TP 7245E

1 of 2

AD Number: CF-2018-23

AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.

Number: Effective Date:
CF-2018-23 5 September 2018

ATA: Type Certificate:

72 H-92

Subject:

Engine Turbine/Turboshaft - RPM (N2) Steady-State Operation Avoidance Range Limit

Replacement:

Supersedes AD CF-2007-13R2, issued 10 November 2009

Applicability:

Bell Helicopter Textron Canada Limited (BHTCL) model 206B series helicopters including those converted from model 206A, serial numbers up to 4690, and model 206L series helicopters, serial numbers 45001 through 45153 and 46601 through 46617.

This AD does not address BHTCL model 206A, 206B, 206L and 206L-4 modified by TCCA Supplemental Type Certificates (STCs) SH95-45, SH95-46, SH01-30 and FAA STCs SH4169NM, SH4179NM and SR00036SE. A separate AD may be issued in the future.

Compliance:

As indicated below, unless already accomplished.

Background:

Transport Canada had been advised of several failures of third stage turbine wheel used in Rolls Royce 250-C20 Series engines. Rolls Royce had determined that detrimental vibrations can occur within a particular range of turbine speeds, which are a potential contributing factor to these failures. Transport Canada issued AD CF-2007-13R2 to require the incorporation of RPM (N2) steady-state operation avoidance range limit and the installation of a decal.

Following issuance of AD CF-2007-13R2, Rolls Royce has expanded the RPM (N2) steady-state operation avoidance range limits. BHTCL has amended the rotorcraft flight manuals and provided a new decal to inform pilots to avoid steady-state operations at those engine turbine speeds.

This AD mandates the incorporation of amended Rotorcraft Flight Manual (RFM) power plant operating limitations and engine starting procedures for RPM (N2) steady-state operation, and installation of a new decal.

Corrective Actions:

Part A: Rotorcraft Flight Manual (RFM) Amendment

 Within 30 days from the effective date of this AD, amend the Transport Canada approved RFM by incorporating the power plant operating limitations and engine starting procedures for RPM (N2) steady-state operation as detailed in the table below, or later revisions approved by Transport Canada.



| Rotorcraft Model | RFM | Revision Number | RFM Issue Date |
|------------------|----------------|-----------------|----------------|
| Model 206B | BHT-206B-FM-1 | Revision B-54 | 30 May 2018 |
| Model 206B3 | BHT-206B3-FM-1 | Revision 17 | 30 May 2018 |
| Model 206L | BHT-206L-FM-1 | Revision 31 | 30 May 2018 |

2. Advise the pilots of this change.

Part B: Installation of Decal

In conjunction with Part A above, install the new decal as per BHTCL Alert Service Bulletin (ASB) 206-07-115, Revision D dated 9 July 2018 or 206L-07-146, Revision C dated 9 July 2018, as applicable, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr Chief, Continuing Airworthiness Issued on 22 August 2018

Contact:

Mrs. Audrey Vézina-Manzo, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail <u>AD-CN@tc.gc.ca</u> or any Transport Canada Centre.