

MAIN ROTOR BLADE ROOT FITTING PERIODIC INSPECTION REQUIREMENTS

SUMMARY:

Helicopter Technology Company (HTC) is currently participating in an NTSB investigation following an accident involving a MD Helicopters 369D. Inspection of the helicopter wreckage performed during this investigation showed evidence of an in-flight separation of one of the main rotor blades due to a fracture at the root fitting. Initial examination of the fracture revealed signatures consistent with fatigue.

Data referenced in this notice provides owners and operators with the Required Main Rotor Blade Root Fitting Periodic Inspection Requirements.

PURPOSE:

While, the NTSB accident investigation remains ongoing, the Purpose of this notice is to emphasize the importance of performing all of the required main rotor blade root fitting periodic inspections. They may be mandated by Airworthiness Directive, mandated by Maintenance Manual (Airworthiness Limitations), or described by Service Bulletin. Additionally, it is imperative that owners and operators understand the definition of Torque Event (TE) and how to keep track of them (Reference 1 below, CSP-HMI-2). Aircraft involved in external lift work with repeated pick-ups and drop-offs may require multiple inspections daily due to the accumulation of high rates of Torque Events per hour.

Failure to comply with these inspection requirements may result in the loss of a main rotor blade during operation.

PART NUMBERS AND SERIAL NUMBERS AFFECTED:

500P2100-BSC and -BSC-1 (STC Number SR09172RC) All Serial Numbers.

All references in MD Helicopters, Inc. CSP-HMI-2 that pertain to Part Number 369D21120-501, -503, and -505 pertain to HTC Part Number 500P2100-BSC and -BSC-1 as well.

500P2100-101, -103, and -105 (STC Number SR09047RC) All Serial Numbers.

These blades are also known as MD Helicopters, Inc. Part Number 369D21120-501, -503, and -505 and all references in MD Helicopters, Inc. CSP-HMI-2 that pertain to Part Number 369D21120-501, -503, and -505 pertain to HTC Part Number 500P2100-101, -103, and -105 as well.

500P2300-501, -503, and -505 (STC Number SR01050LA) All Serial Numbers.

These blades are also known as MD Helicopters, Inc. Part Number 369D21121-501, -503, and -505 and all references in MD Helicopters, Inc. CSP-HMI-2 that pertain to Part Number 369D21121-501, -503, and -505 pertain to HTC Part Number 500P2300-501, -503, and -505 as well.

HELICOPTER MODELS AFFECTED:

MD Helicopters, Inc. Models 369D, E, FF, 500N, and 600N.

MAIN ROTOR BLADE ROOT FITTING PERIODIC INSPECTION REQUIREMENTS

REFERENCES:

- 1) MD Helicopters, Inc. Handbook of Maintenance Instructions (CSP-HMI-2), Revision 29, dated May 11, 2001 or later
- 2) MD Helicopters, Inc. Rotorcraft Log Book (CSP-RLB), Revision 2, dated February 17, 2000 or later
- 3) Maintenance Manual HTCM-001, Main Rotor Blades (Installation and Maintenance), Revision H, dated February 12, 2009 or later.
- 4) FAA Airworthiness Directive (AD) 2005-21-02, dated November 1, 2005
- 5) Mandatory Service Bulletin (SB) 2100-3R3, Main Rotor Blade Torque Event (TE) Inspection, Revision 3, dated January 05, 2004 or later.
- 6) Mandatory Service Bulletin (SB) 2100-4R2, Main Rotor Blade Inspection and Protection, Revision 2, dated December 23, 2005 or later.

REQUIRED ROOT FITTING INSPECTIONS:

- 1) Root Fitting Inspection every 100 hours as described in the 100 Hour or Annual Inspection Checklist – Chapter 5 Continued Airworthiness (Reference 1 - CSP-HMI-2 and Reference 3 - HTCM-001).
- 2) Torque Event Inspection every 35 hours or 200 Torque Events (TE's) as described in Airworthiness Limitations - Chapter 4 Airworthiness Limitations (Reference 1 - CSP-HMI-2, Reference 3 - HTCM-001, Reference 4 - AD 2005-21-02, and Reference 5 - SB 2100-3R3).
- 3) Corrosion Inspection every 100 Hours (Reference 3 - HTCM-001 and Reference 6 - SB 2100-4R2).

RECORDING AND COMPLIANCE:

Record compliance with these inspections in the Rotorcraft Log Book (Reference 2 – CSP-RLB).

POINTS OF CONTACT:

For further information and rotor blade disposition, contact Helicopter Technology Company, LLC (HTC) at (310) 523-2750, or FAX (310) 523-2745. www.helicoptertech.com