
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.

Ayres Thrush (Snow) Commander Series Aeroplanes

AD/AC-SNOW/26

Vertical and Horizontal Stabilisers

**3/2008
DM**

Applicability: Model S2R, S2R-R1340, S2R-R1820, S2R-T11, S2R-T15, S2R-T34, S2RHG-T34, S2R-T45, S2R-T65, S2RHG-T65, S2R-G1, S2R-G5, S2R-G6, S2R-G10, and S2R-T660 aircraft, with serial numbers as listed in the Applicability section of FAA AD 2007-26-01; equipped with metal empennage part numbers 40220 or 95400 (applies to serial numbers with or without a “DC” suffix).

Requirement:

1. Perform a visual inspection of the vertical stabiliser attach fitting part number 40301-7, the horizontal stabiliser attach fitting, part number 40303-1/-4/-7 or 95267-1, attachment bolt, part number NAS1105-68, and the vertical fin aft spar part number 40261-24 or 95253-1, for corrosion and cracking, in accordance with Thrush Aircraft Inc. Service Bulletin No. SB-AG-45 Revision B, dated 1 June 2007, or later FAA approved revision.
2. If corrosion or cracks are found in the vertical stabiliser attach fitting part number 40301-7, the horizontal stabiliser attach fitting, part number 40303-1/-4/-7 or 95267-1, attachment bolt, part number NAS1105-68, or the vertical fin aft spar part number 40261-24 or 95253-1, during any Requirement 1 inspection; accomplish the following in accordance with Thrush Aircraft Inc. Service Bulletin No. SB-AG-45 Revision B, dated 1 June 2007, or later FAA approved revision:
 - a. Replace the vertical stabiliser attach fitting with new part number 95266-3 fitting; the horizontal stabiliser attach fitting with new part number 95267-5 fitting; and the attachment bolt with NAS6207-68; and,
 - b. If corrosion or cracks are found in the part number 40261-24 or 95253-1 vertical fin aft spar, repair in accordance with Thrush SB-AG-45 Revision B, or replace with new part number 40261-24 or 95253-1 vertical fin aft spar.
3. If no corrosion or cracks are found in the vertical stabiliser attach fitting part number 40301-7, the horizontal stabiliser attach fitting, part number 40303-1/-4/-7 or 95267-1, attachment bolt, part number NAS1105-68, or the vertical fin aft spar part number 40261-24 or 95253-1 during any Requirement 1 inspection; accomplish the following in accordance with Thrush Aircraft Inc. Service Bulletin No. SB-AG-45 Revision B, dated 1 June 2007, or later FAA approved revision:

Ayres Thrush (Snow) Commander Series Aeroplanes

AD/AC-SNOW/26 (continued)

- a. Replace the vertical stabiliser attach fitting with new part number 95266-3 fitting; the horizontal stabiliser attach fitting with new part number 95267-5 fitting; and the attachment bolt with NAS6207-68; and,
- b. Perform a visual inspection of the vertical fin aft spar part number 40261-24 or 95253-1 for corrosion and cracking; and,
- c. If corrosion or cracks are found in the part number 40261-24 or 95253-1 vertical fin aft spar, repair in accordance with Thrush SB-AG-45 Revision B, or replace with a new part number 40261-24 or 95253-1 vertical fin aft spar.

Special flight permits authorised to allow aircraft to be ferried to a maintenance facility for inspection shall be limited by the following conditions:

- a. Hopper must be empty;
- b. Vne reduced to 126 m.p.h. (109 knots); and,
- c. No flight into known turbulence.

Note: FAA AD 2007-26-01 Amdt 39-15303 refers.

- Compliance:
1. Within 50 hours time in service after 23 January 2008, and thereafter at intervals not to exceed 100 hours time in service; until compliance with Requirement 2 or Requirement 3.
 2. Before further flight.
 3. Within 2,000 hours time in service or 2 years after 23 January 2008, whichever occurs first.

This Airworthiness Directive becomes effective on 23 January 2008.

Background: The FAA received reports of cracks in the empennage of Model S2R series aircraft. Such cracking, unless detected and corrected, could result in loss of structural integrity of the vertical stabiliser. Failure of the vertical stabiliser could lead to loss of control.



David Villiers
Delegate of the Civil Aviation Safety Authority

21 January 2008