50) and reported to the certificate of registration holder before further flights. Report all major defects to CASA as required by CAR 52.