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## AIRWORTHINESS DIRECTIVE

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On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/SWSA226/86 Amdt 2 and issues the following 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.

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### Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes

**AD/SWSA226/86  
Amdt 3**

**Wing Spar Centre Web Cutout**

**4/2009**

Applicability:	SA226-AT	AT001 through AT074
	SA226-TC	TC201 through TC419
	SA226-T	T201 through T291
	SA226-T(B)	T(B)276 and T(B)292 through T(B)417
	SA227-TT	TT421 through TT541
	SA227-TT(300)	TT(300)447, TT(300)465, TT(300)471, TT(300)483, TT(300)512, TT(300)518, TT(300)521, TT(300)527, TT(300)529, and TT(300)536.
	SA227-AC	AC406, AC415, AC416, and AC420 through AC785
	SA227-AT	AT423 through AT631 and AT695
	SA227-BC	BC762, BC764, BC766, and BC770 through BC789
	SA227-CC/DC	CC/DC784 and CC/DC790 through CC/DC896
Requirement:	<ol style="list-style-type: none"> <li>1. Inspect each wing spar centre web cutout for cracks between Wing Station (WS) 8 and WS 17.5. Accomplish this inspection in accordance with one of the following: <ol style="list-style-type: none"> <li>a. For Models SA227-TT, SA227-AT, SA227-AC, and SA227-BC aircraft: In accordance with Fairchild Airframe Airworthiness Limitations Manual ST-UN-M001, Revision C-10, dated 27 October 2008; or Fairchild Airframe Airworthiness Limitations Manual ST-UN-M001, SA227 Series, Reissue C dated 18 January 1991, at the revision levels stated on page iii, iv and v, dated 16 August 1995, 8 March 2004 and 27 October, respectively.</li> </ol> </li> </ol>	

**Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes**

AD/SWSA226/86 Amdt 3 (continued)

- b. For Models SA226-T, SA226-T(B), SA226-AT, and SA226-TC aircraft: In accordance with Fairchild Airframe Inspection Manual ST-UN-M002, Revision A-11, dated 27 October 2008; or Fairchild Airframe Inspection Manual ST-UN-M002, Reissue A, SA226 Series, dated 9 December 1986, at the revision levels stated on page iii, iv and v, dated 7 April 1998, 5 October 2005 and 27 October 2008, respectively.
  - c. For Models SA227-CC and SA227-DC aircraft: In accordance with Fairchild Airframe Airworthiness Limitations Manual ST-UN-M003, Revision 8, dated 5 October 2005; or Fairchild Airframe Airworthiness Limitations Manual ST-UN-M003, SA227 Commuter Category, Initial issue dated 6 December 1991, at the revision levels stated on page iii and page iv, dated 29 July 2003 and 5 October 2005, respectively.
2. If any crack(s) is/are found during the above required inspection, repair the crack(s) in accordance with one of the following, as applicable. This repair eliminates the repetitive inspections (2,000 hours time in service intervals) specified in Requirement 1 of this Directive for that particular wing spar.
- a. For Models SA226-T, SA226-T(B), SA226-AT, SA226-TC, SA227-TT, SA-227-AT, SA227-AC, and SA-227-BC aircraft: In accordance with Fairchild SA226/227 Series Structural Repair Manual, part number (P/N) 27-10054-079, pages 77 through 89; Initial Issue: 1 March 1983; Revision 38, dated 30 April 2008.
  - b. For Models SA227-CC and SA227-DC aircraft: In accordance with Fairchild SA227 Series Structural Repair Manual, P/N 27-10054-127, pages 47 through 60; Initial Issue: 1 December 1991; Revision 17, dated 30 April 2008.

The repetitive inspections required by Requirement 1 of this Directive may be terminated if the wing spar centre web repair specified in Requirement 2 of this Directive has been accomplished on both the left and right wing spar. If one wing spar centre web has been repaired, then repetitive inspections are still required on the other one if the repair has not been incorporated.

*Note: FAA AD 2005-06-13 Amdt 39-14023 refers.*

- Compliance:
- 1. Upon accumulating 6,500 hours time in service on each wing spar; within the next 2,000 hours time in service after the last inspection accomplished per the applicable Airworthiness Limitations Manual; or within the next 500 hours time in service after 7 July 2005, whichever occurs later, unless already accomplished; and thereafter at intervals not to exceed 2,000 hours time in service.
  - 2. Before further flight.

**Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes**

AD/SWSA226/86 Amdt 3 (continued)

The compliance times remain unchanged by this issue.

This Amendment becomes effective on 9 April 2009.

Background: The FAA received reports of cracks in the wing spar centre web cutout of affected aircraft. The cracks were caused by fatigue, due to aircraft manoeuvring and wing gusts, and if not detected and corrected, could result in structural failure of the wing spar with consequent loss of control of the aircraft.

Amendment 1 aligned this Directive with the latest FAA AD, with no change to technical content.

Amendment 2 was issued to update the Requirement documents revision status.

Amendment 3 is issued to update the Requirement documents revision status.



David Punshon  
Delegate of the Civil Aviation Safety Authority

6 February 2009