

# **LUFTVÄRDIGHETSDIREKTIV** (LVD)

A. Flygplan Raytheon (Beech) **LVD Nr 2971** 

Sektion 2. Utlandstillverkad flygmateriel

Kontroll av höjdroderstyrning TITEL:

GÄLLER: Modellerna 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4,

B90, C90, C90A, E90, H90 och F90

ÅTGÄRD: Utför åtgärder angivna i bifogad kopia av FAA Priority Letter

Airworthiness Directive 99-10-07

TID FÖR ÅTGÄRD: Inom tider och intervaller angivna under "Compliance Time" i FAA

Priority Letter Airworthiness Directive 99-10-07

FAA Priority Letter Airworthiness Directive 99-10-07 och däri angivet **UNDERLAG:** 

underlag

FAA Priority Letter Airworthiness Directive 99-10-07 **REFERENS:** 

**BESLUTSDATUM:** 1999-05-06

LFS 1999:74

Åtgärder enligt LVD utgör nödvändig förutsättning för ifrågavarande flygmateriels luftvärdighet. Referens BCL M 1.11. Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senast gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

**Postadress** 

Gatuadress

Telefonnummer

Telegram

Telex

601 79 NORRKÖPING

Vikboplan 11

011-192000

Civilair Norrköping

62450

# Bilaga till LVD 2971

# PRIORITY LETTER AIRWORTHINESS DIRECTIVE



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

U.S. Department of Transportation Federal Aviati Administration

DATE: May 3, 1999 99-10-07

# Actions Leading to This Priority Letter Airworthiness Directive (AD)

The FAA has received reports of reduced or loss of elevator control on Raytheon Beech 90 series airplanes. The following briefly describes these incidents:

- During flight on a Raytheon Beech Model E90 airplane, the pilot realized he could only utilize elevator up control, declared an emergency, and safely landed using engine power and trim. Investigation revealed that the down elevator cable was severed due to chafing between this cable and the windshield de-ice circuit electrical wire. Verbal communication with an FAA Flight Standards employee indicated another incident of loss of elevator control due to interference with electrical wiring on a Raytheon Beech 90 series airplane; and
- The elevator down cable separated on a Raytheon Beech Model E90 airplane because of interference between this cable and the stainless steel clamp that joined two bleed air supply ducts. The FAA has received two other incidents of reduced/loss of elevator control due to interference between the elevator down cable and the bleed air ducts on Raytheon Beech 90 series airplanes.

#### The FAA's Determination

After examining the circumstances and reviewing all available information related to the incidents described above, the FAA has determined that:

- 1. the elevator control cable on the Raytheon Beech 90 series airplanes could interfere with wire harnesses, stainless steel clamps, and other equipment under the cockpit floor panels; and
- 2. priority letter AD action should be taken to detect and correct such interference before the elevator control cable breaks, which could result in loss of elevator control with potential loss of control of the airplane.

## **Provisions of This Priority Letter AD**

Since an unsafe condition has been identified that is likely to exist or develop on other Beech Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, C90A, E90, H90, and F90 airplanes of the same type design, the FAA is taking priority letter AD action. This AD requires:

- removing the pilot's seat and floor panels in the cockpit area on the pilot's side of the airplane and inspecting the entire area for interference or damage between the elevator control cable and equipment under the cockpit floor panels (wire harnesses, stainless steel clamps, etc.);
- running a cloth wrap around the control cable to detect broken strands of the control cable (Ref: 90 Series Maintenance Manual, Sections 5-20-00, 5-20-01 (if applicable), and 20-04-00);
- replacing or repairing any damaged items found during the required inspection and cloth wrap procedure. This would include chafing damage and nicks, cuts, and broken strands on the control cable (Ref: 90 Series Maintenance Manual, Section 20-04-00, for criteria to determine if the cable needs replaced);
- securing any component that is interfering with the elevator control cable and installing additional supports and clamps as necessary to prevent sagging or further interference between the elevator control cable and equipment under the cockpit floor panels. Use best shop practices and Advisory Circular (AC) 43.13-1B as guides for installing the additional supports;
- reinspecting the elevator control cable upon completion of any rework or replacement to assure that there is no interference; and

- reinstalling the floor panels and the pilot's seat.

