

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

Airworthiness Directive

89-25-10 BEECH: Amendment 39-6409.

Applicability: Models 65-90 and 65-A90 (Serial Number (S/N) LJ-1 thru LJ-317); 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90 (all S/N); C90A (S/N LJ-1063 thru LJ-1087, except LJ-1085); E90, 100, A100 and B100 (all S/N) airplanes certificated in any category.

Compliance: Required as indicated after the effective date of this AD, unless already accomplished.

To detect possible fatigue cracking of the wing main spar lower cap and associated structure, accomplish the following:

(a) Within the next 200 hours time-in-service (TIS), after the effective date of this AD, or upon accumulating 3000 hours TIS, whichever occurs later, unless previously accomplished per AD 87-23-09, Amendment No. 39-5765, or AD 70-25-04, Amendment No. 39-1332, and thereafter at intervals not to exceed 1000 hours TIS (except as provided in paragraph (b) below) after the initial inspection, inspect the wing lower forward spar attach fittings, center section and outboard wing spar caps adjacent to the attach fittings by visual, fluorescent penetrant and eddy current methods as specified in the applicable section of Beech Structural Inspection and Repair Manual (SIRM), Part Number 98-39006, Revision A4, dated May 1, 1987. The inspection must be performed by personnel specifically trained by Beech Aircraft Corporation.

NOTE 1: Beech offers a two-day training course free of charge to qualified personnel who have prior knowledge of eddy current inspection techniques. A listing of Beech Corporate maintenance facilities may be obtained from the sources contained in paragraph (g) of this AD. A listing of other facilities employing qualified inspectors is not available.

(b) At each inspection required by paragraph (a) above, inspect any reinforcing strap installed per Supplemental Type Certificate (STC) SA1178CE or SA1583CE for proper tension and condition in accordance with Aviadesign Engineering Order E.O. B-8001, Issue 3, dated May 30, 1985. Correct any discrepancy prior to further flight. For airplanes so equipped and inspected, the repetitive inspection interval of 1000 hours TIS in paragraph (a) above may be extended to 3000 hours TIS.

(c) If any crack is found in a main spar lower cap or fitting, prior to further flight repair or replace the defective part using the instructions and limitations specified in the Beech SIRM or other FAA approved instructions provided by Beech Aircraft Corporation.

(d) Within one week after completion of any inspection required by paragraph (a) or (b) of this AD, complete the reporting form included with this AD as Figure 1 and mail it to the address shown thereon (Reporting approved by the Office of Management and Budget under OMB No. 2120-0056).

(e) The initial and repetitive inspections specified in this AD are no longer required when the airplane is modified by Beech Wing Modification Kit No. 90-4077-1S or 100-4007-1S.

(f) Airplanes may be flown in accordance with FAR 21.197 to a location where this AD can be accomplished.

(g) An alternate method of compliance or adjustment of the initial or repetitive compliance times which provides an equivalent level of safety, may be approved by the Manager, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Room 100, Wichita, Kansas 67209; Telephone (316) 946-4400.

NOTE 2: The request should be forwarded through an FAA Maintenance Inspector, who may add comments and send it to the Manager, Wichita Aircraft Certification Office.

All persons affected by this directive may obtain copies of the documents referred to herein upon request to the Beech Aircraft Corporation, Commercial Service, Department 52, Wichita, Kansas 67201-0085; or Western Aircraft Maintenance, 4444 Aeronca Street, Boise, Idaho 83705, or may examine these documents at the FAA, Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 East 12th Street, Kansas City, Missouri 64106.

This AD supersedes AD 87-23-09, Amendment 39-5765, and AD 70-25-04, Amendment 39-1332.

This amendment (39-6409, AD 89-25-10) becomes effective on January 4, 1990.

REPORTING FORM - 89-25-10

Airplane Model No. _____

Airplane Serial No. _____

Date of inspection per this AD _____

Airframe total hours time-in-service _____

Were any fatigue cracks found? No___ Yes___

If "Yes" was checked above, complete the following:

Location of crack _____

Was crack removable by reaming or grinding? No___ Yes___

Additional Comments _____

Mailing Address:

FAA, Wichita ACO
Airframe Branch, Room 100
1801 Airport Road
Wichita, KS 67209

FIGURE 1 - 89-25-10