#### B.G.A. TECHNICAL COMMITTEE

#### TECHNICAL NEWSHEET

#### TNS 7/8/84

#### Part 1 AIRWORTHINESS "AGGRO" (Please add to the 1984 'Yellow Pages')

- 1.1. T.49 CAPSTAN Tow Release cable badly frayed having "escaped" from the pulley guard. Cable failure was imminent! (Reported by D. Almey, Peterborough Sailplanes).
- 1.2. <u>BOCIAN WING ROOT ATTACHMENT BOLTS</u> found corroded, and 10mm bolts had been fitted to 12mm holes! All Bocians should be inspected for this defect a.s.a.p., and a log book entry made accordingly.
- 1.3. <u>FALKE/VENTURE WHEEL-BRAKE SEIZURES</u> H.Q. Air Cadets have reported this defect, which may cause propeller tip strikes, unless the stick is kept hard back. Damage to the wheel assembly may have arisen from side-loads imposed during landings.
- 1.4. CASTROL SUPER T.T. 2 STROKE MOTOR-OIL (WRONG BREW!) C.A.A. letter to operators No. 629 enclosed the attached circular, to alert 2 stroke engine operators of the incorrect labelling of batches of oil. Could apply to TWO-STROKE engines fitted to motor gliders (as well as mopeds, chain saws etc. etc.!!).
- 1.5. <a href="HOT" PROPELLER INJURES ENGINEER">HOT" PROPELLER INJURES ENGINEER</a> Faulty Bendix Key Ingnition Switch cause injury.

  ALL IGNITION switches should be tested periodically by momentarily switching off the engine at idle power. (Extract from G.A.S.I.L. 6/84).
- 1.6. GLIDER UNDERCARRIAGE RETRACTION TEST badly injures pilot's arm. The owner was inspecting the undercarriage whilst the weight was on the wheel (no trolley in place) and pushed the over-centre lock out of engagement! 595 lbs of glider trapped his arm!
- 1.7. PROPELLER BLADE DAMAGE & FAILURES C.A.A. Notice No. 55 draws attention to the need for detailed daily inspections for for signs of stone damage, cracks, delamination, or leading-edge seperation of all types of propellers.

Two cases of failure have recently been reported on Grob 109As fitted with factory repaired blades.

Leading-edge damage may be reduced by application of protective adhesive tape, strictly in accordance with instructions. (Hartzell A.289 Tape is available from Soaring Equipment Ltd., 193 Russell Road, Birmingham, Bl3 8RR. Tel: 021 449 1121).

- 1.8. <u>HERBIE HOGG PARACHUTES</u> with Plastic Deployment Handle. FAA AD/84/10/03 herewith may apply in the U.K.?
- 1.9. MOGAS OPERATION IN HIGH AMBIENT TEMPERATURES. Painting the fuel tank tops of Chipmunks white has significantly reduced the temperature of the fuel. Strongly recommended for all tank covers, of all types of tugs.
- 1.10 <a href="RF.5.FLAT BATTERY">RF.5. FLAT BATTERY</a> leads to subsequent accident. Extract from A.I.B. Bulletin 6/84 is self-explanatory. The capacity of all aircraft batteries should be checked periodically.

#### Part 2 GENERAL MATTERS

2.1. <u>LIMBACH 2000 CYLINDER STUD FAILURES</u> A number of stud failures have been reported. To co-ordinate rectification action such reports should be copied to the U.K. Agents, Norvic Racing Engines, Little Staughton Airfiled, Nr. St. Neots, Beds. (Colmworth 700)

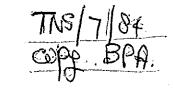
- 2.2. <u>C.A.A. CHARGES C. of A. Issues/Renewals</u> C.A.A. Notice No. 25 (Issue 10, June 1984), raises the charges to £27 per 500 kgs per year of validity, plus £41 "investigation" charge for newly registered aircraft being issued with initial U.K. C. of A.
- 2.3. GROB G.109B Service Time Between Overhauls Grob 2500 E1 Engine. TM 4601-1/2 herewith, extends the recommended T.B.O. to 300 hours. Operators should consult C.A.A. Notice No. 35 for "ON CONDITION" operation in U.K.
- 2.4. TUG OPERATING COSTS Further devaluation of the £ against the \$ has dramatically escalated the cost of spares, repairs & overhauls to U.S.A. derived airframes, engines and accessories. (Typically the U.K. list price for a Lycoming 180 h.p. cylinder assembly is £1020 + VATI) Clubs are strongly recommended:-
  - (a) to review their overhaul, repair and replacement costs.
  - (b) re-calculate their operating costs.
  - (c) review their tug operations to achieve optimum economic use, and to maximise cylinder life.
  - (d) revised their insurance cover, since repair costs have soared.
  - (e) seek to build-up reserves of spare parts, (new or second hand), and to keep such spares in an airworthy condition at all times. (B.G.A.'s"Tug Management Advisory Package" is available price £1.25) P.S. Why not build a winch?
- 2.5. <u>BLANIK OLEO/PNEUMATIC UNDERCARRIAGE UNIT</u>, Service kits are believed to be available from Peter Clifford Aviation, White Waltham Airfield, Nr. Maidenhead, Berks. 062 882 334.

