



AIRWORTHINESS DIRECTIVE

AD 372

TYPE AFFECTED: PIK 20E Powered Sailplanes (All series and all Serial Numbers).

SUBJECT: Propeller Hub Mounting Nut Locking Plate.

BACKGROUND: Confirmed reports of the propeller coming loose as a result of propeller mounting nut shearing off have been received from Finland and W.Germany. The Finnish NBA AD M 1737/90 attached, refers.

REQUIRED ACTION: Before next flight and at every subsequent 25 hours of engine running time inspect propeller hub mounting as detailed in the attached Finnish NBA AD M 1737/90.

This inspection must be repeated at each annual, Form 2 inspection.

The 25 hour inspection requirements must be endorsed on Part 1 of the Maintenance Release.

MATERIALS: New SKF MB7 Tab Washers are available from bearing supply houses and must be used in preference to making a replacement washer.

IMPLEMENTATION: Inspection and replacement to be completed by the holder of a DA 1109 Inspection Certificate endorsed for PIK 20E Powered Sailplanes and approved for propeller maintenance.

All inspection and rectification action to be recorded by Log Book entry.

COMPLIANCE: The requirements of this Airworthiness directive are mandatory. This Airworthiness Directive is issued pursuant to Civil Aviation Regulations under the delegated authority of the Civil Aviation Authority (CE013/89)

SIGNED:


CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of :

THE GLIDING FEDERATION
of AUSTRALIA

AD 372

ISSUE: 1

September 12 1990

Page 1 of 1

RECEIVED 10 SEP 1990

ILMAILUHALITUS
NATIONAL BOARD OF AVIATION

PL 50
SF-01531 VANTAA
FINLAND
Puhelin/Telephone 90-82 921
International +358 0 82 921
Telex 121247 AVIA SF

ILMAILUHALITUKSEN TIEDOTUKSIA
INFORMATION FROM THE NATIONAL BOARD OF AVIATION

MUUTOSMÄÄRÄYS
AIRWORTHINESS
DIRECTIVE

M 1737/90

31.8.1990



Continuing airworthiness of an aircraft is contingent upon compliance with an airworthiness directive. An action according to the AD may be performed, if not stated otherwise in the body of the AD, by an aircraft repair station or aircraft mechanic according to his/her validation, for sailplanes and aircraft in the experimental category by the person responsible for the maintenance of the aircraft. The action performed shall be noted in the technical journal of the aircraft or the sailplane journey log book. The airworthiness directive has been issued on basis of §14 of the Aviation Act (595/64) and §20 of the Aviation Ordinance (525/68).

1737. Eiriavion. Propeller hub mounting.

Applies to: PIK 20E powered sailplanes, all serial numbers.

Reference: LBA LTA 90-239 (Germany) and experience gained in Finland.

Effective date: 1st of October 1990.

Validity: This directive is valid until further notice.

Reason: The propeller hub mounting nut locking plate may shear off, which will result in the propeller coming off.

Action:

- A. Inspect the propeller hub mounting before further flight and thereafter at every 25 hours of engine running time but in any case annually:

Dismount the propeller.

Dismount the mounting nut and discard the locking plate. Ensure that the edges of the propeller shaft wedge groove are still in such a condition that they are able to carry the load from the locking plate. If the groove is deformed, then install in front of the bearing a washer with a diameter equal to the diameter of the inner bearing ring and with a thickness equal to the dimension of the deformation.

Check the condition of the mounting nut and the bearing. Make a new locking plate and install the propeller.

- B. At the next periodic inspection, add a new note 17 in paragraph 4.2.4 (Notes in powerplant maintenance list) of the PIK 20 E Service Manual that includes the action according to para. A, and refer to this note at propeller item nr. 8 in the maintenance and inspection list 4.2.3.

Chief, Technical Division
E202.1jv


Kim Salonen

NATIONAL BOARD OF AVIATION, FINLAND
Flight Safety Department
Technical Division
27 August 1990

Airworthiness Directives, PIK 20 E series powered sailplanes

SUMMARY: The NBA has adopted a new Airworthiness Directive, applicable to all PIK 20 E Series powered sailplanes, which requires a recurring inspection of the propeller mounting. This AD has been prompted by an incident in which the propeller came loose during ground roll. The primary reason for the incident was that the plate securing the mounting nut sheared off. Consequently the mounting nut was free to turn loose and the propeller hub slid from the propeller axis. This condition, if not corrected, could result in the propeller coming loose during flight over sea or other region unsuitable for landing, with possibly fatal consequences.

EFFECTIVE DATE: 1st of October, 1990.

SERVICE BULLETINS: No service Bulletins have been issued on this matter.

SUPPLEMENTARY INFORMATION: One incident of the type described above has been reported in Finland. The Civil Aviation Authority of the Federal Republic of Germany issued shortly before this incident an airworthiness directive (LBA Lufttüchtigkeitsanweisung nr. 90-239) on the same subject. The German AD requires the inspection to be performed at every 10 hours of engine running time. After consulting experts from the former Eiri aircraft factory the NBA decided to adopt an inspection interval of 25 hours of engine running time; the inspection shall anyhow be performed annually.

The Ad requires the locking plate to be renewed at every inspection. A new plate should be manufactured locally. The inspection may be performed by the owner of the glider or members of the flying club. Material costs should stay within \$20 per sailplane.

FOR FURTHER INFORMATION CONTACT: Lassi Valve, Technical Inspector, Airworthiness, National Board of Aviation, PO Box 50, SF-01531 VANTAA, Finland. Telephone int. + 358-0-8292867, telefax int. + 358-0-8702304.