

Fairchild (Swearingen) SA226 and SA227 Series Aeroplanes

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**AD/SWSA226/56**  
**Amdt 3**

**Cockpit and Cabin Windows**

**1/97**

Applicability: Models SA26-T, SA26-AT, SA226-T, SA226-T(B), SA226-AT, SA226-TC, SA227-AT, SA227-AC, SA227-BC, and SA227-TT.

- Requirement:
1. Replace each single pane cockpit side window and then carry out a post installation inspection in accordance with the documents appropriate to the aircraft model and the inspection to be carried out, as listed at Paragraph 4. If cracking is discovered, carry out the action/s specified in the Table at Appendix 1.
  2. Inspect all acrylic single pane cockpit side windows for cracks in accordance with the documents appropriate to the aircraft model and the inspection to be carried out, as listed at Paragraph 4. If cracking is discovered, carry out the action/s specified in the Table at Appendix 1.
  3. Visually inspect dual pane cockpit side windows, and all acrylic cabin windows for cracks in accordance with the documents appropriate to the aircraft model and the inspection to be carried out, as listed at Paragraph 4. If cracking is discovered, carry out the action/s specified in the Table at Appendix 2.
  4. Inspect in accordance with the following document/s as appropriate.

- a. For acrylic cabin windows:

<b>Models</b>	<b>Service Bulletins</b>
SA26-T and SA26-AT	26-56-20-042, Issued: November 28, 1988, Revised: February 7, 1991
SA226-T and SA226-T(B)	226-56-001, Issued: February 2, 1983, Revised: November 26, 1991
SA226-AT and SA226-TC	226-56-002, Issued: March 3, 1983, Revised: May 29, 1992,
SA227-AT, SA227-AC, and SA227-BC	227-56-002, Issued: January 5, 1984, Revised: May 29, 1992, and April 1, 1993
SA227-TT	227-56-001, Issued: February 2, 1983, Revised: November 26, 1991

- b. For acrylic cockpit side windows:

Models	Service Bulletins
SA26-T and SA26-AT	26-56-10-038, Issued: October 8, 1984, Revised: February 7, 1991
SA226-T, SA226-T(B), SA226-AT, and SA226-TC	226-56-003, Issued: September 13, 1984, Revised: November 2, 1989
SA227-AT, SA227-AC, SA227-BC, and SA227-TT	227-56-003, Issued: September 13, 1984, Revised: November 2, 1989

*Note 1: FAA AD 96-20-08 refers.*

*Note 2: The repetitive inspections required by this AD are also referenced in the approved Fairchild Airframe Airworthiness Limitations Manual, ST-UN-M001.*

Compliance:

1. Before 5000 hours component time in service, or within 1000 hours time in service whichever occurs last, after the effective date of this Amendment; thereafter at each 5000 hours component time in service.

The post installation inspection must be carried out between 10 and 20 hours time in service after each installation.

2. As specified in Appendix 1, after the effective date of this Directive.
3. As specified in Appendix 2, after the effective date of this Directive.

This Directive has effect from 02 January 1997.

Background:

In-flight failures have been reported overseas, involving injuries. Inspection and replacement of windows will preclude failure with resultant injury to crew members and passengers. Amendment 1 revised the Directive to clarify Applicability and update the FAA AD reference.

Amendment 2 was issued in response to a new FAA AD which shortened the repetitive inspection interval as a consequence of several acrylic window failures that occurred prior to the previously required inspection interval.

Amendment 3 introduces a life limit for single pane cockpit side windows and a post installation inspection.

Amendment 2 of this Airworthiness Directive became effective on 1 December 1993.

Amendment 1 of this Airworthiness Directive became effective on 15 June 1989.

The original issue of this Airworthiness Directive became effective on 26 January 1989.

APPENDIX 1 to AD/SWSA226/56 Amdt 3

Condition	Initial Action	Repetitive Action
At the effective date.	Inspect at 150 hours TIS after the effective date of this AD	Reinspect at intervals not to exceed 1,000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable condition column entry to determine compliance times if cracks are found.
<p><b>If cracks are found where the sum total of all cracks is less than 4.3 inches in combined length, but where a crack meets or exceeds 0.30 inches as specified in the Crack Limitations section of the service information referenced in paragraph 4. of this AD.</b></p>	<p>Accomplish one of the following:</p> <p>1. Prior to further fight, replace the window with a new approved window in accordance with the applicable maintenance manual.</p> <p>or</p> <p>-----</p> <p>2. Prior to further flight, fabricate a placard with the following words in letters at least 0.10-inch in height and install this placard within the pilot’s clear view close to the pressurisation controls:</p> <p>“AIRPLANE MUST BE OPERATED UNPRESSURISED”, and prior to further flight, insert a copy of this AD into the Limitations Section of the approved Aircraft Flight Manual.</p>	<p>Accomplish the corresponding repetitive action:</p> <p>1. Reinspect initially between 10 and 20 hours TIS after replacing the window to ensure that no damage has occurred after installation, and thereafter at intervals not to exceed 1000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable “Condition” column entry to determine compliance times if cracks are found.or</p> <p>-----</p> <p>2. Repeat the inspection specified in paragraph 2. of the AD at intervals not to exceed 25 hours TIS or 30 calendar days, whichever occurs first, provided the sum total of all cracks does not exceed 4.3 inches in combined length. Use the “<b>If cracks are found where the sum total of all cracks meets or exceeds 4.3 inches in combined length</b>” conditions column for replacement and inspection times if the cracks found are at that level.</p>

