

Ayres Thrush (Snow) Commander Series Aeroplanes

AD/AC-SNOW/14
Amdt 4

Wing Spar and Wing Attachments

10/95

Applicability: All models S2D, S2R, S2R-R1820, S2R-T15 and S2R-T34.

- Requirement:
1. Visually inspect the lower wing spar centre section in accordance with Ayres Corporation Service Letter SL-AG-97.
 2. For aircraft listed in Ayres Corporation Service Bulletin SB-AG-23; Inspect the wing main spar and wing attachment hardware in accordance with Ayres Corporation Service Bulletin SB-AG-23, Accomplishment Instructions. Externally inspect the lower surface of the wing from the root rib to the outboard end of the fuel tank for evidence of fuel leakage. If a fuel leak, originating from the wing main spar, is found inspect the forward face of the wing main spar web common to the fuel tank for cracks.

Note: Inspection of the forward face of the wing main spar will require draining of the fuel tank and removal of the fuel tank sealant.

3. Retire the wing main spar lower cap assembly from service.

- Compliance:
1. Initially inspect in accordance with Requirement 1 before 2500 hours time in service or before 100 hours time in service after 14 September 1995, whichever occurs later. Re-inspect at intervals not to exceed 500 hours time in service.
 2. Initially inspect in accordance with Requirement 2 before 250 hours time in service after 14 September 1995 or before 14 September 1996, whichever occurs first. Re-inspect at intervals not to exceed 500 hours time in service.
 3. Retire, in accordance with Requirement 3, before 25000 hours time in service.

For aircraft incorporating FAA STC SA 1463 NM (46.5 inch wing tip extensions) the threshold and interval values for all Requirements are to be halved.

Note: The limitation on STC SA 1463 NM may be lifted by the Authority upon receipt of fatigue and fail safe substantiation data. This limitation does not apply to the Ayres factory designed wing tip extensions.

This amendment is effective 14 September 1995.

Background: The Requirements in this Directive are based on fatigue and fail safe analyses carried out by the manufacturer of the aircraft and service experience. The limitation on STC SA 1463 NM wing tip extensions is imposed as no fatigue analysis for the modified wing has been provided.

This amendment includes inspection of the wing spar and attachment hardware for aircraft built with aluminium spar webs and doublers. A crack in the wing main spar web was found on one aircraft when repairing a fuel leak. The aft face of the spar web is not visible due to the presence of a doubler.

