

## BGA TECHNICAL COMMITTEE

### TECHNICAL NEWSHEET 11/12/97

- PART 1**     **Airworthiness "AGGRO"** This is the last issue of TNS for 1997! Please refer to BGA 1997 Red Pages.
- 1.1.     **ASTIRS**. Restricted airbrake operation was caused by the lanyards securing the "R" clips in the L'Hotellier connectors, fouling on a bolt in the bell-crank. (Reported by SGU).
  - 1.2.     **OTTFUR HOOKS**. Advice from Cair Aviation is included herewith. Inability to release during an over-speeding winch-launch has been reported. OTTFUR HOOKS must be overhauled and tested to the correct specification, when ever wear or malfunction becomes apparent.
  - 1.3.     **DUO DISCUS - Undercarriage** lowering was restricted by rotation of the hand grip towards the cockpit side fairing. Fixed with Loctite. (RAFGSA Bicester).
  - 1.4.     **DG100/200/400 - Airbrake Torque Tube** to be inspected in accordance with A/D97-011 (herewith), for excessive free-play.
  - 1.5.     **HORNET G.C.** A/D97-311 (herewith) increase the mass balance tolerances.
  - 1.6.     **ASTIRS** - degraded elevator trim performance was caused by unsecured sealing tape. Could apply to many sailplane types. (Four Counties G.C.).
  - 1.7.     **SLINGSBY DART SPAR INSPECTIONS**. TI/109/T51 at **Issue 2**, requires both top and bottom spars to be uncovered for inspection. (Posted to owners 30/9/97).
  - 1.8.     **MAGNETOS, Impulse Coupling Failure**, reported on SF25E. FAA A/D 96/12/07 requires inspection of Bendix Couplings at 500 hour intervals. Could apply also to SLICK Magneto's. (Reported by C. Thorne).
  - 1.9.     **Bombardier - ROTAX Engines**. A/D 94 (herewith) requires inspection of fuel pumps on 912 engines.  
  
The current list of Rotax A/D is also included.
  - 1.10.     **G.103 ACCRO**. Undemanded Airbrake Extention and inability to retract same occurred during aerobatics. Over-centre lock out of adjustment. (Derby & Lancs G.C.).

- 1.11. PIPER PA-25 (Pawnees). FAA A/D 85-02-05 (re-issued November 1997) draws attention to Parking Brake Malfunction.
- 1.12. CAA Airworthiness Notice 12, draws attention to the importance of clear windscreens and transparencies.
- 1.13. PROPELLER INSTALLATIONS. S.L.M.G.'s powered by "VW" variants. (SF25/T61 etc).

In 1996 a propeller assembly departed from a T61A. In 1997 a case was reported of reduced torque loading on a T61(F), resulting in damage to the Woodruffe key.

Checks must be made for the correct assembly (interference fit in some applications), proper torque loading and secure locking of the assembly, in accordance with manufacturers instructions.

- 1.14. CENTRAIR S.B's 20-19(1), 101-18 & 201-15 (herewith) address L'Hotellier Connector Inspections on ASW20F & FL, and Centrair 101 & 201 Sailplanes.

## PART 2      GENERAL MATTERS

### 2.1.      A REMINDER!

- a) LEGAL REQUIREMENTS for the Maintenance of Aeroplanes on the UK Civil Register; for which a Certificate of Airworthiness has been issued :- Article 12 of the Air Navigation Order requires that a Certificate of Release to Service (CRS) shall be issued "if the aircraft or any part of the aircraft or such of its equipment as is necessary for the airworthiness of the aircraft has been overhauled, repaired, replaced, modified, maintained, or has been inspected in accordance with Article 9 (7) (b)". (Mandatory Airworthiness Directives etc).
- b) The format of the CRS is printed at the top of each page of CAA Airframe and Engine Log Books (CAP's 398/399).
- c) The Persons Authorised to SIGN the CRS on Column 7 of the relevant page in the Log Books are:-
  - a) the holders of aircraft maintenance engineer's licences (appropriately rated), or
  - b) a person approved by the Authority as being competent to issue such certification and in accordance with that approval.
- d) In the Case of the BGA , such authorisation to appropriately rated BGA Inspectors, is granted under CAA Approval of the BGA Ref DAI/8378/73 as detailed in the BGA Technical Procedure Manual. (All Inspectors should have a copy.