#### **Compliance Time of This AD**

The compliance time of this AD is structured such that the required actions would occur at the same time as the first Phase III inspection (at 600 hours time-in-service (TIS)) for low-time airplanes with less than 600 hours TIS or within the next 10 hours TIS for those airplanes with over 590 hours total TIS. The Phase III inspection is the first time the pilot's seat and the floor panels are removed during regular maintenance.

Recent inspections of low-time airplanes and airplanes just off the assembly line have not revealed any of the interference problems referenced in this document. By structuring the compliance time to coincide with the Phase III inspection, operators of low-time airplanes do not have to accomplish an unnecessary or unjustified inspection.

### Presentation of the Actual AD

This rule is issued under 49 U.S.C. Section 44701 (formerly section 601 of the Federal Aviation Act of 1958), pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this priority letter.

**99-10-07 RAYTHEON AIRCRAFT CORPORATION:** Priority Letter issued on May 3, 1999. Docket No. 99-CE-18-AD.

Applicability: Beech Models 65-90, 65-A90, 65-A90-1, 65-A90-2, 65-A90-3, 65-A90-4, B90, C90, C90A, E90, H90, and F90 airplanes, all serial numbers, certificated in any category:

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated in the body of this AD, unless already accomplished.

To detect and correct interference between the elevator control cable and equipment under the cockpit floor panels before the elevator control cable breaks, which could result in loss of elevator control with potential loss of control of the airplane, accomplish the following:

- (a) Upon accumulating 600 hours total time in service (TIS) on the airplane or within the next 10 hours TIS after the receipt of this priority letter AD, whichever occurs later, accomplish the following:
  - (1) Remove the pilot's seat and floor panels in the cockpit area on the pilot's side of the airplane and inspect the entire area for interference or damage between the elevator control cable and equipment under the cockpit floor panels (wire harnesses, stainless steel clamps, etc.); and
  - (2) Run a cloth wrap around the control cable to detect broken strands of the control cable (Ref: 90 Series Maintenance Manual, Sections 5-20-00, 5-20-01 (if applicable), and 20-04-00).
- (b) Prior to further flight after the actions required by paragraph (a), including all subparagraphs, of this AD, accomplish the following:
  - (1) Replace or repair any damaged items found during the inspection and cloth wrap procedure required in paragraphs (a)(1) and (a)(2) of this AD, respectively. This would include chafing damage and nicks, cuts, and broken strands on the control cable (Ref: 90 Series Maintenance Manual, Section 20-04-00, for criteria to determine if the cable needs to be replaced);
  - (2) Secure any component that is interfering with the elevator control cable and install additional supports and clamps as necessary to prevent sagging or further interference between the elevator control cables and equipment under the cockpit floor panels. Use best shop practices and Advisory Circular (AC) 43.13-1B as guides for installing the additional supports;
  - (3) Reinspect the elevator control cables in accordance with the procedures specified in paragraph (a)
  - (1) of this AD upon completion of any rework or replacement to assure that there is no interference;

and

- (4) Re-install the floor panels and pilot's seat.
- NOTE 2: Raytheon Safety Communique No. 143, dated October 1997, is not considered an alternative method of compliance to this AD.
- (c) An alternative method of compliance or adjustment of the compliance times that provides an equivalent level of safety may be approved by the Manager, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Rm. 100, Mid-Continent Airport, Wichita, Kansas 67209. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.
- NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from Wichita ACO.
- (d) Information related to this priority letter AD may be examined at the FAA, Central Region, Office of the Regional Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.
- (e) Priority letter AD 99-10-07, issued May 3, 1999, becomes effective immediately upon receipt.

## FOR FURTHER INFORMATION CONTACT:

Mr. Todd Dixon, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209, telephone: (316) 946-4152; facsimile: (316) 946-4407.