#### ACCESS TO INFORMATION!

B.G.A. Technical Newsheets should be made available to all those who may be concerned with airworthiness information. Club Technical Officers (and other recipients) please make such that information on defect/incidents/accidents is made available to all Club Members.

Many Thanks.

R.B. STRATJON, CHIEF TECHNICAL OFFICER. August, 1984.



#### HERB M. GRAVES Airworthiness Directive Volume I

PARACHUTES

84-10-03 HERB M. GRAVES, JR.: Amendment 39-4861. Applies to all Herbie Hog parachutes equipped with plastic deployment handles.

To prevent possible nondeployment of the parachute canopy due to separation of the plastic handle when subjected to the deployment force, replace the plastic handle with a metal handle. Rework the parachute by removing the plastic handle and cable assembly and replacing it with a "Martin Baker" type metal handle and cable assembly. Care must be taken to assure that the pin spacing and cable length are compatible with the parachute rigging installation.

Compliance is required prior to making the parachute available for any parachute jump and before the next deployment the effective date of this AD (unless accomplished).

This amendment becomes effective on May 21, 1984.

#### FOR FURTHER INFORMATION CONTACT:

Joseph L. Condo, Special Programs Branch, ASW-190, Aircraft Certification Division, Federal Aviation Administration, P.O. Box 1689, Fort Worth, Texas 76101, telephone (817) 877-2567.

### ENGINEER INJURED BY 'HOT' PROPELLER

Aircraft

Cessna F150L

March 1984

FAULTY BENSIX KEY IGNISWITCH

The propeller was being pulled over prior to starting the engine for a maintenance check. During the "suck-in" phase the engine kicked over in spite of the switch being OFF with the key out. The propeller struck the engineer badly gashing his head and fracturing his wrist.

A check revealed that the left-hand magneto was providing sparks, so the Bendix igniton switch was removed and disassembled. It was found that all switch contacts were dirty, so they were cleaned and polished and the switch refitted. Everything was then found to be normal. FAA AD76-07-12 is not applicable to this serial number switch; however, the requirement for repetitive inspection has now been included in the Supplementary pages of the LAMS schedule for the particular aircraft at 50 hour intervals.

#### CAA Comment:

The maintenance organisation's addition appears to be a sensible precaution that should be considered by other organisations/operators. A periodic check to ensure that a propeller really is "dead" may be advisable before anyone gets hurt, but it is safest to treat propellers as "live" whenever they are moved.

See also What to do if .... No 3 You Hand Swing a Propeller, which was attached to GASIL 3/81.



## Service Bulletin TM 4601-1/2

TUS/7/8/84

engine for motorglider GROB 2500

Subjekt: Motorglider GROB G 109 B

This Service Bulletin replaces the TM 4601-1 datet 24. Oct. 83.

Subject:

Service time between two overhauls (TBO)

Effectivity:

Aircraft engine for motorglider model GROB 2500, serie GROB 2500 E 1 from

serial no. 001.

Accomplishment:

none

Reason:

The purpose of Service Bulletin TM 4601-1 is to list the TBO of the engine serie GROB 2500 E 1. This Service Bulletin will be reissued as necessary in accordance with TBO progression and

experience.

Instructions:

Service Time between two overhauls: 300 hours.

Remarks:

- a) The TBO listed in this Service Bulletin shall be recorded in the aircraft-log book.
- b) Service hours and all repairs, modifications, overhauls as well as installation to and removal from the A/C are to be listed in the engine log card. Log card shall be kept together with the A/C and they shall be attached to the engine if it is removed from the A/C.

Mattsies, den 12.06.1984

LBA acknowledged 20 July 1984

gez. i.A. Dipl.Ing. H. Wilser

Annual of translation has been done by best knowled a finding of the hoot. — In any case the original text in detunal tangings is authoritative.



BRA NOTE.