- 2.2. Applications of the Light Aircraft Maintenance Schedule (LAMS - Blue Book CAP 411). The FOREWORD (Section 2/1) para 5, requires that “recommendations issued by the manufacturer of the aircraft, engines, propellers and equipment, in Maintenance Manuals, Service Bulletins and other technical service information shall be complied with as specified in Section 3, para 2.

BGA Note CAA Airworthiness Notice No. 35 exempts engines certificated in private category aeroplanes from the fixed time between overhauls recommended by the Manufacturer.

- 2.3. Regulation 16 of the ANO( herewith) prescribes “Pilot Maintenance”  
Article 17 gives details of Log Books.

ALL OWNERS, OPERATORS AND BGA INSPECTORS are advised to familiarise themselves with the legislation referred to above, which includes Articles 12 and 17 of the Air Navigation Order.

- 2.4. Copies of the ANO and. CAA Airworthiness Notices, should be made available to all concerned. The LAMS should be included in all Log Books.

CAA Notices are now at Issue 121. Do you have a copy?

CAA Publications are available from Westward Digital, 37 Windsor St, Cheltenham, GL52 2DG.

(HAPPY X-MAS & AN ACCRO FREE NEW YEAR)

Dick Stratton  
Chief Technical Officer





**Airworthiness  
Directive  
97-311**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Lilienthalplatz 6  
38108 Braunschweig  
Federal Republic of Germany

**Glasflügel**

**Effective Date: October 23, 1997**

**Affected:**

Kind of aeronautical product: Sailplane  
Manufacturer: Streifeneder, Grabenstetten, Germany  
Type: Hornet-C  
Models affected: all  
Serial numbers affected: all  
German Type Certificate No.: 304

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**Subject:**

Weights and moments of control surfaces

**Reason:**

Masses and residual moments of control surfaces differ from permissible values as demonstrated by various checks. A fresh flutter calculation has now defined larger tolerances.

**Action:**

Incorporation of a new page into the Flight and Service Manual. Delete section 6.7 „hinge moments“ of the Manual. Determination of masses and hinge moments of control surfaces in accordance with the Streifeneder Technical Note.

**Compliance:**

Action must be performed within the next 6 month, but at latest during the next annual inspection.

**Technical publication of the manufacturer:**

Streifeneder Technical Note No. 206-18 dated July 21, 1997 which becomes herewith part of this AD and must be obtained from Messrs.:

Hansjörg Streifeneder  
Glasfaser-Flugzeug-Service GmbH  
Hofener Weg

D-72582 Grabenstetten  
Tel.: +49 (0) 7382 / 1032  
Fax: +49 (0) 7382 / 1629

Federal Republic of Germany

**Accomplishment and log book entry:**

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.



**Airworthiness  
Directive  
97-011**

**Luftfahrt-Bundesamt**  
Airworthiness Directive Section  
Lilienthalplatz 6  
38108 Braunschweig  
Federal Republic of Germany

**Glaser-Dirks**

**Effective Date: January 30, 1997**

**Affected:**

Kind of aeronautical product: Sailplane / Powered Sailplane  
Manufacturer: Glaser-Dirks, Bruchsal, Germany  
Type: DG-100, DG-200 and DG-400  
Models affected: all  
Serial numbers affected: all  
German Type Certificate No.: 301, 323 and 826

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**Subject:**

Airbrake torque tube in the fuselage and airbrakes in the wings

**Reason:**

Due to free play between bellcrank and airbrake plate the airbrake cap might not flush with the wing surface at the outboard end. If this is corrected by increasing the locking forces the airbrake control system might be overloaded. This can result in failure at the operating lever of the airbrake torque tube in the fuselage.