## CIVIL AVIATION SAFETY AUTHORITY

## SCHEDULE OF AIRWORTHINESS DIRECTIVES

<p><b>If cracks are found where the sum total of all cracks meets or exceeds 4.3 inches in combined length.</b></p>	<p>Prior to further flight, replace the window with an approved new window in accordance with the applicable maintenance manual</p>	<p>Reinspect initially between 10 and 20 hours TIS after replacing the window to ensure that no damage has occurred after installation, and thereafter at intervals not to exceed 1000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable "Condition" column entry to determine compliance times if cracks are found.</p>
<p><b>With cracks found that are less than 0.30 inches ( as specified in the applicable service information referenced in paragraph 4. of this AD) provided the sum total of all cracks does not exceed 4.3 inches in combined length.</b></p>	<p>Reinspect within 25 hours TIS or 30 calendar days, whichever occurs first.</p>	<p>Continue this reinspection at intervals not to exceed 25 hours TIS or 30 calendar days, whichever occurs first, provided no crack is found that is 0.30 inches or greater or the combined length of all cracks exceeds 4.3 inches. Use applicable "Condition" column entry to determine compliance times if any of these crack limits are met.</p>
<p><b>With no cracks found after one of the inspections required by this AD.</b></p>	<p>Reinspection within 1,000 hours TIS or 12 calendar months after the last inspection, whichever occurs first.</p>	<p>Reinspect at intervals not to exceed 1,000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable "Condition" column entry to determine compliance times if cracks are found.</p>

APPENDIX 2 to AD/SWSA226/56 Amdt 3

Condition	Initial Action	Repetitive Action
<p><b>At the effective date.</b></p>	<p>Inspect at 150 hours TIS after the effective date of the AD, unless already accomplished within the last 1,000 hours TIS or 12 calendar months, which would put aircraft in compliance with the previous issue of this AD. Use the results of the previous inspection under the previous issue to determine repetitive action.</p>	<p>Reinspect at intervals not to exceed 1,000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable “Condition” column entry to determine compliance times if cracks are found.</p> <p>For aircraft owners/operators taking “unless already accomplished” credit for results from the previous inspection under the previous issue to determine the repetitive action.</p>
<p><b>If cracks are found where the sum total of all cracks is less than 4.3 inches in combined length, but where a crack meets or exceeds .30 inches as specified in the Crack Limitations section of the service information referenced in paragraph 4 of this AD.</b></p>	<p>Accomplish one of the following:</p> <p>1. Prior to further flight, replace the window with an approved new window in accordance with the applicable maintenance manual.</p> <p>or</p> <p>-----</p> <p>2. Prior to further flight, fabricate a placard with the following words in letters at least 0.10 inch in height and install this placard within the pilot’s clear view close to the pressurisation controls: <b>”AIRCRAFT MUST BE OPERATED UNPRESSURISED”</b> and prior to further flight, insert a copy of this AD into the Limitations Section of the approved Aircraft Flight Manual (AFM).</p>	<p>Accomplish the corresponding repetitive action:</p> <p>1. Reinspect initially between 10 and 20 hours TIS after replacing the window to ensure that no damage has occurred after installation, and thereafter at intervals not to exceed 1,000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable “Condition” column entry to determine compliance times if cracks are found. or</p> <p>-----</p> <p>2. Repeat the inspection specified in paragraph 3. of this AD at intervals not to exceed 25 hours TIS or 30 calendar days, whichever occurs first, provided the sum total of all cracks does not exceed 4.3 inches in combined length. Use the “ If cracks are found where the sum total of all cracks meets or exceeds 4.3 inches in combined length” “Condition” column for replacement and inspection times if the cracks found are at that level.</p>

SCHEDULE OF AIRWORTHINESS DIRECTIVES

<p><b>If cracks are found where the sum total of all cracks meets or exceeds 4.3 inches in combined length.</b></p>	<p>Prior to further flight, replace the window with an approved new window in accordance with the applicable maintenance manual.</p>	<p>Reinspection initially between 10 and 20 hours TIS after replacing the window to ensure that no damage has occurred after installation, and thereafter at intervals not to exceed 1,000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable "Condition" column entry to determine compliance times if cracks are found.</p>
<p><b>With cracks found that are less than .30 inches (as specified in the applicable service information referenced in paragraph 4 of the AD) provided the sum total of all cracks does not exceed 4.3 inches in combined length</b></p>	<p>Reinspect within 25 hours TIS or 30 calendar days, whichever occurs first.</p>	<p>Continue the reinspection at intervals not to exceed 25 hours TIS or 30 calendar days, whichever occurs first, provided no crack is found that is 0.30 inches or greater, or the combined length of the cracks exceeds 4.3 inches in combined length. Use applicable "Condition" column entry to determine compliance times if any of these crack limits are met.</p>
<p><b>With no cracks found after one of the inspections required by this AD.</b></p>	<p>Reinspect within 1,000 hours TIS or 12 calendar months after the last inspection, whichever occurs first.</p>	<p>Reinspect at intervals not to exceed 1,000 hours TIS or 12 calendar months, whichever occurs first, provided no cracks are found. Use applicable "Condition" column entry to determine compliance times if cracks are found.</p>