



SAIB: CE-11-21

Date: February 16, 2011

SUBJ: Flight Controls: Trailing Edge Flaps; Flap Nose Rib Cracking

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) is intended to inform you, owners, operators and maintenance personnel, of an airworthiness concern on **Hawker Beechcraft Bonanza Model Series 33, 35, and 36; Baron Model Series 55, 56, 58, and 95; and Duke Model Series 60.** Specifically, cracking could occur on the part number (P/N) 35-165050-84 flap nose rib.

At this time, this airworthiness concern has not been determined to be an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

In 2007, a pilot reported a split flap condition during flap extension and landed safely without incident. Inspection of the airplane by a 14 CFR part 145 repair station found the right-hand (R/H) flap rod attach bracket broken and the flap nose rib nut plate flange torn. Further inspection of the flap revealed cracking in the P/N 35-165050-84 nose rib. Inspection of the left-hand (L/H) side flap found similar damage. Six other airplanes were inspected by the repair station and found similar cracking to the P/N 35-165050-84 nose rib. Service difficulty reports were submitted for Hawker Beechcraft Models 35, 36, 55, and 95 aircraft in November 2007 and were published in Advisory Circular 43-16A, Aviation Maintenance Alerts, dated January 2008. These aircraft had flight hours between 4,000 and 6,500 hours. Similar reports of damage have been identified on airplanes with as few as 2,000 flight hours. Nose ribs of both the L/H and R/H flaps are prone to cracking. It is unknown at this time the exact cause of the cracking. See Figure 1 for examples of cracks in the P/N 35-165050-84 nose rib.

Recommendations

Hawker Beechcraft Corporation has published Safety Communiqué No. 313, dated December 2010. In addition to the suggestions given by the Safety Communiqué, the FAA recommends the following:

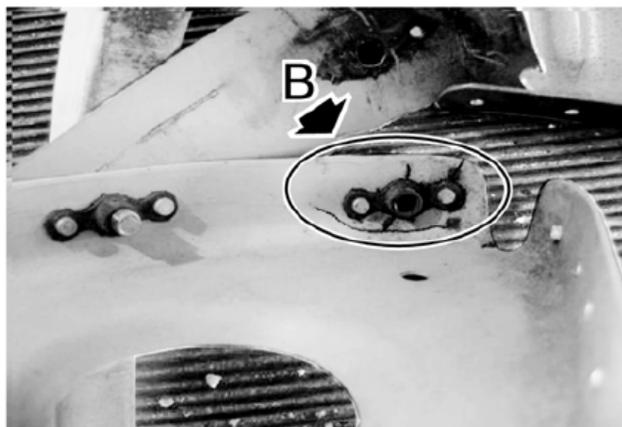
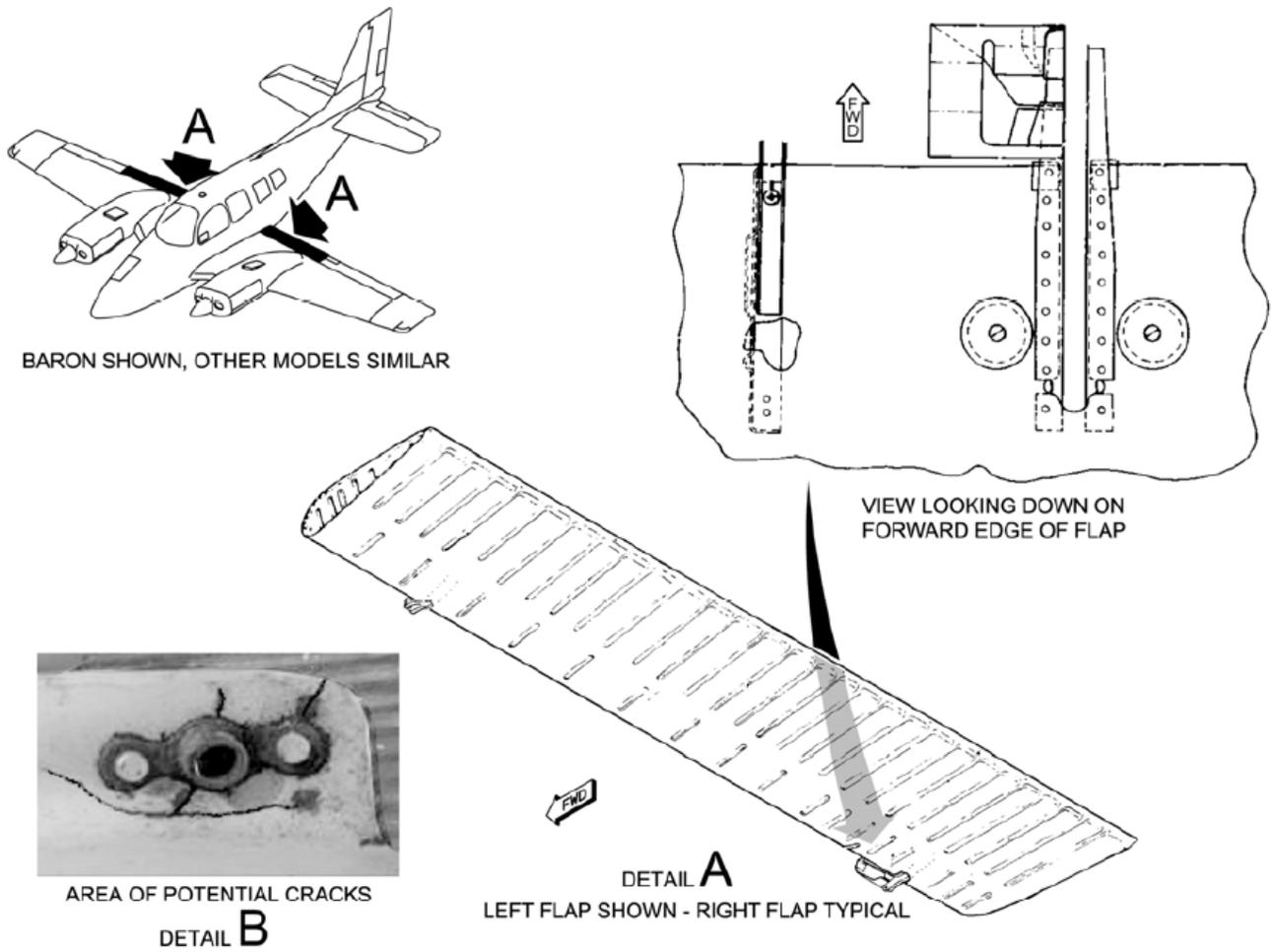
- Pay particular attention to this area during pre-flight inspections.
- Inspect the up-stop bumper for proper rigging and nose rib for cracks during the annual inspection.
- Since the R/H flap nose rib assembly is located in close proximity to the wing walk area, it is recommended to avoid stepping on the flap to reduce the stress on the nose rib.

For Further Information Contact

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(Optional) For Related Service Information Contact

Hawker Beechcraft Corporation, P.O. Box 85, Wichita, KS 67201; phone: (316) 676-3140



Example of Crack in P/N 35-165050-84 Nose Rib



Example of Torn Flange in P/N 35-165050-84 with Nutplate Missing

Figure 1