**Action:**

Inspection of the airbrake and the airbrake torque tube in the fuselage. Modification of airbrake plates and reinforcement of the welded joint between torque tube and lever. Manual amendments.

**Compliance:**

Before the next flight:

Inspection of airbrake and airbrake torque tube in the fuselage. Insert new pages into the AFM.

At latest until March 31, 1997:

Modification of airbrake plates.

**Technical publication of the manufacturer:**

DG-Flugzeugbau Technical Note No. 301/18, 323/9 and 826/34 dated November 04, 1996 which becomes herewith part of this AD and must be obtained from Messrs.:

DG-Flugzeugbau GmbH  
Im Schollengarten 20

D-76646 Bruchsal

Federal Republik of Germany

**Accomplishment and log book entry:**

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

## Airworthiness Directive Nr. 94

### Fuel Pump Rotax P/N 996 592

1. Affected: Fuel Pumps P/N 996 592, S/N 95 0002 up to 97 0100, installed on Engines Rotax 912 A S/N 4,410.122 up to S/N 4,410.180 incl. and Rotax 912 F S/N 4,412.502 up to S/N 4,412.743 incl., or those kept as spare parts.
2. Subject: Inspection of the fuel pump Rotax P/N 996 592
3. Reason: Improper maintenance and modification on clamp block Rotax P/N 851 320 could cause cracks on the fuel pump.
4. Action: All affected Rotax 912 A and F Series engines and fuel pumps must comply with the actions required by Bombardier Rotax Technical Bulletin Nr. 912-20 issued 28. August 1997, which becomes herewith part of this AD.
5. Compliance: Before next flight
6. Accomplishment: The required action has to be accomplished by the manufacturer, or through an approved service center or by a licensed/qualified person. An entry into the aircraft/engine log has to be done.

## SAFETY REGULATION GROUP

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Gatwick Airport South  
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Our ref 9/97/CtAw/241

6 October 1997

### **AUSTRO CONTROL AIRWORTHINESS DIRECTIVE NO. 94 ROTAX 912-A AND 912-F SERIES ENGINES INSPECTION OF THE FUEL PUMP ROTAX P/N 996 592**

This letter transmits a copy of the above referenced Airworthiness Directive for your attention.

The provisions of Article 9(7) of the Air Navigation Order (1995) as amended, are such that a Certificate of Airworthiness in respect of an aircraft registered in the United Kingdom will cease to be in force until any modification or inspection, being a modification or inspection required by the CAA is completed.

In accordance with Article 9(7) and Airworthiness Notice No. 36 the modification or inspection required by this Airworthiness Directive is mandatory for applicable aircraft on the UK Register.

**IT IS RECOMMENDED THAT YOU FORWARD A COPY OF THIS AIRWORTHINESS DIRECTIVE TO THE ORGANISATION THAT MAINTAINS YOUR AIRCRAFT.**

A handwritten signature in black ink, appearing to read 'R J TEW'.

**R J TEW**  
Applications and Certification Section



**BOMBARDIER-ROTAX SERIES ENGINES**

**PART 1 – AUSTRO CONTROL GmbH AIRWORTHINESS DIRECTIVES**

<i>ACG AD No.</i>	<i>Description</i>	<i>Applicability – Compliance – Requirement</i>
64	Piston pin bearing, conversion to reinforced design.	Applicable to Bombardier-Rotax 501 and 505 up to engine No. 3,332.827. Compliance required as detailed in AD. Bombardier-Rotax Service Bulletin No. 505-05 also refers.
69	Ignition – Conversion to the new electronic box Ducati 965675.	Applicable to Bombardier-Rotax 505 and 505A series engines up to Serial No. 3,332.888. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 505-06 also refers.
75	Rework to ensure proper contact between attachment screws and stator.	Applicable to Bombardier-Rotax 912A series engines up to Serial No. 4,076.002. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-02 also refers.
80	Production problems in ignition unit.	Applicable to Bombardier-Rotax 912A series engines for powered sailplanes. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-06 also refers.
82	Ignition problems in areas of heavy radio transmission.	Applicable to Bombardier-Rotax 912A series engines Serial No. 4,076.064 and subsequent. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-07 also refers.
83	Possible contamination of carburetors.	Applicable to Bombardier-Rotax 912A series engines up to Serial No. 4,076.244. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-09 also refers.
84	Problems with SMD Electronicmodule in areas of heavy radio transmissions.	Applicable to Bombardier-Rotax 912A series engines Serial Nos. 4,076.064 to 4,380.752. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-08 also refers.

