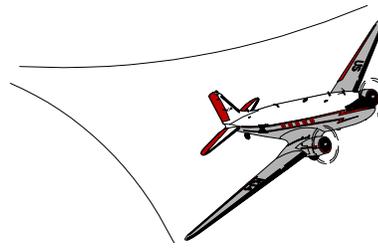


SPECIAL AIRWORTHINESS INFORMATION BULLETIN

REGULATORY SUPPORT DIVISION
P.O. BOX 26460
OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department
of Transportation
**Federal Aviation
Administration**

No. CE-00-21
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SAIB's are posted on the internet at <http://av-info.faa.gov>

This is issued for informational purposes only and any recommendation for corrective action is not mandatory.

Introduction:

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to provide valuable information to owners/operators of Raytheon (Beech) models as listed below. The applicability and model serial numbers were also listed in Airworthiness Directive (AD) 93-24-03.

Models	Serial Numbers
35-33, 35-A33, 35-B33, 35-C33, E33, F33 and G33	CD-1 through CD-1304
35-C33A, E33A, and F33A	CE-1 through CE-1425
E33C and F33C	CJ-1 through CJ-179
36 and A36	E-1 through E-2518
A36TC and B36TC	EA-1 through EA-500

Raytheon Aircraft Company (RAC) issued Service Bulletin (SB) 2333, titled "Flight Controls – Inspection of Rudder Forward Spar for Cracks" in October 1989. This SB provided an inspection and repair procedure for RAC's Model 33 and Model 36 to determine any cracks in the rudder forward spar.

Background:

Following SB 2333, the FAA issued AD 90-11-04. Supplemental Type Certificate (STC) SA 4899NM approved a Spacecraft Machine Product (SMP) reinforcement bracket as a replacement bracket. FAA issued AD 91-23-07 to include the use of SMP brackets. Later, RAC designed a kit (Kit No. 33-6001-1 S) to strengthen the rudder and added inspection covers at the upper and center hinges of the rudder. RAC issued SB 2333, Revision 1 in November 1991 to include the use of this kit. FAA issued AD 92-15-06 to reflect changes made by SB 2333, Revision 1. AD 93-24-03 superseded AD 92-15-06 to include the procedure to modify the rudder found to be cracked near the center hinge.

Recommendations:

AD 93-24-03 requires inspection of rudder forward spars within 100 hours of Time-In-Service (TIS) after initial 1000 hours of TIS. A Bonanza owner/operator reported that this initial period is too long to provide an efficient means for detecting cracks in acrobatic category models, as these airplanes often perform high 'g' maneuvers and are subjected to high loads. The FAA, as a precaution, **highly recommends** inspection of the rudder forward spars of the acrobatic category airplanes for cracks at the next scheduled inspection, unless already accomplished. The instructions given in AD 93-24-03 should be followed.

The same Bonanza owner reported difficulty and long lead-time in obtaining SMP brackets. To install a bracket as suggested in AD 93-24-03 (b)(3), the FAA recommends using a SMP-1 bracket or DW-1 bracket. If a crack is found in the center bracket, we recommend following instructions in AD 93-24-03 (c)(3) or installing a DW-2 center bracket. Both DW-1 and DW-2 brackets are approved by FAA in STC SA0044LA and the use of these brackets is accepted by FAA as an **Alternate Means of Compliance (AMOC)** to AD 93-24-03. The STC holder for DW brackets is Mr. Dick Wilson, P.O Box 2521, Palos Verdes, CA, 90274; telephone: (310) 326-8516.

For Further Information Contact:

Federal Aviation Administration, Wichita Aircraft Certification Office, T. N. Baktha, Aerospace Engineer, Airframe, 1801 Airport Road, Room 100, Wichita, Kansas, 67209, telephone: (316) 946-4155; fax: (316) 946-4407; e-mail: t.n.baktha@faa.gov

