

LUFTVÄRDIGHETSDIREKTIV (LVD)

Helikopter Robinson LVD Nr 2411

Sektion 2. Utlandstillverkad flygmateriel

TITEL:

Kontroll / byte av bultar

GÄLLER:

Alla modell R22

ÅTGÄRD:

Utför kontroll och åtgärd i enlighet med bifogad kopia av Emergency

FAA AD 92-06-17.

<u>TID FÖR</u> ÅTGÄRD:

Inom 10 flygtimmar räknat från detta LVD's utgivningsdatum om ej

tidigare utförts.

UNDERLAG:

Emergency FAA AD 92-06-17

REFERENS:

Emergency FAA AD 92-06-17 och LFV skrivelse L 9203-492-31203

daterad 92-03-20 och sänd till ägare / brukare.

UTGIVNINGS-

DATUM:

1992-05-14

LFS: 1992:16

Åtgärd enligt LVD utgör nödvändig förutsättning för ifrågavarende 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 senaste gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

EMERGENCY AIRWORTHINESS DIRECTIVE



99 -03- **3** 1

OFFICE OF AVIATION SYSTEM STANDARDS P.O. BOX 26460 OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department of Transportation Federal Aviation Administration

March 17, 1992 92-06-17

Pursuant to the authority of the Federal Aviation Act of 1958, delegated to me by the Administrator, the following Priority Letter AD 92-06-17, applicable to Robinson Helicopter Model R22 series helicopters, is issued March 17, 1992, and is effective immediately upon receipt.

This priority letter Airworthiness Directive (AD) is prompted by a report of a bolt failure caused by hydrogen embrittlement during ground run-up of a new Model R22 Beta helicopter at the Robinson Helicopter Company flight test delivery center. The failed bolt, part number (P/N) NAS1304-16, is one of approximately 2,200 pieces of hardware received by Robinson Helicopter Company that were manufactured by a company in Macon, Missouri. These particular bolts are identified by the letters AF on the bolt head and may have been installed, delivered, or distributed by Robinson Helicopter Company between July 9, 1991, and March 1, 1992. Affected bolts are used in several applications on the Model R22 series helicopters. One of the most critical locations is the tail rotor assembly where the failure reportedly occurred. This bolt condition, if not corrected, could result in failure of the bolt during in-flight operation and loss of tail rotor control.

Since an unsafe condition has been identified that is likely to exist or develop on other helicopters of this same type design, this AD requires an inspection at several specific locations on the aircraft of certain Model R22 series helicopters to determine if an affected bolt is installed. Those bolts displaying the AF letter designation on the head of the bolt are to be removed immediately and replaced with an airworthy bolt.

92-06-17 ROBINSON HELICOPTER COMPANY (RHC): Docket No. 92-ASW-14.

Applicability: All Model R22 series helicopters, certificated in any category.

Compliance: Required as indicated, unless accomplished previously. To prevent failure of NAS1304-16 AF bolts, resulting in loss of helicopter

control, accomplish the following:

- (a) Within the next 10 hours' time in service or before March 30, 1992, whichever comes first, visually inspect the helicopters specified in (1), at the inspection areas or locations specified in (2), to determine the identification of the NAS1304-16 bolts.
 - (1) The helicopters affected are:
 - (i) R22 serial numbers (S/N) 1880 through 2060 and S/N 2073;
- (ii) All R22 helicopters regardless of S/N overhauled or repaired at Robinson Helicopter Company between July 9, 1991, and March 1, 1992; and
- (iii) All R22 helicopters regardless of S/N for which maintenance was performed after July 9, 1991, in the inspection locations specified in paragraph (a)(2).

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- (2) The inspection locations are:
- (i) The tail rotor blade control assembly at the aft end of the tail cone, including tail rotor controls connecting the rotor blade pitch link to the rotor pitch control cross head (slider) arms, and the rotor pitch link to the rotor blade attachment;
- (ii) The lower aft corners of the cabin, both left-hand and right-hand sides, where the attachment joins the cabin to the welded frame assembly; and
- (iii) The region above the swash plate attaching the counter weights (balance weights) to the swash plate assembly (also described as the main rotor balance weights attachment to the Chord Arm Yoke).

NOTE: Further details of the installations are contained in Robinson Model R22 Illustrated Parts Catalog (IPC).

- (b) Before further flight, remove those NAS1304-16 bolts bearing the identification letters AF on the head of the bolt and replace with serviceable NAS1304-16 bolts with head marking other than "AF" or with NAS6604-16 bolts.
- (c) After the effective date of this AD, NAS1304-16 bolts identified with the letters AF shall no longer be installed as a replacement part in any application on these helicopters.
- (d) An alternative method of compliance or adjustment of the compliance time, which provides an acceptable level of safety, may be used when approved by the Manager, Los Angeles Aircraft Certification Office, 3229 E. Spring Street, Long Beach, California 90806-2425. The request shall be forwarded through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Los Angeles Aircraft Certification Office.
- (e) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the helicopter to a location where the requirements of this AD can be accomplished.
- (f) Copies of the applicable service information may be obtained from Robinson Helicopter Company, 24747 Crenshaw Blvd., Torrance, CA 90505. This information may be examined at the FAA, Office of the Assistant Chief Counsel, Rules Docket, 4400 Blue Mound Road, Bldg. 3B, Room 158, Fort Worth, Texas.
- (g) This Priority Letter AD 92-06-17, issued March 17, 1992, becomes effective immediately upon receipt.

FOR FURTHER INFORMATION CONTACT:

Mr. Charles W. Matheis, Aerospace Engineer, Los Angeles Aircraft Certification Office, ANM-123L, FAA, Northwest Mountain Region, 3229 E. Spring Street, Long Beach, California 90806-2425; telephone (310) 988-5235.