<i>ACG AD No.</i>	<i>Description</i>	<i>Applicability – Compliance – Requirement</i>
88	Verification or calibration of the mixture enrichment jet.	Applicable to Bombardier-Rotax 914F series engines Serial Nos. 4.420.002 up to 4.420.029 and 4.420.032 up to 4.420.044. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 914-03 also refers.
89	Exchange of propeller gearbox.	Applicable to Bombardier-Rotax 912 A3 engines Serial Nos. 4.076.065 up to 4.380.663 equipped with a hydraulic constant speed propeller. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-19 also refers.
90	Check of the banjo bolt, Rotax Part No. 941 782, installed in the turbo charger pressure oil line.	Applicable to Bombardier-Rotax 914F series engines Serial Nos. 4.420.011 up to 4.420.058 inclusive. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 914-04 also refers.
92/1	Inspection of cam-shaft.	Applicable to Bombardier-Rotax 912A and 912 UL series engines as detailed in AD. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-18 also refers.
94	Inspection of the fuel pump Rotax P/N 996 592.	Applicable to Bombardier-Rotax 912A and 912F series engines as detailed in AD. Compliance required as detailed in AD. Bombardier-Rotax Technical Bulletin No. 912-20 also refers.

Date of Issue: 15th October 1997

OM 100 SERIES OTTFUR RELEASE UNITS.

'IN THE FIELD' SERVICING AND ASSEMBLY.

PREAMBLE.

An OM 100 OTTFUR hook has recently been returned which the pilot reported that he was physically unable to operate from the cockpit control during a very fast winch launch. The Back Release operated normally at the top of the launch.

Investigation has shown that the Unit had been made up of sub-assemblies from other units and a mis-match had occurred between the Casing and the Operating lever which resulted in the Over Dead Centre lock geometry being so far out that with a cable load of only 1.5 KN (337 lbs) the effort required to operate the release lever was 23 daN (51 lbs).

Once assembled, the Ottfur has NO ODC ADJUSTMENT and for types A and B (see below) the ODC geometry depends on the correct shim tubing being installed during assembly. For types C, D and E the Casing top strap acts as a stop for the release lever. The length and position of this top strap can vary.

It follows that that there is a potential risk of the ODC geometry being significantly incorrect when assembling any unit. It is also important to be aware that checking that the release lever of an unloaded hook can be operated by hand on completion of the assembly is no guarantee that the ODC adjustment is correct.

RECOMMENDATIONS.

When servicing in the field the only sub-assemblies that should be changed are SPRINGS and, where applicable, that the shim tubing is installed as per the original.

DO NOT USE SUB-ASSEMBLIES FROM OTHER UNITS.

Carry out the simple Functional Test detailed below.

NOTE: This Functional Test does not satisfy all of the requirements defined in BCAR Section E. If in doubt the unit should be returned for investigation/test/overhaul.

GENERAL.

