PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-T-041/1999

Datum vydání: 14. dubna 1999

VRTULNÍK - VOLNOBĚŽNÁ SPOJKA - KONTROLA/VÝMĚNA

Týká se:: vrtulníků vyrobených firmou Robinson Helicopter comp. typu R44, výrobních čísel (S/N) 0001 až 0541, 0543, 0556, 0565, vybavených volnoběžnými spojkami katalogových čísel (P/N) C188-3, S/N's 0003 až 0452, certifikovaných v kterékoliv kategorii.

Důvod vydání: možnost selhání volnoběžné spojky (sprag clutch) během autorotace, které je zaviněno poruchou uvnitř volnoběžné spojky. Tato porucha má za následek pokles otáček hlavního rotoru.

Datum účinnosti: ihned po obdržení.

Provést v termínech: Jak je popsáno v FAA PL AD 99-07-18. (příloha tohoto PZZ).

Postup provedení prací: Dle pokynů v FAA PL AD 99-07-18.

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. B. Fiala. Pokud to vyžaduje povaha tohoto PZZ musí být zapracováno do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA PL AD 99-07-18.

Ing. Pavel MATOUŠEK Ředitel technického inspektorátu Úřad pro civilní letectví

99-07-18 ROBINSON HELICOPTER COMPANY: Priority Letter issued on March 26, 1999. Docket No. 99-SW-25-AD.

Applicability: Model R44 helicopters, serial numbers (S/N) 0001 through 0541, 0543, 0556, and 0565, with sprag clutch, part number (P/N) C188-3, S/N's 0003 through 0452, installed, certificated in any category.

NOTE 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters 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 (b) 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 before further flight, unless accomplished previously.

To alert pilots of the potential for the sprag clutch failing to overrun during autorotation due to failure of the sprags within the sprag clutch assembly, and loss of main rotor revolutions-per-minute, accomplish the following:

(a) Insert either the Special Pilot Caution, revised March 22, 1999, which is contained in Robinson Helicopter Company R44 Service Bulletin SB-32, dated March 22, 1999, or the following Special Pilot Caution paragraphs, into the Normal Procedures section of the Rotorcraft Flight Manual between pages P.4-8 and P.4-9:

SPECIAL PILOT CAUTION

Some sprags in overrunning clutches have been found cracked in service. A broken sprag could conceivably prevent the clutch from overrunning when entering autorotation. Until the clutch in this aircraft has been replaced, <u>do not</u> enter practice autorotations by rapidly closing or "chopping" the throttle. "Chopping" the throttle could result in a sudden loss of rotor RPM if the clutch failed to disengage.

Enter autorotation by first lowering collective and then rolling off just enough throttle to produce a small visible split between the rotor and engine tachometer needles. If the clutch fails to disengage, immediately complete a power recovery. Perform hovering autos only after checking the function of the overrunning sprag clutch prior to lift-off, then smoothly rolling off the throttle from a low hover with the skids no more than two feet above the ground.

Be sure to perform the sprag clutch check (split tach needles) before every flight, not just the first flight of the day.

- (b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office, FAA. Operators shall submit their requests through a FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Los Angeles Aircraft Certification Office.
- NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles Aircraft Certification Office.
- (c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.
 - (d) Priority Letter AD 99-07-18, issued March 26, 1999, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT: Elizabeth Bumann, Aerospace Engineer, FAA, Los Angeles Aircraft Certification Office, Propulsion Branch, 3960 Paramount Blvd., Lakewood, California 90712, telephone (562) 627-5265, fax (562) 627-5210.