
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Airtractor 600 Series Aeroplanes**AD/AT 600/5 Wing Main Spar Lower Cap Fastener Hole 1/2007**

Applicability: Model AT-602 aircraft, serial numbers 602-0337 and subsequent.

- Requirement:
1. Unless already accomplished, before accomplishment of the initial eddy current inspection, gain access for the inspection by cutting inspection holes, modify the vent tube, and install cover plates, in accordance with Snow Engineering Co. Service Letter No. 204 Revised 26 March 2001, and Drawing titled "602 Spar Inspection Holes and Vent Tube Mod.," dated 13 November 2003.
 2. Eddy current inspect the wing centre splice joint outboard two fastener holes in both the left and right wing main spar lower spar caps for cracks, in accordance with Snow Engineering Co. Process Specification 197 Revised 4 June 2002. For the following aircraft, use the wing spar lower cap hours time in service in the compliance section and accomplish the initial and repetitive inspections:
 - a. For aircraft with serial numbers 602-0337 through 602-0584, as manufactured, inspect at the times specified in the compliance section.
 - b. For aircraft with serial numbers 602-0337 through 602-0584, modified with cold-worked fastener holes in accordance with Snow Engineering Co. Service Letter (SL) No. 244 dated 25 April 2005; if performing the cold working procedure in SL No. 244, it includes the eddy current inspection.

Accomplish an eddy current inspection as part of the cold working procedure in SL No. 244 even if the wing spar was previously inspected.
 3. For aircraft with serial numbers 602-0337 through 602-0584, terminating action for the inspection requirements may be achieved by modification of the wing with installation of part number 20996-2 steel web plate and part number 20985-1/2 8-bolt splice blocks in accordance with Snow Engineering Co. Drawing 20998 Revision B, dated 28 September 2004, and cold work of the lower spar cap two outboard fastener holes at the wing centre section splice connection in accordance with Snow Engineering Co. Service Letter No. 240 dated 30 September 2004.
 4. For aircraft with serial numbers 602-0337 through 602-0584, repair or replace a cracked spar cap found during any inspection, by accomplishing one of the following:

Airtractor 600 Series Aeroplanes

AD/AT 600/5 (continued)

- a. For cracks that can be removed by performing the terminating action listed in Requirement 3, accomplish the action specified in Requirement 3.
 - b. For cracks that cannot be removed by performing the terminating action listed in Requirement 3, replace the lower spar caps and associated parts listed in Requirement 5 before continued flight.
5. For all Model AT-602 aircraft, replace the wing lower spar caps, splice blocks and hardware, wing attach angles and hardware, and install the steel web plate part number 20996-2, if not already installed, in accordance with Snow Engineering Co. Drawing 20776, Sheet 2, Revision A dated 30 August 2004. This Requirement terminates the inspection requirements of Requirement 2.

Note: FAA AD 2006-23-09 Amdt 39-14798 refers.

Compliance:

1. As specified in Requirement 1.
- 2.a. Unless the initial inspection is already accomplished, inspect upon the accumulation of 2,000 hours time in service or within 50 hours time in service after 18 January 2007, whichever occurs later. Inspect thereafter at intervals not to exceed 1,000 hours time in service.
- 2.b. Repetitively inspect thereafter at intervals not to exceed 2,000 hours time in service.
3. As specified in Requirement 3.
4. Before further flight.
5. Upon the accumulation of 6,500 hours time in service on the wing spar lower caps or within 50 hours time in service after 18 January 2007, whichever occurs later.

This Airworthiness Directive becomes effective on 18 January 2007.

Background:

The FAA received reports of fatigue cracking at the wing centre splice joint outboard fastener hole in one of the wing main spar lower caps. Such cracking, unless detected and corrected, could result in failure of the spar cap and lead to wing separation and loss of control of the aircraft.



David Villiers
Delegate of the Civil Aviation Safety Authority

23 November 2006