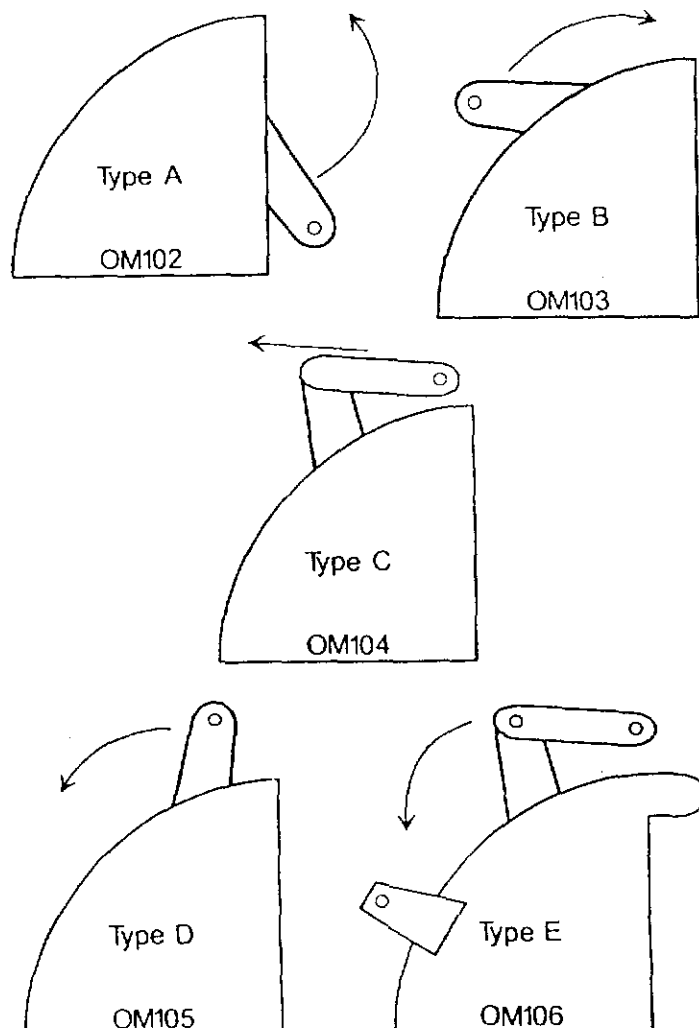
Cair Aviation Ltd now offer a comprehensive support service for the OM 100 Series of Ottfur Release Units with a prompt return service for most configurations and are pleased to provide advice for any in the field problems.

A leaflet giving information on the care and maintenance of Ottfurs, which includes instructions on spring replacement, is available from Cair Aviation on receipt of an S.A.E..

For reasons explained above the only spares provided by Cair Aviation are Springs. Part Numbers are:-

Back Release Spring	Part No. OM 123/13
Release Lever Spring	Part No. OM 123/14

OTTFUR TYPES. (OM 100 SERIES)



FUNCTIONAL TEST.

1. RELEASE PULL LOAD CHECK.

Mount the Unit inverted on a suitable bar ensuring that the bar permits access to the release lever as shown in the sketch below and is adequately supported. Note that the extension plates on the Type C lever extend beyond the rear face of the Unit mounting flanges.

Using a serviceable set of cable rings hang a 20 kg (45 lbs) weight on the unit as shown in the sketch, approximately in line with the horizontal load line of the cable.

Release the weight by pulling on the release lever using a suitable spring balance at right angles to the lever. In the case of levers with extension plates the pull should be in line with longitudinal centre line of the extension plates.

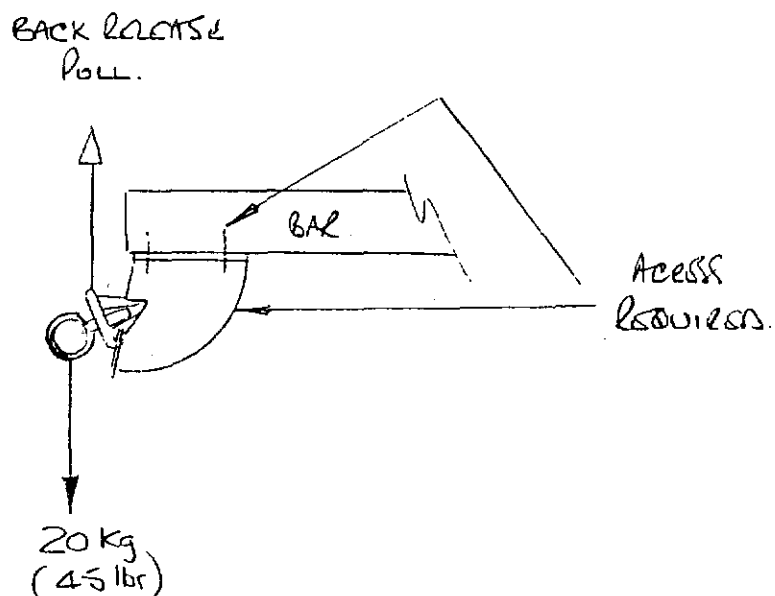
The release pull load should not be less than 2.7 daN (6 lbf) or more than 11 daN (25 lbf).

