



**Caution**

*This Airworthiness Directive is issued by the Minister of Transport, Public Works and Water Management in accordance with the Aviation Act 2001 (Wet Luchtvaart), Article 3.22. Airworthiness Directives affect aviation safety. These are regulations which require immediate attention. No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements thereof, unless otherwise agreed with the Authority of the State of Registry (EC2042/2003, M.A.201 & M.A.303).*

**Nr. NL-2005-001**

Distribution : **L**

Date : March 23, 2005

Type Certificate Holder :

**FOKKER SERVICES B.V.**  
(formerly Fokker Aircraft B.V.)

F.27 Mk.050, Mk.0502 and Mk.0604

CAA-NL Type Certificate Nr.

**T-050-87**

THIS AIRWORTHINESS DIRECTIVE IS PUBLISHED BY THE CAA-NL :

- acting for and on behalf of the European Aviation Safety Agency (EASA), as Airworthiness Authority (ICAO Annex 8) of the State of Design for the affected product(s) with reference to 21A.3B (a) and (b); and
- has been approved under EASA reference Number 2005-2568 dated March 23, 2005.

**Supersedure** : Not Applicable

**Subject** : FLIGHT CONTROLS – ELEVATOR LEADING EDGE - INSPECTION/MODIFICATION

**Applicability** : Fokker Aircraft B.V. Model F.27 Mk.050, Mk.0502 and Mk.0604, all serial numbers.

**Reason :**

Several operators have reported cases in which the (divided type) leading edges of the elevators appeared to be loose. The fasteners of the leading edges were still in place in almost all cases, except in one, where a stud appeared to be broken. However, the fastener holes in the leading edge sections appeared to be elongated and worn out. In addition, fretting damage was found on the elevator front spar and the balance weights. In some cases, the elevator front spar did not meet the minimum strength requirements anymore and replacement was necessary. Investigation has shown that vibration induced by the propeller slipstream is the most likely cause of these problems. Due to initial play in the attachment holes and at the lip at the free end of each leading edge section, some movement of the leading edge sections over the front spar may be possible, causing fretting of the front spar and elongation of the fastener attachment holes. The stud failure was caused by incorrect installation in accordance with Fokker Service Bulletin (SB) F50-55-008. To prevent recurrence, the instructions have been amended and Fokker has issued SB Change Notification (SBCN) F50-55-008/01 to reflect this. The conditions described above, if not corrected, could lead to further incidents of elevator control surface binding, possibly resulting in loss of control of the aircraft. Since an unsafe condition has been identified that is likely to exist or develop on other aircraft of the same type design, this Airworthiness Directive requires a repetitive inspection and, eventually, modification of the elevator leading edges.

**Effective date** : March 31, 2005

**Mandatory Actions and Compliance Times :**

Required as indicated, unless accomplished previously.

(a) Within the next 6 months after the effective date of this directive, inspect the elevator leading edge sections in accordance with Part 2 Accomplishment Instructions of Fokker SB F50-55-012 dated October 11, 2004 or a later CAA-NL approved revision;

(b) For aircraft equipped with the "divided type" elevator leading edge sections, after the inspection as required by paragraph (a) of this directive, at intervals not to exceed 6 months, re-inspect the elevator leading edge sections in accordance with Part 2 Accomplishment Instructions of Fokker SB F50-55-012 dated October 11, 2004 or a later CAA-NL approved revision;

**Note 1:** The divided type elevator leading edge sections were introduced on the production line with serial number 20160, but since the single-piece elevator leading edge section are no longer available, earlier aircraft may have had the divided type sections installed as replacement parts.

NL-2005-001

(c) For aircraft equipped with the "divided type" elevator leading edge sections, within the next 2 years after the effective date of this directive, modify the elevator leading edge sections in accordance with Part 2 Accomplishment Instructions of Fokker SB F50-55-013 dated October 11, 2004 or a later CAA-NL approved revision.

**Note 2:** Fokker Services Component SB's F3203-010-55-01 and F3203-011-55-02, both dated October 11, 2004 pertain to the modification of the LH and RH Elevator Leading Edges, respectively.

**Note 3:** After modification of the elevator leading edge sections in accordance with paragraph (c) of this directive, the repetitive inspections of paragraph (b) are no longer required.

**Reference Publication(s) :**

Fokker SBCN F50-55-008/01

Fokker SB F50-55-012

Fokker SB F50-55-013

Fokker CSB F3203-010-55-01

Fokker CSB F3203-011-55-02

Remarks :

- Operators of the affected aircraft may obtain copies of the referenced service information upon request directly from **Fokker Services B.V., Technical Services Dept., P.O.Box 231, 2150 AE Nieuw-Vennep, The Netherlands;** telephone (31) 252-627-350; facsimile (31) 252-627-211; e-mail [technicalservices.fokkerservices@stork.com](mailto:technicalservices.fokkerservices@stork.com) or can be downloaded from [www.myfokkerfleet.com](http://www.myfokkerfleet.com).
- Compliance with this directive must be recorded in the proper Aircraft Log Book(s).
- Where applicable, the requirements of this directive must be integrated into the aircraft's Maintenance Schedule.

Address inquiries concerning this AD to : Civil Aviation Authority, Aircraft Division, Section C&D, P.O. Box 575, 2130 AN Hoofddorp, The Netherlands; telephone +31-23-566-3155; facsimile +31-23-566-3006; e-mail [Info.Register@ivw.nl](mailto:Info.Register@ivw.nl).