DIRECCIÓN NACIONAL DE AERONAVEGABILIDAD (DNA)
DIRECCIÓN AVIACIÓN GENERAL (DAG)
REPÚBLICA ARGENTINA

ADVERTENCIA 088/DAG

La presente ADVERTENCIA tiene por objeto dar a conocer una situación que puede resultar de interés para Talleres Aeronáuticos de Reparación, operadores y/o propietarios de aeronaves. Se emite a los efectos de informar y las recomendaciones no tienen carácter mandatorio.

Ciudad Autónoma de Buenos Aires, 26 de junio de 2008.

APLICABLE A: Aeronaves Douglas DC3. Aplicabilidad según FAA SAIB Nº NM-08-28.

MOTIVO: Fisuras en la horquilla de rueda de cola.

ANTECEDENTES: Esta Advertencia pone en conocimiento del público usuario el Special Airworthiness Information Bulletin (SAIB) Nº NM-08-28 del 12-Junio-2008, emitido por la Federal Aviation Administration de EE.UU., relacionado con la presencia de fisuras en la horquilla de rueda de cola de las aeronaves Douglas de la serie DC3.

Se adjunta a esta Advertencia el SAIB Nº NM-08-28 (dos páginas).

RECOMENDACION: Con el fin de minimizar la posibilidad de inicio de fisuras por fatiga y su propagación hasta la rotura, esta Dirección recomienda la inspección de las horquillas de rueda de cola de acuerdo al párrafo *"Recommendations*" del SAIB Nº NM-08-28.

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FAA
Aircraft Certification Service

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: NM-08-28
SUBJ: Landing Gear: DC-3 Tail Wheel Fork Check **Date:** June 12, 2008

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, owners and operators of **all McDonnell Douglas Corporation Model DC3-G102, DC3-G102A (Army C-49E, C-50, C-50A, C-50B, C-50C, C-50D, C-51), DC3-G103A, DC3-G202A (Army C-49, C-49A, C-49B, C-49C, C-49D, C-49J, C-49K; Navy R4D-2), DC3A-SCG, DC3A-SC3G, DC3A-S1CG, DC3A-S1C3G (Army C-41, C-41A, C-48, C-48A, C-52, C-52A, C-52B, C-52C, C-53, C-53B, C-53C, C-53D, C-68; Navy R4D-3, R4D-4), DC3A-S4C4G, DC3C-SC3G, DC3C-S1C3G, -S4C4G (Army C-47, C-47A; Navy R4D-1, R4D-5), DC3C-R-1830-90C (Army C-47B, Navy R4D-6), DC3D-R-1830-90C (Army C-117A) airplanes,** to inspect for cracks initiating from the fairing attachment holes in the tail wheel fork.

Background

On February 25, 2008, we received a report indicating that a Model DC-3C (produced as a C-47A) airplane experienced failure of the tail wheel fork during rollout after landing. The airplane suffered structural damage to the bottom of the fuselage immediately adjacent to the tail wheel area. Subsequent inspection revealed that the tail wheel fork, part number 5115862, had failed. Review of the failed part indicated that a crack had initiated at a threaded fastener hole for the tail wheel strut fairing. Discoloration in the vicinity of the failure suggested the crack was present for some time. In this case, the fairing was not installed but the two attachment screws were in place. The airplane had accumulated 19,482 total flight hours. Currently, there is no specific inspection requirement of the tail wheel area.

Recommendations

Although none have been reported, failure of the tail wheel fork in flight could result in loss of the tail wheel. To minimize the possibility of fatigue crack initiation and propagation to failure of the fork, we recommend the following be accomplished:

1. Perform visual inspections of the fairing attach screw hole areas of the tail wheel fork for cracks (under proper lighting, with a 10X-20X magnifying glass, with the fairing and screws removed, and the area properly cleaned); and
2. Assure that appropriate screws are installed in the fairing attach screw holes before returning the airplane to service following the crack inspection.

Note that the inspection may be accomplished during other maintenance activities, such as a scheduled lubrication of the tail wheel fork bearings. We also recommend that the inspection be repeated on an annual basis, which can greatly reduce downtime and cost of repair due to collateral damage from a fatigue failure.

For Further Information Contact

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