If the release pull load is less than 2.7 daN the release lever spring should be replaced. If the release pull load is higher than 11 daN, clean and lubricate the Unit. If this does not reduce the pull load the Unit should be rejected and returned for overhaul.

2. BACK RELEASE CHECK.

Attach a suitable spring balance to the rear of the back release ring and pull the Ring Carriage backwards in line with the cable load line.

Full movement of the carriage should give a minimum of 3.0 daN (6.5 lbf) and not more than 11.5 daN (30 lbf); without the ring carriage reaching the casing stop. If the pull load is less than 3.0 daN the spring should be replaced. If the pull load is in excess of 11.5 daN, clean and lubricate the Unit. If this does not reduce the pull load the Unit should be rejected and returned for overhaul.



16 For the purposes of article 11(3), the following repairs or replacements are hereby prescribed -

- (1) Replacement of landing gear tyres, landing skids or skid shoes;
- (2) Replacement of elastic shock absorber cord units on landing gear where special tools are not required;
- (3) Replacement of defective safety wiring or split pins excluding those in engine, transmission, flight control and rotor systems;
- (4) Patch-repairs to fabric not requiring rib stitching or the removal of structural parts or control surfaces, if the repairs do not cover-up structural damage and do not include repairs to rotor blades;
- (5) Repairs to upholstery and decorative furnishing of the cabin or cockpit interior when repair does not require dismantling of any structure or operating system or interfere with an operating system or affect the structure of the aircraft;
- (6) Repairs, not requiring welding, to fairings, non-structural cover plates and cowlings;
- (7) Replacement of side windows where that work does not interfere with the structure or with any operating system;
- (8) Replacement of safety belts or safety harness;
- (9) Replacement of seats or seat parts not involving dismantling of any structure or of any operating system;
- (10) Replacement of bulbs, reflectors, glasses, lenses or lights;
- (11) Replacement of any cowling not requiring removal of the propeller, rotors or disconnection of engine or flight controls;
- (12) Replacement of unserviceable sparking plugs;
- (13) Replacement of batteries;
- (14) Replacement of wings and tail surfaces and controls, the attachments of which are designed to provide for assembly immediately before each flight and dismantling after each flight;
- (15) Replacement of main rotor blades that are designed for removal where special tools are not required;
- (16) Replacement of generator and fan belts designed for removal where special tools are not required;
- (17) Replacement of VHF communication equipment, being equipment which is not combined with navigation equipment.



TWS 11/12/97

# BULLETIN DE SERVICE

N° 20-19 Révision 1

Société Nouvelle Centrair

PLANEURS CENTRAIR  
ASW20F et ASW20FL

Page 1/2

also Centrair 101 & 201. d. 24/11/97  
Centrair 101-18 and 201-15.

