

**AIRWORTHINESS DIRECTIVE**

**TYPES AFFECTED:** Grob Astir CS gliders (All serial Nos.)

**SUBJECT:** Replacement of tailplane/fin locating pins.

**BACKGROUND:**

- (1) These pins were found to be cracking in service during 1980. All pins were replaced by the manufacturer to GFA AD 194.
- (2) In October 1982 the replacement pins were found to be cracking in service.
- (3) In November 1982 GFA issued a precautionary inspection request asking for pins to be crack detected. Cracked pins to be replaced. Pins not cracked and replacement pins to be checked at 25 hour intervals until the manufacturer supplied pins of a different design.
- (4) Cracking as illustrated may be caused by:-
  - (a) Incorrect heat treatment.
  - (b) Overtightening of nut.
- (5) Operators crack detecting at 25 hour intervals have found cracks developing during that time period.
- (6) Grob have supplied new pins to replace cracked pins, but the new pins, up to 24/1/83, are identical to the ones that crack.

**GFA REQUEST:** The manufacturer was requested to supply replacement pins of a different design, preferably to be non heat treated, to be supplied to operators before April 30th 1983.

- ACTION REQUIRED:**
- (1) All Astir CS pins are to be dye checked at 25 hour intervals irrespective of pin time in service and immediately following any heavy landing or ground loop, until replaced with Grob "new style pins".
  - (2) On receipt of "new style" pins, the old pins are to be removed and destroyed.
  - (3) "new style" pins to be fitted observing the manufacturer's recommended torque specification.  
(Shown on Dwg 102-2142-32)

Issued by:

*A. P. Burns*

Chief Technical Officer  
Airworthiness

Date 21/4/1983

For and on behalf of:

**GLIDING FEDERATION OF AUSTRALIA**

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- (4) "New style" pins to be crack detected at each annual inspection or 200 hours flight time, whichever comes first.
- (5) "New style" pins to be crack detected after all heavy landings and ground loops.
- (6) Record of component replacement and all inspections to be entered into log book.

#### PIN IDENTIFICATION

To ensure that the correct pins are fitted at all times the Grob drawing is reproduced to show the "New style" pin identifying features which are:-

- (1) Flats on the flange
- (2) Rolled thread
- (3) Only first 10mm of pin nose Nitrided
- (4) Made to Grob drawing 102-2142-32

#### IMPLEMENTATION

If "New style" pins are not fitted on or before 30th June 1983 each Grob Astir CS affected will be deemed to have had its C.of A. suspended and is to be removed from service until satisfactory parts are supplied.

#### LOCAL PRODUCTION

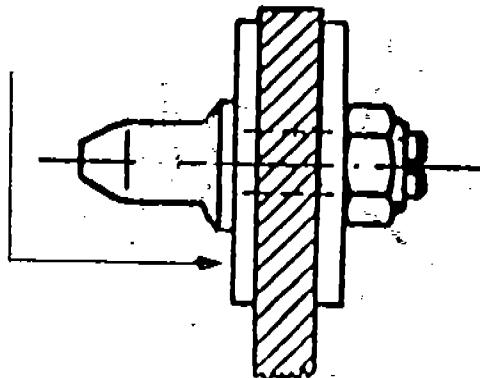
Persons wishing to manufacture alternative pins must have GFA approval for any such replacement part.

#### PARTS SUPPLY

Operators should contact E.Schneider Ltd. Two Wells Rd. Gawler, for "New style" pins.

