

LUFTVÄRDIGHETSDIREKTIV (LVD)

A Motordrivna Luftfartyg Bell (BHTC) LVD Nr 2911 R7 Upphäver 2911 R6

Sektion 2. Utlandstillverkad flygmateriel

TITEL:

ÄNDRING AV FLYGHANDBOK OCH INSTALLATION AV

PEDALSTOPP FÖR STJÄRTROTORKONTROLL

GÄLLER:

Modell 407 S/N 53000 t.o.m. 53399

ATGÄRD:

Utför åtgärder angivna i bifogad kopia av CF-98-36R7

TID FÖR ÅTGÄRD:

Ej senare än 31 januari 2001 om ej tidigare utfört.

UNDERLAG:

CF-98-36R7 och däri angivet underlag

REFERENS:

CF-98-36R7

BESLUTSDATUM:

2000-03-08

LFS

2000:29

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.



Transport Canada Transports Canada Civil Aviation Aviation Civile

	TP 7245E		
No. CF-1998-36R7	1/2		
Date			
1 February 2000			

AIRWORTHINESS DIRECTIVE

THE FOLLOWING AIRWORTHINESS DIRECTIVE (AD) MAY BE APPLICABLE TO AN AIRCRAFT, WHICH OUR RECORDS INDICATE IS REGISTERED IN YOUR NAME. ADI ARE ISSUED PURSUANT TO CANADAM AVAITION RESULATION (CAR) 593. PURSUANT TO CAR 605.94 AND THE FIRTHER DETAILS OF CAR STANDARD 625, APPENDIX H, THE CONTINUING AIRWORTHINESS OF AN AIRCRAFT IS CONTINUED CONTINUING MAY BE APPLICABLE ADI. FAILURE TO COMPLY WITH THE REQUIREMENTS OF AN AD MAY INVALIDATE THE FLIGHT AUTHORIZATION OF THE AIRCRAFT. ALTERNATIVE MEANS OF COMPLIANCE SHALL SE APPLIED FOR IN ACCORDANCE WITH CAR 805.84 AND THE ABOVE-REFERENCED STANDARD.

CF-98-36R7 BELL

Applies to Bell Helicopter Textron Canada (BHTC) Model 407 helicopters, serial numbers 53000 to 53399, except 53397.

Compliance is required no later than 31 January 2001, unless already accomplished.

There have been three Bell 407 helicopter accidents in which the tail boom was severed by the tail rotor. The first two accidents occurred while at cruise speeds approaching never-exceed speed (V_{NE}). In both cases an unexpected right yaw, followed by a large left directional control input, was reported prior to the tail boom strike. High cruising speed may have been a contributing factor. Consequently, Airworthiness Directives CF-98-36 and -36R1 reduced the V_{NE} by 25 knots. BHTC introduced a temporary pedal stop to limit left pedal directional control input, allowing a V_{NE} reduction of only 15 knots. This option was introduced by Technical Bulletin (TB) 407-98-13 and mandated by CF-98-36R2. A further V_{NE} reduction to 100 KIAS was mandated by CF-98-36R3. Revision CF-99-36R4 specified serial number applicability, clarified V_{NE} values and incorporated new Temporary Revisions to the flight manual. BHTC introduced a modified tail rotor hub and blade installation providing increased clearance of the blades from the tail boom and demonstrated safe flight up to a V_{NE} of 130 KIAS at moderate temperatures. CF-98-36R5 was then issued to mandate BHTC Alert Service Bulletin (ASB) 407-99-27 to allow an increased V_{NE} of 130 KIAS up to 20°C and 125 KIAS above 20°C. The subsequent CF-98-36R6 removed the V_{NE} limitation above 20°C. Since then BHTC has developed an airspeed-actuated pedal stop that allows reinstatement of the original design speed limitation of 140 KIAS.

This revision mandates the installation of the airspeed-actuated pedal stop as per ASB 407-99-33, and constitutes terminating action to this directive.

To reinstate the original type certified V_{NE} of 140 KIAS, accomplish the following:

- 1. Install in the helicopter an airspeed-actuated pedal stop in accordance with Bell Helicopter Alert Service Bulletin (ASB) BHT 407-99-33 dated 17 December 1999, or later revision approved by the Director, Aircraft Certification, Transport Canada.
- 2. Replace the V_{NE} placards as instructed in ASB 407-99-33. The maximum V_{NE} is 140 KIAS except in autorotation where it remains 100 KIAS maximum or where the basic flight manual or optional installation limitations indicate less than these values.
- 3. Remove the temporary instrument markings and install the new airspeed limitation decals as per Part II of ASB 407-99-33.



_			
1	No.	CF-1998-36R7	2/2
1	Nº	O1 1550 50IC,	

- 4. Remove Temporary Revision titled " V_{NE} Increase to 130 KIAS" dated 3 June 1999 from the applicable Rotorcraft Flight Manual:
 - (a) BHT-407-FM-1,
 - (b) BHT-407-FMS-25, Quiet Cruise Mode,
 - (c) BHT-407-FMS-28, Increased Internal Gross Weight,

and insert Temporary Revision titled "V_{NE} Increase to 140 KIAS" dated 17 December 1999.

- 5. Remove Temporary Revision titled "Hover Performance Correction for Temporary Tail Rotor Pedal Stop" dated 10 March 1999 from the applicable Rotorcraft Flight Manual:
 - (a) BHT-407-FM-1,
 - (b) BHT-407-FMS-3, Particle Separator,
 - (c) BHT-407-FMS-4, Snow Deflector,
 - (d) BHT-407-FMS-28, Increased Internal Gross Weight.
- 6. Remove all earlier editions of this directive from the Rotorcraft Flight Manual (BHT-407-FM-1) and brief the pilots of the content of this directive.

The accomplishment of paragraphs 1 through 6 above provides terminating action for the requirements of all previous issues of this directive.

This revision supersedes Airworthiness Directive CF-98-36R6 issued 22 July 1999.

This directive becomes effective 1 February 2000.

For Minister of Transport

B. Govaniuk

Chief, Continuing Airworthiness

For further information contact a Transport Canada Centre, or Mr. Bogdan Gajewski, Continuing Airworthiness, Ottawa, telephone (613) 952-4450, facsimile (613) 996-9178 or e-mail gajewsb@tc.gc.ca.

The intent of this directive will be met by BHTC on helicopter serial numbers 53397, 53400, and subsequent.