**OBJET :** INSPECTION DES EMBOUTS ET ROTULES L'HOTELLIER.

**VALIDITÉ :** Planeurs ASW20F et ASW20FL tous numéros de série.

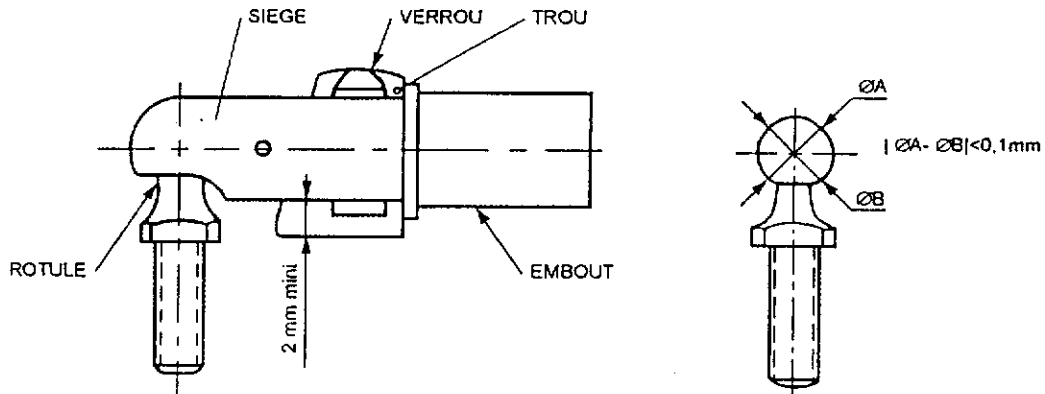
**BUT :** Vérifier l'absence d'endommagement ou d'usure excessive.

**APPLICATION :** Lors de chaque Visite Annuelle ou Grande Visite.

**DESCRIPTION :**

Le document L'Hotellier IMF N° 10.01 Révision E décrit les « instructions de maintenance des embouts et rotules L'Hotellier ».

Afin de clarifier ces instructions dans le cadre de l'entretien des planeurs ASW20F et ASW20FL, les inspections de chaque ensemble rotule et embout à effectuer lors de chaque Visite Annuelle ou Grande Visite sont détaillées page suivante. Dans le cas où certaines opérations n'auraient pas été effectuées lors de la dernière visite, nous recommandons de les effectuer rapidement pour éviter tout risque de défaillance.



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CENT63-1a

Société Nouvelle CENTRAIR

Aérodrome - 36300 LE BLANC  
FRANCE

Tél : 54.37.07.96 - Fax : 54.37.48.64

Approbation



Classification

- Impératif
- Recommandé
- Pour information

18 Nov 97



Also Centrair 101 0 261. Or.

**Inspections périodiques** (Visites Annuelles et Grandes Visites) :

- a. Vérifier que la rotule pivote dans l'embout sans point dur.
- b. Vérifier le débattement de la rotule dans l'embout.
- c. Vérifier l'absence de criques à la base de la sphère.
- d. Vérifier la sphéricité de la rotule : l'écart entre plusieurs mesures du diamètre de la sphère ne doit pas excéder 0,1 mm (usure anormale). Un écart de plus de 0,05 mm est cependant déconseillé car il peut induire une dureté dans le circuit de commande.
- e. Vérifier l'état du filetage de la rotule : aucun filet ne doit être endommagé. Au remontage, la collerette doit venir parfaitement en appui sur son support. La rotule doit être immobilisée par un contre-écrou au niveau des guignols d'ailerons, de volets et d'aérofreins et par du freinfillet normal (type Loctite 243) au niveau de la gouverne de profondeur.
- f. Inspecter visuellement l'embout : il ne doit y avoir aucune déformation ou matage au niveau de la cavité qui sert de réceptacle à la rotule, ainsi qu'au niveau du siège et du système de verrouillage.
- g. Vérifier le dépassement de la partie inférieure du verrou après montage de l'embout sur la rotule : Ce dépassement doit être supérieur à 2 mm (efficacité du rattrapage automatique de jeu).
- h. Vérifier la liaison entre la commande et l'embout : dans le cas des embouts réglables, vérifier que la liaison embout-commande est bloquée par un contre-écrou.
- i. Vérifier le fonctionnement de l'embout assemblé : il ne doit exister aucun blocage, dû à l'oxydation ou autre, du siège et du verrou.

Dans le cas où l'une des vérifications ci-dessus (sauf **h**) n'est pas satisfaisante, il est impératif de remplacer le couple rotule+embout concerné.

Dans le cas où la vérification **h** n'est pas satisfaisante, effectuer le blocage correct avec le contre-écrou.



