# THE GLIDING FEDERATION OF AUSTRALIA

BUILDING 130, WIRRAWAY ROAD, ESSENDON AIRPORT, VICTORIA 3041.

| GFA/AD 243 |
|---|
| ROLLADEN SCHNEIDER 21 |
| Issue 1 |
| 5.10.1982 |
| Sheet 1 of 1 |

AIRWORTHINESS DIRECTIVE
GLIDER/POWERED SAILPLANE

CANCELLED 3-10-2018
REFER TYPE CERTIFICATE HOLDERS WEBSITE

**TYPE AFFECTED:** LS3 gliders.

**SUBJECT:** Corrections to Flight and Maintenance Manual

**BACKGROUND:** Manufacturers Technical bulletin 3029 provides amendments for both manuals.

**REQUIREMENT:** Flight Manual:- Exchange Pages 0.5 and 1.3

Maintenance Manual - Exchange pages 00.1 and 00.2, 3.3, 5.1, 12.3 and add page 13.12. (Pages attached)

**COMPLIANCE:** The requirements of this Airworthiness Directive are mandatory. This Directive is issued pursuant to Air Navigation Regulations under delegated authority from the Secretary of the Department of Aviation.

Mike Burns

M.P. BURNS.
CHIEF TECHNICAL OFFICER AIRWORTHINESS
GLIDING FEDERATION OF AUSTRALIA.

Edition: Dec.3,1976

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## Colour Marking on Airspeed Indicator

Green Range 85 - 190 km/h (46-103 kts, 53-118 mph): The sailplane can not be stalled at maximum weight of 472 kp (1o41 lbs) and speeds above 85 km/h (46 kts, 53 mph), regardless of flap position and with dive brakes deployed.
The structural limits of the aircraft cannot be exceeded at speeds below 190 km/h (103 kts, 118 mph) through severe turbulence or control surface deflections.

Yellow Range 190 - 270 km/h (103-146 kts, 118-168 mph): The structural limits of the aircraft can be exceeded in this range by severe turbulence, or through rapid deflections of control surfaces.
Severe turbulence would include wave rotors, visible wind funnels, cumulonimbus clouds or when crossing mountain ridges in strong winds. Therefore, in this speed range severe turbulence should be avoided, and control surface movements should be gentle.

Red Line Speed 270 km/h (146 kts, 168 mph): Never exceed.

White Range 85 - 190 km/h (46-103 kts, 53-118 mph): At maximum weight of 472 kp (1o41 lbs) 85 km/h (46 kts,53 mph) is minimum speed in straight and level flight and flap position +10°. 190 km/h (103 kts, 118 mph) is maximum permissible speed with flap positions from +10° to 0°.

Yellow Triangle 90 km/h (49 kts, 56 mph): Recommended approach to landing speed without water ballast.

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LUBRICATION SCHEDULE

| Location | Frequency | Lubricant |
|---|---|---|
| 1. Pins and matching holes of automatic connectors, main pins and matching holes. | Before assembly | Water unsoluble bearing grease or Grease containing Molybdenum |
| 2. Landing gear, all joints at rubber bearings | Once a year | Oil |
| | Once a year | Oil |
| All metal parts | Once a year | Spray oil |
| 3. Bearings on aileron automatic connectors | Once a year | Water insoluble bearing grease or Grease containing Molybdenum |
| 4. Dive brakes drive (bevel gear) | Once a year | Water insoluble bearing grease or Grease containing Molybdenum |
| 5. Tow release | See Maintenance Instructions of Manufacturer | Spray oil |
| 6. FAG-7H safety harness multiple-point buckle | See Maintenance Instructions of Manufacturer | G 353 - Aero Shell Grease 17 |



COMPONENTS LIFE / TBO

1. C.G. release Tost Europa G73 : 36 months or 2ooo starts )+
   or Tost Europa G72

2. Nose release Tost E75 : 36 months or 2ooo starts )+
   or Tost E72

3. Safety harness Autoflug FAG-7H : 1o years from manufacturing date. )+
   (Before 198o manufactured safety harnesses only 7 years)

)+ See also Maintenance and Operating Instructions of manufacturers.

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INSTRUMENTATION

Required installed instruments approved during initial type certification:

| Name | Maker | Type | TSO-Standard |
|---|---|---|---|
| Airspeed Indicator | Winter | 6FMS4-2 | TSO C-2b |
| Altimeter | Winter | 4FGH 10 | TSO C-10b including AS 392C |
| Magnetic Compass | Airpath | C 2300 | TSO C-7c |

MASTER EQUIPMENT LIST (Instruments)

Basic Equipment Instruments

1. Approved Airspeed Indicators
   Original certification was carried out using a Winter 6FMS4-2 airspeed indicator with a range of 30 to 300 km/h.
   Any FAA approved airspeed indicator for use in aircraft with an effective range of 300 km/h (162 kts, 186 mph) may be used.
   Colour coding must be as follows:

| | | | |
|---|---|---|---|
| red radial | 270 km/h | 146 kts | 168 mph |
| yellow arc | 190-270 km/h | 103-146 kts | 118-168 mph |
| green arc | 85-190 km/h | 46-103 kts | 53-118 mph |
| white arc | 85-190 km/h | 46-103 kts | 53-118 mph |
| yellow triangle | 90 km/h | 49 kts | 56 mph |



Recommendations to maintenance and care of gelcoat surfaces

according to paint manufacturer Lesonal's note dated 7.7.81

Suitable: Water with washing-up liquid added in recommended quantities, car polish with or without silicone.

Suitable with reservations: Tar remover based on petrol for cars. Alcohol, like spirit or isopropyl alcohol. Reservations are, that these liquids should only be used for wiping off, not for soaking with rags !

Unsuitable: Strong solvents and thinners, they may decompose gelcoat and cause local shrinking.

Completely unsuitable: Trichloroethylene, carbon tetrachloride or similar hydrocarbon chlorides. These liquids destroy the gelcoat.

Other mediums must be checked for suitability by Lesonal before use !

Warning : Sanded gelcoat shows distinctive weathering marks due to changes of temperature, ultra violet radiation and humidity unless regularly polished with hardwax.