ministerie van verkeer en waterstaat Ministry of Transport and Public Works

rijksluchtvaartdienst

Department of Civil Aviation

directie luchtvaartinspectie Aeronautical Inspection Directorate BLA nr: 91-129

Date : October 25, 1991

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0 K K

Type: F.27

Seq.: 110

Postbus 575 2130 AN Hoofddorp Tel. 02503 - 63131

BIJZONDERE LUCHTWAARDIGHEIDSAANWIJZING (BLA) **NETHERLANDS AIRWORTHINESS DIRECTIVE**

Onder verwijzing naar BLA nr. 68-19-00 en BLA nr. 74-70-00 geeft de directeur Luchtvaartinspectie van de Rijksluchtvaartdienst de volgende Bijzondere Luchtwaardigheidsaanwijzing.

Under authority of the Netherlands Regulations on the State Control of Aviation the Director Aeronautical Inspection of the Civil Aviation Department gives the following Airworthiness Directive.

WINGS OUTER FLAP CENTRE HINGE INSPECTION/REPAIR

Description:

Analysis of loading spectra has revealed that the loads on the outer flap centre hinge are higher than originally expected. For some centre hinges, this results in a fatigue life of less than 90,000 flight cycles. On the production line, a new centre hinge P/N 3809-039-401 was introduced on aircraft serial number 10241 and subsequent, the fatigue life of which exceeds 90,000 flight cycles. For early hinges, retirement lives have now been established and repair instructions have been incorporated into the Structural Integrity Program Part I, Doc.No.27438. To ensure fleet safety at present, this Airworthiness Directive requires the inspection and, if necessary, repair of the affected hinges.

Effectivity:

F.27 aircraft (except Mk.050) serial numbers: 10102 and 10105 to 10240 inclusive

Effective date:

November 01, 1991

Compliance: required as indicated, unless already accomplished:

before further flight, determine the configuration of the outer flap centre hinges as pre- or post-SBF27/57-22:

- (1) for aircraft in pre-SBF27/57-22 configuration and which have accumulated 72,000 flight cycles or more on the effective date of this AD:
- within 1,000 flight cycles after the effective date of this AD or before May 01, 1992, whichever comes first, perform a High Frequency Eddy Current inspection inside the bearing bore of the outer flap centre hinges in accordance with Part 1 of Fokker Service Bulletin F27/57-66 dated October 11, 1991:
- if no cracks are found, repair the outer flap centre hinges within 2,800 flight cycles or two calendar years after the inspection of paragraph (1)(a), whichever comes first, in accordance with Part 2 of Fokker SBF27/57-66;
- if cracks are found, repair the outer flap centre hinges in accordance with Part 2 of Fokker SBF27/57-66:
- within 300 flight cycles after the inspection of paragraph (1)(a), if the crack length inside the bore is less than 5 mm and no cracks have been found in one of the faces around the bore:
 - before further flight if:
 - the crack length inside the bore is equal to or more than 5 mm; or
- the crack length inside the bore is less than 5 mm but is also present in one of the faces around the bore; ISSN 0920 - 1084

- (2) for aircraft in post-SBF27/57-22 configuration and which have accumulated 55,000 flight cycles or more on the effective date of this AD:
- (a) within 1,000 flight cycles after the effective date of this AD or before May 01, 1992, whichever comes first, perform a High Frequency Eddy Current inspection inside the bearing bore of the outer flap centre hinges in accordance with Part 1 of Fokker Service Bulletin F27/57-66 dated October 11, 1991;
- (b) if no cracks are found, repair the outer flap centre hinges within 2,800 flight cycles or two calendar years after the inspection of paragraph (2)(a), whichever comes first, in accordance with Part 2 of Fokker SBF27/57-66;
- (c) if cracks are found, repair the outer flap centre hinges in accordance with Part 2 of Fokker SBF27/57-66:
- (i) within 300 flight cycles after the inspection of paragraph (2)(a), if the crack length inside the bore is less than 5 mm and no cracks have been found in one of the faces around the bore;
 - (ii) before further flight if:
- a crack inside the bore is located near the grease nipple bore;
- the crack length inside the bore is equal to or more than 5 mm; or
- the crack length inside the bore is less than 5 mm but is also present in one of the faces around the bore;

NOTE: For outer flap centre hinges which have not yet attained the newly established retirement lives of 72,000 or 55,000 flight cycles, the Structural Integrity Program Part I, Item 57-50-02, applies. Refer to Airworthiness Directive (BLA) 91-049.

Accomplishment:

in accordance with Fokker Service Bulletin F27/57-66 dated October 11, 1991 or a later RLD-approved revision.

Remarks:

- In respect to Art.88 par.3 of the Civil Air Navigation Regulations, this Airworthiness Directive (BLA) must be accomplished by or under supervision of an approved company.
- All operators of the affected aircraft have received the ref. Service Bulletin directly from the manufacturer.

Note: Address the inspection results of this AD to:

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