**PIPER, THE NEW  
AIRWORTHINESS DIRECTIVE  
SMALL AIRCRAFT & ROTORCRAFT**

Revision issued November 1997.

**85-02-05 R1 THE NEW PIPER AIRCRAFT, INC.:** Amendment 39-10189; Docket No. 84-CE-27-AD. Revises AD 85-02-05, Amendment 39-4984.

Applicability: The following model and serial number airplanes, certificated in any category:

<b>Models</b>	<b>Serial Numbers</b>
PA-20, PA-20S, PA-20-115, PA-20S-115, PA-20-135, and PA-20S-135	20-1 through 20-1121
PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, and PA-22S-160	22-1 through 22-9848
PA-23 and PA-23-160	23-1 through 23-2046
PA-23-235, PA-23-250, and PA-E23-250	27-1 through 27-8154030
PA-24, PA-24-250, and PA-24-260	24-1 through 24-5034
PA-24-400	26-1 through 26-148
PA-25, PA-25-235, and PA-25-260	25-1 through 25-8156024
PA-30	30-1 through 30-2000
PA-31P	31P-1 through 31P-7730012
PA-36-285, PA-36-300, and PA-36-375	36-7360001 through 36-8302025
PA-39	39-1 through 39-162
PA-44-180	44-7995001 through 44-8195026
PA-44-180T	44-8107001 through 44-8207020

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, repaired, or reconfigured in the area subject to the requirements of this AD. For airplanes that have been modified, altered, repaired, or reconfigured so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required within 100 hours time-in-service after March 1, 1985 (the effective date of AD 85-02-05, Amendment 39-4984) or prior to the next flight after the effective date of this AD, whichever occurs later, unless already accomplished.

To prevent airplane controllability problems while involved in ground operation because of improper brake operations, accomplish the following:

(a) Install one of the following in a central location on the pilot's instrument panel in full view of the pilot.

- (1) A Piper part number 81090-02 placard; or
- (2) A Piper part number 683-107 placard.

NOTE 2: The above referenced placards both contain the following language:

**"WARNING  
NO BRAKING WILL OCCUR IF AIRCRAFT  
BRAKES ARE APPLIED WHILE PARKING  
BRAKE HANDLE IS PULLED AND HELD"**

(b) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(c) Installing the placard required by paragraph (a) of this AD may be performed by the owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), and must be entered into the aircraft records showing compliance with this AD in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(d) An alternative method of compliance or adjustment of the compliance time that provides an equivalent level of safety may be approved by the Manager, Atlanta Aircraft Certification Office (ACO), One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349.

(1) The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

(2) Alternative methods of compliance approved in accordance with AD 85-02-05 (revised by this action) are considered approved as alternative methods of compliance with this AD.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta ACO.

(e) All persons affected by this directive may examine information pertaining to this document at the FAA, Central Region, Office of the Regional Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

(f) This amendment becomes effective on November 21, 1997.

**FOR FURTHER INFORMATION CONTACT:**

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**AIRWORTHINESS NOTICE No. 12  
APPENDIX No. 54**

*Issue 1*

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**AIRCRAFT WINDSHIELDS AND TRANSPARENCIES**

- 1** Resulting from a General Aviation accident review, the CAA wishes to draw attention to the importance of maintaining the visibility of windshields and transparencies to ensure that a clear and undistorted view is provided for flight crew.
- 2** Operators and maintenance organisations are reminded that the optical standard and the standard of cleanliness of cockpit windshields and transparencies can have a direct effect on the flying of the aircraft especially in conditions of poor visibility. A hazy screen blurs the details, reduces black to grey and dims outlines. Dirt or slight scratching scatters the light and may make it impossible for the pilot to see against the sun.
- 3** Section 7 of the Light Aircraft Maintenance Schedule (LAMS) requires the inspection of windscreens at Check A intervals, with a further inspection of all windows at 50 hour, 150 hour and Annual check periods. Where other maintenance schedules do not refer to this subject, action should be taken to revise the schedule as appropriate.

