



Airworthiness Directive of the Netherlands

Bijzondere Luchtwaardigheids Aanwijzing - BLA

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Caution

In accordance with the Civil Air Navigation Regulations (RTL), Articles 76 and 88, the following Airworthiness Directive (BLA) is issued by the Director-General of Civil Aviation of the Netherlands (Directeur-Generaal van de Rijksluchtvaartdienst-RLD). Airworthiness Directives affect aviation safety. These are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive.

BLA nr : 1998-023/2

(A)

Date : October 30, 1998

FOKKER SERVICES B.V.
(formerly Fokker Aircraft B.V.)
Model F.27 Mk.050 series

RLD Type Certificate Nr.:

T-050-87

WINGS - OUTER WING STRINGER-TO-RIB CONNECTIONS - INSPECTION/MODIFICATION

Description:

In the past, a number of Fokker Model F.27 "Friendship" operators reported that rivet heads were missing at the rib-to-stringer connections of the upper and lower wing skin. Investigation revealed that on the production line, from aircraft serial number 10653 onwards, certain rivets were used in the affected connections, which had lower allowable tensile strength than the rivets installed in the earlier production aircraft. Airworthiness Directive (BLA) 1994-148 was subsequently issued to remedy this situation and required the inspection and, if necessary, modification of rib-to-stringer connections. Based upon this experience, gradually more and more rib-to-stringer connections were improved and modified on the Fokker 50 production line. As the complete package of modifications was not introduced before serial number 20299, the fatigue life of the rib-to-stringer connections on early Model F.27 Mk.050 series aircraft is limited to 40,000 flight cycles, and loose connections between ribs and stringers may still occur. Such deficient connections reduce the static buckling strength of the wing skin, and may cause fretting of the stringer. This condition, if not corrected, could result in fatigue cracking of the stringer and skin. Since an unsafe condition has been identified that is likely to exist or develop on other aircraft of the same type design, this BLA requires inspection and modification of the connections between stringers and ribs outboard of Wing STA.10760. The present revision is issued to add the requirement of a repetitive visual inspection for all aircraft on which the modification as described in Part 2 of the referenced Service Bulletin has not yet been carried out.

Applicability: **Fokker Aircraft B.V.** Model F.27 Mk.050 and Mk.0502 aircraft, serial numbers 20103 through 20298.

Effective date: December 1, 1998

Compliance: Required as indicated, unless accomplished previously.

(a) Visually inspect the outer wing for loose or missing rivets and gaps in the connections between ribs 11260, 11860, 12660 and 13460, and stringers 4, 5, 6 and 7 of the top and bottom wing skins in accordance with Part 1 of the Accomplishment Instructions of Fokker Service Bulletin (SB) F50-57-019 dated February 27, 1998, or a later RLD-approved revision, at the thresholds indicated below :

**Flight Cycles (FC) Accumulated
Since New on March 15, 1998**

**Inspection after March 15, 1998
(effective date of first issue of this directive)**

More than 25,000 FC

Three (3) calendar months

Between 20,000 and 25,000 FC

Six (6) calendar months

Between 15,000 and 20,000 FC

Twelve (12) calendar months

Less than 15,000 FC

Twelve (12) calendar months after
accumulating 15,000 FC

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(b) After the accomplishment of paragraph (a) of this directive, repeat the inspection of the top and bottom wing skins in accordance with Part 1 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision, at intervals not exceeding 2,500 flight cycles, until the accomplishment of the modification in accordance with Part 2 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision. Temporary Revision (TR) No.57-002 of the Fokker 50/60 Maintenance Review Board (MRB) document, which introduces Task Number 572000-00-17, also pertains to this subject;

(c) If no defects are found as a result of the visual inspections as required by paragraph (a) and (b) of this directive, before accumulating 40,000 FC since new, modify the aircraft in accordance with Part 2 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision;

(d) If gaps and/or loose or missing rivets are found as a result of the visual inspections as required by paragraph (a) or (b) of this directive, repair and/or modification is required as follows :

(1) Before further flight, modify the aircraft in accordance with Part 2 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision, or, if so selected, accomplish a temporary repair in accordance with either Part 3 or Part 4 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision;

(2) Thereafter, if a temporary repair has been accomplished, modify the aircraft in accordance with Part 2 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision, at the thresholds indicated below :

Temporary Modification Accomplished

Modification Required

Part 3 of SB F50-57-019

Within 500 FC after temporary repair

Part 4 of SB F50-57-019

Within 2,500 FC after temporary repair

(e) If, during the accomplishment of the rivet hole Eddy-Current inspection, which is part of the modification procedures as required by either paragraph (c) or (d) of this directive, as applicable, one or more of the rivet holes are found cracked, before further flight, inspect and repair the corresponding stringer(s) in accordance with Part 5 of the Accomplishment Instructions of Fokker SB F50-57-019 dated February 27, 1998, or a later RLD-approved revision.

Remarks:

- Operators of the affected aircraft may obtain copies of the referenced service information upon request directly from **Fokker Services B.V., Technical Services, P.O.Box 75047, 1117 ZN Schiphol Airport, The Netherlands; telephone (31) 20-605-2047; facsimile (31) 20-605-2000.**
- Compliance with this AD must be recorded in the proper Aircraft Log Book(s).
- This revision supersedes and cancels Airworthiness Directive (BLA 1998-023) dated February 27, 1998.

Address inquiries concerning this AD to:

Bureau Coordination & Technical Information (CTI); Telephone 31-(0)23-566 3155; Facsimile 31-(0)23-562 3848; Telex 74592 rldli nl