

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).

Civil Aviation Authority Netherlands Airworthiness Directive

Nr.	NL-2005-016	Distribution :
Type Ce FOKK (forme	December 16, 2005 rtificate Holder : ER SERVICES B.V. rly Fokker Aircraft B.V.) ark 050, 0502 and 0604	
EASA Ty	pe Certificate Nr.	A.036

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 FASA reference Number 2005-6448 dated December 15, 2005.

Supersedure : Not Applicable

Subject : PROPELLER - BLADE DE-ICER (BOOT) ASSEMBLY - INSPECTION/REPLACEMENT

<u>Applicability</u>: Fokker Aircraft B.V. Model F27 Mark 050, Mark 0502 and Mark 0604 aircraft, all serial numbers, equipped with **Dowty Propellers** (formerly **Dowty Aerospace Gloucester**) Type R.352 or R.410 series propellers.

Reason : Since May 2003, there have been three events with Fokker 50 (F27 Mark 050) aircraft, where the propeller blade de-icer assembly overshoe (boot) detached during flight. Two impacted the fuselage, causing considerable damage but did not penetrate, one hit a passenger cabin window, shattering the pane and penetrating into the fuselage, thereby injuring two passengers. All of the affected boots had been fitted using Minnesota Mining and Manufacture Co. (3M) 1300L adhesive. A thorough safety analysis has shown that this condition, if not corrected, could result in a hazardous event, including the possibility of passengers being seriously or fatally injured. Since an unsafe condition has been identified that may exist or develop on aircraft of the same type design, this Airworthiness Directive requires a repetitive inspection and, if signs of debonding are found, replacement of the propeller blade de-icer assembly. In addition, the continued use of 3M 1300L adhesive for fitting propeller blade de-icer assemblies (boots) is no longer authorized.

Effective date : January 1, 2006

Mandatory Actions and Compliance Times : Required as indicated, unless accomplished previously.

(a) Within 30 days after the effective date of this directive, check the maintenance records to determine whether 3M 1300L adhesive has been used to fit the de-icer assemblies (boots) to the propeller blades. If it has been positively established that Bostik 2402 adhesive has been used, no further action is required by this directive;

(b) If 3M 1300L adhesive has been used, within the next 650 flight hours after the effective date of this directive, and thereafter at intervals not exceeding 650 flight hours, inspect the propeller blade de-icer assemblies (boots) in accordance with the accomplishment instructions of Dowty Propellers Service Bulletin (SB) F50-61-158 dated September 30, 2005 or a later EASA-approved revision;

(c) When, during the inspection in accordance with paragraph (b) of this directive, any signs of lifting or bubbling are found, before next flight, replace the affected de-icer assembly (boot) in accordance with Dowty Propellers Specification PS 5723 (attached to Dowty SB F50-61-158 as Appendix 1), latest revision;

(d) As of the effective date of this directive, 3M 1300L adhesive may no longer be used to fit de-icer assemblies (boots) to propeller blades on Fokker F27 Mark 050, 0502 and 0604 series aircraft.

AD Nr. NL-2005-016

Reference Publication(s) :

Dowty Propellers SB F50-61-158 Dowty Propellers Specification PS 5723 (supersedes PS 723)

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 or can be downloaded from www.myfokkerfleet.com; or from Dowty Propellers, Anson Business park, Cheltenham Road East, Staverton, Gloucester GL2 9QN, United Kingdom; telephone (44) 1452-716000; facsimile (44) 1452-716001; website www.smiths-aerospace.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 <u>Info.Register@ivw.nl</u>.