



U.S. Department
of Transportation

Federal Aviation
Administration

Airworthiness Concern Sheet

Date: **JUN 27 2019**

| | |
|---|---|
| <p>Reply to: Name: Bobbie Kroetch Title: Aerospace Engineer Office: Wichita ACO Branch Street Address: 1801 Airport Road, Room 100 City, State, ZIP: Wichita, KS 67209 Telephone: (316) 946-4155 Electronic Mail: bobbie.kroetch@faa.gov</p> | <p>Make: Cessna Aircraft Company Model / Series: Model 177 and Model 210 with Cantilever Wing Serial Numbers: Refer to attached Textron Aviation Service Letters, SEL-57-06 and SEL-57-07 Reason for Airworthiness Concern: Cracking in the Wing Carry-Thru Spar</p> |
|---|---|

Federal Aviation Administration (FAA) Description of Airworthiness Concern
On May 26, 2019, a Cessna Model 210M airplane suffered an in-flight separation of the right wing, resulting in a fatal accident. Preliminary investigation of the accident indicated that the wing fractured due to fatigue cracking inboard of the wing attachment lugs. Current details regarding the Australian Transportation Safety Bureau's investigation into the accident can be found online:

https://www.atsb.gov.au/publications/investigation_reports/2019/aaair/ao-2019-026/

In response to the accident, Textron Aviation issued Mandatory Service Letters SEL-57-06 (Cessna Model 210) and SEL-57-07 (Cessna Model 177) to provide instructions for a detailed visual inspection and an eddy current inspection of the lower surface of the carry-thru spar. Cessna Model 177 airplanes share a common carry-thru design with the Model 210. Corrosion is a factor in the development of cracks in the carry-thru spar.

At this time, the FAA has identified no additional instances of cracking on the carry-thru spar inboard of the wing attach lugs in either the Cessna Model 177 or Cessna Model 210 airplanes. The FAA is continuing to assess the available information to determine what future corrective action may be needed.

Request for Information

The FAA is interested in receiving any information on known cracking of the carry-thru spar on Cessna Model 177 or cantilever wing Cessna Model 210 airplanes, specifically any cracking identified inboard of the wing attach lugs. This includes any cracking identified previously on the Cessna Model 177 and 210 carry-thru spars.

Additionally, the FAA is interested in any comments on the Textron Aviation Service Letters SEL-57-06 and SEL-57-07, including ease of accessing the area of concern, structure and systems in and around the area of concern that may affect the inspection, and time required to complete the inspection as detailed in the service letters. Please provide any additional comments on the published service letters that may be helpful for us to consider as part of our evaluation.

The FAA is also interested in obtaining information on the status of the fleet. Any of the following information you can provide on your Cessna Model 177 or cantilever wing Cessna Model 210 airplane would be beneficial to our evaluation:

- Total time-in-service on the airframe
- Any modifications or STCs on your airplane(s) that may affect our evaluation of this issue, including, but not limited to, vortex generators, wing cuffs, STOL kits, wing tips, gross weight increases, and add-on wing fuel tanks.
- Information detailing the usage environment in which you operate your airplane, specifically identifying severe or unusual usage.

Please provide any other information you feel may be helpful for us to consider as part of our evaluation.

This Airworthiness Concern Sheet (ACS) is intended as a means for FAA Aviation Safety Engineers to coordinate airworthiness concerns with aircraft owners/operators through associations and type clubs. At this time, the FAA has not made a determination on what type of corrective action (if any) should be taken. The resolution of this airworthiness concern could involve Airworthiness Directive (AD) action or a Special Airworthiness Information Bulletin (SAIB), or the FAA could determine that no action is needed at this time. The FAA's final determination will depend in part on the information received in response to this ACS.

The FAA endorses dissemination of this technical information to all manufacturers and requests association and type club comments.

| Attachments: | Transmittal: | Response Requested By: |
|--|--|---|
| <input type="checkbox"/> Service Difficulty Report <input type="checkbox"/> Accident/Incident Data System <input checked="" type="checkbox"/> Service Letter / Bulletin <input type="checkbox"/> Special Airworthiness Information Bulletin <input type="checkbox"/> Federal Aviation Administration or National Transportation Safety Board Safety Recommendation <input type="checkbox"/> Airworthiness Directive <input type="checkbox"/> Alternate Means of Compliance <input type="checkbox"/> Risk Analysis | <input checked="" type="checkbox"/> Federal Aviation Administration <input checked="" type="checkbox"/> Airplane Owners and Pilots Association <input checked="" type="checkbox"/> Experimental Aircraft Association <input checked="" type="checkbox"/> Type Club <input checked="" type="checkbox"/> Type Certificate Holder <input checked="" type="checkbox"/> Other: | <input type="checkbox"/> Emergency (10 days) <input checked="" type="checkbox"/> Alert (30 days) <input type="checkbox"/> Information (90 days) |