FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-12-24
SUBJ: Flight Controls – Frayed Flap Extend Cables **Date:** April 6, 2012

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises owners, operators, and maintenance personnel of an airworthiness concern, specifically the possibility of frayed flap extend cables on **Cessna Models 336 and 337 (all derivatives)** airplanes.

At this time, this airworthiness concern is not considered an unsafe condition that would warrant airworthiness directive action under Title 14 of the Code of Federal Regulations (14 CFR), part 39.

Background

The FAA recently received a report through the Safety Difficulty Reporting (SDR) system of worn flap extend cables. The report stated the cables were original and recommended a 500-hour inspection interval. This same report was printed in the December 2011 issue of Advisory Circular 43-16A (*Aviation Maintenance Alerts*).

The average part hours for cables replaced due to fraying reported through the FAA's SDR system is approximately 4,500 hours, but has been as low as 2,487 hours. Most reports of fraying occurred in the same area of the wing. Because this cable is bent around the bellcrank, the inside radius of the cable can wear on the bellcrank. This part of the cable is approximately 1 to 2 inches from the cable tension adjusting nut and is not typically visible if performing a static, visual inspection. If the cable is not properly inspected, it can appear to be acceptable when it really is not.

Recommendations

1. The FAA recommends following the existing Model 336 & 337 maintenance manual inspection intervals:

    - Every 100 hours or 12 months – visually inspect along the entire length of the cable for broken wires, corrosion, fraying, or other damage.

      NOTE: Flight controls should be operated through their full travel so that all portions of the cable are exposed for inspection (including the critical area noted in Background). This may require one person to cycle the controls and a second person to inspect the cables. If this is not possible, maintenance personnel may find it necessary to remove the cable to get access to the entire length of the cable.

    - Every 600 hours or 12 months – inspect along the entire length of the cable per section 2-20-01, Expanded Maintenance.

- Every 800 hours or 4 years – inspect along the entire length of the cable per section 2-20-01, Expanded Maintenance, paying special attention to the critical area noted in section 2-14-05 (Supplemental Inspection Document 27-50-01 for all Model 337 airplanes), or section 2-14-04 (Supplemental Inspection Document 27-50-01 for Model 336 airplanes).

2. The FAA also recommends that maintenance personnel review AC 43.13-1B, Chapter 7, paragraph 7-149., "Cable System Inspection."

For Further Information Contact

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For Related Service Information Contact

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