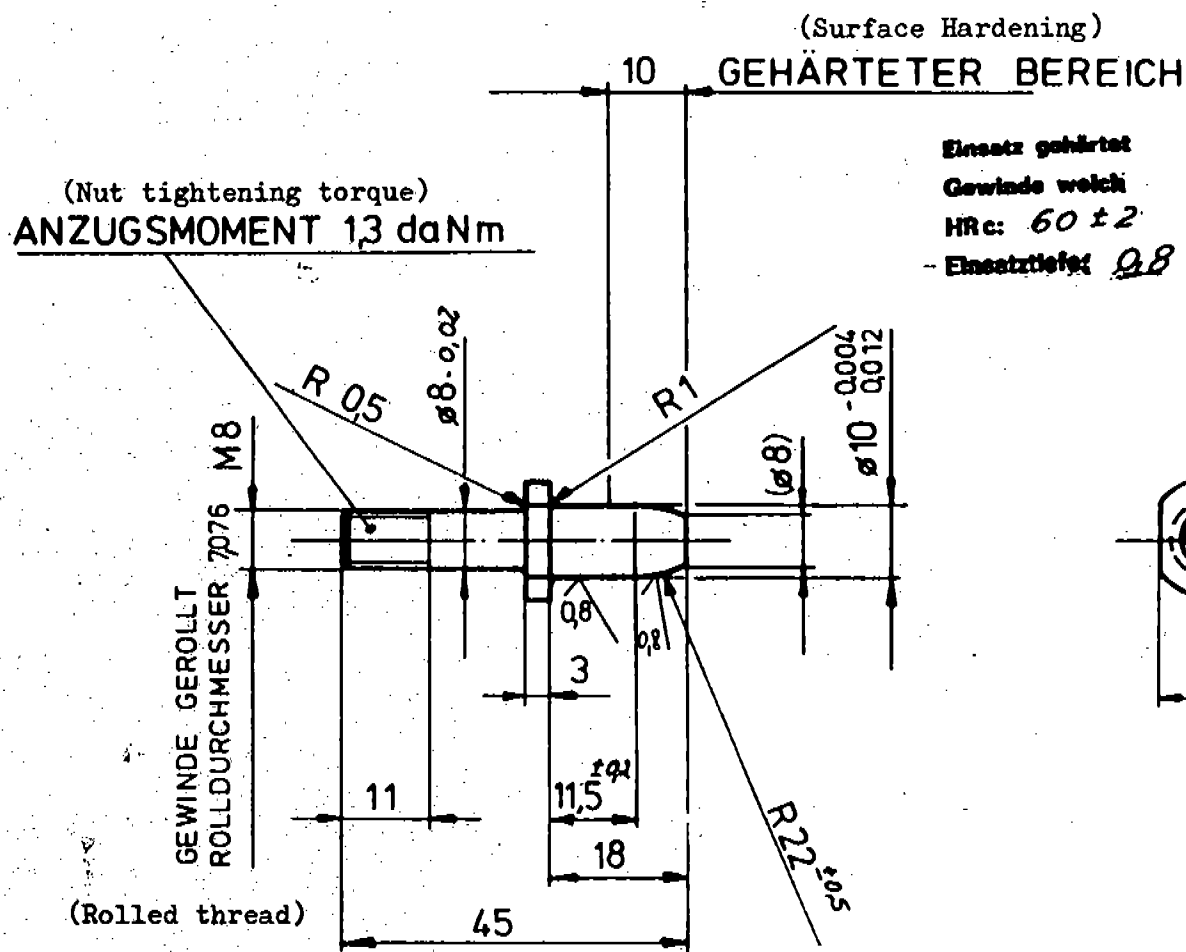
#### PIN INSTALLATION

Be very sure that this side of this washer is countersunk so that the edge of its hole does not bottom on the radius at the bottom of the flange.

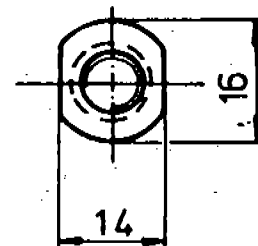


#### COMPLIANCE

The requirements of this Airworthiness Directive are mandatory, issued pursuant with Air Navigation Regulations under delegated authority from the Secretary of the Department of Aviation.




Einsatz gehärtet  
Gewinde weich  
HRc: 60 ± 2  
Einsatztiefe: 9,8



**Maße nach  
Toleranzangabe  
DIN 7168  
MITTEL**

'New Style Pin'

2 ST. / FLG Z.					
				1983 Jahr: 25.2. Gepr.: 25.2. Norm: 25.2.	Tag Name <i>Loock</i> <i>Wolner</i> <i>H. Aler</i>
				Werkstoff 16 Mn Cr 5 Vergütet auf 100 daN/mm <sup>2</sup>	Oberflächenzustand 3,2 / (0,8)
				Oberflächenenschutz —	
				Benennung BUNDBOLZEN	Maßstab 1:1
				Zeichnungs-Nr. 102 - 2142 . 32	
				Ersatz Nr. 102 - 2142 . 26 u. 102 - 2142 . 06	P-Nr. —
				Ersetzt durch —	
					
a	R22	11.4.83	491		
Änd.-Zust.	Änderungs-Mitteilung	Tag	Name		