FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: NM-14-05
SUBJ: Wing: Ailerons **Date:** November 27, 2013

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises owners, operators, and maintenance personnel of **Beechcraft Corporation (Type Certificate Previously Held by Hawker Beechcraft Corporation) Model BAe.125 Series 800A (including C-29A and U-125), 800B, 1000A, and 1000B airplanes and Model Hawker 750, 800 (including variant U-125A), 800XP, 850XP, 900XP, and 1000 airplanes** of an airworthiness concern regarding wing/aileron oscillations. This SAIB does not apply to airplanes that are modified by Aviation Partners Inc. Supplemental Type Certificate ST01411SE, which are the subject of airworthiness directive (AD) 2013-11-16, issued to correct severe vibration and potentially divergent wing/aileron oscillations.

At this time, the airworthiness concern does not warrant an AD action under Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 39.

Background

We have received reports of wing/aileron oscillations from operators of Beechcraft Model Hawker 800XP and 850XP airplanes, at altitudes above 33,000 feet and at speeds over 0.73 Mach. These oscillations were not divergent, and when airplane speed was reduced and the airplane was flown at an altitude below 30,000 feet, the oscillations ceased. Investigation of these incidents revealed missing aileron bushings, low cable tensions, and improperly installed brackets. After the operators corrected the airplanes to the type design configuration, as defined per the existing maintenance manuals, the oscillations did not recur.

These oscillations could reduce the fatigue life of the airplane, and in some severe cases could adversely affect the wing structure by causing the wing spars and stiffeners to crack. It is imperative that the wing structure be thoroughly checked after any such severe oscillations. The aileron and aileron tabs should also be checked to determine if the free play is within the limits recommended in the maintenance manual. If the aileron system, including cable tension, is not properly maintained within the requirements specified in the maintenance manual, these wing oscillations could develop into divergent flutter causing severe damage to the structure.

Recommendations

The FAA recommends a one-time maintenance check at the earliest opportunity to verify that all the bushings in the aileron and aileron tab assemblies are correctly installed, that the free play is within the limits specified in the maintenance manual, and to ensure that the hinge brackets are properly installed and the cable tensions are correct. We strongly recommend that maintenance be done at regular intervals, as given in the maintenance manual. We encourage submitting a report of any wing oscillation findings by email to wichita-cos@faa.gov.

For Further Information: Contact Hawker Beechcraft

Hawker Beechcraft Corporation, Department 62, P.O. Box 85, Wichita, Kansas 67201-0085; telephone 316-676-8238; fax 316-676-6706; e-mail tmdc@hawkerbeechcraft.com; Internet https://www.hawkerbeechcraft.com/service_support/pubs.

For Further Information: Contact FAA

T.N. Baktha, Senior Aerospace Engineer, Airframe and Services Branch, ACE-118W, Wichita Aircraft Certification Office; 1801 Airport Road, Room 100, Mid-continent Airport, Wichita, Kansas 67209; phone: (316) 946-4100; fax: (316) 946-4107; email t.n.baktha@faa.gov.