CHERATORS SHOULD CONSULT CAA NOTICE 35 (Me 31.3)

Datum ersetzt Ausgabe Bearbeitung Seite

TNS 7/8/84

No: 6/84

Ref: EW/G84/05/02

Aircraft type and registration:

Sportavia RF-5B G-KCIG (single-engined motorised glider)

Year of manufacture:

1972

Date and time (GMT):

7 May 1984 at about 1600 hrs

Location:

Caddiford Farm, near Crediton, Devonshire

Type of flight:

Private

Persons on board:

Crew - 1

Passengers - Nil

Injuries:

Crew - Nil

Passengers - N/A

Nature of damage:

Substantial damage to the aircraft's wings and main structure; minor

damage to a field boundary fence

Commander's, Licence:

Private Pilot's Licence

Commander's Age:

32 years

Commander's total flying

experience:

133 hours (of which 77 were on type)

The aircraft, with the pilot and one passenger on board, was on a local VFR flight from Exeter Airport; the purpose of the flight was primarily to be gliding experience. After approximately 2½ hours of engine-off gliding flight, the pilot reports that attempts to restart the engine were unsuccessful due, he believes, to a flat battery. A further attempt to restart the engine by diving the aircraft and windmilling the propeller was also unsuccessful, and accordingly he elected to land the aircraft in a convenient field. The landing was completed without incident.

After ne nad reported his situation, by telephone to Exeter Airport Air Traffic Control, the pilot returned to the field and established that the engine would restart by hand swinging the propeller. He then walked the field in order to assess the surface conditions and the take-off run available. The field had a grass surface and the take-off run available on a magnetic heading of 085° was assessed as 256 metres and slightly uphill. There was a 1.5 metre high fence at the up-wind boundary. The surface wind was estimated to be from 070°/15 to 20 kt with gusts up to about 25 kt, and the pilot decided to make a solo take-off. He reports that the aircraft appeared to accelerate to normal flying speed, however on rotation he was unable to establish and maintain a sufficient rate of climb to clear the boundary fence. The aircraft struck the fence and came to rest some 35 metres further on in an adjacent field. The pilot, who was wearing upper torso restraint, was uninjured.

TOO LOW. ] FOR RELIGHT.
TOO SHORT. FOR TAKE-OFF
TOO FLAT A BATTERY!

PBS. CCB/BRA



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#### IMPORTANT ADVICE FROM CASTROL

It has come to the attention of Castrol Limited that a batch of 500ml. bottles of Castrol Super T.T. 2-stroke Motorcycle Oil contains a labelling error. The 50:1 and 25:1 mixing ratios printed on the side of the bottle have been wrongly positioned. They should be shown as on the enclosed example.

Ensure that you only use the correct scales and ratios as shown above when mixing Castrol Super T.T. 2-stroke Motorcycle Oil with petrol in machines having a pre-mix or petroil lubrication system.

If you do not use the correct scales and rations as shown above there is a risk of engine failure.

If you have any query please contact the Consumer Relations Department, Castrol Ltd., Burmah House, Pipers Way, Swindon, Wiltshire. Telephone Number: Swindon (0793) 30151.

ENDS. 31st May 1984.

For CLUB NOTIEBOOD

# REMEMBER

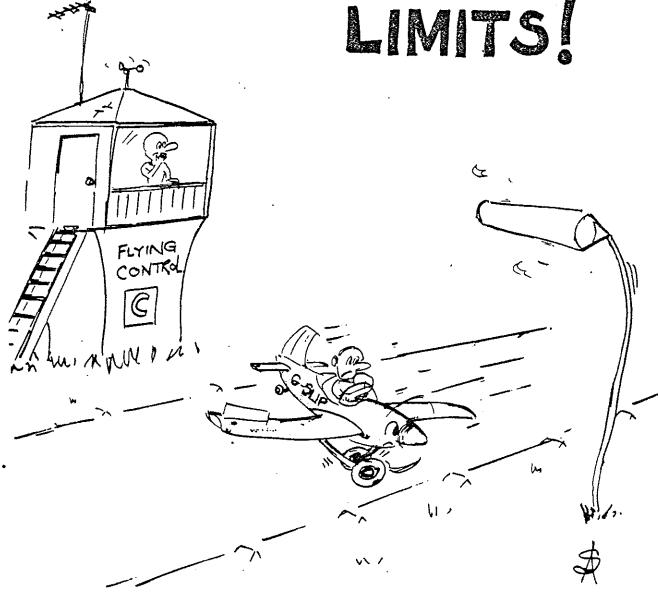
PILOTS AND

AIRCRAFT

CLIDERS.

BOTH

HAVE CROSSWIND



Produced, sponsored and distributed by General Aviation Safety Committee, Popular Flying Association and Civil Aviation Authority.







